

Appendix I

Country/Economy Profiles

Country/Economy Profiles

The following tables provide detailed profiles for each of the 143 economies in the Global Innovation Index 2014. They are constructed around three sections.

1 Five key indicators at the beginning of each profile are intended to put the economy into context. They present the population in millions,¹ GDP in US\$ billions, and GDP per capita in PPP current international dollars.² The fourth indicator categorizes the economy into income group and the fifth indicates its geographical region.³

2 The next section provides the economy's scores and rankings on the Global Innovation Index (GII), the Innovation Output Sub-Index, the Innovation Input Sub-Index, and the Innovation Efficiency Ratio.

The GII ranking for the 2013 edition comes next. Four economies were added in 2014, and three were excluded. For that reason, and because of adjustments made to the GII framework every year and other technical factors not directly related to actual performance (missing data, updates of data, etc.), the GII rankings are not directly comparable from one year to the next. Please refer to Annex 2 of Chapter 1 for details.

Scores are normalized in the 0–100 range except for the Innovation Efficiency Ratio, for which scores

revolve around the number 1 (this index is calculated as the ratio between the Output and Input Sub-Indices).

The Innovation Input Sub-Index score is calculated as the simple average of the scores in the first five pillars, while the Innovation Output

The 2014 GII includes 81 indicators and three types of data. Composite indicators are identified with an asterisk (*), survey questions from the World Economic Forum's Executive Opinion Survey are identified with a dagger (†), and the remaining indicators are all hard data series.

For hard data, the original value is provided (except for indicators 7.3.1, 7.3.2, and 7.3.4, for which the raw data were provided under the condition that only the normalized scores be published). Normalized scores in the 0–100 range are provided for everything else (index and survey data, sub-pillars, pillars, and indices).

When data are either not available or out of date (the cutoff year is 2004), 'n/a' is used (please refer to Annex 2 of Chapter 1 for more information regarding the use of 'n/a' and zero in particular indicators). The year of each data point is indicated in the Data Tables shown in Appendix II.

For further details, see Appendix III, Sources and Definitions, and Appendix IV, Technical Notes.

4 To the far right of each column, a solid circle indicates that an indicator is one of the strengths of the country/economy in question, and a hollow circle indicates that it is a weakness.

Albania	
1 Key indicators	
Population (millions)	3.2
GDP (US\$ billions)	12.8
GDP per capita PPP	4,083
Income group	Upper middle income
Region	Europe
2 Global Innovation Index (out of 143)	94
Innovation Output Sub-Index	45.1
Innovation Input Sub-Index	43.1
Innovation Efficiency Ratio	1.05
3 Pillars	
1 Institutions	58.8
1.1 Political stability	61.8
1.2 Government effectiveness	58.4
1.3 Rule of law	60.1
1.4 Regulatory quality	55.2
1.5 Quality of infrastructure	55.2
1.6 Cost of doing business	55.2
1.7 Ease of starting a business	55.2
1.8 Ease of doing business	55.2
1.9 Ease of paying taxes	55.2
2 Human capital & research	22.8
2.1 Expenditure on education, % GDP	5.3
2.2 Govt expenditure on research, % GDP	0.4
2.3 Govt expenditure on research, % GDP	0.4
2.4 R&D expenditure on research, % GDP	0.4
2.5 R&D expenditure on research, % GDP	0.4
2.6 R&D expenditure on research, % GDP	0.4
2.7 R&D expenditure on research, % GDP	0.4
2.8 R&D expenditure on research, % GDP	0.4
2.9 R&D expenditure on research, % GDP	0.4
2.10 R&D expenditure on research, % GDP	0.4
2.11 R&D expenditure on research, % GDP	0.4
2.12 R&D expenditure on research, % GDP	0.4
2.13 R&D expenditure on research, % GDP	0.4
2.14 R&D expenditure on research, % GDP	0.4
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2.81 R&D expenditure on research, % GDP	0.4
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2.83 R&D expenditure on research, % GDP	0.4
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2.96 R&D expenditure on research, % GDP	0.4
2.97 R&D expenditure on research, % GDP	0.4
2.98 R&D expenditure on research, % GDP	0.4
2.99 R&D expenditure on research, % GDP	0.4
2.100 R&D expenditure on research, % GDP	0.4
3 Infrastructure	34.1
3.1 Information & communication technologies (ICT)	34.1
3.2 ICT access	34.1
3.3 Government's online services	34.1
3.4 E-government	34.1
3.5 Current infrastructure	34.1
3.6 Infrastructure quality	34.1
3.7 Logistics performance	34.1
3.8 Cost of doing business	34.1
3.9 Ease of starting a business	34.1
3.10 Ease of doing business	34.1
3.11 Ease of paying taxes	34.1
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3.45 Ease of paying taxes	34.1
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3.97 Ease of paying taxes	34.1
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3.99 Ease of paying taxes	34.1
3.100 Ease of doing business	34.1
4 Market sophistication	61.9
4.1 Market size	61.9
4.2 Domestic market size	61.9
4.3 Domestic market size	61.9
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4.5 Domestic market size	61.9
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4.97 Domestic market size	61.9
4.98 Domestic market size	61.9
4.99 Domestic market size	61.9
4.100 Domestic market size	61.9

■ indicates a strength, ○ indicates a weakness. * an index, † a survey question.

All top ranks (of 1) are highlighted as strengths; for the remaining indicators, strengths and weaknesses of a particular economy are based on the percentage of economies with scores that fall below its score (i.e., percent ranks).

- For a given economy, strengths (●) are those scores with percent ranks greater than the 10th largest percent rank among the 81 indicators in that economy.
- Similarly, for that economy, weaknesses (○) are those scores with percent ranks lower than the 10th smallest percent rank among the 81 indicators in that economy.

Percent ranks embed more information than ranks and allow for comparisons of ranks of series with missing data and ties in ranks. Examples from Sweden illustrate this point:

1. Strengths for Sweden are all indicators with percent ranks above 0.97 (10th largest percent rank for Sweden); weaknesses are all indicators with percent ranks below 0.62 (Sweden's 10th smallest percent rank).
2. Sweden ranks 5th out of 143 in 3.2.1 *Electricity output, kWh/cap* with a percent rank of 0.97; this indicator is a strength for Sweden.
3. Sweden also ranks 5th in 5.1.3 *GERD performed by business, % GDP*, but with a percent rank of 0.95 (because only 87 countries are covered by that indicator), this indicator is not a strength for Sweden.
4. The rank of 52 (percent rank of 0.59) in 3.3.1 *GDP/unit of energy use, 2005 PPP\$/kg oil eq* is a weakness for Sweden. By contrast, the rank of 76 for Sudan for that same indicator is a strength

for Sudan (with a percent rank of 0.39, this is above the cutoff for strengths for Sudan, which is 0.37).

Percent ranks are not reported in the Country/Economy Profiles but they are presented in the Data Tables (Appendix II).

Notes

- 1 Data are from the United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2012 Revision*.
- 2 Data for GDP and GDP per capita are from the International Monetary Fund *World Economic Outlook 2014* database.
- 3 Income group is according to the World Bank Income Group Classification (July 2013): LI = low income; LM = lower-middle income; UM = upper-middle income; and HI = high income. Geographical regions are based on the United Nations Classification: EUR = Europe; NAC = Northern America; LCN = Latin America and the Caribbean; CSA = Central and Southern Asia; SEAO = South East Asia and Oceania; NAWA = Northern Africa and Western Asia; and SSF = Sub-Saharan Africa.

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Albania

Key indicators

Population (millions)	3.2
GDP (US\$ billions)	12.9
GDP per capita, PPP\$	9,506.1
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.5	94
Innovation Output Sub-Index	20.4	117
Innovation Input Sub-Index	40.5	71
Innovation Efficiency Ratio	0.5	131 ○
Global Innovation Index 2013 (out of 142)	30.9	93

1 Institutions	58.8	79
1.1 Political environment	54.8	78
1.1.1 Political stability*	61.8	81
1.1.2 Government effectiveness*	33.4	85
1.1.3 Press freedom*	69.1	82
1.2 Regulatory environment	58.1	94
1.2.1 Regulatory quality*	53.2	67
1.2.2 Rule of law*	30.7	96
1.2.3 Cost of redundancy dismissal, salary weeks	20.8	98
1.3 Business environment	63.7	75
1.3.1 Ease of starting a business*	89.4	40
1.3.2 Ease of resolving insolvency*	43.1	54
1.3.3 Ease of paying taxes*	58.5	105

2 Human capital & research	22.8	93
2.1 Education	35.6	96
2.1.1 Expenditure on education, % GDP	3.3	106
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	395.2	57 ○
2.1.5 Pupil-teacher ratio, secondary	14.9	60
2.2 Tertiary education	30.1	80
2.2.1 Tertiary enrolment, % gross	55.5	45
2.2.2 Graduates in science & engineering, %	17.2	67
2.2.3 Tertiary inbound mobility, %	1.3	77
2.3 Research & development (R&D)	2.7	96
2.3.1 Researchers, headcounts/mn pop.	545.2	70
2.3.2 Gross expenditure on R&D, % GDP	0.2	95
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	34.1	79
3.1 Information & communication technologies (ICTs)	29.4	93
3.1.1 ICT access*	37.3	89
3.1.2 ICT use*	27.1	63
3.1.3 Government's online service*	42.5	90
3.1.4 E-participation*	10.5	94
3.2 General infrastructure	28.4	95
3.2.1 Electricity output, kWh/cap	1,291.6	89
3.2.2 Logistics performance*	46.0	78
3.2.3 Gross capital formation, % GDP	23.4	67
3.3 Ecological sustainability	44.5	44
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	11.6	9 ●
3.3.2 Environmental performance*	54.7	62
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.7	70

4 Market sophistication	61.9	21 ●
4.1 Credit	43.6	48
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	38.3	84
4.1.3 Microfinance gross loans, % GDP	2.5	21 ●

4.2 Investment	73.3	6 ●
4.2.1 Ease of protecting investors*	73.3	14 ●
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	68.9	114
4.3.1 Applied tariff rate, weighted mean, %	1.3	37 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	19 ●
4.3.3 Intensity of local competition†	40.3	132 ○

5 Business sophistication	24.9	115
5.1 Knowledge workers	30.3	95
5.1.1 Knowledge-intensive employment, %	16.1	86
5.1.2 Firms offering formal training, % firms	19.9	93
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20-34	147.9	37 ●
5.2 Innovation linkages	17.8	134 ○
5.2.1 University/industry research collaboration†	26.3	129 ○
5.2.2 State of cluster development†	24.8	133 ○
5.2.3 GERD financed by abroad, %	7.4	52
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	52
5.3 Knowledge absorption	26.5	61
5.3.1 Royalty & license fees payments, % total trade	0.4	58
5.3.2 High-tech imports less re-imports, %	3.4	120 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.2	51
5.3.4 FDI net inflows, % GDP	9.6	14 ●

6 Knowledge & technology outputs	20.2	111
6.1 Knowledge creation	2.4	136 ○
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.1	100 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.1	69
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.0	61 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.2	107
6.1.5 Citable documents H index	36.0	128 ○
6.2 Knowledge impact	25.7	115
6.2.1 Growth rate of PPP\$ GDP/worker, %	-0.7	101
6.2.2 New businesses/th pop. 15-64	0.9	65
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	5.9	61
6.2.5 High- & medium-high-tech manufactures, %	1.2	96 ○
6.3 Knowledge diffusion	32.7	64
6.3.1 Royalty & license fees receipts, % total trade	0.0	75
6.3.2 High-tech exports less re-exports, %	0.2	96
6.3.3 Comm., computer & info. services exp., % total trade	3.3	17 ●
6.3.4 FDI net outflows, % GDP	2.6	27 ●

7 Creative outputs	20.6	123
7.1 Intangible assets	26.1	133 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	17.0	86
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.1	59
7.1.3 ICTs & business model creation†	44.0	116
7.1.4 ICTs & organizational model creation†	39.8	118
7.2 Creative goods & services	18.2	69
7.2.1 Cultural & creative services exports, % total trade	0.7	15 ●
7.2.2 National feature films/mn pop. 15-69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15-69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	95
7.3 Online creativity	12.0	86
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	6.8	53
7.3.2 Country-code TLDs/th pop. 15-69	19.6	82
7.3.3 Wikipedia edits/pop. 15-69	5,681.0	53
7.3.4 Video uploads on YouTube/pop. 15-69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	38.5
GDP (US\$ billions)	206.1
GDP per capita, PPP\$	7,534.1
Income group	Upper-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	24.2	133
Innovation Output Sub-Index	16.7	132
Innovation Input Sub-Index	31.7	122
Innovation Efficiency Ratio	0.5	130
Global Innovation Index 2013 (out of 142)	23.1	138

1	Institutions	47.2	118
1.1	Political environment	40.8	123
1.1.1	Political stability*	32.8	131
1.1.2	Government effectiveness*	26.1	106
1.1.3	Press freedom*	63.5	102
1.2	Regulatory environment	50.5	113
1.2.1	Regulatory quality*	15.1	137 ○
1.2.2	Rule of law*	24.5	113
1.2.3	Cost of redundancy dismissal, salary weeks	17.3	81 ●
1.3	Business environment	50.2	117
1.3.1	Ease of starting a business*	68.5	120
1.3.2	Ease of resolving insolvency*	44.1	52 ●
1.3.3	Ease of paying taxes*	38.1	133
2	Human capital & research	25.5	82 ●
2.1	Education	44.1	66 ●
2.1.1	Expenditure on education, % GDP	4.3	79
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3	School life expectancy, years	14.0	56 ●
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	30.6	77 ●
2.2.1	Tertiary enrolment, % gross	31.5	74 ●
2.2.2	Graduates in science & engineering, %	25.0	27 ●
2.2.3	Tertiary inbound mobility, %	0.5	90
2.3	Research & development (R&D)	1.6	111
2.3.1	Researchers, headcounts/mn pop.	406.5	73
2.3.2	Gross expenditure on R&D, % GDP	0.1	109
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	32.2	86
3.1	Information & communication technologies (ICTs)	18.4	116
3.1.1	ICT access*	36.0	91
3.1.2	ICT use*	6.8	111
3.1.3	Government's online service*	25.5	128
3.1.4	E-participation*	5.3	111
3.2	General infrastructure	45.9	23 ●
3.2.1	Electricity output, kWh/cap	1,423.7	84
3.2.2	Logistics performance*	31.7	120
3.2.3	Gross capital formation, % GDP	43.3	5 ●
3.3	Ecological sustainability	32.4	82 ●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.6	54 ●
3.3.2	Environmental performance*	50.1	83 ●
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	89
4	Market sophistication	36.2	138 ○
4.1	Credit	23.5	115
4.1.1	Ease of getting credit*	43.8	112
4.1.2	Domestic credit to private sector, % GDP	14.3	134
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	33.4	75 ●
4.2.1	Ease of protecting investors*	50.0	81
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	70 ○
4.3	Trade & competition	51.6	140 ○
4.3.1	Applied tariff rate, weighted mean, %	8.6	118
4.3.2	Non-agricultural mkt access weighted tariff, %	n/a	n/a
4.3.3	Intensity of local competition†	42.7	131 ○

5 Business sophistication **17.2** **137 ○**

5.1	Knowledge workers	20.5	122
5.1.1	Knowledge-intensive employment, %	19.1	75
5.1.2	Firms offering formal training, % firms	17.3	96
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	2.8	137 ○
5.2	Innovation linkages	19.0	131
5.2.1	University/industry research collaboration†	18.5	135 ○
5.2.2	State of cluster development†	36.5	112
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	93
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	100
5.3	Knowledge absorption	12.1	135
5.3.1	Royalty & license fees payments, % total trade	0.1	93
5.3.2	High-tech imports less re-imports, %	5.7	91
5.3.3	Comm., computer & info. services imp., % total trade	0.2	124
5.3.4	FDI net inflows, % GDP	1.4	106

6 Knowledge & technology outputs **19.5** **114**

6.1	Knowledge creation	5.5	108
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.4	79
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.0	107
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	7.1	89
6.1.5	Citable documents H index	78.0	82 ●
6.2	Knowledge impact	32.4	93
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.0	69
6.2.2	New businesses/th pop. 15–64	0.5	74
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	1.6	112
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	20.5	129
6.3.1	Royalty & license fees receipts, % total trade	0.0	103
6.3.2	High-tech exports less re-exports, %	0.0	124 ○
6.3.3	Comm., computer & info. services exp., % total trade	0.3	118
6.3.4	FDI net outflows, % GDP	0.0	98

7 Creative outputs **14.0** **138 ○**

7.1	Intangible assets	19.7	137 ○
7.1.1	Domestic res trademark app./bn PPP\$ GDP	12.8	91
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.1	61
7.1.3	ICTs & business model creation†	31.5	135 ○
7.1.4	ICTs & organizational model creation†	31.8	132 ○
7.2	Creative goods & services	4.0	114
7.2.1	Cultural & creative services exports, % total trade	0.2	43 ●
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	0.1	48
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.0	124 ○
7.3	Online creativity	12.5	84 ●
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.5	123
7.3.2	Country-code TLDs/th pop. 15–69	2.5	121
7.3.3	Wikipedia edits/pop. 15–69	700.5	103
7.3.4	Video uploads on YouTube/pop. 15–69	46.0	56

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Angola

Key indicators

Population (millions)	20.8
GDP (US\$ billions)	121.7
GDP per capita, PPP\$	6,247.3
Income group	Upper-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	23.8	135
Innovation Output Sub-Index	21.4	112
Innovation Input Sub-Index	26.2	138
Innovation Efficiency Ratio	0.8	33 ●
Global Innovation Index 2013 (out of 142)	23.5	135
1 Institutions	39.1	136
1.1 Political environment	44.1	116
1.1.1 Political stability*	56.4	87 ●
1.1.2 Government effectiveness*	13.5	133
1.1.3 Press freedom*	62.2	106
1.2 Regulatory environment	35.5	135
1.2.1 Regulatory quality*	23.3	130
1.2.2 Rule of law*	11.3	139 ○
1.2.3 Cost of redundancy dismissal, salary weeks	31.0	132
1.3 Business environment	37.8	138
1.3.1 Ease of starting a business*	56.5	134
1.3.2 Ease of resolving insolvency*	0.0	140 ○
1.3.3 Ease of paying taxes*	56.9	112
2 Human capital & research	13.8	129
2.1 Education	33.5	102 ●
2.1.1 Expenditure on education, % GDP	3.5	100
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	11.3	100
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	27.4	98
2.2 Tertiary education	6.8	132
2.2.1 Tertiary enrolment, % gross	7.5	118
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	0.9	120
2.3.1 Researchers, headcounts/mn pop.	148.4	93
2.3.2 Gross expenditure on R&D, % GDP	0.1	106
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	17.5	137
3.1 Information & communication technologies (ICTs)	15.1	126
3.1.1 ICT access*	18.3	128
3.1.2 ICT use*	6.2	113
3.1.3 Government's online service*	33.3	110
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	12.2	141 ○
3.2.1 Electricity output, kWh/cap	288.0	111
3.2.2 Logistics performance*	26.6	127
3.2.3 Gross capital formation, % GDP	13.8	135
3.3 Ecological sustainability	25.3	116
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.6	42 ●
3.3.2 Environmental performance*	28.7	132
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.0	127 ○
4 Market sophistication	42.9	107
4.1 Credit	16.8	133
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	23.5	112
4.1.3 Microfinance gross loans, % GDP	0.0	85

4.2 Investment	53.3	23 ●
4.2.1 Ease of protecting investors*	53.3	66 ●
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	58.6	133
4.3.1 Applied tariff rate, weighted mean, %	7.4	108
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	11 ●
4.3.3 Intensity of local competition†	30.3	136 ○
5 Business sophistication	17.8	135
5.1 Knowledge workers	22.2	116
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	26.9	72 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	5.1	131
5.2 Innovation linkages	25.1	101 ●
5.2.1 University/industry research collaboration†	19.7	133 ○
5.2.2 State of cluster development†	34.8	116
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	56 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	6.0	141 ○
5.3.1 Royalty & license fees payments, % total trade	0.0	123
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.7	72 ●
5.3.4 FDI net inflows, % GDP	-2.9	142 ○
6 Knowledge & technology outputs	24.8	83 ●
6.1 Knowledge creation	0.7	143 ○
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	112 ○
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	0.3	142 ○
6.1.5 Citable documents H index	25.0	137
6.2 Knowledge impact	47.1	37 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.1	35 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.3	137
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	26.6	98 ●
6.3.1 Royalty & license fees receipts, % total trade	0.0	84 ●
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	0.1	134 ○
6.3.4 FDI net outflows, % GDP	2.4	30 ●
7 Creative outputs	18.1	127
7.1 Intangible assets	35.1	115
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	37.8	130
7.1.4 ICTs & organizational model creation†	32.3	130
7.2 Creative goods & services	1.9	125
7.2.1 Cultural & creative services exports, % total trade	0.0	79
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	0.3	135
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.1	135
7.3.2 Country-code TLDs/th pop. 15–69	0.4	133
7.3.3 Wikipedia edits/pop. 15–69	292.0	112
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	41.1
GDP (US\$ billions)	488.2
GDP per capita, PPP\$	18,749.3
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	35.1	70
Innovation Output Sub-Index	31.1	61
Innovation Input Sub-Index	39.2	83
Innovation Efficiency Ratio	0.8	43
Global Innovation Index 2013 (out of 142)	37.7	56

1	Institutions	49.1	111
1.1	Political environment	58.6	66
1.1.1	Political stability*	67.3	66
1.1.2	Government effectiveness*	34.1	84
1.1.3	Press freedom*	74.3	45
1.2	Regulatory environment	40.2	129 ○
1.2.1	Regulatory quality*	23.6	129 ○
1.2.2	Rule of law*	26.7	106
1.2.3	Cost of redundancy dismissal, salary weeks	30.3	129 ○
1.3	Business environment	48.5	124 ○
1.3.1	Ease of starting a business*	68.8	119
1.3.2	Ease of resolving insolvency*	32.6	86
1.3.3	Ease of paying taxes*	44.0	127 ○
2	Human capital & research	38.3	41
2.1	Education	50.0	47
2.1.1	Expenditure on education, % GDP	5.8	36
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	25.1	38
2.1.3	School life expectancy, years	16.4	16 ●
2.1.4	PISA scales in reading, maths, & science	396.7	55 ○
2.1.5	Pupil-teacher ratio, secondary	10.9	29
2.2	Tertiary education	39.6	49
2.2.1	Tertiary enrolment, % gross	74.8	16 ●
2.2.2	Graduates in science & engineering, %	13.5	90 ○
2.2.3	Tertiary inbound mobility, %	n/a	n/a
2.3	Research & development (R&D)	25.1	39
2.3.1	Researchers, headcounts/mn pop.	1,941.9	40
2.3.2	Gross expenditure on R&D, % GDP	0.6	53
2.3.3	QS university ranking, average score top 3*	42.7	32 ●
3	Infrastructure	38.0	65
3.1	Information & communication technologies (ICTs)	43.1	57
3.1.1	ICT access*	58.8	53
3.1.2	ICT use*	31.6	58
3.1.3	Government's online service*	52.9	60
3.1.4	E-participation*	29.0	53
3.2	General infrastructure	34.3	64
3.2.1	Electricity output, kWh/cap	3,177.7	62
3.2.2	Logistics performance*	57.1	48
3.2.3	Gross capital formation, % GDP	24.2	58
3.3	Ecological sustainability	36.5	64
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.9	39
3.3.2	Environmental performance*	49.6	84
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.7	49
4	Market sophistication	37.7	132 ○
4.1	Credit	22.4	120
4.1.1	Ease of getting credit*	62.5	69
4.1.2	Domestic credit to private sector, % GDP	18.5	122 ○
4.1.3	Microfinance gross loans, % GDP	0.0	87 ○

4.2	Investment	21.2	136 ○
4.2.1	Ease of protecting investors*	50.0	81
4.2.2	Market capitalization, % GDP	7.2	94 ○
4.2.3	Total value of stocks traded, % GDP	0.3	86
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	53
4.3	Trade & competition	69.6	113
4.3.1	Applied tariff rate, weighted mean, %	5.6	88
4.3.2	Non-agricultural mkt access weighted tariff, %	0.2	37
4.3.3	Intensity of local competition†	50.2	126 ○

5	Business sophistication	32.9	66
5.1	Knowledge workers	42.0	60
5.1.1	Knowledge-intensive employment, %	25.0	54
5.1.2	Firms offering formal training, % firms	58.1	10 ●
5.1.3	GERD performed by business, % GDP	0.2	52
5.1.4	GERD performed by business, %	24.6	59
5.1.5	GMAT test takers/mn pop. 20–34	37.0	85
5.2	Innovation linkages	18.7	133 ○
5.2.1	University/industry research collaboration†	45.0	59
5.2.2	State of cluster development†	37.0	110
5.2.3	GERD financed by abroad, %	0.5	87 ○
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	88
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	65
5.3	Knowledge absorption	38.0	22 ●
5.3.1	Royalty & license fees payments, % total trade	2.4	5 ●
5.3.2	High-tech imports less re-imports, %	10.6	26 ●
5.3.3	Comm., computer & info. services imp., % total trade	1.3	48
5.3.4	FDI net inflows, % GDP	2.7	70

6	Knowledge & technology outputs	25.2	81
6.1	Knowledge creation	10.8	75
6.1.1	Domestic resident patent app./tr PPP\$ GDP	1.0	68
6.1.2	PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app./tr PPP\$ GDP	0.2	49
6.1.4	Scientific & technical articles/bn PPP\$ GDP	10.3	72
6.1.5	Citable documents H index	222.0	35
6.2	Knowledge impact	31.0	102
6.2.1	Growth rate of PPP\$ GDP/worker, %	0.5	78
6.2.2	New businesses/th pop. 15–64	0.5	79
6.2.3	Computer software spending, % GDP	0.2	63
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	9.0	52
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	33.9	50
6.3.1	Royalty & license fees receipts, % total trade	0.2	38
6.3.2	High-tech exports less re-exports, %	2.2	51
6.3.3	Comm., computer & info. services exp., % total trade	2.3	31 ●
6.3.4	FDI net outflows, % GDP	0.2	78

7	Creative outputs	36.9	49
7.1	Intangible assets	42.1	82
7.1.1	Domestic res trademark app./bn PPP\$ GDP	83.2	25 ●
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	45.7	113
7.1.4	ICTs & organizational model creation†	48.5	85
7.2	Creative goods & services	24.4	51
7.2.1	Cultural & creative services exports, % total trade	1.0	7 ●
7.2.2	National feature films/mn pop. 15–69	3.6	37
7.2.3	Global ent. & media output/th pop. 15–69	0.5	30
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.2	82
7.3	Online creativity	39.0	36
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	3.7	67
7.3.2	Country-code TLDs/th pop. 15–69	62.9	16 ●
7.3.3	Wikipedia edits/pop. 15–69	7,140.9	51
7.3.4	Video uploads on YouTube/pop. 15–69	77.4	34

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Armenia

Key indicators

Population (millions)	3.0
GDP (US\$ billions)	10.5
GDP per capita, PPP\$	6,190.7
Income group	Lower-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.1	65
Innovation Output Sub-Index	32.7	55
Innovation Input Sub-Index	39.4	81
Innovation Efficiency Ratio	0.8	28 ●
Global Innovation Index 2013 (out of 142)	37.6	59

1 Institutions	66.4	58
1.1 Political environment	60.1	63
1.1.1 Political stability*	68.3	62
1.1.2 Government effectiveness*	39.9	70
1.1.3 Press freedom*	72.0	61
1.2 Regulatory environment	70.2	53
1.2.1 Regulatory quality*	57.4	61
1.2.2 Rule of law*	35.4	84
1.2.3 Cost of redundancy dismissal, salary weeks	11.0	45
1.3 Business environment	68.9	54
1.3.1 Ease of starting a business*	97.3	6 ●
1.3.2 Ease of resolving insolvency*	38.6	68
1.3.3 Ease of paying taxes*	70.8	62

2 Human capital & research	21.4	99
2.1 Education	28.4	123 ○
2.1.1 Expenditure on education, % GDP	3.3	105 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	17.7	67
2.1.3 School life expectancy, years	12.3	84
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	29.0	82
2.2.1 Tertiary enrolment, % gross	46.0	56
2.2.2 Graduates in science & engineering, %	15.9	78
2.2.3 Tertiary inbound mobility, %	3.4	48
2.3 Research & development (R&D)	6.6	78
2.3.1 Researchers, headcounts/mn pop.	1,504.0	47
2.3.2 Gross expenditure on R&D, % GDP	0.3	79
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	30.0	93
3.1 Information & communication technologies (ICTs)	26.0	98
3.1.1 ICT access*	45.2	73
3.1.2 ICT use*	26.0	67
3.1.3 Government's online service*	32.7	113 ○
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	28.7	91
3.2.1 Electricity output, kWh/cap	2,397.7	70
3.2.2 Logistics performance*	37.7	97
3.2.3 Gross capital formation, % GDP	24.5	56
3.3 Ecological sustainability	35.4	69
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.8	72
3.3.2 Environmental performance*	61.7	46
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	111 ○

4 Market sophistication	50.4	56
4.1 Credit	46.2	42
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	42.9	78
4.1.3 Microfinance gross loans, % GDP	4.0	13 ●

4.2 Investment	28.9	104
4.2.1 Ease of protecting investors*	66.7	21 ●
4.2.2 Market capitalization, % GDP	1.3	107 ○
4.2.3 Total value of stocks traded, % GDP	0.0	106 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	30

4.3 Trade & competition	76.1	60
4.3.1 Applied tariff rate, weighted mean, %	2.3	49
4.3.2 Non-agricultural mkt access weighted tariff, %	0.7	59
4.3.3 Intensity of local competition†	59.7	97

5 Business sophistication	28.8	90
5.1 Knowledge workers	38.3	75
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	30.4	65
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	85.5	55

5.2 Innovation linkages	24.0	111 ○
5.2.1 University/industry research collaboration†	36.0	102 ○
5.2.2 State of cluster development†	43.8	80
5.2.3 GERD financed by abroad, %	3.4	71
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	38
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	53
5.3 Knowledge absorption	24.2	77
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	6.9	68
5.3.3 Comm., computer & info. services imp., % total trade	0.7	73
5.3.4 FDI net inflows, % GDP	4.9	40

6 Knowledge & technology outputs	31.8	51
6.1 Knowledge creation	27.7	37
6.1.1 Domestic resident patent app/tr PPP\$ GDP	7.0	16 ●
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.4	42
6.1.3 Domestic res utility model app/tr PPP\$ GDP	2.0	16 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	33.8	26 ●
6.1.5 Citable documents H index	105.0	62

6.2 Knowledge impact	32.2	95
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.3	33
6.2.2 New businesses/th pop. 15–64	1.5	48
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.3	117 ○
6.2.5 High- & medium-high-tech manufactures, %	4.9	87 ○
6.3 Knowledge diffusion	35.7	44
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.2	94
6.3.3 Comm., computer & info. services exp., % total trade	2.7	23 ●
6.3.4 FDI net outflows, % GDP	0.2	83

7 Creative outputs	33.6	63
7.1 Intangible assets	49.9	43
7.1.1 Domestic res trademark app/bn PPP\$ GDP	102.1	15 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.3	26
7.1.3 ICTs & business model creation†	62.2	44
7.1.4 ICTs & organizational model creation†	61.3	34 ●

7.2 Creative goods & services	14.6	81
7.2.1 Cultural & creative services exports, % total trade	0.1	52
7.2.2 National feature films/mn pop. 15–69	2.4	53
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	45
7.2.5 Creative goods exports, % total trade	0.3	72

7.3 Online creativity	20.2	65
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.5	83
7.3.2 Country-code TLDs/th pop. 15–69	32.6	53
7.3.3 Wikipedia edits/pop. 15–69	14,960.1	33 ●
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	22.7
GDP (US\$ billions)	1,505.3
GDP per capita, PPP\$	43,073.1
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	55.0	17
Innovation Output Sub-Index	45.5	22
Innovation Input Sub-Index	64.6	10
Innovation Efficiency Ratio	0.7	81 ○
Global Innovation Index 2013 (out of 142)	53.1	19

1 Institutions	88.9	11
1.1 Political environment	86.3	14
1.1.1 Political stability*	90.1	19
1.1.2 Government effectiveness*	83.9	12
1.1.3 Press freedom*	84.8	24
1.2 Regulatory environment	93.7	12
1.2.1 Regulatory quality*	95.0	7 ●
1.2.2 Rule of law*	94.4	12
1.2.3 Cost of redundancy dismissal, salary weeks	11.7	49
1.3 Business environment	86.9	12
1.3.1 Ease of starting a business*	95.9	9 ●
1.3.2 Ease of resolving insolvency*	86.1	17
1.3.3 Ease of paying taxes*	78.7	38

2 Human capital & research	61.8	7 ●
2.1 Education	55.5	24
2.1.1 Expenditure on education, % GDP	5.6	43
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	19.9	59 ○
2.1.3 School life expectancy, years	19.9	1 ●
2.1.4 PISA scales in reading, maths, & science	512.5	14
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	59.9	7 ●
2.2.1 Tertiary enrolment, % gross	83.2	7 ●
2.2.2 Graduates in science & engineering, %	16.6	73 ○
2.2.3 Tertiary inbound mobility, %	19.8	1 ●
2.3 Research & development (R&D)	70.2	8 ●
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	2.4	13
2.3.3 QS university ranking, average score top 3*	85.8	5 ●

3 Infrastructure	60.1	7 ●
3.1 Information & communication technologies (ICTs)	78.4	9 ●
3.1.1 ICT access*	76.4	21
3.1.2 ICT use*	74.6	8 ●
3.1.3 Government's online service*	86.3	9
3.1.4 E-participation*	76.3	8
3.2 General infrastructure	55.0	9 ●
3.2.1 Electricity output, kWh/cap	10,929.8	10
3.2.2 Logistics performance*	84.1	18
3.2.3 Gross capital formation, % GDP	28.5	26
3.3 Ecological sustainability	46.8	37
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.1	66 ○
3.3.2 Environmental performance*	82.4	3 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.1	47

4 Market sophistication	68.1	10
4.1 Credit	66.8	11
4.1.1 Ease of getting credit*	93.8	3
4.1.2 Domestic credit to private sector, % GDP	123.3	22
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	50.4	29
4.2.1 Ease of protecting investors*	56.7	55 ○
4.2.2 Market capitalization, % GDP	84.6	20
4.2.3 Total value of stocks traded, % GDP	69.2	10
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	23
4.3 Trade & competition	86.9	1 ●
4.3.1 Applied tariff rate, weighted mean, %	1.8	45
4.3.2 Non-agricultural mkt access weighted tariff, %	0.6	56
4.3.3 Intensity of local competition†	80.3	11

5 Business sophistication	43.9	26
5.1 Knowledge workers	63.0	22
5.1.1 Knowledge-intensive employment, %	42.9	16
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.3	16
5.1.4 GERD performed by business, %	58.4	23
5.1.5 GMAT test takers/mn pop. 20–34	159.6	31
5.2 Innovation linkages	38.4	48
5.2.1 University/industry research collaboration†	67.7	14
5.2.2 State of cluster development†	54.5	34
5.2.3 GERD financed by abroad, %	1.6	76 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	27
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.0	20
5.3 Knowledge absorption	30.3	42
5.3.1 Royalty & license fees payments, % total trade	1.3	14
5.3.2 High-tech imports less re-imports, %	10.1	28
5.3.3 Comm., computer & info. services imp., % total trade	0.6	86 ○
5.3.4 FDI net inflows, % GDP	4.8	42

6 Knowledge & technology outputs	38.5	31
6.1 Knowledge creation	36.6	26
6.1.1 Domestic resident patent app./tr PPP\$ GDP	2.7	40
6.1.2 PCT resident patent app./tr PPP\$ GDP	1.8	26
6.1.3 Domestic res utility model app./tr PPP\$ GDP	1.3	26
6.1.4 Scientific & technical articles/bn PPP\$ GDP	48.0	12
6.1.5 Citable documents H index	514.0	10
6.2 Knowledge impact	48.4	34
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.6	41
6.2.2 New businesses/th pop. 15–64	12.2	8
6.2.3 Computer software spending, % GDP	0.3	31
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	9.6	49
6.2.5 High- & medium-high-tech manufactures, %	20.2	54 ○
6.3 Knowledge diffusion	30.4	78 ○
6.3.1 Royalty & license fees receipts, % total trade	0.3	32
6.3.2 High-tech exports less re-exports, %	1.7	56
6.3.3 Comm., computer & info. services exp., % total trade	0.9	87 ○
6.3.4 FDI net outflows, % GDP	0.9	49

7 Creative outputs	52.5	12
7.1 Intangible assets	49.4	45
7.1.1 Domestic res trademark app./bn PPP\$ GDP	73.4	32
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.1	28
7.1.3 ICTs & business model creation†	69.2	21
7.1.4 ICTs & organizational model creation†	65.7	20
7.2 Creative goods & services	42.4	12
7.2.1 Cultural & creative services exports, % total trade	0.1	64 ○
7.2.2 National feature films/mn pop. 15–69	2.6	49 ○
7.2.3 Global ent. & media output/th pop. 15–69	2.3	3 ●
7.2.4 Printing & publishing manufactures, %	0.1	5 ●
7.2.5 Creative goods exports, % total trade	0.6	52
7.3 Online creativity	68.6	10
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	83.6	10
7.3.2 Country-code TLDs/th pop. 15–69	68.9	14
7.3.3 Wikipedia edits/pop. 15–69	20,276.2	25
7.3.4 Video uploads on YouTube/pop. 15–69	87.6	13

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Austria

Key indicators

Population (millions)	8.5
GDP (US\$ billions)	415.4
GDP per capita, PPP\$	42,596.6
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	53.4	20
Innovation Output Sub-Index	45.5	21
Innovation Input Sub-Index	61.3	18
Innovation Efficiency Ratio	0.7	69 ○
Global Innovation Index 2013 (out of 142)	51.9	23

1 Institutions	88.8	12
1.1 Political environment	90.4	9 ●
1.1.1 Political stability*	98.2	6 ●
1.1.2 Government effectiveness*	82.4	15
1.1.3 Press freedom*	90.6	10 ●
1.2 Regulatory environment	96.4	8 ●
1.2.1 Regulatory quality*	88.3	17
1.2.2 Rule of law*	97.1	6 ●
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	79.5	23
1.3.1 Ease of starting a business*	79.2	93 ○
1.3.2 Ease of resolving insolvency*	87.2	14
1.3.3 Ease of paying taxes*	72.2	56

2 Human capital & research	61.5	8 ●
2.1 Education	55.9	20
2.1.1 Expenditure on education, % GDP	5.9	31
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	29.6	23
2.1.3 School life expectancy, years	15.6	30
2.1.4 PISA scales in reading, maths, & science	500.3	18
2.1.5 Pupil-teacher ratio, secondary	9.5	20
2.2 Tertiary education	66.7	4 ●
2.2.1 Tertiary enrolment, % gross	71.0	24
2.2.2 Graduates in science & engineering, %	27.1	18
2.2.3 Tertiary inbound mobility, %	19.5	7 ●
2.3 Research & development (R&D)	61.9	13
2.3.1 Researchers, headcounts/mn pop.	7,780.1	7 ●
2.3.2 Gross expenditure on R&D, % GDP	2.9	9 ●
2.3.3 QS university ranking, average score top 3*	47.4	26

3 Infrastructure	53.7	21
3.1 Information & communication technologies (ICTs)	62.7	26
3.1.1 ICT access*	79.6	13
3.1.2 ICT use*	59.7	23
3.1.3 Government's online service*	74.5	26
3.1.4 E-participation*	36.8	42
3.2 General infrastructure	45.7	24
3.2.1 Electricity output, kWh/cap	7,665.8	25
3.2.2 Logistics performance*	90.5	11 ●
3.2.3 Gross capital formation, % GDP	21.9	74 ○
3.3 Ecological sustainability	52.6	19
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.3	19
3.3.2 Environmental performance*	78.3	8 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	3.1	32

4 Market sophistication	57.2	32
4.1 Credit	59.5	19
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	117.0	26
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	31.7	87 ○
4.2.1 Ease of protecting investors*	50.0	81 ○
4.2.2 Market capitalization, % GDP	26.5	61 ○
4.2.3 Total value of stocks traded, % GDP	11.8	38
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	19
4.3 Trade & competition	80.5	27
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	80.5	9 ●

5 Business sophistication	45.5	24
5.1 Knowledge workers	67.1	14
5.1.1 Knowledge-intensive employment, %	38.5	25
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	2.0	10
5.1.4 GERD performed by business, %	68.8	10
5.1.5 GMAT test takers/mn pop. 20–34	198.3	25
5.2 Innovation linkages	44.3	32
5.2.1 University/industry research collaboration†	63.2	22
5.2.2 State of cluster development†	64.2	16
5.2.3 GERD financed by abroad, %	15.2	30
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	63 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.5	13
5.3 Knowledge absorption	25.1	72 ○
5.3.1 Royalty & license fees payments, % total trade	0.8	36
5.3.2 High-tech imports less re-imports, %	8.3	53
5.3.3 Comm., computer & info. services imp., % total trade	1.4	44
5.3.4 FDI net inflows, % GDP	0.5	125 ○

6 Knowledge & technology outputs	41.1	25
6.1 Knowledge creation	37.8	24
6.1.1 Domestic resident patent app/tr PPP\$ GDP	6.4	21
6.1.2 PCT resident patent app/tr PPP\$ GDP	3.7	13
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.5	22
6.1.4 Scientific & technical articles/bn PPP\$ GDP	35.7	23
6.1.5 Citable documents H index	378.0	17
6.2 Knowledge impact	44.3	46
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.4	82 ○
6.2.2 New businesses/th pop. 15–64	0.5	77 ○
6.2.3 Computer software spending, % GDP	0.6	13
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	14.9	31
6.2.5 High- & medium-high-tech manufactures, %	38.1	22
6.3 Knowledge diffusion	41.2	29
6.3.1 Royalty & license fees receipts, % total trade	0.4	27
6.3.2 High-tech exports less re-exports, %	8.3	24
6.3.3 Comm., computer & info. services exp., % total trade	2.1	38
6.3.4 FDI net outflows, % GDP	4.5	17

7 Creative outputs	49.9	15
7.1 Intangible assets	51.5	34
7.1.1 Domestic res trademark app/bn PPP\$ GDP	75.4	31
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	3.2	7
7.1.3 ICTs & business model creation†	64.7	34
7.1.4 ICTs & organizational model creation†	58.2	46
7.2 Creative goods & services	37.6	22
7.2.1 Cultural & creative services exports, % total trade	0.6	19
7.2.2 National feature films/mn pop. 15–69	8.8	15
7.2.3 Global ent. & media output/th pop. 15–69	1.8	9
7.2.4 Printing & publishing manufactures, %	0.0	40 ○
7.2.5 Creative goods exports, % total trade	1.3	37
7.3 Online creativity	58.8	19
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	49.4	18
7.3.2 Country-code TLDs/th pop. 15–69	71.3	10 ●
7.3.3 Wikipedia edits/pop. 15–69	19,348.1	27
7.3.4 Video uploads on YouTube/pop. 15–69	81.7	25

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	9.3
GDP (US\$ billions)	73.5
GDP per capita, PPP\$	11,044.2
Income group	Upper-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	29.6	101
Innovation Output Sub-Index	21.8	109
Innovation Input Sub-Index	37.4	91
Innovation Efficiency Ratio	0.6	120
Global Innovation Index 2013 (out of 142)	29.0	105

1 Institutions	53.4	100
1.1 Political environment	40.4	124 ○
1.1.1 Political stability*	48.9	108
1.1.2 Government effectiveness*	20.1	119
1.1.3 Press freedom*	52.3	128 ○
1.2 Regulatory environment	51.5	111
1.2.1 Regulatory quality*	36.6	107
1.2.2 Rule of law*	24.2	115
1.2.3 Cost of redundancy dismissal, salary weeks	21.7	100
1.3 Business environment	68.2	57
1.3.1 Ease of starting a business*	94.9	13 ●
1.3.2 Ease of resolving insolvency*	36.0	76
1.3.3 Ease of paying taxes*	73.7	52
2 Human capital & research	20.9	100
2.1 Education	29.3	121 ○
2.1.1 Expenditure on education, % GDP	2.4	123 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	11.9	88
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	21.6	99
2.2.1 Tertiary enrolment, % gross	20.4	90
2.2.2 Graduates in science & engineering, %	16.2	76
2.2.3 Tertiary inbound mobility, %	2.5	55
2.3 Research & development (R&D)	11.9	63
2.3.1 Researchers, headcounts/mn pop.	1,292.2	51
2.3.2 Gross expenditure on R&D, % GDP	0.2	86
2.3.3 QS university ranking, average score top 3*	19.2	53
3 Infrastructure	32.4	85
3.1 Information & communication technologies (ICTs)	34.7	78
3.1.1 ICT access*	51.7	65
3.1.2 ICT use*	37.2	48 ●
3.1.3 Government's online service*	36.6	101
3.1.4 E-participation*	13.2	84
3.2 General infrastructure	27.9	98
3.2.1 Electricity output, kWh/cap	2,213.1	75
3.2.2 Logistics performance*	34.5	110
3.2.3 Gross capital formation, % GDP	24.7	52
3.3 Ecological sustainability	34.7	75
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.5	57
3.3.2 Environmental performance*	55.5	59
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.6	78
4 Market sophistication	59.9	26 ●
4.1 Credit	40.1	56
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	20.1	119
4.1.3 Microfinance gross loans, % GDP	3.7	15 ●

4.2 Investment	66.7	10 ●
4.2.1 Ease of protecting investors*	66.7	21 ●
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	73.0	92
4.3.1 Applied tariff rate, weighted mean, %	3.9	70
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	9 ●
4.3.3 Intensity of local competition†	52.8	122 ○

5 Business sophistication	20.1	131 ○
5.1 Knowledge workers	21.6	119
5.1.1 Knowledge-intensive employment, %	24.2	57
5.1.2 Firms offering formal training, % firms	10.5	101 ○
5.1.3 GERD performed by business, % GDP	0.0	72
5.1.4 GERD performed by business, %	17.8	66
5.1.5 GMAT test takers/mn pop. 20–34	34.7	88
5.2 Innovation linkages	19.9	130 ○
5.2.1 University/industry research collaboration†	39.3	81
5.2.2 State of cluster development†	46.3	72
5.2.3 GERD financed by abroad, %	0.0	93 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	81
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	89
5.3 Knowledge absorption	18.9	111
5.3.1 Royalty & license fees payments, % total trade	0.1	105
5.3.2 High-tech imports less re-imports, %	4.0	115 ○
5.3.3 Comm., computer & info. services imp., % total trade	0.5	99
5.3.4 FDI net inflows, % GDP	7.7	21 ●

6 Knowledge & technology outputs	19.1	115
6.1 Knowledge creation	3.9	126 ○
6.1.1 Domestic resident patent app./tr PPP\$ GDP	1.5	59
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.1	90
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.1	54 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	4.2	115
6.1.5 Citable documents H index	45.0	116
6.2 Knowledge impact	31.2	98
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.6	40 ●
6.2.2 New businesses/th pop. 15–64	0.7	70
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.9	101
6.2.5 High- & medium-high-tech manufactures, %	8.4	79
6.3 Knowledge diffusion	22.2	121 ○
6.3.1 Royalty & license fees receipts, % total trade	0.0	112 ○
6.3.2 High-tech exports less re-exports, %	0.2	102
6.3.3 Comm., computer & info. services exp., % total trade	0.4	110
6.3.4 FDI net outflows, % GDP	6.7	8 ●

7 Creative outputs	24.6	104
7.1 Intangible assets	40.9	86
7.1.1 Domestic res trademark app./bn PPP\$ GDP	37.7	66
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.1	63
7.1.3 ICTs & business model creation†	63.3	41 ●
7.1.4 ICTs & organizational model creation†	64.8	23 ●
7.2 Creative goods & services	6.2	108
7.2.1 Cultural & creative services exports, % total trade	0.0	86
7.2.2 National feature films/mn pop. 15–69	3.0	45
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	79 ○
7.2.5 Creative goods exports, % total trade	0.0	121 ○
7.3 Online creativity	10.3	91
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.7	99
7.3.2 Country-code TLDs/th pop. 15–69	18.6	83
7.3.3 Wikipedia edits/pop. 15–69	6,203.3	52
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Bahrain

Key indicators

Population (millions)	1.3
GDP (US\$ billions)	32.2
GDP per capita, PPP\$	34,584.4
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.3	62
Innovation Output Sub-Index	27.1	80
Innovation Input Sub-Index	45.5	48
Innovation Efficiency Ratio	0.6	117
Global Innovation Index 2013 (out of 142)	36.1	67

1	Institutions	67.9	52
1.1	Political environment	43.5	118
1.1.1	Political stability*	38.0	120
1.1.2	Government effectiveness*	55.3	45
1.1.3	Press freedom*	37.3	137 ○
1.2	Regulatory environment	80.2	32
1.2.1	Regulatory quality*	66.8	41
1.2.2	Rule of law*	54.0	52
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	80.1	22 ●
1.3.1	Ease of starting a business*	76.2	103
1.3.2	Ease of resolving insolvency*	71.4	25
1.3.3	Ease of paying taxes*	92.8	7 ●

2	Human capital & research	27.0	78
2.1	Education	40.7	82
2.1.1	Expenditure on education, % GDP	2.6	119 ○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3	School life expectancy, years	n/a	n/a
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	9.8	25
2.2	Tertiary education	34.1	66
2.2.1	Tertiary enrolment, % gross	33.5	73
2.2.2	Graduates in science & engineering, %	17.9	65
2.2.3	Tertiary inbound mobility, %	8.5	19 ●
2.3	Research & development (R&D)	6.0	79
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	6.0	65

3	Infrastructure	48.1	29
3.1	Information & communication technologies (ICTs)	68.0	21 ●
3.1.1	ICT access*	72.5	27
3.1.2	ICT use*	47.5	37
3.1.3	Government's online service*	86.3	9 ●
3.1.4	E-participation*	65.8	19 ●
3.2	General infrastructure	45.1	27
3.2.1	Electricity output, kWh/cap	10,474.2	12 ●
3.2.2	Logistics performance*	57.1	48
3.2.3	Gross capital formation, % GDP	25.9	42
3.3	Ecological sustainability	31.2	88
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.9	111 ○
3.3.2	Environmental performance*	51.8	74
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	4.3	27

4	Market sophistication	48.5	68
4.1	Credit	32.9	82
4.1.1	Ease of getting credit*	43.8	112 ○
4.1.2	Domestic credit to private sector, % GDP	70.0	47
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	36.7	62
4.2.1	Ease of protecting investors*	46.7	97
4.2.2	Market capitalization, % GDP	89.0	18 ●
4.2.3	Total value of stocks traded, % GDP	1.3	65
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	76.0	63
4.3.1	Applied tariff rate, weighted mean, %	5.7	91
4.3.2	Non-agricultural mkt access weighted tariff, %	1.9	90
4.3.3	Intensity of local competition [†]	72.2	38

5	Business sophistication	35.7	49
5.1	Knowledge workers	43.4	54
5.1.1	Knowledge-intensive employment, %	20.7	69
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	177.3	27
5.2	Innovation linkages	50.3	14 ●
5.2.1	University/industry research collaboration [†]	32.2	117
5.2.2	State of cluster development [†]	55.8	30
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	0.4	1 ●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	60
5.3	Knowledge absorption	13.5	128 ○
5.3.1	Royalty & license fees payments, % total trade	n/a	n/a
5.3.2	High-tech imports less re-imports, %	4.2	111 ○
5.3.3	Comm., computer & info. services imp., % total trade	0.3	118
5.3.4	FDI net inflows, % GDP	2.7	68

6	Knowledge & technology outputs	28.4	63
6.1	Knowledge creation	3.0	131 ○
6.1.1	Domestic resident patent app/tr PPP\$ GDP	0.1	102 ○
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	86
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	4.3	112
6.1.5	Citable documents H index	39.0	124
6.2	Knowledge impact	42.8	53
6.2.1	Growth rate of PPP\$ GDP/worker, %	-1.0	104 ○
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	0.4	27
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	17.4	27
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	39.4	34
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	0.0	120 ○
6.3.3	Comm., computer & info. services exp., % total trade	3.4	16 ●
6.3.4	FDI net outflows, % GDP	3.1	22 ●

7	Creative outputs	25.8	100
7.1	Intangible assets	36.4	108
7.1.1	Domestic res trademark app/bn PPP\$ GDP	9.4	96 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.3	48
7.1.3	ICTs & business model creation [†]	62.2	44
7.1.4	ICTs & organizational model creation [†]	58.7	44
7.2	Creative goods & services	2.2	123
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	0.2	41
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.0	123 ○
7.3	Online creativity	28.0	54
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	9.2	50
7.3.2	Country-code TLDs/th pop. 15–69	22.6	73
7.3.3	Wikipedia edits/pop. 15–69	3,226.2	66
7.3.4	Video uploads on YouTube/pop. 15–69	74.9	38

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	154.7
GDP (US\$ billions)	141.3
GDP per capita, PPP\$	2,079.8
Income group	Low income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	24.4	129
Innovation Output Sub-Index	19.7	120
Innovation Input Sub-Index	29.0	130
Innovation Efficiency Ratio	0.7	91
Global Innovation Index 2013 (out of 142)	24.5	130

1	Institutions	45.2	128
1.1	Political environment	36.5	133 ○
1.1.1	Political stability*	32.6	132
1.1.2	Government effectiveness*	18.8	121
1.1.3	Press freedom*	58.0	118
1.2	Regulatory environment	38.2	132
1.2.1	Regulatory quality*	23.7	128
1.2.2	Rule of law*	21.4	121
1.2.3	Cost of redundancy dismissal, salary weeks	31.0	131
1.3	Business environment	61.1	82
1.3.1	Ease of starting a business*	84.7	69
1.3.2	Ease of resolving insolvency*	27.3	104
1.3.3	Ease of paying taxes*	71.2	61 ●
2	Human capital & research	14.1	126
2.1	Education	20.6	134 ○
2.1.1	Expenditure on education, % GDP	2.2	124 ○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	13.9	88
2.1.3	School life expectancy, years	10.0	115
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	30.6	105
2.2	Tertiary education	16.0	108
2.2.1	Tertiary enrolment, % gross	13.2	99
2.2.2	Graduates in science & engineering, %	15.6	83
2.2.3	Tertiary inbound mobility, %	0.1	109 ○
2.3	Research & development (R&D)	5.7	82
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	5.7	66 ●
3	Infrastructure	26.7	110
3.1	Information & communication technologies (ICTs)	18.8	114
3.1.1	ICT access*	20.3	121
3.1.2	ICT use*	2.4	124
3.1.3	Government's online service*	44.4	86
3.1.4	E-participation*	7.9	98
3.2	General infrastructure	31.3	77
3.2.1	Electricity output, kWh/cap	292.8	110
3.2.2	Logistics performance*	44.8	83
3.2.3	Gross capital formation, % GDP	27.6	31 ●
3.3	Ecological sustainability	30.0	94
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.5	43 ●
3.3.2	Environmental performance*	25.6	138 ○
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a
4	Market sophistication	44.1	99
4.1	Credit	32.9	81
4.1.1	Ease of getting credit*	56.3	81
4.1.2	Domestic credit to private sector, % GDP	49.6	67
4.1.3	Microfinance gross loans, % GDP	2.2	24 ●

4.2	Investment	38.2	56 ●
4.2.1	Ease of protecting investors*	66.7	21 ●
4.2.2	Market capitalization, % GDP	15.1	80
4.2.3	Total value of stocks traded, % GDP	10.9	39 ●
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	61.3	129
4.3.1	Applied tariff rate, weighted mean, %	13.0	135 ○
4.3.2	Non-agricultural mkt access weighted tariff, %	3.8	127
4.3.3	Intensity of local competition†	65.5	71

5 Business sophistication **14.9** **138** ○

5.1	Knowledge workers	11.8	138 ○
5.1.1	Knowledge-intensive employment, %	7.3	102 ○
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	9.4	123
5.2	Innovation linkages	25.5	100
5.2.1	University/industry research collaboration†	27.0	128 ○
5.2.2	State of cluster development†	48.2	63 ●
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	82
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3	Knowledge absorption	7.3	140 ○
5.3.1	Royalty & license fees payments, % total trade	0.0	115
5.3.2	High-tech imports less re-imports, %	n/a	n/a
5.3.3	Comm., computer & info. services imp., % total trade	0.1	133 ○
5.3.4	FDI net inflows, % GDP	1.0	114

6 Knowledge & technology outputs **22.2** **99**

6.1	Knowledge creation	6.1	103
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.2	86
6.1.2	PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	4.0	117
6.1.5	Citable documents H index	97.0	67
6.2	Knowledge impact	29.9	104
6.2.1	Growth rate of PPP\$ GDP/worker, %	3.5	26 ●
6.2.2	New businesses/th pop. 15–64	0.1	89
6.2.3	Computer software spending, % GDP	0.2	73 ○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	0.9	124
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	30.5	77
6.3.1	Royalty & license fees receipts, % total trade	0.0	101
6.3.2	High-tech exports less re-exports, %	n/a	n/a
6.3.3	Comm., computer & info. services exp., % total trade	1.4	62 ●
6.3.4	FDI net outflows, % GDP	0.0	105

7 Creative outputs **17.2** **130**

7.1	Intangible assets	33.0	121
7.1.1	Domestic res trademark app./bn PPP\$ GDP	27.4	78
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	47.0	109
7.1.4	ICTs & organizational model creation†	41.5	115
7.2	Creative goods & services	2.3	122
7.2.1	Cultural & creative services exports, % total trade	0.0	100 ○
7.2.2	National feature films/mn pop. 15–69	0.7	83
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	n/a	n/a
7.3	Online creativity	0.5	134 ○
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.5	119
7.3.2	Country-code TLDs/th pop. 15–69	0.6	132
7.3.3	Wikipedia edits/pop. 15–69	238.3	115
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Barbados

Key indicators

Population (millions)	0.3
GDP (US\$ billions)	4.3
GDP per capita, PPP\$	25,180.9
Income group	High income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.8	41
Innovation Output Sub-Index	33.2	53
Innovation Input Sub-Index	48.3	38
Innovation Efficiency Ratio	0.7	87
Global Innovation Index 2013 (out of 142)	40.5	47

1 Institutions	78.5	26
1.1 Political environment	87.3	12 ●
1.1.1 Political stability*	95.0	10 ●
1.1.2 Government effectiveness*	79.6	20
1.1.3 Press freedom*	n/a	n/a
1.2 Regulatory environment	75.3	41
1.2.1 Regulatory quality*	59.8	54
1.2.2 Rule of law*	73.7	30
1.2.3 Cost of redundancy dismissal, salary weeks	16.0	76
1.3 Business environment	72.8	38
1.3.1 Ease of starting a business*	82.8	73
1.3.2 Ease of resolving insolvency*	68.9	26
1.3.3 Ease of paying taxes*	66.7	81

2 Human capital & research	31.6	58
2.1 Education	49.7	50
2.1.1 Expenditure on education, % GDP	5.6	41
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	25.0	39
2.1.3 School life expectancy, years	15.4	36
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	14.6	56
2.2 Tertiary education	45.0	35
2.2.1 Tertiary enrolment, % gross	60.8	35
2.2.2 Graduates in science & engineering, %	15.0	86 ○
2.2.3 Tertiary inbound mobility, %	13.8	12 ●
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	27.9	103
3.1 Information & communication technologies (ICTs)	40.7	63
3.1.1 ICT access*	72.9	25
3.1.2 ICT use*	50.0	31
3.1.3 Government's online service*	37.3	99
3.1.4 E-participation*	2.6	116 ○
3.2 General infrastructure	11.3	142 ○
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	n/a	n/a
3.2.3 Gross capital formation, % GDP	14.3	130 ○
3.3 Ecological sustainability	31.6	87
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	45.5	94
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.6	81

4 Market sophistication	48.7	66
4.1 Credit	40.9	54
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	80.6	39
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	33.3	81
4.2.1 Ease of protecting investors*	30.0	133 ○
4.2.2 Market capitalization, % GDP	124.1	6 ●
4.2.3 Total value of stocks traded, % GDP	0.5	79
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	72.0	97
4.3.1 Applied tariff rate, weighted mean, %	14.8	137 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	17 ●
4.3.3 Intensity of local competition†	70.2	48

5 Business sophistication	55.0	5 ●
5.1 Knowledge workers	61.9	24
5.1.1 Knowledge-intensive employment, %	30.3	46
5.1.2 Firms offering formal training, % firms	53.1	19
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	390.1	11 ●
5.2 Innovation linkages	63.1	3 ●
5.2.1 University/industry research collaboration†	54.7	37
5.2.2 State of cluster development†	46.2	73
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	7 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	4.8	3 ●
5.3 Knowledge absorption	39.9	17 ●
5.3.1 Royalty & license fees payments, % total trade	0.9	32
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	1.9	12 ●
5.3.4 FDI net inflows, % GDP	7.6	23

6 Knowledge & technology outputs	38.0	33
6.1 Knowledge creation	30.0	33
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.1	98 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	23.7	1 ●
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	9.7	75
6.1.5 Citable documents H index	50.0	111 ○
6.2 Knowledge impact	44.0	49
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.3	85 ○
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	6.3	57
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	40.0	32
6.3.1 Royalty & license fees receipts, % total trade	0.2	40
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	1.8	48
6.3.4 FDI net outflows, % GDP	7.7	7 ●

7 Creative outputs	28.5	85
7.1 Intangible assets	39.5	93
7.1.1 Domestic res trademark app/bn PPP\$ GDP	28.0	77 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	55.5	71
7.1.4 ICTs & organizational model creation†	52.0	73
7.2 Creative goods & services	22.0	56
7.2.1 Cultural & creative services exports, % total trade	0.3	28
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	13.0	81
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	12.9	42
7.3.2 Country-code TLDs/th pop. 15–69	20.7	76
7.3.3 Wikipedia edits/pop. 15–69	3,174.5	69
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	9.5
GDP (US\$ billions)	71.7
GDP per capita, PPP\$	15,753.2
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	37.1	58
Innovation Output Sub-Index	33.7	50
Innovation Input Sub-Index	40.5	70
Innovation Efficiency Ratio	0.8	27 ●
Global Innovation Index 2013 (out of 142)	34.6	77

1 Institutions	52.1	105
1.1 Political environment	44.6	110
1.1.1 Political stability*	66.3	69
1.1.2 Government effectiveness*	15.8	128 ○
1.1.3 Press freedom*	51.7	129 ○
1.2 Regulatory environment	46.6	120 ○
1.2.1 Regulatory quality*	20.2	135 ○
1.2.2 Rule of law*	21.0	124 ○
1.2.3 Cost of redundancy dismissal, salary weeks	21.7	100
1.3 Business environment	65.0	69
1.3.1 Ease of starting a business*	90.9	31
1.3.2 Ease of resolving insolvency*	39.1	66
1.3.3 Ease of paying taxes*	65.0	86
2 Human capital & research	39.8	38
2.1 Education	53.6	35
2.1.1 Expenditure on education, % GDP	5.1	55
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	15.7	25 ●
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	50.0	24 ●
2.2.1 Tertiary enrolment, % gross	91.5	4 ●
2.2.2 Graduates in science & engineering, %	27.2	17 ●
2.2.3 Tertiary inbound mobility, %	2.1	59
2.3 Research & development (R&D)	15.7	53
2.3.1 Researchers, headcounts/mn pop.	2,081.2	38
2.3.2 Gross expenditure on R&D, % GDP	0.7	49
2.3.3 QS university ranking, average score top 3*	11.8	58
3 Infrastructure	39.9	56
3.1 Information & communication technologies (ICTs)	38.6	68
3.1.1 ICT access*	64.1	45
3.1.2 ICT use*	41.3	44
3.1.3 Government's online service*	41.2	94
3.1.4 E-participation*	7.9	98
3.2 General infrastructure	46.3	22 ●
3.2.1 Electricity output, kWh/cap	3,399.4	58
3.2.2 Logistics performance*	39.7	91
3.2.3 Gross capital formation, % GDP	39.5	6 ●
3.3 Ecological sustainability	34.7	74
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.2	95
3.3.2 Environmental performance*	67.7	32
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	113 ○
4 Market sophistication	46.0	86
4.1 Credit	28.0	100
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	22.6	114
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	50.0	30
4.2.1 Ease of protecting investors*	50.0	81
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	59.9	130 ○
4.3.1 Applied tariff rate, weighted mean, %	1.8	44
4.3.2 Non-agricultural mkt access weighted tariff, %	7.0	137 ○
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication **24.9** **114**

5.1 Knowledge workers	53.4	35
5.1.1 Knowledge-intensive employment, %	35.9	31
5.1.2 Firms offering formal training, % firms	47.7	31
5.1.3 GERD performed by business, % GDP	0.5	34
5.1.4 GERD performed by business, %	69.9	7 ●
5.1.5 GMAT test takers/mn pop. 20–34	50.5	75
5.2 Innovation linkages	8.8	140 ○
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	8.7	47
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	55
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	95 ○
5.3 Knowledge absorption	12.5	133 ○
5.3.1 Royalty & license fees payments, % total trade	0.2	78
5.3.2 High-tech imports less re-imports, %	4.2	112 ○
5.3.3 Comm., computer & info. services imp., % total trade	0.4	110
5.3.4 FDI net inflows, % GDP	2.3	81

6 Knowledge & technology outputs **38.8** **30**

6.1 Knowledge creation	49.2	13 ●
6.1.1 Domestic resident patent app/tr PPP\$ GDP	11.6	6 ●
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.1	74
6.1.3 Domestic res utility model app/tr PPP\$ GDP	7.6	1 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.8	92
6.1.5 Citable documents H index	106.0	60
6.2 Knowledge impact	41.0	61
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.8	9 ●
6.2.2 New businesses/th pop. 15–64	1.1	55
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.2	120 ○
6.2.5 High- & medium-high-tech manufactures, %	28.7	36
6.3 Knowledge diffusion	26.2	100
6.3.1 Royalty & license fees receipts, % total trade	0.0	70
6.3.2 High-tech exports less re-exports, %	1.3	63
6.3.3 Comm., computer & info. services exp., % total trade	1.2	78
6.3.4 FDI net outflows, % GDP	0.2	77

7 Creative outputs **28.6** **84**

7.1 Intangible assets	43.1	74
7.1.1 Domestic res trademark app/bn PPP\$ GDP	121.7	9 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.0	16 ●
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	10.6	92
7.2.1 Cultural & creative services exports, % total trade	0.2	41
7.2.2 National feature films/mn pop. 15–69	0.1	97 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.5	61
7.3 Online creativity	17.5	70
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.9	76
7.3.2 Country-code TLDs/th pop. 15–69	36.4	49
7.3.3 Wikipedia edits/pop. 15–69	7,714.7	49
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Belgium

Key indicators

Population (millions)	11.1
GDP (US\$ billions)	506.6
GDP per capita, PPP\$	37,880.5
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	51.7	23
Innovation Output Sub-Index	45.2	23
Innovation Input Sub-Index	58.2	22
Innovation Efficiency Ratio	0.8	55
Global Innovation Index 2013 (out of 142)	52.5	21
1 Institutions	87.9	15
1.1 Political environment	86.0	15
1.1.1 Political stability*	87.7	28
1.1.2 Government effectiveness*	83.3	13 ●
1.1.3 Press freedom*	87.1	19
1.2 Regulatory environment	91.4	17
1.2.1 Regulatory quality*	80.7	21
1.2.2 Rule of law*	84.8	20
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	86.2	14
1.3.1 Ease of starting a business*	94.2	16
1.3.2 Ease of resolving insolvency*	94.2	6 ●
1.3.3 Ease of paying taxes*	70.1	66
2 Human capital & research	51.7	20
2.1 Education	56.7	19
2.1.1 Expenditure on education, % GDP	6.6	19
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	37.8	7 ●
2.1.3 School life expectancy, years	16.2	21
2.1.4 PISA scales in reading, maths, & science	509.8	15
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	41.6	40
2.2.1 Tertiary enrolment, % gross	69.3	25
2.2.2 Graduates in science & engineering, %	16.5	74 ○
2.2.3 Tertiary inbound mobility, %	8.2	20
2.3 Research & development (R&D)	57.0	17
2.3.1 Researchers, headcounts/mn pop.	5,742.6	18
2.3.2 Gross expenditure on R&D, % GDP	2.2	15
2.3.3 QS university ranking, average score top 3*	66.0	15
3 Infrastructure	46.5	33
3.1 Information & communication technologies (ICTs)	53.0	37
3.1.1 ICT access*	76.7	18
3.1.2 ICT use*	57.5	26
3.1.3 Government's online service*	64.7	39
3.1.4 E-participation*	13.2	84 ○
3.2 General infrastructure	45.1	26
3.2.1 Electricity output, kWh/cap	6,999.3	29
3.2.2 Logistics performance*	94.0	7 ●
3.2.3 Gross capital formation, % GDP	21.3	77 ○
3.3 Ecological sustainability	41.4	53
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.4	58
3.3.2 Environmental performance*	66.6	36
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.5	39
4 Market sophistication	58.5	30
4.1 Credit	46.0	43
4.1.1 Ease of getting credit*	62.5	69 ○
4.1.2 Domestic credit to private sector, % GDP	92.2	34
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	47.9	35
4.2.1 Ease of protecting investors*	70.0	16
4.2.2 Market capitalization, % GDP	62.0	31
4.2.3 Total value of stocks traded, % GDP	21.3	29
4.2.4 Venture capital deals/tr PPP\$ GDP	0.2	15
4.3 Trade & competition	81.7	21
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	82.8	5 ●
5 Business sophistication	46.5	18
5.1 Knowledge workers	68.0	13 ●
5.1.1 Knowledge-intensive employment, %	44.6	11
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.5	12
5.1.4 GERD performed by business, %	67.8	13
5.1.5 GMAT test takers/mn pop. 20–34	172.3	28
5.2 Innovation linkages	43.9	33
5.2.1 University/industry research collaboration†	75.5	6 ●
5.2.2 State of cluster development†	63.5	19
5.2.3 GERD financed by abroad, %	13.0	36
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	64 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.1	17
5.3 Knowledge absorption	27.6	55
5.3.1 Royalty & license fees payments, % total trade	0.7	45
5.3.2 High-tech imports less re-imports, %	9.2	41
5.3.3 Comm., computer & info. services imp., % total trade	1.8	14
5.3.4 FDI net inflows, % GDP	-0.4	139 ○
6 Knowledge & technology outputs	44.6	19
6.1 Knowledge creation	44.8	22
6.1.1 Domestic resident patent app/tr PPP\$ GDP	1.8	53
6.1.2 PCT resident patent app/tr PPP\$ GDP	2.9	17
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	44.0	14
6.1.5 Citable documents H index	454.0	13 ●
6.2 Knowledge impact	44.1	48
6.2.1 Growth rate of PPP\$ GDP/worker, %	-0.2	92 ○
6.2.2 New businesses/th pop. 15–64	2.5	38
6.2.3 Computer software spending, % GDP	0.7	7 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	9.4	51
6.2.5 High- & medium-high-tech manufactures, %	34.2	29
6.3 Knowledge diffusion	44.8	21
6.3.1 Royalty & license fees receipts, % total trade	0.7	19
6.3.2 High-tech exports less re-exports, %	9.3	23
6.3.3 Comm., computer & info. services exp., % total trade	2.3	30
6.3.4 FDI net outflows, % GDP	3.0	24
7 Creative outputs	45.7	22
7.1 Intangible assets	46.9	55
7.1.1 Domestic res trademark app/bn PPP\$ GDP	47.4	57 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.7	20
7.1.3 ICTs & business model creation†	66.8	29
7.1.4 ICTs & organizational model creation†	63.5	28
7.2 Creative goods & services	31.7	37
7.2.1 Cultural & creative services exports, % total trade	0.1	50
7.2.2 National feature films/mn pop. 15–69	6.2	21
7.2.3 Global ent. & media output/th pop. 15–69	1.5	15
7.2.4 Printing & publishing manufactures, %	0.0	46 ○
7.2.5 Creative goods exports, % total trade	2.0	27
7.3 Online creativity	57.6	22
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	22.7	29
7.3.2 Country-code TLDs/th pop. 15–69	70.4	11 ●
7.3.3 Wikipedia edits/pop. 15–69	29,735.8	9 ●
7.3.4 Video uploads on YouTube/pop. 15–69	86.7	17

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	10.1
GDP (US\$ billions)	8.3
GDP per capita, PPP\$	1,622.6
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	24.2	132
Innovation Output Sub-Index	18.1	129
Innovation Input Sub-Index	30.3	129
Innovation Efficiency Ratio	0.6	115
Global Innovation Index 2013 (out of 142)	25.1	127

1	Institutions	53.4	101
1.1	Political environment	57.2	70 ●
1.1.1	Political stability*	73.3	54 ●
1.1.2	Government effectiveness*	26.6	101
1.1.3	Press freedom*	71.7	65 ●
1.2	Regulatory environment	63.2	80
1.2.1	Regulatory quality*	38.5	102
1.2.2	Rule of law*	28.8	101
1.2.3	Cost of redundancy dismissal, salary weeks	11.6	48 ●
1.3	Business environment	39.7	136 ○
1.3.1	Ease of starting a business*	63.8	127
1.3.2	Ease of resolving insolvency*	19.2	120
1.3.3	Ease of paying taxes*	36.0	135 ○
2	Human capital & research	18.1	108
2.1	Education	36.5	91
2.1.1	Expenditure on education, % GDP	5.3	50 ●
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	24.7	42 ●
2.1.3	School life expectancy, years	11.0	104
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	23.9	85
2.2	Tertiary education	17.2	107
2.2.1	Tertiary enrolment, % gross	12.4	101
2.2.2	Graduates in science & engineering, %	12.7	93
2.2.3	Tertiary inbound mobility, %	n/a	n/a
2.3	Research & development (R&D)	0.5	124
2.3.1	Researchers, headcounts/mn pop.	114.8	100
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	18.3	134
3.1	Information & communication technologies (ICTs)	13.1	134
3.1.1	ICT access*	23.6	117
3.1.2	ICT use*	1.4	127
3.1.3	Government's online service*	19.6	134 ○
3.1.4	E-participation*	7.9	98
3.2	General infrastructure	22.9	122
3.2.1	Electricity output, kWh/cap	16.9	124 ○
3.2.2	Logistics performance*	49.2	66 ●
3.2.3	Gross capital formation, % GDP	19.0	103
3.3	Ecological sustainability	19.0	138 ○
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.5	103
3.3.2	Environmental performance*	32.4	125
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	120
4	Market sophistication	36.5	137 ○
4.1	Credit	26.4	107
4.1.1	Ease of getting credit*	43.8	112
4.1.2	Domestic credit to private sector, % GDP	24.0	111
4.1.3	Microfinance gross loans, % GDP	2.3	23 ●

4.2	Investment	33.3	76
4.2.1	Ease of protecting investors*	33.3	125
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	49.7	142 ○
4.3.1	Applied tariff rate, weighted mean, %	15.0	138 ○
4.3.2	Non-agricultural mkt access weighted tariff, %	6.9	136 ○
4.3.3	Intensity of local competition†	62.3	85

5 Business sophistication **25.2** **111**

5.1	Knowledge workers	24.7	112
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	26.8	73
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	11.6	117
5.2	Innovation linkages	22.7	118
5.2.1	University/industry research collaboration†	28.0	123
5.2.2	State of cluster development†	31.3	125
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3	Knowledge absorption	28.1	50 ●
5.3.1	Royalty & license fees payments, % total trade	0.1	88
5.3.2	High-tech imports less re-imports, %	n/a	n/a
5.3.3	Comm., computer & info. services imp., % total trade	2.2	9 ●
5.3.4	FDI net inflows, % GDP	1.6	94

6 Knowledge & technology outputs **15.0** **127**

6.1	Knowledge creation	9.9	81
6.1.1	Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	80
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	15.3	58 ●
6.1.5	Citable documents H index	49.0	113
6.2	Knowledge impact	4.7	133
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.1	96
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	30.6	76
6.3.1	Royalty & license fees receipts, % total trade	0.0	114 ○
6.3.2	High-tech exports less re-exports, %	n/a	n/a
6.3.3	Comm., computer & info. services exp., % total trade	1.7	51 ●
6.3.4	FDI net outflows, % GDP	-2.2	122 ○

7 Creative outputs **21.2** **119**

7.1	Intangible assets	42.2	81
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	49.2	96
7.1.4	ICTs & organizational model creation†	35.2	126
7.2	Creative goods & services	0.0	140 ○
7.2.1	Cultural & creative services exports, % total trade	0.0	103 ○
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	n/a	n/a
7.3	Online creativity	0.5	133
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.7	110
7.3.2	Country-code TLDs/th pop. 15–69	0.9	131
7.3.3	Wikipedia edits/pop. 15–69	31.7	135 ○
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Bhutan

Key indicators

Population (millions)	0.7
GDP (US\$ billions)	2.0
GDP per capita, PPP\$	6,369.7
Income group	Lower-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	31.8	86
Innovation Output Sub-Index	23.9	102
Innovation Input Sub-Index	39.8	76
Innovation Efficiency Ratio	0.6	112
Global Innovation Index 2013 (out of 142)	n/a	n/a

1 Institutions	62.6	62
1.1 Political environment	70.3	47 ●
1.1.1 Political stability*	85.6	30 ●
1.1.2 Government effectiveness*	53.6	47 ●
1.1.3 Press freedom*	71.6	68
1.2 Regulatory environment	67.5	63
1.2.1 Regulatory quality*	19.6	136 ○
1.2.2 Rule of law*	51.6	56 ●
1.2.3 Cost of redundancy dismissal, salary weeks	8.3	23 ●
1.3 Business environment	49.9	118
1.3.1 Ease of starting a business*	80.0	91
1.3.2 Ease of resolving insolvency*	0.0	140 ○
1.3.3 Ease of paying taxes*	69.8	69

2 Human capital & research	17.0	116
2.1 Education	42.3	71
2.1.1 Expenditure on education, % GDP	4.7	70
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	31.5	19 ●
2.1.3 School life expectancy, years	12.7	77
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	19.9	79
2.2 Tertiary education	8.8	125
2.2.1 Tertiary enrolment, % gross	9.4	112
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	44.0	43 ●
3.1 Information & communication technologies (ICTs)	18.8	113
3.1.1 ICT access*	26.8	105
3.1.2 ICT use*	10.5	105
3.1.3 Government's online service*	35.3	106
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	66.4	1 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	36.1	105
3.2.3 Gross capital formation, % GDP	47.7	4 ●
3.3 Ecological sustainability	46.9	36 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	46.9	92
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	45.9	87
4.1 Credit	47.6	38 ●
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	47.5	73
4.1.3 Microfinance gross loans, % GDP	6.3	6 ●

4.2 Investment	36.7	59
4.2.1 Ease of protecting investors*	36.7	119
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	53.4	137 ○
4.3.1 Applied tariff rate, weighted mean, %	17.8	140 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	n/a	n/a
4.3.3 Intensity of local competition†	61.5	91

5 Business sophistication	29.3	85
5.1 Knowledge workers	31.1	91
5.1.1 Knowledge-intensive employment, %	16.5	85
5.1.2 Firms offering formal training, % firms	29.9	66
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	39.0	81
5.2 Innovation linkages	43.4	35 ●
5.2.1 University/industry research collaboration†	28.0	123 ○
5.2.2 State of cluster development†	41.2	93
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	10 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	13.3	129
5.3.1 Royalty & license fees payments, % total trade	0.0	122 ○
5.3.2 High-tech imports less re-imports, %	6.0	84
5.3.3 Comm., computer & info. services imp., % total trade	0.5	95
5.3.4 FDI net inflows, % GDP	0.9	117

6 Knowledge & technology outputs	2.8	142 ○
6.1 Knowledge creation	5.1	113
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.7	94
6.1.5 Citable documents H index	18.0	141 ○
6.2 Knowledge impact	2.5	140 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	0.2	85
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.6	109
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	0.7	140 ○
6.3.1 Royalty & license fees receipts, % total trade	0.0	107 ○
6.3.2 High-tech exports less re-exports, %	0.0	127 ○
6.3.3 Comm., computer & info. services exp., % total trade	0.1	129 ○
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	45.0	25 ●
7.1 Intangible assets	45.4	66
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	47.8	105
7.1.4 ICTs & organizational model creation†	43.0	111
7.2 Creative goods & services	83.3	1 ●
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	58.5	1 ●
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	7.1	7 ●
7.3 Online creativity	6.0	106
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.1	89
7.3.2 Country-code TLDs/th pop. 15–69	15.2	86
7.3.3 Wikipedia edits/pop. 15–69	371.4	108
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	10.5
GDP (US\$ billions)	29.8
GDP per capita, PPP\$	5,363.5
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.8	111
Innovation Output Sub-Index	22.8	106
Innovation Input Sub-Index	32.7	115
Innovation Efficiency Ratio	0.7	84
Global Innovation Index 2013 (out of 142)	30.5	95

1	Institutions	32.7	141	○
1.1	Political environment	50.5	87	
1.1.1	Political stability*	53.4	95	
1.1.2	Government effectiveness*	30.9	90	
1.1.3	Press freedom*	67.2	88	
1.2	Regulatory environment	11.2	141	○
1.2.1	Regulatory quality*	27.0	124	○
1.2.2	Rule of law*	17.7	127	○
1.2.3	Cost of redundancy dismissal, salary weeks	82.3	139	○
1.3	Business environment	36.5	140	○
1.3.1	Ease of starting a business*	55.7	135	○
1.3.2	Ease of resolving insolvency*	41.2	59	●
1.3.3	Ease of paying taxes*	12.7	142	○
2	Human capital & research	28.1	74	
2.1	Education	44.9	63	●
2.1.1	Expenditure on education, % GDP	6.9	13	●
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	19.5	63	
2.1.3	School life expectancy, years	13.2	70	
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	18.2	76	
2.2	Tertiary education	37.8	55	●
2.2.1	Tertiary enrolment, % gross	37.7	69	
2.2.2	Graduates in science & engineering, %	n/a	n/a	
2.2.3	Tertiary inbound mobility, %	n/a	n/a	
2.3	Research & development (R&D)	1.7	110	
2.3.1	Researchers, headcounts/mn pop.	212.0	84	
2.3.2	Gross expenditure on R&D, % GDP	0.2	92	
2.3.3	QS university ranking, average score top 3*	0.0	70	○
3	Infrastructure	26.9	108	
3.1	Information & communication technologies (ICTs)	27.3	97	
3.1.1	ICT access*	32.7	98	
3.1.2	ICT use*	14.2	96	
3.1.3	Government's online service*	41.2	94	
3.1.4	E-participation*	21.1	65	
3.2	General infrastructure	21.7	126	○
3.2.1	Electricity output, kWh/cap	715.8	99	
3.2.2	Logistics performance*	39.7	91	
3.2.3	Gross capital formation, % GDP	19.3	98	
3.3	Ecological sustainability	31.8	86	
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.9	69	
3.3.2	Environmental performance*	50.5	79	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.8	68	
4	Market sophistication	48.2	71	
4.1	Credit	52.4	30	●
4.1.1	Ease of getting credit*	43.8	112	○
4.1.2	Domestic credit to private sector, % GDP	44.2	77	
4.1.3	Microfinance gross loans, % GDP	13.7	1	●

4.2	Investment	22.4	130	○
4.2.1	Ease of protecting investors*	40.0	113	
4.2.2	Market capitalization, % GDP	16.4	79	
4.2.3	Total value of stocks traded, % GDP	0.1	102	○
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a	
4.3	Trade & competition	69.8	112	
4.3.1	Applied tariff rate, weighted mean, %	3.7	64	●
4.3.2	Non-agricultural mkt access weighted tariff, %	0.2	35	●
4.3.3	Intensity of local competition [†]	47.2	129	○

5	Business sophistication	27.7	96	
5.1	Knowledge workers	40.1	66	
5.1.1	Knowledge-intensive employment, %	15.3	91	
5.1.2	Firms offering formal training, % firms	54.1	17	●
5.1.3	GERD performed by business, % GDP	n/a	n/a	
5.1.4	GERD performed by business, %	n/a	n/a	
5.1.5	GMAT test takers/mn pop. 20–34	13.3	115	
5.2	Innovation linkages	23.0	117	
5.2.1	University/industry research collaboration [†]	42.5	68	
5.2.2	State of cluster development [†]	42.5	85	
5.2.3	GERD financed by abroad, %	1.9	73	
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a	
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	72	
5.3	Knowledge absorption	20.1	101	
5.3.1	Royalty & license fees payments, % total trade	0.2	76	
5.3.2	High-tech imports less re-imports, %	6.9	66	
5.3.3	Comm., computer & info. services imp., % total trade	0.7	76	
5.3.4	FDI net inflows, % GDP	3.6	60	●
6	Knowledge & technology outputs	21.4	104	
6.1	Knowledge creation	5.9	105	
6.1.1	Domestic resident patent app./tr PPP\$ GDP	n/a	n/a	
6.1.2	PCT resident patent app./tr PPP\$ GDP	n/a	n/a	
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a	
6.1.4	Scientific & technical articles/bn PPP\$ GDP	3.8	118	
6.1.5	Citable documents H index	61.0	96	
6.2	Knowledge impact	32.3	94	
6.2.1	Growth rate of PPP\$ GDP/worker, %	2.7	38	●
6.2.2	New businesses/th pop. 15–64	0.6	73	
6.2.3	Computer software spending, % GDP	0.3	62	○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	3.4	81	
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a	
6.3	Knowledge diffusion	26.0	102	
6.3.1	Royalty & license fees receipts, % total trade	0.1	60	
6.3.2	High-tech exports less re-exports, %	0.5	80	
6.3.3	Comm., computer & info. services exp., % total trade	1.0	83	
6.3.4	FDI net outflows, % GDP	0.0	104	
7	Creative outputs	24.1	105	
7.1	Intangible assets	37.2	104	
7.1.1	Domestic res trademark app./bn PPP\$ GDP	46.8	58	
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a	
7.1.3	ICTs & business model creation [†]	48.0	104	
7.1.4	ICTs & organizational model creation [†]	45.5	95	
7.2	Creative goods & services	16.9	73	
7.2.1	Cultural & creative services exports, % total trade	0.1	66	
7.2.2	National feature films/mn pop. 15–69	4.1	31	●
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a	
7.2.4	Printing & publishing manufactures, %	n/a	n/a	
7.2.5	Creative goods exports, % total trade	0.7	50	●
7.3	Online creativity	5.2	108	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.9	95	
7.3.2	Country-code TLDs/th pop. 15–69	12.1	96	
7.3.3	Wikipedia edits/pop. 15–69	995.1	97	
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a	

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Bosnia and Herzegovina

Key indicators

Population (millions)	3.8
GDP (US\$ billions)	17.8
GDP per capita, PPP\$	8,280.4
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.4	81
Innovation Output Sub-Index	25.5	92
Innovation Input Sub-Index	39.4	82
Innovation Efficiency Ratio	0.6	101
Global Innovation Index 2013 (out of 142)	36.2	65

1 Institutions	59.5	78
1.1 Political environment	51.4	84
1.1.1 Political stability*	52.6	98
1.1.2 Government effectiveness*	28.4	96
1.1.3 Press freedom*	73.1	55
1.2 Regulatory environment	70.6	52
1.2.1 Regulatory quality*	47.1	76
1.2.2 Rule of law*	40.0	73
1.2.3 Cost of redundancy dismissal, salary weeks	9.2	31 ●
1.3 Business environment	56.5	94
1.3.1 Ease of starting a business*	71.0	114
1.3.2 Ease of resolving insolvency*	38.2	69
1.3.3 Ease of paying taxes*	60.3	102

2 Human capital & research	18.1	107
2.1 Education	n/a	n/a
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	33.7	68
2.2.1 Tertiary enrolment, % gross	37.7	68
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	5.9	29 ●
2.3 Research & development (R&D)	2.4	101
2.3.1 Researchers, headcounts/mn pop.	763.3	60
2.3.2 Gross expenditure on R&D, % GDP	0.0	116 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	29.4	95
3.1 Information & communication technologies (ICTs)	29.4	92
3.1.1 ICT access*	48.3	70
3.1.2 ICT use*	31.9	57
3.1.3 Government's online service*	37.3	99
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	26.3	104
3.2.1 Electricity output, kWh/cap	4,074.7	53
3.2.2 Logistics performance*	54.8	55
3.2.3 Gross capital formation, % GDP	16.1	123 ○
3.3 Ecological sustainability	32.7	81
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.0	97
3.3.2 Environmental performance*	45.8	93
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	5.5	23 ●

4 Market sophistication	51.9	47
4.1 Credit	40.2	55
4.1.1 Ease of getting credit*	62.5	69
4.1.2 Domestic credit to private sector, % GDP	62.3	51
4.1.3 Microfinance gross loans, % GDP	3.1	17 ●

4.2 Investment	46.7	36 ●
4.2.1 Ease of protecting investors*	46.7	97
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a

4.3 Trade & competition	68.7	115
4.3.1 Applied tariff rate, weighted mean, %	1.5	41 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	14 ●
4.3.3 Intensity of local competition†	40.3	132 ○

5 Business sophistication	37.9	40 ●
5.1 Knowledge workers	65.5	19 ●
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	67.5	6 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	30.6	97

5.2 Innovation linkages	29.1	82
5.2.1 University/industry research collaboration†	55.3	36 ●
5.2.2 State of cluster development†	16.0	136 ○
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a

5.3 Knowledge absorption	19.3	107
5.3.1 Royalty & license fees payments, % total trade	0.1	102
5.3.2 High-tech imports less re-imports, %	5.7	90
5.3.3 Comm., computer & info. services imp., % total trade	0.9	65
5.3.4 FDI net inflows, % GDP	3.7	58

6 Knowledge & technology outputs	29.2	61
6.1 Knowledge creation	6.5	99
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.1	105 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	56
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	9.5	76
6.1.5 Citable documents H index	44.0	119

6.2 Knowledge impact	52.3	21 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	–0.2	93
6.2.2 New businesses/th pop. 15–64	0.7	69
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	39.3	7 ●
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	28.9	84
6.3.1 Royalty & license fees receipts, % total trade	0.2	41
6.3.2 High-tech exports less re-exports, %	1.0	69
6.3.3 Comm., computer & info. services exp., % total trade	1.2	76
6.3.4 FDI net outflows, % GDP	0.0	107 ○

7 Creative outputs	21.8	116
7.1 Intangible assets	32.0	125 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	16.9	87 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.4	43
7.1.3 ICTs & business model creation†	51.5	88
7.1.4 ICTs & organizational model creation†	50.5	77

7.2 Creative goods & services	7.3	106
7.2.1 Cultural & creative services exports, % total trade	0.0	91 ○
7.2.2 National feature films/mn pop. 15–69	2.5	51
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.2	81

7.3 Online creativity	15.9	76
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.7	81
7.3.2 Country-code TLDs/th pop. 15–69	25.1	69
7.3.3 Wikipedia edits/pop. 15–69	11,760.9	42 ●
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.0
GDP (US\$ billions)	14.8
GDP per capita, PPP\$	16,376.7
Income group	Upper-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.9	92
Innovation Output Sub-Index	20.5	116
Innovation Input Sub-Index	41.2	67
Innovation Efficiency Ratio	0.5	133 ○
Global Innovation Index 2013 (out of 142)	31.1	91

1 Institutions	71.5	42
1.1 Political environment	74.1	36 ●
1.1.1 Political stability*	92.8	13 ●
1.1.2 Government effectiveness*	52.6	49
1.1.3 Press freedom*	77.1	36 ●
1.2 Regulatory environment	69.1	59
1.2.1 Regulatory quality*	66.9	40
1.2.2 Rule of law*	64.5	39
1.2.3 Cost of redundancy dismissal, salary weeks	21.7	103
1.3 Business environment	71.3	41
1.3.1 Ease of starting a business*	72.6	110
1.3.2 Ease of resolving insolvency*	65.6	30 ●
1.3.3 Ease of paying taxes*	75.8	45

2 Human capital & research	25.1	85
2.1 Education	54.5	29 ●
2.1.1 Expenditure on education, % GDP	9.5	2 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	33.0	15 ●
2.1.3 School life expectancy, years	11.7	92
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	13.9	48
2.2 Tertiary education	13.9	116
2.2.1 Tertiary enrolment, % gross	7.4	120 ○
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	4.2	40
2.3 Research & development (R&D)	6.8	77
2.3.1 Researchers, headcounts/mn pop.	923.3	58
2.3.2 Gross expenditure on R&D, % GDP	0.5	57
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	35.4	76
3.1 Information & communication technologies (ICTs)	21.1	107
3.1.1 ICT access*	35.8	93
3.1.2 ICT use*	10.0	106
3.1.3 Government's online service*	36.0	104
3.1.4 E-participation*	2.6	116 ○
3.2 General infrastructure	43.3	32 ●
3.2.1 Electricity output, kWh/cap	183.3	116 ○
3.2.2 Logistics performance*	48.8	68
3.2.3 Gross capital formation, % GDP	38.3	8 ●
3.3 Ecological sustainability	41.6	52
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	11.9	7 ●
3.3.2 Environmental performance*	47.6	90
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	96

4 Market sophistication	49.5	60
4.1 Credit	35.8	68
4.1.1 Ease of getting credit*	62.5	69
4.1.2 Domestic credit to private sector, % GDP	32.0	93
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	34.8	70
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	31.8	56
4.2.3 Total value of stocks traded, % GDP	0.8	72
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	77.9	43
4.3.1 Applied tariff rate, weighted mean, %	3.6	63
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	1 ●
4.3.3 Intensity of local competition†	62.2	88

5 Business sophistication	24.5	117
5.1 Knowledge workers	33.7	86
5.1.1 Knowledge-intensive employment, %	17.1	81
5.1.2 Firms offering formal training, % firms	51.8	23 ●
5.1.3 GERD performed by business, % GDP	0.1	59
5.1.4 GERD performed by business, %	15.6	68
5.1.5 GMAT test takers/mn pop. 20–34	35.6	86
5.2 Innovation linkages	27.5	89
5.2.1 University/industry research collaboration†	37.2	97
5.2.2 State of cluster development†	43.0	84
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	48
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	12.5	134 ○
5.3.1 Royalty & license fees payments, % total trade	0.2	83
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.4	112
5.3.4 FDI net inflows, % GDP	2.0	86

6 Knowledge & technology outputs	23.7	92
6.1 Knowledge creation	5.2	112
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	99
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.9	101
6.1.5 Citable documents H index	57.0	100
6.2 Knowledge impact	41.2	60
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	12.3	7 ●
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.5	130 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	24.8	110
6.3.1 Royalty & license fees receipts, % total trade	0.0	102 ○
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	0.1	133 ○
6.3.4 FDI net outflows, % GDP	–0.1	111

7 Creative outputs	17.3	129
7.1 Intangible assets	33.9	119
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.2	56
7.1.3 ICTs & business model creation†	44.0	116
7.1.4 ICTs & organizational model creation†	39.3	121 ○
7.2 Creative goods & services	0.0	141 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	105 ○
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	1.6	122
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.2	103
7.3.2 Country-code TLDs/th pop. 15–69	3.3	118
7.3.3 Wikipedia edits/pop. 15–69	245.0	114
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Brazil

Key indicators

Population (millions)	198.7
GDP (US\$ billions)	2,242.9
GDP per capita, PPP\$	12,220.9
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.3	61
Innovation Output Sub-Index	30.8	64
Innovation Input Sub-Index	41.7	63
Innovation Efficiency Ratio	0.7	71
Global Innovation Index 2013 (out of 142)	36.3	64
1 Institutions	53.9	96
1.1 Political environment	57.4	69
1.1.1 Political stability*	67.3	67
1.1.2 Government effectiveness*	37.5	78
1.1.3 Press freedom*	67.3	87
1.2 Regulatory environment	66.2	70
1.2.1 Regulatory quality*	51.2	70
1.2.2 Rule of law*	43.3	66
1.2.3 Cost of redundancy dismissal, salary weeks	15.4	71
1.3 Business environment	38.2	137 ○
1.3.1 Ease of starting a business*	54.7	136 ○
1.3.2 Ease of resolving insolvency*	20.7	117 ○
1.3.3 Ease of paying taxes*	39.3	131 ○
2 Human capital & research	31.1	62
2.1 Education	50.6	43
2.1.1 Expenditure on education, % GDP	5.8	33
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	14.2	52
2.1.4 PISA scales in reading, maths, & science	402.1	53 ○
2.1.5 Pupil-teacher ratio, secondary	16.7	68
2.2 Tertiary education	12.6	120 ○
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	12.0	96 ○
2.2.3 Tertiary inbound mobility, %	0.2	101 ○
2.3 Research & development (R&D)	30.1	34
2.3.1 Researchers, headcounts/mn pop.	1,202.8	52
2.3.2 Gross expenditure on R&D, % GDP	1.2	31
2.3.3 QS university ranking, average score top 3*	51.5	23 ●
3 Infrastructure	39.2	60
3.1 Information & communication technologies (ICTs)	51.6	41
3.1.1 ICT access*	54.9	63
3.1.2 ICT use*	34.1	55
3.1.3 Government's online service*	67.3	32
3.1.4 E-participation*	50.0	31 ●
3.2 General infrastructure	29.2	90
3.2.1 Electricity output, kWh/cap	2,703.9	67
3.2.2 Logistics performance*	60.3	45
3.2.3 Gross capital formation, % GDP	19.2	101
3.3 Ecological sustainability	36.7	62
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.5	44
3.3.2 Environmental performance*	53.0	70
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.4	53
4 Market sophistication	45.2	89
4.1 Credit	24.1	112
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	68.4	48
4.1.3 Microfinance gross loans, % GDP	0.1	74

4.2 Investment	36.1	63
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	54.6	36
4.2.3 Total value of stocks traded, % GDP	37.0	23 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	44
4.3 Trade & competition	75.3	74
4.3.1 Applied tariff rate, weighted mean, %	7.9	111
4.3.2 Non-agricultural mkt access weighted tariff, %	0.3	45
4.3.3 Intensity of local competition [†]	66.3	67
5 Business sophistication	39.3	37
5.1 Knowledge workers	45.5	52
5.1.1 Knowledge-intensive employment, %	20.5	70
5.1.2 Firms offering formal training, % firms	52.7	20 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	31.6	96
5.2 Innovation linkages	35.7	57
5.2.1 University/industry research collaboration [†]	49.7	46
5.2.2 State of cluster development [†]	58.8	24 ●
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	92 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	59
5.3 Knowledge absorption	36.8	25 ●
5.3.1 Royalty & license fees payments, % total trade	1.3	18 ●
5.3.2 High-tech imports less re-imports, %	11.3	24 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.6	29 ●
5.3.4 FDI net inflows, % GDP	3.4	61
6 Knowledge & technology outputs	28.1	65
6.1 Knowledge creation	18.8	54
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.1	51
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	61
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.2	27
6.1.4 Scientific & technical articles/bn PPP\$ GDP	14.9	59
6.1.5 Citable documents H index	305.0	22 ●
6.2 Knowledge impact	37.4	72
6.2.1 Growth rate of PPP\$ GDP/worker, %	–0.3	96 ○
6.2.2 New businesses/th pop. 15–64	2.2	41
6.2.3 Computer software spending, % GDP	0.3	52
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	11.1	45
6.2.5 High- & medium-high-tech manufactures, %	39.6	21 ●
6.3 Knowledge diffusion	28.0	89
6.3.1 Royalty & license fees receipts, % total trade	0.2	39
6.3.2 High-tech exports less re-exports, %	3.3	41
6.3.3 Comm., computer & info. services exp., % total trade	0.3	114 ○
6.3.4 FDI net outflows, % GDP	0.4	74
7 Creative outputs	33.6	64
7.1 Intangible assets	46.8	56
7.1.1 Domestic res trademark app/bn PPP\$ GDP	51.7	54
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation [†]	61.3	49
7.1.4 ICTs & organizational model creation [†]	59.0	41
7.2 Creative goods & services	9.3	100
7.2.1 Cultural & creative services exports, % total trade	0.3	35
7.2.2 National feature films/mn pop. 15–69	0.7	81
7.2.3 Global ent. & media output/th pop. 15–69	0.3	36
7.2.4 Printing & publishing manufactures, %	0.0	77 ○
7.2.5 Creative goods exports, % total trade	0.2	78
7.3 Online creativity	31.6	47
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.0	92
7.3.2 Country-code TLDs/th pop. 15–69	43.0	44
7.3.3 Wikipedia edits/pop. 15–69	3,464.7	65
7.3.4 Video uploads on YouTube/pop. 15–69	75.4	37

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	0.4
GDP (US\$ billions)	16.2
GDP per capita, PPP\$	53,430.9
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	31.7	88
Innovation Output Sub-Index	19.0	124 ○
Innovation Input Sub-Index	44.3	55
Innovation Efficiency Ratio	0.4	139 ○
Global Innovation Index 2013 (out of 142)	31.2	74

1	Institutions	73.4	37 ●
1.1	Political environment	72.0	42
1.1.1	Political stability*	88.2	25 ●
1.1.2	Government effectiveness*	63.1	37 ●
1.1.3	Press freedom*	64.6	100
1.2	Regulatory environment	86.9	22 ●
1.2.1	Regulatory quality*	79.0	23 ●
1.2.2	Rule of law*	68.6	35 ●
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	61.4	77
1.3.1	Ease of starting a business*	51.9	138 ○
1.3.2	Ease of resolving insolvency*	50.0	43
1.3.3	Ease of paying taxes*	82.3	29 ●
2	Human capital & research	22.7	95
2.1	Education	38.9	87
2.1.1	Expenditure on education, % GDP	3.5	101
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	8.1	104 ○
2.1.3	School life expectancy, years	14.5	49
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	10.1	27 ●
2.2	Tertiary education	26.8	85
2.2.1	Tertiary enrolment, % gross	24.3	85
2.2.2	Graduates in science & engineering, %	18.3	63
2.2.3	Tertiary inbound mobility, %	4.2	38
2.3	Research & development (R&D)	2.3	103
2.3.1	Researchers, headcounts/mn pop.	676.3	65
2.3.2	Gross expenditure on R&D, % GDP	0.0	114 ○
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	36.6	70
3.1	Information & communication technologies (ICTs)	49.4	46
3.1.1	ICT access*	65.5	40
3.1.2	ICT use*	25.3	68
3.1.3	Government's online service*	59.5	44
3.1.4	E-participation*	47.4	34 ●
3.2	General infrastructure	23.7	117
3.2.1	Electricity output, kWh/cap	9,085.4	14 ●
3.2.2	Logistics performance*	n/a	n/a
3.2.3	Gross capital formation, % GDP	15.2	127 ○
3.3	Ecological sustainability	36.6	63
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.8	85
3.3.2	Environmental performance*	66.5	37
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.1	62
4	Market sophistication	54.7	38
4.1	Credit	38.9	61
4.1.1	Ease of getting credit*	68.8	53
4.1.2	Domestic credit to private sector, % GDP	31.5	95
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	46.7	36 ●
4.2.1	Ease of protecting investors*	46.7	97
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	78.5	37 ●
4.3.1	Applied tariff rate, weighted mean, %	4.1	75
4.3.2	Non-agricultural mkt access weighted tariff, %	0.7	61
4.3.3	Intensity of local competition [†]	68.0	59

5	Business sophistication	34.1	62
5.1	Knowledge workers	50.9	39
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	114.5	45
5.2	Innovation linkages	34.1	61
5.2.1	University/industry research collaboration [†]	43.5	63
5.2.2	State of cluster development [†]	53.0	36
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	57
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	55
5.3	Knowledge absorption	17.5	117
5.3.1	Royalty & license fees payments, % total trade	0.1	94
5.3.2	High-tech imports less re-imports, %	4.1	113 ○
5.3.3	Comm., computer & info. services imp., % total trade	0.3	121 ○
5.3.4	FDI net inflows, % GDP	7.4	25 ●

6	Knowledge & technology outputs	12.8	136 ○
6.1	Knowledge creation	4.2	121
6.1.1	Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	68
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	3.6	121 ○
6.1.5	Citable documents H index	40.0	122 ○
6.2	Knowledge impact	7.3	129 ○
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	3.2	84
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	27.0	95
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	1.2	64
6.3.3	Comm., computer & info. services exp., % total trade	0.4	109
6.3.4	FDI net outflows, % GDP	0.2	85

7	Creative outputs	25.3	102
7.1	Intangible assets	38.8	100
7.1.1	Domestic res trademark app./bn PPP\$ GDP	3.9	99 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation [†]	57.8	64
7.1.4	ICTs & organizational model creation [†]	57.0	52
7.2	Creative goods & services	10.8	91
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.4	65
7.3	Online creativity	12.7	83
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	13.5	41
7.3.2	Country-code TLDs/th pop. 15–69	21.3	74
7.3.3	Wikipedia edits/pop. 15–69	1,852.6	83
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Bulgaria

Key indicators

Population (millions)	7.3
GDP (US\$ billions)	53.0
GDP per capita, PPP\$	14,499.1
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.7	44
Innovation Output Sub-Index	37.1	37
Innovation Input Sub-Index	44.3	54
Innovation Efficiency Ratio	0.8	25 ●
Global Innovation Index 2013 (out of 142)	41.3	41

1 Institutions	68.5	48
1.1 Political environment	63.2	56
1.1.1 Political stability*	73.8	53
1.1.2 Government effectiveness*	44.5	60
1.1.3 Press freedom*	71.4	72
1.2 Regulatory environment	76.5	38
1.2.1 Regulatory quality*	63.0	47
1.2.2 Rule of law*	43.0	67
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	65.7	66
1.3.1 Ease of starting a business*	90.7	35
1.3.2 Ease of resolving insolvency*	34.5	82
1.3.3 Ease of paying taxes*	72.0	58

2 Human capital & research	31.2	61
2.1 Education	44.5	65
2.1.1 Expenditure on education, % GDP	4.1	88
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	24.9	40
2.1.3 School life expectancy, years	14.3	51
2.1.4 PISA scales in reading, maths, & science	440.4	42
2.1.5 Pupil-teacher ratio, secondary	12.3	40
2.2 Tertiary education	35.9	61
2.2.1 Tertiary enrolment, % gross	59.6	39
2.2.2 Graduates in science & engineering, %	19.1	61
2.2.3 Tertiary inbound mobility, %	3.6	47
2.3 Research & development (R&D)	13.3	61
2.3.1 Researchers, headcounts/mn pop.	2,017.4	39
2.3.2 Gross expenditure on R&D, % GDP	0.6	54
2.3.3 QS university ranking, average score top 3*	6.7	64

3 Infrastructure	42.7	47
3.1 Information & communication technologies (ICTs)	39.2	67
3.1.1 ICT access*	63.3	47
3.1.2 ICT use*	42.0	43
3.1.3 Government's online service*	49.0	72
3.1.4 E-participation*	2.6	116 ○
3.2 General infrastructure	37.0	54
3.2.1 Electricity output, kWh/cap	6,687.6	30
3.2.2 Logistics performance*	63.5	36
3.2.3 Gross capital formation, % GDP	21.2	79
3.3 Ecological sustainability	51.9	23 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.6	89
3.3.2 Environmental performance*	64.0	41
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	13.6	4 ●

4 Market sophistication	44.2	97
4.1 Credit	34.7	72
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	71.9	46
4.1.3 Microfinance gross loans, % GDP	0.0	79 ○

4.2 Investment	27.7	111 ○
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	13.1	83 ○
4.2.3 Total value of stocks traded, % GDP	0.7	74
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	32

4.3 Trade & competition	70.1	111 ○
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	59.7	97 ○

5 Business sophistication	35.1	53
5.1 Knowledge workers	46.6	49
5.1.1 Knowledge-intensive employment, %	29.6	48
5.1.2 Firms offering formal training, % firms	30.8	64
5.1.3 GERD performed by business, % GDP	0.4	36
5.1.4 GERD performed by business, %	60.5	21
5.1.5 GMAT test takers/mn pop. 20–34	318.7	15 ●

5.2 Innovation linkages	33.6	64
5.2.1 University/industry research collaboration†	34.0	111 ○
5.2.2 State of cluster development†	38.8	104 ○
5.2.3 GERD financed by abroad, %	43.9	9 ●
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	77 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	77
5.3 Knowledge absorption	25.0	73
5.3.1 Royalty & license fees payments, % total trade	0.5	54
5.3.2 High-tech imports less re-imports, %	8.5	47
5.3.3 Comm., computer & info. services imp., % total trade	0.9	67
5.3.4 FDI net inflows, % GDP	4.0	53

6 Knowledge & technology outputs	36.2	38
6.1 Knowledge creation	19.5	53
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.4	47
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	50
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.9	17
6.1.4 Scientific & technical articles/bn PPP\$ GDP	19.9	46
6.1.5 Citable documents H index	138.0	44

6.2 Knowledge impact	57.0	10 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.7	37
6.2.2 New businesses/th pop. 15–64	9.0	11 ●
6.2.3 Computer software spending, % GDP	0.3	40
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	59.3	1 ●
6.2.5 High- & medium-high-tech manufactures, %	18.4	58
6.3 Knowledge diffusion	32.1	67
6.3.1 Royalty & license fees receipts, % total trade	0.1	54
6.3.2 High-tech exports less re-exports, %	2.9	43
6.3.3 Comm., computer & info. services exp., % total trade	2.0	40
6.3.4 FDI net outflows, % GDP	1.1	47

7 Creative outputs	38.1	45
7.1 Intangible assets	49.9	42
7.1.1 Domestic res trademark app/bn PPP\$ GDP	146.0	5 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.7	9 ●
7.1.3 ICTs & business model creation†	48.5	101 ○
7.1.4 ICTs & organizational model creation†	45.3	99 ○

7.2 Creative goods & services	25.1	49
7.2.1 Cultural & creative services exports, % total trade	0.8	14 ●
7.2.2 National feature films/mn pop. 15–69	2.8	48
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	59
7.2.5 Creative goods exports, % total trade	0.9	42

7.3 Online creativity	27.4	56
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	23.3	28 ●
7.3.2 Country-code TLDs/th pop. 15–69	27.4	66
7.3.3 Wikipedia edits/pop. 15–69	18,504.0	29
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	16.5
GDP (US\$ billions)	12.2
GDP per capita, PPP\$	1,585.0
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	28.2	109
Innovation Output Sub-Index	23.5	104
Innovation Input Sub-Index	32.9	112
Innovation Efficiency Ratio	0.7	78
Global Innovation Index 2013 (out of 142)	27.0	116

1	Institutions	56.5	87
1.1	Political environment	50.3	88
1.1.1	Political stability*	50.6	104
1.1.2	Government effectiveness*	24.0	111
1.1.3	Press freedom*	76.3	41 ●
1.2	Regulatory environment	67.6	62 ●
1.2.1	Regulatory quality*	45.7	83
1.2.2	Rule of law*	34.5	87
1.2.3	Cost of redundancy dismissal, salary weeks	10.5	42 ●
1.3	Business environment	51.6	114
1.3.1	Ease of starting a business*	73.3	109
1.3.2	Ease of resolving insolvency*	27.6	103
1.3.3	Ease of paying taxes*	54.0	116
2	Human capital & research	14.9	122
2.1	Education	21.4	130
2.1.1	Expenditure on education, % GDP	3.4	102
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	17.1	71
2.1.3	School life expectancy, years	7.5	126 ○
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	26.3	94
2.2	Tertiary education	21.8	98
2.2.1	Tertiary enrolment, % gross	4.6	125
2.2.2	Graduates in science & engineering, %	19.9	58
2.2.3	Tertiary inbound mobility, %	3.0	52 ●
2.3	Research & development (R&D)	1.6	112
2.3.1	Researchers, headcounts/mn pop.	73.6	107
2.3.2	Gross expenditure on R&D, % GDP	0.2	87
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	21.5	126
3.1	Information & communication technologies (ICTs)	16.3	122
3.1.1	ICT access*	18.7	125 ○
3.1.2	ICT use*	1.3	128 ○
3.1.3	Government's online service*	29.4	125
3.1.4	E-participation*	15.8	79
3.2	General infrastructure	21.0	129
3.2.1	Electricity output, kWh/cap	n/a	n/a
3.2.2	Logistics performance*	28.2	125
3.2.3	Gross capital formation, % GDP	17.1	116
3.3	Ecological sustainability	27.3	107
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2	Environmental performance*	40.5	107
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	121 ○
4	Market sophistication	40.4	122
4.1	Credit	23.7	113
4.1.1	Ease of getting credit*	43.8	112
4.1.2	Domestic credit to private sector, % GDP	22.1	115
4.1.3	Microfinance gross loans, % GDP	1.7	29 ●

4.2	Investment	27.1	113
4.2.1	Ease of protecting investors*	36.7	119
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	37 ●
4.3	Trade & competition	70.5	107
4.3.1	Applied tariff rate, weighted mean, %	8.6	117
4.3.2	Non-agricultural mkt access weighted tariff, %	0.0	18 ●
4.3.3	Intensity of local competition†	56.5	110

5	Business sophistication	31.0	75
5.1	Knowledge workers	21.5	120
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	24.9	79
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	7.4	126
5.2	Innovation linkages	50.3	15 ●
5.2.1	University/industry research collaboration†	37.3	96
5.2.2	State of cluster development†	30.8	127
5.2.3	GERD financed by abroad, %	59.6	2 ●
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	21.2	94
5.3.1	Royalty & license fees payments, % total trade	0.0	125 ○
5.3.2	High-tech imports less re-imports, %	4.8	103
5.3.3	Comm., computer & info. services imp., % total trade	2.2	10 ●
5.3.4	FDI net inflows, % GDP	0.1	134 ○

6	Knowledge & technology outputs	23.1	94
6.1	Knowledge creation	4.2	120
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.1	101
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	88
6.1.3	Domestic res utility model app./tr PPP\$ GDP	0.1	52
6.1.4	Scientific & technical articles/bn PPP\$ GDP	9.5	77
6.1.5	Citable documents H index	62.0	94
6.2	Knowledge impact	36.7	75
6.2.1	Growth rate of PPP\$ GDP/worker, %	3.4	29 ●
6.2.2	New businesses/th pop. 15–64	0.1	86
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	1.3	118
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	28.4	86
6.3.1	Royalty & license fees receipts, % total trade	0.0	86
6.3.2	High-tech exports less re-exports, %	0.1	107
6.3.3	Comm., computer & info. services exp., % total trade	2.4	27 ●
6.3.4	FDI net outflows, % GDP	0.0	102

7	Creative outputs	23.9	107
7.1	Intangible assets	46.3	58 ●
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	51.8	85
7.1.4	ICTs & organizational model creation†	40.8	116
7.2	Creative goods & services	2.7	118
7.2.1	Cultural & creative services exports, % total trade	0.1	58
7.2.2	National feature films/mn pop. 15–69	0.5	89
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.0	110
7.3	Online creativity	0.1	143 ○
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.0	142 ○
7.3.2	Country-code TLDs/th pop. 15–69	0.1	139 ○
7.3.3	Wikipedia edits/pop. 15–69	17.8	139 ○
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Burundi

Key indicators

Population (millions)	9.8
GDP (US\$ billions)	2.7
GDP per capita, PPP\$	641.7
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	22.4	138
Innovation Output Sub-Index	14.2	141 ○
Innovation Input Sub-Index	30.6	126
Innovation Efficiency Ratio	0.5	135
Global Innovation Index 2013 (out of 142)	n/a	n/a

1 Institutions	45.5	127
1.1 Political environment	30.6	139
1.1.1 Political stability*	24.5	138
1.1.2 Government effectiveness*	5.3	141 ○
1.1.3 Press freedom*	62.0	107
1.2 Regulatory environment	52.1	109
1.2.1 Regulatory quality*	23.8	127
1.2.2 Rule of law*	16.4	128
1.2.3 Cost of redundancy dismissal, salary weeks	15.9	74
1.3 Business environment	53.9	106
1.3.1 Ease of starting a business*	93.3	17 ●
1.3.2 Ease of resolving insolvency*	8.1	138
1.3.3 Ease of paying taxes*	60.4	101

2 Human capital & research	17.5	111
2.1 Education	36.4	92
2.1.1 Expenditure on education, % GDP	5.8	34 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	33.5	13 ●
2.1.3 School life expectancy, years	10.1	114
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	29.7	104
2.2 Tertiary education	15.3	111
2.2.1 Tertiary enrolment, % gross	3.2	130
2.2.2 Graduates in science & engineering, %	9.6	99
2.2.3 Tertiary inbound mobility, %	6.2	27 ●
2.3 Research & development (R&D)	0.9	118
2.3.1 Researchers, headcounts/mn pop.	39.7	116
2.3.2 Gross expenditure on R&D, % GDP	0.1	101
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	16.1	141 ○
3.1 Information & communication technologies (ICTs)	7.5	141 ○
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	15.0	138
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	15.0	139
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	0.0	137 ○
3.2.3 Gross capital formation, % GDP	19.6	95
3.3 Ecological sustainability	25.8	113
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	25.8	137
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	47.3	76
4.1 Credit	15.2	137
4.1.1 Ease of getting credit*	25.0	134 ○
4.1.2 Domestic credit to private sector, % GDP	19.5	120
4.1.3 Microfinance gross loans, % GDP	1.3	32

4.2 Investment	63.3	14 ●
4.2.1 Ease of protecting investors*	63.3	32 ●
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	63.3	127
4.3.1 Applied tariff rate, weighted mean, %	6.6	102
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	1 ●
4.3.3 Intensity of local competition†	38.2	134 ○

5 Business sophistication	26.7	104
5.1 Knowledge workers	18.5	127
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	22.1	86
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	6.3	127
5.2 Innovation linkages	36.7	52
5.2.1 University/industry research collaboration†	25.3	130
5.2.2 State of cluster development†	29.2	130
5.2.3 GERD financed by abroad, %	39.9	12 ●
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.3	29 ●
5.3 Knowledge absorption	24.9	75
5.3.1 Royalty & license fees payments, % total trade	0.1	91
5.3.2 High-tech imports less re-imports, %	9.8	31 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.5	34 ●
5.3.4 FDI net inflows, % GDP	0.1	133

6 Knowledge & technology outputs	12.3	139
6.1 Knowledge creation	2.8	133
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	3.0	124
6.1.5 Citable documents H index	24.0	138
6.2 Knowledge impact	n/a	n/a
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	n/a	n/a
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	21.8	124
6.3.1 Royalty & license fees receipts, % total trade	0.0	109
6.3.2 High-tech exports less re-exports, %	0.2	103
6.3.3 Comm., computer & info. services exp., % total trade	0.7	94
6.3.4 FDI net outflows, % GDP	0.0	99

7 Creative outputs	16.2	132
7.1 Intangible assets	29.7	128
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	31.8	134 ○
7.1.4 ICTs & organizational model creation†	27.5	136 ○
7.2 Creative goods & services	4.2	113
7.2.1 Cultural & creative services exports, % total trade	0.1	60
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	86
7.3 Online creativity	1.1	125
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.0	141 ○
7.3.2 Country-code TLDs/th pop. 15–69	3.3	119
7.3.3 Wikipedia edits/pop. 15–69	13.5	140 ○
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	0.5
GDP (US\$ billions)	1.9
GDP per capita, PPP\$	4,337.7
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.1	97
Innovation Output Sub-Index	21.3	114
Innovation Input Sub-Index	38.9	85
Innovation Efficiency Ratio	0.5	126 ○
Global Innovation Index 2013 (out of 142)	29.7	103

1 Institutions	59.6	76
1.1 Political environment	71.3	44 ●
1.1.1 Political stability*	84.9	31 ●
1.1.2 Government effectiveness*	43.5	63 ●
1.1.3 Press freedom*	85.7	23 ●
1.2 Regulatory environment	55.7	103
1.2.1 Regulatory quality*	49.9	72
1.2.2 Rule of law*	59.6	45 ●
1.2.3 Cost of redundancy dismissal, salary weeks	29.5	127 ○
1.3 Business environment	51.9	112
1.3.1 Ease of starting a business*	85.6	68
1.3.2 Ease of resolving insolvency*	0.0	140 ○
1.3.3 Ease of paying taxes*	70.0	68

2 Human capital & research	17.9	109
2.1 Education	39.6	85
2.1.1 Expenditure on education, % GDP	5.0	60
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	14.8	85
2.1.3 School life expectancy, years	13.2	66
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	16.8	70
2.2 Tertiary education	13.0	119 ○
2.2.1 Tertiary enrolment, % gross	20.6	89
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	1.1	81
2.3 Research & development (R&D)	1.2	114
2.3.1 Researchers, headcounts/mn pop.	260.9	81
2.3.2 Gross expenditure on R&D, % GDP	0.1	108 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	39.3	59 ●
3.1 Information & communication technologies (ICTs)	30.8	89
3.1.1 ICT access*	34.6	94
3.1.2 ICT use*	21.2	80
3.1.3 Government's online service*	43.8	87
3.1.4 E-participation*	23.7	60
3.2 General infrastructure	56.5	8 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	n/a	n/a
3.2.3 Gross capital formation, % GDP	35.8	13 ●
3.3 Ecological sustainability	30.4	92
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	44.1	98
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.5	84

4 Market sophistication	47.3	77
4.1 Credit	34.2	76
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	59.4	54 ●
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	40.0	51 ●
4.2.1 Ease of protecting investors*	40.0	113
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	67.6	117
4.3.1 Applied tariff rate, weighted mean, %	10.2	126 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	0.4	47 ●
4.3.3 Intensity of local competition†	55.3	116 ○

5 Business sophistication	30.3	79
5.1 Knowledge workers	26.3	105
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	24.1	83
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	28.2	98
5.2 Innovation linkages	37.4	51 ●
5.2.1 University/industry research collaboration†	36.8	100
5.2.2 State of cluster development†	37.7	107
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	27.4	57 ●
5.3.1 Royalty & license fees payments, % total trade	0.0	121 ○
5.3.2 High-tech imports less re-imports, %	10.0	30 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.5	35 ●
5.3.4 FDI net inflows, % GDP	2.8	66

6 Knowledge & technology outputs	14.6	128 ○
6.1 Knowledge creation	6.8	96
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	9.5	78
6.1.5 Citable documents H index	12.0	143 ○
6.2 Knowledge impact	9.5	125 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.2	72
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	27.7	90
6.3.1 Royalty & license fees receipts, % total trade	0.0	113 ○
6.3.2 High-tech exports less re-exports, %	0.0	121 ○
6.3.3 Comm., computer & info. services exp., % total trade	2.5	26 ●
6.3.4 FDI net outflows, % GDP	0.2	80

7 Creative outputs	27.9	88
7.1 Intangible assets	52.3	31 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	54.5	76
7.1.4 ICTs & organizational model creation†	50.0	81
7.2 Creative goods & services	0.9	135 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	83
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	6.3	104
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.7	111
7.3.2 Country-code TLDs/th pop. 15–69	16.9	85
7.3.3 Wikipedia edits/pop. 15–69	675.6	104
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Cambodia

Key indicators

Population (millions)	14.9
GDP (US\$ billions)	15.7
GDP per capita, PPP\$	2,576.2
Income group	Low income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	28.7	106
Innovation Output Sub-Index	24.5	99
Innovation Input Sub-Index	32.9	113
Innovation Efficiency Ratio	0.7	67
Global Innovation Index 2013 (out of 142)	n/a	110

1	Institutions	46.6	120
1.1	Political environment	46.4	101
1.1.1	Political stability*	62.4	79
1.1.2	Government effectiveness*	18.7	122
1.1.3	Press freedom*	58.2	117
1.2	Regulatory environment	53.5	106
1.2.1	Regulatory quality*	39.7	99
1.2.2	Rule of law*	19.8	125
1.2.3	Cost of redundancy dismissal, salary weeks	19.4	91
1.3	Business environment	40.1	135
1.3.1	Ease of starting a business*	40.1	142 ○
1.3.2	Ease of resolving insolvency*	8.7	137
1.3.3	Ease of paying taxes*	71.5	59 ●
2	Human capital & research	14.1	127
2.1	Education	28.6	122
2.1.1	Expenditure on education, % GDP	2.6	118
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3	School life expectancy, years	10.9	106
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	28.9	100
2.2	Tertiary education	13.7	117
2.2.1	Tertiary enrolment, % gross	15.8	96
2.2.2	Graduates in science & engineering, %	12.5	95
2.2.3	Tertiary inbound mobility, %	0.1	111 ○
2.3	Research & development (R&D)	0.0	131 ○
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	21.0	128
3.1	Information & communication technologies (ICTs)	13.6	132
3.1.1	ICT access*	31.4	100
3.1.2	ICT use*	4.1	120
3.1.3	Government's online service*	19.0	136
3.1.4	E-participation*	0.0	129 ○
3.2	General infrastructure	24.9	114
3.2.1	Electricity output, kWh/cap	73.6	121 ○
3.2.2	Logistics performance*	37.7	97
3.2.3	Gross capital formation, % GDP	23.5	66 ●
3.3	Ecological sustainability	24.5	121
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.6	75
3.3.2	Environmental performance*	35.4	122
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	102
4	Market sophistication	55.8	35 ●
4.1	Credit	62.2	15 ●
4.1.1	Ease of getting credit*	75.0	40 ●
4.1.2	Domestic credit to private sector, % GDP	38.7	83
4.1.3	Microfinance gross loans, % GDP	15.3	1 ●

4.2	Investment	53.3	23 ●
4.2.1	Ease of protecting investors*	53.3	66
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	52.0	139 ○
4.3.1	Applied tariff rate, weighted mean, %	9.9	124
4.3.2	Non-agricultural mkt access weighted tariff, %	8.3	139 ○
4.3.3	Intensity of local competition†	65.0	74

5	Business sophistication	26.7	105
5.1	Knowledge workers	25.3	108
5.1.1	Knowledge-intensive employment, %	2.5	109 ○
5.1.2	Firms offering formal training, % firms	48.4	30 ●
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	2.5	138 ○
5.2	Innovation linkages	38.7	47 ●
5.2.1	University/industry research collaboration†	36.0	102
5.2.2	State of cluster development†	52.3	41 ●
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	47 ●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	16.0	121
5.3.1	Royalty & license fees payments, % total trade	0.1	96
5.3.2	High-tech imports less re-imports, %	2.3	125 ○
5.3.3	Comm., computer & info. services imp., % total trade	0.5	94
5.3.4	FDI net inflows, % GDP	7.0	27 ●
6	Knowledge & technology outputs	26.4	76
6.1	Knowledge creation	4.0	124
6.1.1	Domestic resident patent app/tr PPP\$ GDP	0.0	109 ○
6.1.2	PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	4.9	110
6.1.5	Citable documents H index	49.0	113
6.2	Knowledge impact	50.4	26 ●
6.2.1	Growth rate of PPP\$ GDP/worker, %	4.3	15 ●
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	0.4	135
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	24.7	113
6.3.1	Royalty & license fees receipts, % total trade	0.0	72
6.3.2	High-tech exports less re-exports, %	0.2	97
6.3.3	Comm., computer & info. services exp., % total trade	1.0	82
6.3.4	FDI net outflows, % GDP	0.2	79
7	Creative outputs	22.6	113
7.1	Intangible assets	39.9	91
7.1.1	Domestic res trademark app/bn PPP\$ GDP	24.8	81
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	54.7	74
7.1.4	ICTs & organizational model creation†	55.3	60 ●
7.2	Creative goods & services	9.4	99
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	1.4	62
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.3	68
7.3	Online creativity	1.1	126
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.7	112
7.3.2	Country-code TLDs/th pop. 15–69	2.0	123
7.3.3	Wikipedia edits/pop. 15–69	337.4	109
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	21.7
GDP (US\$ billions)	28.0
GDP per capita, PPP\$	2,422.8
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.5	114
Innovation Output Sub-Index	24.5	100
Innovation Input Sub-Index	30.6	127
Innovation Efficiency Ratio	0.8	39 ●
Global Innovation Index 2013 (out of 142)	25.7	125

1 Institutions	46.8	119
1.1 Political environment	44.5	111
1.1.1 Political stability*	51.6	102
1.1.2 Government effectiveness*	16.8	126
1.1.3 Press freedom*	65.2	99
1.2 Regulatory environment	53.3	107
1.2.1 Regulatory quality*	24.4	126
1.2.2 Rule of law*	18.3	126
1.2.3 Cost of redundancy dismissal, salary weeks	15.3	70 ●
1.3 Business environment	42.6	132 ○
1.3.1 Ease of starting a business*	76.9	99
1.3.2 Ease of resolving insolvency*	16.3	129 ○
1.3.3 Ease of paying taxes*	34.5	136 ○

2 Human capital & research	17.9	110
2.1 Education	29.9	118
2.1.1 Expenditure on education, % GDP	3.2	108
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	20.9	56 ●
2.1.3 School life expectancy, years	10.4	110
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	21.4	83
2.2 Tertiary education	22.7	93
2.2.1 Tertiary enrolment, % gross	11.9	105
2.2.2 Graduates in science & engineering, %	21.0	47 ●
2.2.3 Tertiary inbound mobility, %	1.4	75
2.3 Research & development (R&D)	1.0	115
2.3.1 Researchers, headcounts/mn pop.	232.8	83
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	20.0	132 ○
3.1 Information & communication technologies (ICTs)	13.3	133 ○
3.1.1 ICT access*	18.7	125 ○
3.1.2 ICT use*	1.9	126 ○
3.1.3 Government's online service*	30.1	120
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	20.5	131 ○
3.2.1 Electricity output, kWh/cap	299.4	109
3.2.2 Logistics performance*	36.5	103
3.2.3 Gross capital formation, % GDP	19.3	97
3.3 Ecological sustainability	26.1	111
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.2	63 ●
3.3.2 Environmental performance*	36.7	119
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	109

4 Market sophistication	45.0	91
4.1 Credit	21.4	125
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	15.0	131 ○
4.1.3 Microfinance gross loans, % GDP	0.9	41 ●

4.2 Investment	43.3	43 ●
4.2.1 Ease of protecting investors*	43.3	105
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	70.3	109
4.3.1 Applied tariff rate, weighted mean, %	11.9	132 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	29 ●
4.3.3 Intensity of local competition†	62.2	88

5 Business sophistication	23.3	123
5.1 Knowledge workers	28.1	102
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	24.5	82
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	37.2	84 ●
5.2 Innovation linkages	30.9	72 ●
5.2.1 University/industry research collaboration†	34.0	111
5.2.2 State of cluster development†	41.8	89
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	71
5.3 Knowledge absorption	10.7	137 ○
5.3.1 Royalty & license fees payments, % total trade	0.2	79
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.3	120
5.3.4 FDI net inflows, % GDP	1.4	104

6 Knowledge & technology outputs	21.8	103
6.1 Knowledge creation	9.3	87 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.1	85
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	12.2	69 ●
6.1.5 Citable documents H index	72.0	87 ●
6.2 Knowledge impact	29.1	110
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.2	52 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.2	72 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.8	125
6.2.5 High- & medium-high-tech manufactures, %	5.1	86
6.3 Knowledge diffusion	27.1	93
6.3.1 Royalty & license fees receipts, % total trade	0.0	98
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	0.7	92
6.3.4 FDI net outflows, % GDP	–1.1	119 ○

7 Creative outputs	27.1	96
7.1 Intangible assets	47.0	54 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	50.3	94
7.1.4 ICTs & organizational model creation†	43.7	104
7.2 Creative goods & services	10.9	90
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.0	101 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	60
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	3.3	116
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.4	124
7.3.2 Country-code TLDs/th pop. 15–69	9.5	104
7.3.3 Wikipedia edits/pop. 15–69	74.3	127
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Canada

Key indicators

Population (millions)	34.9
GDP (US\$ billions)	1,825.1
GDP per capita, PPP\$	43,471.7
Income group	High income
Region	Northern America

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	56.1	12
Innovation Output Sub-Index	46.0	20
Innovation Input Sub-Index	66.3	8
Innovation Efficiency Ratio	0.7	86 ○
Global Innovation Index 2013 (out of 142)	57.6	11

1	Institutions	92.7	7 ●
1.1	Political environment	89.1	11
1.1.1	Political stability*	92.4	14
1.1.2	Government effectiveness*	87.7	10
1.1.3	Press freedom*	87.3	18
1.2	Regulatory environment	94.9	11
1.2.1	Regulatory quality*	93.0	10
1.2.2	Rule of law*	94.6	11
1.2.3	Cost of redundancy dismissal, salary weeks	10.0	37
1.3	Business environment	94.1	2 ●
1.3.1	Ease of starting a business*	99.0	2 ●
1.3.2	Ease of resolving insolvency*	92.5	9
1.3.3	Ease of paying taxes*	91.0	8

2	Human capital & research	56.4	13
2.1	Education	49.9	48
2.1.1	Expenditure on education, % GDP	5.4	47
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3	School life expectancy, years	n/a	n/a
2.1.4	PISA scales in reading, maths, & science	522.2	8
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	n/a	n/a
2.2.1	Tertiary enrolment, % gross	n/a	n/a
2.2.2	Graduates in science & engineering, %	n/a	n/a
2.2.3	Tertiary inbound mobility, %	n/a	n/a
2.3	Research & development (R&D)	62.8	12
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	1.7	23
2.3.3	QS university ranking, average score top 3*	87.1	3 ●

3	Infrastructure	58.4	13
3.1	Information & communication technologies (ICTs)	74.4	14
3.1.1	ICT access*	76.5	20
3.1.2	ICT use*	63.8	19
3.1.3	Government's online service*	88.9	6 ●
3.1.4	E-participation*	68.4	15
3.2	General infrastructure	61.2	5 ●
3.2.1	Electricity output, kWh/cap	18,547.9	4 ●
3.2.2	Logistics performance*	88.9	12
3.2.3	Gross capital formation, % GDP	24.3	57
3.3	Ecological sustainability	39.7	57
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.0	84 ○
3.3.2	Environmental performance*	73.1	24
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.2	59 ○

4	Market sophistication	75.9	5 ●
4.1	Credit	61.4	17
4.1.1	Ease of getting credit*	81.3	27
4.1.2	Domestic credit to private sector, % GDP	128.2	19
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	80.6	4 ●
4.2.1	Ease of protecting investors*	86.7	4 ●
4.2.2	Market capitalization, % GDP	110.7	11
4.2.3	Total value of stocks traded, % GDP	66.3	11
4.2.4	Venture capital deals/tr PPP\$ GDP	0.7	1 ●
4.3	Trade & competition	85.6	5 ●
4.3.1	Applied tariff rate, weighted mean, %	0.9	7 ●
4.3.2	Non-agricultural mkt access weighted tariff, %	0.2	34
4.3.3	Intensity of local competition†	73.8	31

5	Business sophistication	48.0	15
5.1	Knowledge workers	66.5	17
5.1.1	Knowledge-intensive employment, %	43.8	13
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.9	24
5.1.4	GERD performed by business, %	52.3	35
5.1.5	GMAT test takers/mn pop. 20–34	893.1	4 ●
5.2	Innovation linkages	44.7	31
5.2.1	University/industry research collaboration†	65.5	17
5.2.2	State of cluster development†	64.0	17
5.2.3	GERD financed by abroad, %	5.8	60 ○
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	18
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	1.0	18
5.3	Knowledge absorption	32.8	34
5.3.1	Royalty & license fees payments, % total trade	1.9	8
5.3.2	High-tech imports less re-imports, %	10.0	29
5.3.3	Comm., computer & info. services imp., % total trade	1.0	63 ○
5.3.4	FDI net inflows, % GDP	2.5	74 ○

6	Knowledge & technology outputs	43.7	21
6.1	Knowledge creation	48.9	14
6.1.1	Domestic resident patent app/tr PPP\$ GDP	3.2	36
6.1.2	PCT resident patent app/tr PPP\$ GDP	1.9	25
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	37.4	19
6.1.5	Citable documents H index	658.0	5 ●
6.2	Knowledge impact	42.2	57
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.0	67 ○
6.2.2	New businesses/th pop. 15–64	1.1	58 ○
6.2.3	Computer software spending, % GDP	0.7	4 ●
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	4.7	66 ○
6.2.5	High- & medium-high-tech manufactures, %	28.7	37
6.3	Knowledge diffusion	39.9	33
6.3.1	Royalty & license fees receipts, % total trade	0.6	20
6.3.2	High-tech exports less re-exports, %	4.8	32
6.3.3	Comm., computer & info. services exp., % total trade	1.8	46
6.3.4	FDI net outflows, % GDP	3.1	23

7	Creative outputs	48.3	16
7.1	Intangible assets	52.3	30
7.1.1	Domestic res trademark app/bn PPP\$ GDP	52.3	53 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	67.7	27
7.1.4	ICTs & organizational model creation†	69.0	12
7.2	Creative goods & services	18.4	66 ○
7.2.1	Cultural & creative services exports, % total trade	0.2	47
7.2.2	National feature films/mn pop. 15–69	3.4	42
7.2.3	Global ent. & media output/th pop. 15–69	1.6	13
7.2.4	Printing & publishing manufactures, %	0.0	85 ○
7.2.5	Creative goods exports, % total trade	0.7	49
7.3	Online creativity	70.1	6 ●
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	92.9	6 ●
7.3.2	Country-code TLDs/th pop. 15–69	59.9	20
7.3.3	Wikipedia edits/pop. 15–69	20,636.0	24
7.3.4	Video uploads on YouTube/pop. 15–69	92.6	7

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	17.5
GDP (US\$ billions)	277.0
GDP per capita, PPP\$	19,067.3
Income group	High income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.6	46
Innovation Output Sub-Index	32.8	54
Innovation Input Sub-Index	48.4	37
Innovation Efficiency Ratio	0.7	92 ○
Global Innovation Index 2013 (out of 142)	40.6	46

1 Institutions	71.7	41
1.1 Political environment	74.1	37
1.1.1 Political stability*	74.2	51
1.1.2 Government effectiveness*	74.3	24 ●
1.1.3 Press freedom*	73.8	51
1.2 Regulatory environment	73.8	44
1.2.1 Regulatory quality*	89.0	14 ●
1.2.2 Rule of law*	84.0	21 ●
1.2.3 Cost of redundancy dismissal, salary weeks	27.4	120 ○
1.3 Business environment	67.3	62
1.3.1 Ease of starting a business*	88.1	53
1.3.2 Ease of resolving insolvency*	30.8	91 ○
1.3.3 Ease of paying taxes*	83.0	26

2 Human capital & research	32.4	57
2.1 Education	41.9	74
2.1.1 Expenditure on education, % GDP	4.5	74
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	17.9	66
2.1.3 School life expectancy, years	15.2	39
2.1.4 PISA scales in reading, maths, & science	436.3	45 ○
2.1.5 Pupil-teacher ratio, secondary	20.0	81 ○
2.2 Tertiary education	35.6	63
2.2.1 Tertiary enrolment, % gross	74.4	17 ●
2.2.2 Graduates in science & engineering, %	19.2	60
2.2.3 Tertiary inbound mobility, %	0.3	99 ○
2.3 Research & development (R&D)	19.9	45
2.3.1 Researchers, headcounts/mn pop.	551.2	69
2.3.2 Gross expenditure on R&D, % GDP	0.4	68
2.3.3 QS university ranking, average score top 3*	45.2	28

3 Infrastructure	48.2	28
3.1 Information & communication technologies (ICTs)	58.5	29
3.1.1 ICT access*	56.5	59
3.1.2 ICT use*	36.7	50
3.1.3 Government's online service*	75.2	24
3.1.4 E-participation*	65.8	19 ●
3.2 General infrastructure	37.9	51
3.2.1 Electricity output, kWh/cap	3,921.2	54
3.2.2 Logistics performance*	61.9	39
3.2.3 Gross capital formation, % GDP	25.7	46
3.3 Ecological sustainability	48.1	33
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.5	33
3.3.2 Environmental performance*	69.9	29
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	3.4	31

4 Market sophistication	53.3	44
4.1 Credit	33.5	78
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	73.3	44
4.1.3 Microfinance gross loans, % GDP	0.7	44

4.2 Investment	44.0	42
4.2.1 Ease of protecting investors*	63.3	32
4.2.2 Market capitalization, % GDP	116.8	10 ●
4.2.3 Total value of stocks traded, % GDP	17.4	30
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	36
4.3 Trade & competition	82.3	15 ●
4.3.1 Applied tariff rate, weighted mean, %	4.0	72
4.3.2 Non-agricultural mkt access weighted tariff, %	0.3	38
4.3.3 Intensity of local competition†	73.0	34

5 Business sophistication	36.6	46
5.1 Knowledge workers	42.1	59
5.1.1 Knowledge-intensive employment, %	24.1	59
5.1.2 Firms offering formal training, % firms	45.9	34
5.1.3 GERD performed by business, % GDP	0.2	51
5.1.4 GERD performed by business, %	38.7	48
5.1.5 GMAT test takers/mn pop. 20–34	114.1	47
5.2 Innovation linkages	30.1	77
5.2.1 University/industry research collaboration†	54.5	39
5.2.2 State of cluster development†	51.3	47
5.2.3 GERD financed by abroad, %	15.7	27
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	61
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	92 ○
5.3 Knowledge absorption	37.5	23 ●
5.3.1 Royalty & license fees payments, % total trade	0.9	31
5.3.2 High-tech imports less re-imports, %	9.7	34
5.3.3 Comm., computer & info. services imp., % total trade	0.8	68
5.3.4 FDI net inflows, % GDP	11.3	11 ●

6 Knowledge & technology outputs	27.3	66
6.1 Knowledge creation	12.3	69
6.1.1 Domestic resident patent app./tr PPP\$ GDP	1.1	65
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.4	44
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.4	42 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	17.1	52
6.1.5 Citable documents H index	194.0	37
6.2 Knowledge impact	43.8	51
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.2	17 ●
6.2.2 New businesses/th pop. 15–64	5.7	18 ●
6.2.3 Computer software spending, % GDP	0.3	51 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	12.6	41
6.2.5 High- & medium-high-tech manufactures, %	21.7	49
6.3 Knowledge diffusion	26.0	104 ○
6.3.1 Royalty & license fees receipts, % total trade	0.1	58
6.3.2 High-tech exports less re-exports, %	0.6	75
6.3.3 Comm., computer & info. services exp., % total trade	0.4	107 ○
6.3.4 FDI net outflows, % GDP	7.8	6 ●

7 Creative outputs	38.3	44
7.1 Intangible assets	54.2	23 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	88.9	21
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	67.0	28
7.1.4 ICTs & organizational model creation†	61.0	36
7.2 Creative goods & services	8.0	103 ○
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	1.8	54
7.2.3 Global ent. & media output/th pop. 15–69	0.3	37
7.2.4 Printing & publishing manufactures, %	0.0	81 ○
7.2.5 Creative goods exports, % total trade	0.2	77
7.3 Online creativity	37.0	39
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	3.2	70
7.3.2 Country-code TLDs/th pop. 15–69	48.7	38
7.3.3 Wikipedia edits/pop. 15–69	10,125.8	45
7.3.4 Video uploads on YouTube/pop. 15–69	78.8	31

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

China

Key indicators

Population (millions)	1,350.7
GDP (US\$ billions)	9,181.4
GDP per capita, PPP\$	9,844.0
Income group	Upper-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	46.6	29
Innovation Output Sub-Index	47.3	16
Innovation Input Sub-Index	45.8	45
Innovation Efficiency Ratio	1.0	2 ●
Global Innovation Index 2013 (out of 142)	52.2	35

1 Institutions **48.3** **114**

1.1 Political environment	40.1	125 ○
1.1.1 Political stability*	52.3	99
1.1.2 Government effectiveness*	41.0	67
1.1.3 Press freedom*	26.9	141 ○
1.2 Regulatory environment	49.3	117
1.2.1 Regulatory quality*	42.1	92
1.2.2 Rule of law*	32.9	90
1.2.3 Cost of redundancy dismissal, salary weeks	27.4	120 ○
1.3 Business environment	55.5	98
1.3.1 Ease of starting a business*	67.4	122 ○
1.3.2 Ease of resolving insolvency*	38.1	70
1.3.3 Ease of paying taxes*	61.1	100

2 Human capital & research **43.4** **32**

2.1 Education	71.3	1 ●
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	13.1	74
2.1.4 PISA scales in reading, maths, & science	587.5	1 ●
2.1.5 Pupil-teacher ratio, secondary	14.5	55
2.2 Tertiary education	13.9	115 ○
2.2.1 Tertiary enrolment, % gross	26.7	82
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	0.3	100 ○
2.3 Research & development (R&D)	45.0	23
2.3.1 Researchers, headcounts/mn pop.	1,392.8	50
2.3.2 Gross expenditure on R&D, % GDP	2.0	19
2.3.3 QS university ranking, average score top 3*	76.8	10 ●

3 Infrastructure **45.0** **39**

3.1 Information & communication technologies (ICTs)	36.1	73
3.1.1 ICT access*	43.6	74
3.1.2 ICT use*	27.0	64
3.1.3 Government's online service*	52.9	60
3.1.4 E-participation*	21.1	65
3.2 General infrastructure	65.3	2 ●
3.2.1 Electricity output, kWh/cap	3,508.4	56
3.2.2 Logistics performance*	75.8	24
3.2.3 Gross capital formation, % GDP	48.9	2 ●
3.3 Ecological sustainability	33.5	80
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.7	101
3.3.2 Environmental performance*	43.0	103
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	7.5	16

4 Market sophistication **50.5** **54**

4.1 Credit	35.8	69
4.1.1 Ease of getting credit*	62.5	69
4.1.2 Domestic credit to private sector, % GDP	131.6	18
4.1.3 Microfinance gross loans, % GDP	0.2	62

4.2 Investment	40.5	50
4.2.1 Ease of protecting investors*	50.0	81
4.2.2 Market capitalization, % GDP	44.9	44
4.2.3 Total value of stocks traded, % GDP	70.8	9
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	42

4.3 Trade & competition	75.1	75
4.3.1 Applied tariff rate, weighted mean, %	4.1	73
4.3.2 Non-agricultural mkt access weighted tariff, %	2.6	94
4.3.3 Intensity of local competition†	71.0	43

5 Business sophistication **41.8** **32**

5.1 Knowledge workers	59.4	29
5.1.1 Knowledge-intensive employment, %	7.4	101 ○
5.1.2 Firms offering formal training, % firms	79.2	1 ●
5.1.3 GERD performed by business, % GDP	1.5	13
5.1.4 GERD performed by business, %	76.2	5 ●
5.1.5 GMAT test takers/mn pop. 20–34	154.2	33

5.2 Innovation linkages	30.5	74
5.2.1 University/industry research collaboration†	56.8	32
5.2.2 State of cluster development†	60.2	23
5.2.3 GERD financed by abroad, %	1.0	81 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	67
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	36

5.3 Knowledge absorption	35.5	28
5.3.1 Royalty & license fees payments, % total trade	0.8	34
5.3.2 High-tech imports less re-imports, %	18.3	8 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.3	123 ○
5.3.4 FDI net inflows, % GDP	3.0	65

6 Knowledge & technology outputs **59.0** **2 ●**

6.1 Knowledge creation	67.1	4 ●
6.1.1 Domestic resident patent app/tr PPP\$ GDP	43.7	1 ●
6.1.2 PCT resident patent app/tr PPP\$ GDP	1.5	29
6.1.3 Domestic res utility model app/tr PPP\$ GDP	59.9	1 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	15.8	56
6.1.5 Citable documents H index	385.0	16

6.2 Knowledge impact	65.7	3 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	7.4	2 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.4	24
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	27.2	16
6.2.5 High- & medium-high-tech manufactures, %	43.6	16

6.3 Knowledge diffusion	44.3	23
6.3.1 Royalty & license fees receipts, % total trade	0.0	68
6.3.2 High-tech exports less re-exports, %	27.8	1 ●
6.3.3 Comm., computer & info. services exp., % total trade	0.8	89
6.3.4 FDI net outflows, % GDP	1.4	41

7 Creative outputs **35.7** **59**

7.1 Intangible assets	48.9	47
7.1.1 Domestic res trademark app/bn PPP\$ GDP	122.5	8
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.2	55
7.1.3 ICTs & business model creation†	60.7	50
7.1.4 ICTs & organizational model creation†	61.5	31

7.2 Creative goods & services	33.6	33
7.2.1 Cultural & creative services exports, % total trade	0.2	39
7.2.2 National feature films/mn pop. 15–69	0.6	86 ○
7.2.3 Global ent. & media output/th pop. 15–69	0.1	49 ○
7.2.4 Printing & publishing manufactures, %	0.0	83 ○
7.2.5 Creative goods exports, % total trade	14.9	1 ●

7.3 Online creativity	11.2	87
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.2	86
7.3.2 Country-code TLDs/th pop. 15–69	31.2	55
7.3.3 Wikipedia edits/pop. 15–69	190.1	117
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	47.7
GDP (US\$ billions)	381.8
GDP per capita, PPP\$	11,188.8
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	35.5	68
Innovation Output Sub-Index	27.6	77
Innovation Input Sub-Index	43.4	58
Innovation Efficiency Ratio	0.6	102
Global Innovation Index 2013 (out of 142)	37.4	60

1	Institutions	60.4	71
1.1	Political environment	45.0	107
1.1.1	Political stability*	31.3	134 ○
1.1.2	Government effectiveness*	41.2	66
1.1.3	Press freedom*	62.5	105
1.2	Regulatory environment	64.9	76
1.2.1	Regulatory quality*	58.9	58
1.2.2	Rule of law*	35.6	83
1.2.3	Cost of redundancy dismissal, salary weeks	16.7	78
1.3	Business environment	71.4	40
1.3.1	Ease of starting a business*	81.6	81
1.3.2	Ease of resolving insolvency*	74.5	23 ●
1.3.3	Ease of paying taxes*	58.0	107
2	Human capital & research	29.4	65
2.1	Education	33.1	104
2.1.1	Expenditure on education, % GDP	4.4	77
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	15.2	84
2.1.3	School life expectancy, years	13.2	68
2.1.4	PISA scales in reading, maths, & science	392.9	58 ○
2.1.5	Pupil-teacher ratio, secondary	25.4	91 ○
2.2	Tertiary education	39.9	46
2.2.1	Tertiary enrolment, % gross	45.0	57
2.2.2	Graduates in science & engineering, %	21.5	44
2.2.3	Tertiary inbound mobility, %	n/a	n/a
2.3	Research & development (R&D)	15.3	56
2.3.1	Researchers, headcounts/mn pop.	346.4	76
2.3.2	Gross expenditure on R&D, % GDP	0.2	90
2.3.3	QS university ranking, average score top 3*	39.1	34
3	Infrastructure	44.8	40
3.1	Information & communication technologies (ICTs)	56.0	33
3.1.1	ICT access*	43.5	75
3.1.2	ICT use*	22.6	76
3.1.3	Government's online service*	84.3	16 ●
3.1.4	E-participation*	73.7	11 ●
3.2	General infrastructure	29.7	87
3.2.1	Electricity output, kWh/cap	1,317.3	88
3.2.2	Logistics performance*	50.0	64
3.2.3	Gross capital formation, % GDP	23.7	64
3.3	Ecological sustainability	48.7	31 ●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	13.2	2 ●
3.3.2	Environmental performance*	50.8	77
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	2.9	36
4	Market sophistication	51.8	48
4.1	Credit	33.4	79
4.1.1	Ease of getting credit*	62.5	69
4.1.2	Domestic credit to private sector, % GDP	48.9	69
4.1.3	Microfinance gross loans, % GDP	1.8	26

4.2	Investment	43.2	44
4.2.1	Ease of protecting investors*	83.3	6 ●
4.2.2	Market capitalization, % GDP	70.9	25 ●
4.2.3	Total value of stocks traded, % GDP	7.0	45
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	59 ○
4.3	Trade & competition	78.6	33
4.3.1	Applied tariff rate, weighted mean, %	5.6	89
4.3.2	Non-agricultural mkt access weighted tariff, %	0.1	28 ●
4.3.3	Intensity of local competition†	67.7	61

5	Business sophistication	30.8	76
5.1	Knowledge workers	38.5	71
5.1.1	Knowledge-intensive employment, %	16.8	84
5.1.2	Firms offering formal training, % firms	56.7	13 ●
5.1.3	GERD performed by business, % GDP	0.0	69 ○
5.1.4	GERD performed by business, %	26.2	58
5.1.5	GMAT test takers/mn pop. 20–34	65.6	66
5.2	Innovation linkages	21.7	122 ○
5.2.1	University/industry research collaboration†	47.5	51
5.2.2	State of cluster development†	46.5	71
5.2.3	GERD financed by abroad, %	3.5	69
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	107 ○
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	90
5.3	Knowledge absorption	32.1	36
5.3.1	Royalty & license fees payments, % total trade	0.8	39
5.3.2	High-tech imports less re-imports, %	13.0	18 ●
5.3.3	Comm., computer & info. services imp., % total trade	0.7	74
5.3.4	FDI net inflows, % GDP	4.3	50

6	Knowledge & technology outputs	24.4	85
6.1	Knowledge creation	7.4	93
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.4	80
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	67
6.1.3	Domestic res utility model app./tr PPP\$ GDP	0.5	39
6.1.4	Scientific & technical articles/bn PPP\$ GDP	6.1	97
6.1.5	Citable documents H index	133.0	47
6.2	Knowledge impact	39.7	66
6.2.1	Growth rate of PPP\$ GDP/worker, %	2.6	43
6.2.2	New businesses/th pop. 15–64	2.0	43
6.2.3	Computer software spending, % GDP	0.2	65 ○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	19.9	21 ●
6.2.5	High- & medium-high-tech manufactures, %	22.1	47
6.3	Knowledge diffusion	26.1	101
6.3.1	Royalty & license fees receipts, % total trade	0.1	43
6.3.2	High-tech exports less re-exports, %	0.9	72
6.3.3	Comm., computer & info. services exp., % total trade	0.5	102
6.3.4	FDI net outflows, % GDP	–0.1	112 ○

7	Creative outputs	30.7	76
7.1	Intangible assets	37.2	105
7.1.1	Domestic res trademark app./bn PPP\$ GDP	37.4	68
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.0	73 ○
7.1.3	ICTs & business model creation†	59.2	59
7.1.4	ICTs & organizational model creation†	56.5	54
7.2	Creative goods & services	16.4	76
7.2.1	Cultural & creative services exports, % total trade	0.2	42
7.2.2	National feature films/mn pop. 15–69	0.6	85 ○
7.2.3	Global ent. & media output/th pop. 15–69	0.2	44
7.2.4	Printing & publishing manufactures, %	0.0	23
7.2.5	Creative goods exports, % total trade	0.3	70
7.3	Online creativity	32.2	45
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	3.8	66
7.3.2	Country-code TLDs/th pop. 15–69	51.8	35
7.3.3	Wikipedia edits/pop. 15–69	3,505.2	64
7.3.4	Video uploads on YouTube/pop. 15–69	67.3	46

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Costa Rica

Key indicators

Population (millions)	4.8
GDP (US\$ billions)	49.6
GDP per capita, PPP\$	12,942.1
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	37.3	57
Innovation Output Sub-Index	33.3	51
Innovation Input Sub-Index	41.3	66
Innovation Efficiency Ratio	0.8	38
Global Innovation Index 2013 (out of 142)	41.5	39

1 Institutions	66.7	56
1.1 Political environment	74.3	35 ●
1.1.1 Political stability*	81.1	40
1.1.2 Government effectiveness*	53.9	46
1.1.3 Press freedom*	87.9	16 ●
1.2 Regulatory environment	70.0	54
1.2.1 Regulatory quality*	63.6	45
1.2.2 Rule of law*	59.4	46
1.2.3 Cost of redundancy dismissal, salary weeks	18.7	87
1.3 Business environment	55.9	95
1.3.1 Ease of starting a business*	79.4	92
1.3.2 Ease of resolving insolvency*	26.0	108
1.3.3 Ease of paying taxes*	62.2	96

2 Human capital & research	25.0	87
2.1 Education	43.0	68
2.1.1 Expenditure on education, % GDP	6.3	22 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	14.4	86
2.1.3 School life expectancy, years	13.7	61
2.1.4 PISA scales in reading, maths, & science	425.6	46
2.1.5 Pupil-teacher ratio, secondary	14.9	62
2.2 Tertiary education	22.7	94
2.2.1 Tertiary enrolment, % gross	46.7	53
2.2.2 Graduates in science & engineering, %	11.9	97 ○
2.2.3 Tertiary inbound mobility, %	1.4	72
2.3 Research & development (R&D)	9.4	69
2.3.1 Researchers, headcounts/mn pop.	1,867.6	43
2.3.2 Gross expenditure on R&D, % GDP	0.5	61
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	38.1	64
3.1 Information & communication technologies (ICTs)	41.8	60
3.1.1 ICT access*	55.3	61
3.1.2 ICT use*	30.6	60
3.1.3 Government's online service*	49.7	68
3.1.4 E-participation*	31.6	48
3.2 General infrastructure	26.9	102
3.2.1 Electricity output, kWh/cap	2,078.9	77
3.2.2 Logistics performance*	45.2	81
3.2.3 Gross capital formation, % GDP	21.3	76
3.3 Ecological sustainability	45.5	40
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	10.9	11 ●
3.3.2 Environmental performance*	58.5	52
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.4	55

4 Market sophistication	40.7	121 ○
4.1 Credit	24.3	110
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	49.1	68
4.1.3 Microfinance gross loans, % GDP	0.1	64

4.2 Investment	15.6	142 ○
4.2.1 Ease of protecting investors*	30.0	133 ○
4.2.2 Market capitalization, % GDP	4.5	102 ○
4.2.3 Total value of stocks traded, % GDP	0.1	101 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a

4.3 Trade & competition	82.2	17 ●
4.3.1 Applied tariff rate, weighted mean, %	3.1	57
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	13 ●
4.3.3 Intensity of local competition†	70.0	50

5 Business sophistication	35.9	47
5.1 Knowledge workers	37.2	79
5.1.1 Knowledge-intensive employment, %	23.9	61
5.1.2 Firms offering formal training, % firms	48.9	28
5.1.3 GERD performed by business, % GDP	0.1	63
5.1.4 GERD performed by business, %	15.9	67 ○
5.1.5 GMAT test takers/mn pop. 20–34	59.3	69

5.2 Innovation linkages	26.5	93
5.2.1 University/industry research collaboration†	56.8	32 ●
5.2.2 State of cluster development†	52.0	43
5.2.3 GERD financed by abroad, %	6.5	55
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	90 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	78

5.3 Knowledge absorption	44.0	8 ●
5.3.1 Royalty & license fees payments, % total trade	0.5	55
5.3.2 High-tech imports less re-imports, %	21.8	3 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.7	80
5.3.4 FDI net inflows, % GDP	5.3	36

6 Knowledge & technology outputs	30.3	57
6.1 Knowledge creation	4.4	118 ○
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.2	94 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.1	79
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.1	56 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.5	95
6.1.5 Citable documents H index	103.0	64

6.2 Knowledge impact	34.4	86
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.1	36
6.2.2 New businesses/th pop. 15–64	3.5	30
6.2.3 Computer software spending, % GDP	0.3	44
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.0	74
6.2.5 High- & medium-high-tech manufactures, %	11.6	72
6.3 Knowledge diffusion	52.0	8 ●
6.3.1 Royalty & license fees receipts, % total trade	0.0	81
6.3.2 High-tech exports less re-exports, %	15.3	9 ●
6.3.3 Comm., computer & info. services exp., % total trade	10.5	1 ●
6.3.4 FDI net outflows, % GDP	1.7	39

7 Creative outputs	36.3	55
7.1 Intangible assets	55.4	17 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	111.1	12 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	62.5	43
7.1.4 ICTs & organizational model creation†	60.5	37

7.2 Creative goods & services	19.4	62
7.2.1 Cultural & creative services exports, % total trade	0.0	85 ○
7.2.2 National feature films/mn pop. 15–69	0.9	75
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	24
7.2.5 Creative goods exports, % total trade	0.7	48

7.3 Online creativity	15.2	77
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	15.7	33 ●
7.3.2 Country-code TLDs/th pop. 15–69	22.6	72
7.3.3 Wikipedia edits/pop. 15–69	4,284.2	59
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	19.8
GDP (US\$ billions)	28.3
GDP per capita, PPP\$	1,818.1
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.0	116
Innovation Output Sub-Index	26.0	88
Innovation Input Sub-Index	28.0	135 ○
Innovation Efficiency Ratio	0.9	10 ●
Global Innovation Index 2013 (out of 142)	23.4	136
1 Institutions	48.8	112
1.1 Political environment	38.8	130 ○
1.1.1 Political stability*	34.8	127
1.1.2 Government effectiveness*	11.3	135 ○
1.1.3 Press freedom*	70.2	77 ●
1.2 Regulatory environment	56.1	99
1.2.1 Regulatory quality*	28.7	122
1.2.2 Rule of law*	15.9	130 ○
1.2.3 Cost of redundancy dismissal, salary weeks	13.1	58 ●
1.3 Business environment	51.6	115
1.3.1 Ease of starting a business*	77.8	98
1.3.2 Ease of resolving insolvency*	33.7	85 ●
1.3.3 Ease of paying taxes*	43.3	130 ○
2 Human capital & research	13.0	131 ○
2.1 Education	31.3	111
2.1.1 Expenditure on education, % GDP	4.6	71 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	7.0	129 ○
2.2.1 Tertiary enrolment, % gross	8.4	116
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	1.3	78
2.3 Research & development (R&D)	0.6	122
2.3.1 Researchers, headcounts/mn pop.	137.8	94
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	20.1	131 ○
3.1 Information & communication technologies (ICTs)	18.3	117
3.1.1 ICT access*	25.8	108
3.1.2 ICT use*	0.9	130 ○
3.1.3 Government's online service*	33.3	110
3.1.4 E-participation*	13.2	84
3.2 General infrastructure	20.9	130 ○
3.2.1 Electricity output, kWh/cap	302.7	108
3.2.2 Logistics performance*	44.4	84
3.2.3 Gross capital formation, % GDP	17.9	111
3.3 Ecological sustainability	21.1	127
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.8	114 ○
3.3.2 Environmental performance*	39.7	109
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	92
4 Market sophistication	37.7	133 ○
4.1 Credit	16.9	132 ○
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	18.3	123
4.1.3 Microfinance gross loans, % GDP	0.2	61

4.2 Investment	21.4	135 ○
4.2.1 Ease of protecting investors*	33.3	125 ○
4.2.2 Market capitalization, % GDP	31.7	57 ●
4.2.3 Total value of stocks traded, % GDP	0.7	76
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	74.8	78 ●
4.3.1 Applied tariff rate, weighted mean, %	6.8	104
4.3.2 Non-agricultural mkt access weighted tariff, %	0.9	69 ●
4.3.3 Intensity of local competition [†]	66.2	68 ●
5 Business sophistication	20.5	130 ○
5.1 Knowledge workers	23.3	114
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	21.3	89
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	25.3	106
5.2 Innovation linkages	23.6	112
5.2.1 University/industry research collaboration [†]	30.2	119
5.2.2 State of cluster development [†]	32.2	124 ○
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	14.5	126
5.3.1 Royalty & license fees payments, % total trade	0.2	86
5.3.2 High-tech imports less re-imports, %	4.7	104
5.3.3 Comm., computer & info. services imp., % total trade	0.8	71 ●
5.3.4 FDI net inflows, % GDP	1.4	103
6 Knowledge & technology outputs	27.2	67 ●
6.1 Knowledge creation	4.5	116
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.7	74
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	102
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	4.3	113
6.1.5 Citable documents H index	68.0	90
6.2 Knowledge impact	54.0	16 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	5.3	7 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.6	114
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	23.2	117
6.3.1 Royalty & license fees receipts, % total trade	0.0	106 ○
6.3.2 High-tech exports less re-exports, %	0.9	71 ●
6.3.3 Comm., computer & info. services exp., % total trade	0.9	86
6.3.4 FDI net outflows, % GDP	0.2	81
7 Creative outputs	24.8	103
7.1 Intangible assets	47.9	50 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation [†]	50.7	92
7.1.4 ICTs & organizational model creation [†]	45.2	100
7.2 Creative goods & services	1.6	129 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	69
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	112
7.3 Online creativity	1.9	120
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.5	122
7.3.2 Country-code TLDs/th pop. 15–69	3.3	117
7.3.3 Wikipedia edits/pop. 15–69	n/a	n/a
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Croatia

Key indicators

Population (millions)	4.3
GDP (US\$ billions)	58.1
GDP per capita, PPP\$	18,190.9
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.7	42
Innovation Output Sub-Index	36.4	40
Innovation Input Sub-Index	45.1	50
Innovation Efficiency Ratio	0.8	36
Global Innovation Index 2013 (out of 142)	41.9	37

1	Institutions	69.8	45
1.1	Political environment	70.9	46
1.1.1	Political stability*	79.8	43
1.1.2	Government effectiveness*	59.4	41
1.1.3	Press freedom*	73.4	54
1.2	Regulatory environment	71.0	48
1.2.1	Regulatory quality*	60.2	53
1.2.2	Rule of law*	52.2	55
1.2.3	Cost of redundancy dismissal, salary weeks	15.1	69
1.3	Business environment	67.4	61
1.3.1	Ease of starting a business*	88.3	51
1.3.2	Ease of resolving insolvency*	32.1	87
1.3.3	Ease of paying taxes*	81.9	30 ●
2	Human capital & research	35.3	48
2.1	Education	56.7	17 ●
2.1.1	Expenditure on education, % GDP	4.3	81
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3	School life expectancy, years	14.5	47
2.1.4	PISA scales in reading, maths, & science	482.4	33
2.1.5	Pupil-teacher ratio, secondary	8.0	5 ●
2.2	Tertiary education	32.7	69
2.2.1	Tertiary enrolment, % gross	58.8	41
2.2.2	Graduates in science & engineering, %	20.1	56
2.2.3	Tertiary inbound mobility, %	0.4	94 ○
2.3	Research & development (R&D)	16.5	49
2.3.1	Researchers, headcounts/mn pop.	2,649.0	32
2.3.2	Gross expenditure on R&D, % GDP	0.8	44
2.3.3	QS university ranking, average score top 3*	7.7	62
3	Infrastructure	45.4	37
3.1	Information & communication technologies (ICTs)	52.4	39
3.1.1	ICT access*	66.6	37
3.1.2	ICT use*	49.9	32 ●
3.1.3	Government's online service*	64.1	40
3.1.4	E-participation*	29.0	53
3.2	General infrastructure	30.6	81
3.2.1	Electricity output, kWh/cap	2,426.8	69
3.2.2	Logistics performance*	61.5	42
3.2.3	Gross capital formation, % GDP	20.5	85
3.3	Ecological sustainability	53.3	16 ●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.3	34
3.3.2	Environmental performance*	62.2	45
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	9.8	11 ●
4	Market sophistication	42.5	113 ○
4.1	Credit	32.1	85
4.1.1	Ease of getting credit*	75.0	40
4.1.2	Domestic credit to private sector, % GDP	68.0	49
4.1.3	Microfinance gross loans, % GDP	0.0	89 ○

4.2	Investment	18.4	139 ○
4.2.1	Ease of protecting investors*	33.3	125 ○
4.2.2	Market capitalization, % GDP	38.2	52
4.2.3	Total value of stocks traded, % GDP	0.9	70 ○
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	51 ○
4.3	Trade & competition	77.0	53
4.3.1	Applied tariff rate, weighted mean, %	1.3	38
4.3.2	Non-agricultural mkt access weighted tariff, %	0.5	50
4.3.3	Intensity of local competition†	58.7	102 ○

5	Business sophistication	32.5	69
5.1	Knowledge workers	41.3	62
5.1.1	Knowledge-intensive employment, %	32.2	40
5.1.2	Firms offering formal training, % firms	28.9	69 ○
5.1.3	GERD performed by business, % GDP	0.3	39
5.1.4	GERD performed by business, %	45.8	39
5.1.5	GMAT test takers/mn pop. 20–34	97.0	53
5.2	Innovation linkages	26.6	92 ○
5.2.1	University/industry research collaboration†	41.0	74
5.2.2	State of cluster development†	37.2	108 ○
5.2.3	GERD financed by abroad, %	14.4	33
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	43
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	47
5.3	Knowledge absorption	29.7	44
5.3.1	Royalty & license fees payments, % total trade	1.2	22 ●
5.3.2	High-tech imports less re-imports, %	6.8	69
5.3.3	Comm., computer & info. services imp., % total trade	1.8	15 ●
5.3.4	FDI net inflows, % GDP	2.3	84
6	Knowledge & technology outputs	34.9	40
6.1	Knowledge creation	22.0	45
6.1.1	Domestic resident patent app/tr PPP\$ GDP	2.8	39
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.4	43
6.1.3	Domestic res utility model app/tr PPP\$ GDP	1.1	32
6.1.4	Scientific & technical articles/bn PPP\$ GDP	40.6	17 ●
6.1.5	Citable documents H index	143.0	42
6.2	Knowledge impact	49.3	29 ●
6.2.1	Growth rate of PPP\$ GDP/worker, %	–1.8	110 ○
6.2.2	New businesses/th pop. 15–64	2.8	35
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	33.7	10 ●
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	33.5	54
6.3.1	Royalty & license fees receipts, % total trade	0.1	49
6.3.2	High-tech exports less re-exports, %	3.8	38
6.3.3	Comm., computer & info. services exp., % total trade	2.2	35
6.3.4	FDI net outflows, % GDP	–0.2	115 ○
7	Creative outputs	37.9	47
7.1	Intangible assets	43.0	75
7.1.1	Domestic res trademark app/bn PPP\$ GDP	56.6	46
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	1.8	19
7.1.3	ICTs & business model creation†	58.7	62
7.1.4	ICTs & organizational model creation†	54.0	64
7.2	Creative goods & services	35.9	26 ●
7.2.1	Cultural & creative services exports, % total trade	1.4	3 ●
7.2.2	National feature films/mn pop. 15–69	2.9	46
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.4	62
7.3	Online creativity	29.6	50
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	14.9	36
7.3.2	Country-code TLDs/th pop. 15–69	44.7	41
7.3.3	Wikipedia edits/pop. 15–69	17,144.1	30 ●
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	1.1
GDP (US\$ billions)	21.8
GDP per capita, PPP\$	25,265.4
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	45.8	30
Innovation Output Sub-Index	39.9	34
Innovation Input Sub-Index	51.7	31
Innovation Efficiency Ratio	0.8	56
Global Innovation Index 2013 (out of 142)	49.3	27

1	Institutions	83.5	19	●
1.1	Political environment	81.7	20	●
1.1.1	Political stability*	81.1	39	
1.1.2	Government effectiveness*	77.7	22	
1.1.3	Press freedom*	86.2	22	
1.2	Regulatory environment	88.5	20	●
1.2.1	Regulatory quality*	78.1	24	
1.2.2	Rule of law*	75.8	25	
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1	●
1.3	Business environment	80.3	21	●
1.3.1	Ease of starting a business*	88.0	54	
1.3.2	Ease of resolving insolvency*	74.6	22	
1.3.3	Ease of paying taxes*	78.2	40	
2	Human capital & research	39.4	39	
2.1	Education	58.2	10	●
2.1.1	Expenditure on education, % GDP	7.3	10	●
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	40.7	5	●
2.1.3	School life expectancy, years	14.0	57	
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	9.7	22	
2.2	Tertiary education	51.1	22	
2.2.1	Tertiary enrolment, % gross	46.5	54	
2.2.2	Graduates in science & engineering, %	17.2	68	
2.2.3	Tertiary inbound mobility, %	28.0	1	●
2.3	Research & development (R&D)	8.9	71	
2.3.1	Researchers, headcounts/mn pop.	1,734.9	45	
2.3.2	Gross expenditure on R&D, % GDP	0.5	62	
2.3.3	QS university ranking, average score top 3*	0.0	70	○
3	Infrastructure	37.6	66	
3.1	Information & communication technologies (ICTs)	42.7	59	
3.1.1	ICT access*	64.5	44	
3.1.2	ICT use*	42.3	42	
3.1.3	Government's online service*	56.2	51	
3.1.4	E-participation*	7.9	98	
3.2	General infrastructure	25.4	108	
3.2.1	Electricity output, kWh/cap	6,161.3	33	
3.2.2	Logistics performance*	64.7	35	
3.2.3	Gross capital formation, % GDP	10.5	140	○
3.3	Ecological sustainability	44.6	42	
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.9	25	
3.3.2	Environmental performance*	66.2	38	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.4	56	
4	Market sophistication	64.4	16	●
4.1	Credit	84.4	1	●
4.1.1	Ease of getting credit*	68.8	53	
4.1.2	Domestic credit to private sector, % GDP	302.2	1	●
4.1.3	Microfinance gross loans, % GDP	n/a	n/a	

4.2	Investment	33.2	83	
4.2.1	Ease of protecting investors*	63.3	32	
4.2.2	Market capitalization, % GDP	8.7	92	○
4.2.3	Total value of stocks traded, % GDP	1.3	63	
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a	
4.3	Trade & competition	75.7	70	
4.3.1	Applied tariff rate, weighted mean, %	1.1	10	
4.3.2	Non-agricultural mkt access weighted tariff, %	3.3	97	○
4.3.3	Intensity of local competition†	70.8	45	

5	Business sophistication	33.8	63	
5.1	Knowledge workers	39.6	68	
5.1.1	Knowledge-intensive employment, %	35.0	34	
5.1.2	Firms offering formal training, % firms	n/a	n/a	
5.1.3	GERD performed by business, % GDP	0.1	66	
5.1.4	GERD performed by business, %	13.9	71	○
5.1.5	GMAT test takers/mn pop. 20–34	170.6	29	
5.2	Innovation linkages	39.2	45	
5.2.1	University/industry research collaboration†	46.5	52	
5.2.2	State of cluster development†	51.0	49	
5.2.3	GERD financed by abroad, %	14.1	34	
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	16	●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.5	26	
5.3	Knowledge absorption	22.6	88	
5.3.1	Royalty & license fees payments, % total trade	0.3	69	
5.3.2	High-tech imports less re-imports, %	4.6	106	○
5.3.3	Comm., computer & info. services imp., % total trade	1.4	39	
5.3.4	FDI net inflows, % GDP	4.3	48	

6	Knowledge & technology outputs	34.6	42	
6.1	Knowledge creation	28.1	36	
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.2	92	○
6.1.2	PCT resident patent app./tr PPP\$ GDP	2.1	22	
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a	
6.1.4	Scientific & technical articles/bn PPP\$ GDP	44.9	13	●
6.1.5	Citable documents H index	86.0	72	
6.2	Knowledge impact	51.2	23	
6.2.1	Growth rate of PPP\$ GDP/worker, %	–0.8	103	○
6.2.2	New businesses/th pop. 15–64	22.5	1	●
6.2.3	Computer software spending, % GDP	n/a	n/a	
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	12.7	38	
6.2.5	High- & medium-high-tech manufactures, %	13.8	67	
6.3	Knowledge diffusion	24.4	115	
6.3.1	Royalty & license fees receipts, % total trade	0.0	80	
6.3.2	High-tech exports less re-exports, %	0.6	78	
6.3.3	Comm., computer & info. services exp., % total trade	1.2	79	
6.3.4	FDI net outflows, % GDP	–1.5	120	○

7	Creative outputs	45.3	24	
7.1	Intangible assets	53.3	27	
7.1.1	Domestic res trademark app./bn PPP\$ GDP	81.1	26	
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	8.6	1	●
7.1.3	ICTs & business model creation†	54.8	73	
7.1.4	ICTs & organizational model creation†	50.3	79	
7.2	Creative goods & services	25.8	48	
7.2.1	Cultural & creative services exports, % total trade	0.7	16	●
7.2.2	National feature films/mn pop. 15–69	3.6	39	
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a	
7.2.4	Printing & publishing manufactures, %	0.0	15	
7.2.5	Creative goods exports, % total trade	0.0	111	○
7.3	Online creativity	48.6	28	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	90.6	7	●
7.3.2	Country-code TLDs/th pop. 15–69	37.4	48	
7.3.3	Wikipedia edits/pop. 15–69	10,397.0	44	
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a	

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Czech Republic

Key indicators

Population (millions)	10.5
GDP (US\$ billions)	198.3
GDP per capita, PPP\$	27,200.1
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	50.2	26
Innovation Output Sub-Index	46.8	17
Innovation Input Sub-Index	53.6	27
Innovation Efficiency Ratio	0.9	18
Global Innovation Index 2013 (out of 142)	48.4	28

1 Institutions	76.2	31
1.1 Political environment	82.1	19
1.1.1 Political stability*	91.2	16
1.1.2 Government effectiveness*	65.4	36
1.1.3 Press freedom*	89.8	14 ●
1.2 Regulatory environment	75.4	40
1.2.1 Regulatory quality*	76.5	29
1.2.2 Rule of law*	74.1	29
1.2.3 Cost of redundancy dismissal, salary weeks	20.2	94 ○
1.3 Business environment	71.0	43
1.3.1 Ease of starting a business*	79.1	94 ○
1.3.2 Ease of resolving insolvency*	68.9	27
1.3.3 Ease of paying taxes*	65.0	87 ○

2 Human capital & research	45.7	29
2.1 Education	51.6	41
2.1.1 Expenditure on education, % GDP	4.2	82 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	24.4	44
2.1.3 School life expectancy, years	16.4	17
2.1.4 PISA scales in reading, maths, & science	500.0	19
2.1.5 Pupil-teacher ratio, secondary	11.2	30
2.2 Tertiary education	46.0	31
2.2.1 Tertiary enrolment, % gross	64.6	28
2.2.2 Graduates in science & engineering, %	21.8	40
2.2.3 Tertiary inbound mobility, %	8.5	18
2.3 Research & development (R&D)	39.5	28
2.3.1 Researchers, headcounts/mn pop.	4,442.5	25
2.3.2 Gross expenditure on R&D, % GDP	1.9	20
2.3.3 QS university ranking, average score top 3*	34.0	37

3 Infrastructure	50.8	25
3.1 Information & communication technologies (ICTs)	49.6	45
3.1.1 ICT access*	66.0	38
3.1.2 ICT use*	51.7	30
3.1.3 Government's online service*	54.3	53
3.1.4 E-participation*	26.3	56
3.2 General infrastructure	39.8	44
3.2.1 Electricity output, kWh/cap	8,264.0	21
3.2.2 Logistics performance*	60.7	44
3.2.3 Gross capital formation, % GDP	22.7	71
3.3 Ecological sustainability	63.0	5 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.8	73
3.3.2 Environmental performance*	81.5	5 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	14.9	1 ●

4 Market sophistication	49.1	62
4.1 Credit	43.2	50
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	56.9	56
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	23.6	126 ○
4.2.1 Ease of protecting investors*	50.0	81 ○
4.2.2 Market capitalization, % GDP	19.0	74 ○
4.2.3 Total value of stocks traded, % GDP	5.2	48
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	52 ○
4.3 Trade & competition	80.5	27
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	80.5	9 ●

5 Business sophistication	46.2	20
5.1 Knowledge workers	61.2	26
5.1.1 Knowledge-intensive employment, %	37.3	26
5.1.2 Firms offering formal training, % firms	69.6	4 ●
5.1.3 GERD performed by business, % GDP	1.0	22
5.1.4 GERD performed by business, %	53.6	31
5.1.5 GMAT test takers/mn pop. 20–34	37.3	83
5.2 Innovation linkages	35.8	56
5.2.1 University/industry research collaboration†	56.8	32
5.2.2 State of cluster development†	52.3	41
5.2.3 GERD financed by abroad, %	25.9	16
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	104 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	37
5.3 Knowledge absorption	41.5	11 ●
5.3.1 Royalty & license fees payments, % total trade	0.5	49
5.3.2 High-tech imports less re-imports, %	16.2	10 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.4	37
5.3.4 FDI net inflows, % GDP	5.4	34

6 Knowledge & technology outputs	46.4	15
6.1 Knowledge creation	46.7	19
6.1.1 Domestic resident patent app/tr PPP\$ GDP	3.1	37
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.6	36
6.1.3 Domestic res utility model app/tr PPP\$ GDP	6.3	7
6.1.4 Scientific & technical articles/bn PPP\$ GDP	34.8	25
6.1.5 Citable documents H index	239.0	31
6.2 Knowledge impact	50.6	25
6.2.1 Growth rate of PPP\$ GDP/worker, %	–1.1	105 ○
6.2.2 New businesses/th pop. 15–64	3.0	32
6.2.3 Computer software spending, % GDP	0.3	34
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	37.7	8 ●
6.2.5 High- & medium-high-tech manufactures, %	48.8	10 ●
6.3 Knowledge diffusion	41.8	27
6.3.1 Royalty & license fees receipts, % total trade	0.1	42
6.3.2 High-tech exports less re-exports, %	17.1	7 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.7	52
6.3.4 FDI net outflows, % GDP	0.7	56

7 Creative outputs	47.3	18
7.1 Intangible assets	47.3	53
7.1.1 Domestic res trademark app/bn PPP\$ GDP	115.2	11
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.5	23
7.1.3 ICTs & business model creation†	54.7	74
7.1.4 ICTs & organizational model creation†	52.5	70
7.2 Creative goods & services	43.5	11 ●
7.2.1 Cultural & creative services exports, % total trade	0.1	48
7.2.2 National feature films/mn pop. 15–69	5.6	25
7.2.3 Global ent. & media output/th pop. 15–69	0.6	26
7.2.4 Printing & publishing manufactures, %	0.0	31
7.2.5 Creative goods exports, % total trade	11.3	2 ●
7.3 Online creativity	51.2	24
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	15.1	35
7.3.2 Country-code TLDs/th pop. 15–69	66.5	15
7.3.3 Wikipedia edits/pop. 15–69	21,838.6	19
7.3.4 Video uploads on YouTube/pop. 15–69	86.2	18

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	5.6
GDP (US\$ billions)	331.0
GDP per capita, PPP\$	37,900.5
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	57.5	8
Innovation Output Sub-Index	49.5	12
Innovation Input Sub-Index	65.5	9
Innovation Efficiency Ratio	0.8	61
Global Innovation Index 2013 (out of 142)	58.3	9

1 Institutions	93.6	4 ●
1.1 Political environment	91.4	8
1.1.1 Political stability*	87.8	27
1.1.2 Government effectiveness*	93.3	3 ●
1.1.3 Press freedom*	92.9	5 ●
1.2 Regulatory environment	98.2	3 ●
1.2.1 Regulatory quality*	95.7	6 ●
1.2.2 Rule of law*	97.3	5 ●
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	91.3	6 ●
1.3.1 Ease of starting a business*	92.4	23
1.3.2 Ease of resolving insolvency*	92.1	10
1.3.3 Ease of paying taxes*	89.5	11

2 Human capital & research	61.5	9
2.1 Education	60.8	7
2.1.1 Expenditure on education, % GDP	8.7	3 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	33.0	16
2.1.3 School life expectancy, years	16.9	10
2.1.4 PISA scales in reading, maths, & science	498.2	22
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	45.4	33
2.2.1 Tertiary enrolment, % gross	73.6	19
2.2.2 Graduates in science & engineering, %	20.2	55 ○
2.2.3 Tertiary inbound mobility, %	7.5	23
2.3 Research & development (R&D)	78.2	4 ●
2.3.1 Researchers, headcounts/mn pop.	10,182.8	3 ●
2.3.2 Gross expenditure on R&D, % GDP	3.0	6
2.3.3 QS university ranking, average score top 3*	70.9	13

3 Infrastructure	59.1	9
3.1 Information & communication technologies (ICTs)	76.0	13
3.1.1 ICT access*	81.8	12
3.1.2 ICT use*	81.5	3 ●
3.1.3 Government's online service*	85.6	13
3.1.4 E-participation*	55.3	28
3.2 General infrastructure	39.5	46
3.2.1 Electricity output, kWh/cap	5,438.8	38
3.2.2 Logistics performance*	95.6	5
3.2.3 Gross capital formation, % GDP	17.4	114 ○
3.3 Ecological sustainability	61.7	6 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	10.6	13
3.3.2 Environmental performance*	76.9	13
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	8.4	14

4 Market sophistication	67.8	11
4.1 Credit	74.4	5 ●
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	205.8	2 ●
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	51.3	27
4.2.1 Ease of protecting investors*	63.3	32
4.2.2 Market capitalization, % GDP	71.6	24
4.2.3 Total value of stocks traded, % GDP	33.6	27
4.2.4 Venture capital deals/tr PPP\$ GDP	0.2	13
4.3 Trade & competition	77.6	45
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition [†]	74.7	25

5 Business sophistication	45.6	22
5.1 Knowledge workers	68.8	11
5.1.1 Knowledge-intensive employment, %	45.2	9
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	2.0	8
5.1.4 GERD performed by business, %	65.7	16
5.1.5 GMAT test takers/mn pop. 20–34	106.3	50
5.2 Innovation linkages	41.6	38
5.2.1 University/industry research collaboration [†]	63.5	21
5.2.2 State of cluster development [†]	55.0	32
5.2.3 GERD financed by abroad, %	7.2	53 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	23
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.2	15
5.3 Knowledge absorption	26.5	62
5.3.1 Royalty & license fees payments, % total trade	1.1	23
5.3.2 High-tech imports less re-imports, %	6.8	70 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.7	21
5.3.4 FDI net inflows, % GDP	0.4	128 ○

6 Knowledge & technology outputs	46.6	14
6.1 Knowledge creation	46.7	20
6.1.1 Domestic resident patent app./tr PPP\$ GDP	6.8	17
6.1.2 PCT resident patent app./tr PPP\$ GDP	6.8	7
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.8	36 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	67.1	3 ●
6.1.5 Citable documents H index	427.0	14
6.2 Knowledge impact	49.7	28
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.4	79 ○
6.2.2 New businesses/th pop. 15–64	4.4	26
6.2.3 Computer software spending, % GDP	0.6	14
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	13.3	36
6.2.5 High- & medium-high-tech manufactures, %	44.8	14
6.3 Knowledge diffusion	43.6	25
6.3.1 Royalty & license fees receipts, % total trade	1.5	13
6.3.2 High-tech exports less re-exports, %	6.1	27
6.3.3 Comm., computer & info. services exp., % total trade	1.6	58
6.3.4 FDI net outflows, % GDP	1.7	38

7 Creative outputs	52.4	13
7.1 Intangible assets	50.6	38
7.1.1 Domestic res trademark app./bn PPP\$ GDP	55.9	49 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.9	8
7.1.3 ICTs & business model creation [†]	65.8	32
7.1.4 ICTs & organizational model creation [†]	63.7	26
7.2 Creative goods & services	42.2	13
7.2.1 Cultural & creative services exports, % total trade	0.6	18
7.2.2 National feature films/mn pop. 15–69	10.9	11
7.2.3 Global ent. & media output/th pop. 15–69	2.0	7
7.2.4 Printing & publishing manufactures, %	0.0	44 ○
7.2.5 Creative goods exports, % total trade	1.7	32
7.3 Online creativity	66.1	12
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	58.7	17
7.3.2 Country-code TLDs/th pop. 15–69	77.6	3 ●
7.3.3 Wikipedia edits/pop. 15–69	21,687.3	21
7.3.4 Video uploads on YouTube/pop. 15–69	91.1	9

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Dominican Republic

Key indicators

Population (millions)	10.3
GDP (US\$ billions)	60.8
GDP per capita, PPP\$	9,910.5
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.3	83
Innovation Output Sub-Index	29.6	71
Innovation Input Sub-Index	34.9	101
Innovation Efficiency Ratio	0.8	21 ●
Global Innovation Index 2013 (out of 142)	33.3	79

1 Institutions	53.4	99
1.1 Political environment	56.4	74
1.1.1 Political stability*	71.4	57 ●
1.1.2 Government effectiveness*	26.2	104
1.1.3 Press freedom*	71.7	66
1.2 Regulatory environment	49.8	116
1.2.1 Regulatory quality*	45.1	85
1.2.2 Rule of law*	27.0	105
1.2.3 Cost of redundancy dismissal, salary weeks	26.2	116
1.3 Business environment	53.9	107
1.3.1 Ease of starting a business*	81.0	85
1.3.2 Ease of resolving insolvency*	9.3	135 ○
1.3.3 Ease of paying taxes*	71.3	60

2 Human capital & research	7.1	142 ○
2.1 Education	14.2	137 ○
2.1.1 Expenditure on education, % GDP	2.2	127 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	8.5	102 ○
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	29.2	101 ○
2.2 Tertiary education	n/a	n/a
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	34.0	80
3.1 Information & communication technologies (ICTs)	39.3	66
3.1.1 ICT access*	33.5	97
3.1.2 ICT use*	22.7	74
3.1.3 Government's online service*	53.6	56
3.1.4 E-participation*	47.4	34 ●
3.2 General infrastructure	19.1	132 ○
3.2.1 Electricity output, kWh/cap	1,289.8	90
3.2.2 Logistics performance*	43.3	86
3.2.3 Gross capital formation, % GDP	15.3	126 ○
3.3 Ecological sustainability	43.6	47 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	11.8	8 ●
3.3.2 Environmental performance*	53.2	68
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	95

4 Market sophistication	50.4	55 ●
4.1 Credit	25.6	108
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	23.1	113
4.1.3 Microfinance gross loans, % GDP	1.1	35 ●

4.2 Investment	50.0	30 ●
4.2.1 Ease of protecting investors*	50.0	81
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	75.6	71
4.3.1 Applied tariff rate, weighted mean, %	6.1	96
4.3.2 Non-agricultural mkt access weighted tariff, %	0.6	57 ●
4.3.3 Intensity of local competition†	65.3	72

5 Business sophistication	29.9	82
5.1 Knowledge workers	44.4	53 ●
5.1.1 Knowledge-intensive employment, %	17.3	80
5.1.2 Firms offering formal training, % firms	55.9	15 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	26.6	101
5.2 Innovation linkages	26.2	96
5.2.1 University/industry research collaboration†	38.5	88
5.2.2 State of cluster development†	43.5	82
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	99 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	83
5.3 Knowledge absorption	19.0	109
5.3.1 Royalty & license fees payments, % total trade	0.4	61
5.3.2 High-tech imports less re-imports, %	6.0	85
5.3.3 Comm., computer & info. services imp., % total trade	0.5	97
5.3.4 FDI net inflows, % GDP	4.1	52 ●

6 Knowledge & technology outputs	22.8	95
6.1 Knowledge creation	1.7	141 ○
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.2	90
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	95 ○
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	0.7	140 ○
6.1.5 Citable documents H index	41.0	120 ○
6.2 Knowledge impact	35.9	77
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.1	53
6.2.2 New businesses/th pop. 15–64	1.0	59
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.9	100
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	30.8	74
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.8	74
6.3.3 Comm., computer & info. services exp., % total trade	1.4	67
6.3.4 FDI net outflows, % GDP	0.5	65

7 Creative outputs	36.4	53 ●
7.1 Intangible assets	59.3	10 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	59.7	55 ●
7.1.4 ICTs & organizational model creation†	59.0	41 ●
7.2 Creative goods & services	18.2	67
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.9	72
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	1.0	39 ●
7.3 Online creativity	8.9	96
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	3.1	73
7.3.2 Country-code TLDs/th pop. 15–69	20.6	77
7.3.3 Wikipedia edits/pop. 15–69	1,760.0	84
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	15.5
GDP (US\$ billions)	94.1
GDP per capita, PPP\$	10,080.2
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.5	115
Innovation Output Sub-Index	21.3	113
Innovation Input Sub-Index	33.7	105
Innovation Efficiency Ratio	0.6	104
Global Innovation Index 2013 (out of 142)	32.8	83

1	Institutions	43.6	130	○
1.1	Political environment	47.8	97	
1.1.1	Political stability*	50.9	103	
1.1.2	Government effectiveness*	27.2	99	
1.1.3	Press freedom*	65.3	98	
1.2	Regulatory environment	35.2	136	○
1.2.1	Regulatory quality*	21.7	133	○
1.2.2	Rule of law*	14.5	132	○
1.2.3	Cost of redundancy dismissal, salary weeks	31.8	133	○
1.3	Business environment	47.9	125	
1.3.1	Ease of starting a business*	63.3	128	○
1.3.2	Ease of resolving insolvency*	18.9	122	
1.3.3	Ease of paying taxes*	61.6	98	
2	Human capital & research	21.6	98	
2.1	Education	36.1	93	
2.1.1	Expenditure on education, % GDP	4.4	78	
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	17.6	68	
2.1.3	School life expectancy, years	n/a	n/a	
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	11.5	35	●
2.2	Tertiary education	26.4	87	
2.2.1	Tertiary enrolment, % gross	38.9	67	
2.2.2	Graduates in science & engineering, %	12.8	92	
2.2.3	Tertiary inbound mobility, %	n/a	n/a	
2.3	Research & development (R&D)	2.2	104	
2.3.1	Researchers, headcounts/mn pop.	180.7	90	
2.3.2	Gross expenditure on R&D, % GDP	0.2	83	
2.3.3	QS university ranking, average score top 3*	0.0	70	○
3	Infrastructure	35.9	74	
3.1	Information & communication technologies (ICTs)	33.8	80	
3.1.1	ICT access*	43.4	76	
3.1.2	ICT use*	22.2	78	
3.1.3	Government's online service*	45.8	82	
3.1.4	E-participation*	23.7	60	
3.2	General infrastructure	33.4	70	
3.2.1	Electricity output, kWh/cap	1,381.5	85	
3.2.2	Logistics performance*	45.6	80	
3.2.3	Gross capital formation, % GDP	28.2	28	●
3.3	Ecological sustainability	40.7	54	
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.7	30	●
3.3.2	Environmental performance*	58.5	51	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.0	64	
4	Market sophistication	43.7	103	
4.1	Credit	35.2	70	
4.1.1	Ease of getting credit*	56.3	81	
4.1.2	Domestic credit to private sector, % GDP	28.3	102	
4.1.3	Microfinance gross loans, % GDP	3.3	16	●

4.2	Investment	21.0	137	○
4.2.1	Ease of protecting investors*	40.0	113	
4.2.2	Market capitalization, % GDP	7.0	95	
4.2.3	Total value of stocks traded, % GDP	0.2	96	
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a	
4.3	Trade & competition	74.7	80	
4.3.1	Applied tariff rate, weighted mean, %	4.1	73	
4.3.2	Non-agricultural mkt access weighted tariff, %	0.3	40	●
4.3.3	Intensity of local competition†	58.2	106	

5 Business sophistication **23.8** **120**

5.1	Knowledge workers	33.1	88	
5.1.1	Knowledge-intensive employment, %	14.7	94	
5.1.2	Firms offering formal training, % firms	56.4	14	●
5.1.3	GERD performed by business, % GDP	0.0	76	
5.1.4	GERD performed by business, %	8.5	77	○
5.1.5	GMAT test takers/mn pop. 20–34	41.4	79	
5.2	Innovation linkages	22.0	120	
5.2.1	University/industry research collaboration†	49.0	48	●
5.2.2	State of cluster development†	47.5	66	
5.2.3	GERD financed by abroad, %	0.5	88	○
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	86	
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	75	
5.3	Knowledge absorption	16.3	120	
5.3.1	Royalty & license fees payments, % total trade	0.3	66	
5.3.2	High-tech imports less re-imports, %	9.1	42	●
5.3.3	Comm., computer & info. services imp., % total trade	0.1	135	○
5.3.4	FDI net inflows, % GDP	0.8	118	

6 Knowledge & technology outputs **14.4** **130** ○

6.1	Knowledge creation	4.0	125	
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.0	108	○
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.3	54	
6.1.3	Domestic res utility model app./tr PPP\$ GDP	0.1	53	
6.1.4	Scientific & technical articles/bn PPP\$ GDP	2.7	128	○
6.1.5	Citable documents H index	83.0	76	
6.2	Knowledge impact	34.8	84	
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.9	56	
6.2.2	New businesses/th pop. 15–64	n/a	n/a	
6.2.3	Computer software spending, % GDP	0.2	70	○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	6.3	58	
6.2.5	High- & medium-high-tech manufactures, %	14.0	66	
6.3	Knowledge diffusion	4.6	136	○
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a	
6.3.2	High-tech exports less re-exports, %	0.2	95	
6.3.3	Comm., computer & info. services exp., % total trade	0.5	101	
6.3.4	FDI net outflows, % GDP	n/a	n/a	

7 Creative outputs **28.1** **86**

7.1	Intangible assets	44.8	70	
7.1.1	Domestic res trademark app./bn PPP\$ GDP	68.8	36	●
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a	
7.1.3	ICTs & business model creation†	53.7	80	
7.1.4	ICTs & organizational model creation†	54.0	64	
7.2	Creative goods & services	14.1	83	
7.2.1	Cultural & creative services exports, % total trade	0.4	27	●
7.2.2	National feature films/mn pop. 15–69	n/a	n/a	
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a	
7.2.4	Printing & publishing manufactures, %	0.0	55	
7.2.5	Creative goods exports, % total trade	0.1	99	
7.3	Online creativity	8.7	97	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.9	94	
7.3.2	Country-code TLDs/th pop. 15–69	19.9	81	
7.3.3	Wikipedia edits/pop. 15–69	2,516.4	72	
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a	

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Egypt

Key indicators

Population (millions)	80.7
GDP (US\$ billions)	271.4
GDP per capita, PPP\$	6,578.5
Income group	Lower-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.0	99
Innovation Output Sub-Index	26.0	89
Innovation Input Sub-Index	34.1	104
Innovation Efficiency Ratio	0.8	59
Global Innovation Index 2013 (out of 142)	28.5	108

1	Institutions	42.1	133	○
1.1	Political environment	33.7	136	○
1.1.1	Political stability*	29.4	135	○
1.1.2	Government effectiveness*	20.3	118	
1.1.3	Press freedom*	51.3	130	○
1.2	Regulatory environment	38.5	131	○
1.2.1	Regulatory quality*	36.0	109	
1.2.2	Rule of law*	33.9	88	
1.2.3	Cost of redundancy dismissal, salary weeks	36.8	135	○
1.3	Business environment	54.0	105	
1.3.1	Ease of starting a business*	86.5	61	
1.3.2	Ease of resolving insolvency*	17.9	125	○
1.3.3	Ease of paying taxes*	57.6	110	

2	Human capital & research	27.8	75	
2.1	Education	48.3	53	
2.1.1	Expenditure on education, % GDP	3.8	93	
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3	School life expectancy, years	13.1	71	
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	12.1	39	●
2.2	Tertiary education	19.0	102	
2.2.1	Tertiary enrolment, % gross	28.8	76	
2.2.2	Graduates in science & engineering, %	n/a	n/a	
2.2.3	Tertiary inbound mobility, %	1.9	62	
2.3	Research & development (R&D)	16.2	50	
2.3.1	Researchers, headcounts/mn pop.	1,146.1	54	
2.3.2	Gross expenditure on R&D, % GDP	0.4	67	
2.3.3	QS university ranking, average score top 3*	28.2	44	●

3	Infrastructure	36.1	73	
3.1	Information & communication technologies (ICTs)	48.9	48	●
3.1.1	ICT access*	42.0	77	
3.1.2	ICT use*	25.1	70	
3.1.3	Government's online service*	60.1	42	●
3.1.4	E-participation*	68.4	15	●
3.2	General infrastructure	23.0	121	
3.2.1	Electricity output, kWh/cap	1,897.1	78	
3.2.2	Logistics performance*	54.4	56	
3.2.3	Gross capital formation, % GDP	15.6	125	○
3.3	Ecological sustainability	36.5	65	
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.9	69	
3.3.2	Environmental performance*	61.1	48	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.1	61	

4	Market sophistication	35.4	141	○
4.1	Credit	21.8	123	
4.1.1	Ease of getting credit*	56.3	81	
4.1.2	Domestic credit to private sector, % GDP	29.7	99	
4.1.3	Microfinance gross loans, % GDP	0.0	77	

4.2	Investment	18.9	138	○
4.2.1	Ease of protecting investors*	36.7	119	
4.2.2	Market capitalization, % GDP	22.5	65	
4.2.3	Total value of stocks traded, % GDP	7.8	44	
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	64	○

4.3	Trade & competition	65.4	124	
4.3.1	Applied tariff rate, weighted mean, %	8.1	112	
4.3.2	Non-agricultural mkt access weighted tariff, %	1.1	78	
4.3.3	Intensity of local competition†	51.0	123	○

5	Business sophistication	28.9	89	
5.1	Knowledge workers	38.8	69	
5.1.1	Knowledge-intensive employment, %	34.0	36	●
5.1.2	Firms offering formal training, % firms	21.7	88	
5.1.3	GERD performed by business, % GDP	n/a	n/a	
5.1.4	GERD performed by business, %	n/a	n/a	
5.1.5	GMAT test takers/mn pop. 20–34	35.2	87	

5.2	Innovation linkages	31.3	70	
5.2.1	University/industry research collaboration†	27.5	127	○
5.2.2	State of cluster development†	51.5	45	●
5.2.3	GERD financed by abroad, %	n/a	n/a	
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	0.1	35	●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	99	
5.3	Knowledge absorption	16.6	119	
5.3.1	Royalty & license fees payments, % total trade	0.4	59	
5.3.2	High-tech imports less re-imports, %	6.5	77	
5.3.3	Comm., computer & info. services imp., % total trade	0.8	69	
5.3.4	FDI net inflows, % GDP	-0.2	138	○

6	Knowledge & technology outputs	25.4	80	
6.1	Knowledge creation	11.5	71	
6.1.1	Domestic resident patent app/tr PPP\$ GDP	1.3	61	
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	81	
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a	
6.1.4	Scientific & technical articles/bn PPP\$ GDP	13.6	64	
6.1.5	Citable documents H index	132.0	48	●

6.2	Knowledge impact	33.2	89	
6.2.1	Growth rate of PPP\$ GDP/worker, %	0.0	90	
6.2.2	New businesses/th pop. 15–64	n/a	n/a	
6.2.3	Computer software spending, % GDP	0.2	64	
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	4.5	69	
6.2.5	High- & medium-high-tech manufactures, %	21.4	52	
6.3	Knowledge diffusion	31.4	69	
6.3.1	Royalty & license fees receipts, % total trade	0.3	34	●
6.3.2	High-tech exports less re-exports, %	0.1	105	
6.3.3	Comm., computer & info. services exp., % total trade	1.7	53	
6.3.4	FDI net outflows, % GDP	0.1	92	

7	Creative outputs	26.6	97	
7.1	Intangible assets	40.1	89	
7.1.1	Domestic res trademark app/bn PPP\$ GDP	n/a	n/a	
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.1	62	
7.1.3	ICTs & business model creation†	49.0	98	
7.1.4	ICTs & organizational model creation†	50.8	75	

7.2	Creative goods & services	9.7	98	
7.2.1	Cultural & creative services exports, % total trade	0.3	31	●
7.2.2	National feature films/mn pop. 15–69	0.5	87	
7.2.3	Global ent. & media output/th pop. 15–69	0.1	52	○
7.2.4	Printing & publishing manufactures, %	0.0	80	
7.2.5	Creative goods exports, % total trade	0.5	58	

7.3	Online creativity	16.6	74	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.7	98	
7.3.2	Country-code TLDs/th pop. 15–69	1.4	129	○
7.3.3	Wikipedia edits/pop. 15–69	1,006.2	96	
7.3.4	Video uploads on YouTube/pop. 15–69	61.7	50	

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	6.3
GDP (US\$ billions)	24.5
GDP per capita, PPP\$	7,515.1
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	29.1	103
Innovation Output Sub-Index	21.7	110
Innovation Input Sub-Index	36.4	97
Innovation Efficiency Ratio	0.6	116
Global Innovation Index 2013 (out of 142)	31.3	88

1 Institutions	57.4	84
1.1 Political environment	61.7	57
1.1.1 Political stability*	70.8	58
1.1.2 Government effectiveness*	37.0	80
1.1.3 Press freedom*	77.1	34 ●
1.2 Regulatory environment	55.8	102
1.2.1 Regulatory quality*	57.2	62
1.2.2 Rule of law*	25.9	109
1.2.3 Cost of redundancy dismissal, salary weeks	22.9	106
1.3 Business environment	54.6	102
1.3.1 Ease of starting a business*	78.4	95
1.3.2 Ease of resolving insolvency*	34.8	80
1.3.3 Ease of paying taxes*	50.6	121

2 Human capital & research	18.5	105
2.1 Education	29.6	120
2.1.1 Expenditure on education, % GDP	3.4	103
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	11.3	92
2.1.3 School life expectancy, years	12.3	86
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	24.3	86
2.2 Tertiary education	25.5	89
2.2.1 Tertiary enrolment, % gross	25.5	83
2.2.2 Graduates in science & engineering, %	21.5	42
2.2.3 Tertiary inbound mobility, %	0.4	95
2.3 Research & development (R&D)	0.4	125
2.3.1 Researchers, headcounts/mn pop.	96.1	103
2.3.2 Gross expenditure on R&D, % GDP	0.0	115 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	31.3	89
3.1 Information & communication technologies (ICTs)	43.6	55
3.1.1 ICT access*	39.5	84
3.1.2 ICT use*	12.5	99
3.1.3 Government's online service*	67.3	32 ●
3.1.4 E-participation*	55.3	28 ●
3.2 General infrastructure	16.4	138 ○
3.2.1 Electricity output, kWh/cap	931.8	92
3.2.2 Logistics performance*	39.3	93
3.2.3 Gross capital formation, % GDP	14.0	133 ○
3.3 Ecological sustainability	33.9	78
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.7	29 ●
3.3.2 Environmental performance*	43.8	100
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	98

4 Market sophistication	43.1	106
4.1 Credit	34.4	74
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	40.1	82
4.1.3 Microfinance gross loans, % GDP	1.8	28 ●

4.2 Investment	21.6	134 ○
4.2.1 Ease of protecting investors*	30.0	133 ○
4.2.2 Market capitalization, % GDP	45.2	43
4.2.3 Total value of stocks traded, % GDP	0.2	89
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	73.3	88
4.3.1 Applied tariff rate, weighted mean, %	5.5	87
4.3.2 Non-agricultural mkt access weighted tariff, %	0.5	54
4.3.3 Intensity of local competition†	59.2	100

5 Business sophistication	31.8	71
5.1 Knowledge workers	42.9	57
5.1.1 Knowledge-intensive employment, %	11.9	96
5.1.2 Firms offering formal training, % firms	60.4	9 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	25.7	103
5.2 Innovation linkages	31.9	69
5.2.1 University/industry research collaboration†	37.5	94
5.2.2 State of cluster development†	51.2	48 ●
5.2.3 GERD financed by abroad, %	18.1	22 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	74
5.3 Knowledge absorption	20.8	97
5.3.1 Royalty & license fees payments, % total trade	0.5	51
5.3.2 High-tech imports less re-imports, %	8.9	45 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.6	83
5.3.4 FDI net inflows, % GDP	1.1	113

6 Knowledge & technology outputs	13.6	134 ○
6.1 Knowledge creation	1.3	142 ○
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	105 ○
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	0.7	139 ○
6.1.5 Citable documents H index	31.0	132 ○
6.2 Knowledge impact	6.2	130 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	0.5	78
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.1	73
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.4	56
6.3.1 Royalty & license fees receipts, % total trade	0.1	46
6.3.2 High-tech exports less re-exports, %	2.5	48
6.3.3 Comm., computer & info. services exp., % total trade	2.4	29 ●
6.3.4 FDI net outflows, % GDP	–0.2	114 ○

7 Creative outputs	29.8	78
7.1 Intangible assets	51.3	36 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	51.8	85
7.1.4 ICTs & organizational model creation†	50.7	76
7.2 Creative goods & services	10.3	94
7.2.1 Cultural & creative services exports, % total trade	0.0	102 ○
7.2.2 National feature films/mn pop. 15–69	0.3	94 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.7	46
7.3 Online creativity	6.5	102
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.6	82
7.3.2 Country-code TLDs/th pop. 15–69	13.6	91
7.3.3 Wikipedia edits/pop. 15–69	2,044.0	81
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Estonia

Key indicators

Population (millions)	1.3
GDP (US\$ billions)	24.5
GDP per capita, PPP\$	23,144.0
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	51.5	24
Innovation Output Sub-Index	46.3	19
Innovation Input Sub-Index	56.8	23
Innovation Efficiency Ratio	0.8	34
Global Innovation Index 2013 (out of 142)	50.6	25

1 Institutions	78.6	24
1.1 Political environment	79.2	26
1.1.1 Political stability*	80.4	42
1.1.2 Government effectiveness*	66.5	33
1.1.3 Press freedom*	90.7	9 ●
1.2 Regulatory environment	85.8	23
1.2.1 Regulatory quality*	85.5	18
1.2.2 Rule of law*	77.4	24
1.2.3 Cost of redundancy dismissal, salary weeks	12.9	54
1.3 Business environment	70.7	46
1.3.1 Ease of starting a business*	90.4	37
1.3.2 Ease of resolving insolvency*	41.2	58
1.3.3 Ease of paying taxes*	80.7	31

2 Human capital & research	46.3	28
2.1 Education	59.2	8 ●
2.1.1 Expenditure on education, % GDP	5.7	38
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	31.9	17
2.1.3 School life expectancy, years	16.5	15
2.1.4 PISA scales in reading, maths, & science	526.1	7
2.1.5 Pupil-teacher ratio, secondary	8.8	13
2.2 Tertiary education	38.1	54
2.2.1 Tertiary enrolment, % gross	71.7	23
2.2.2 Graduates in science & engineering, %	20.6	50
2.2.3 Tertiary inbound mobility, %	1.8	65 ○
2.3 Research & development (R&D)	41.7	27
2.3.1 Researchers, headcounts/mn pop.	5,906.5	17
2.3.2 Gross expenditure on R&D, % GDP	2.2	17
2.3.3 QS university ranking, average score top 3*	20.0	51

3 Infrastructure	57.4	15
3.1 Information & communication technologies (ICTs)	74.1	16
3.1.1 ICT access*	72.7	26
3.1.2 ICT use*	65.2	18
3.1.3 Government's online service*	82.4	18
3.1.4 E-participation*	76.3	8 ●
3.2 General infrastructure	42.4	34
3.2.1 Electricity output, kWh/cap	8,929.9	15
3.2.2 Logistics performance*	49.6	65
3.2.3 Gross capital formation, % GDP	27.0	35
3.3 Ecological sustainability	55.7	11 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.4	92 ○
3.3.2 Environmental performance*	74.7	20
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	13.5	5 ●

4 Market sophistication	55.4	36
4.1 Credit	50.0	34
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	79.3	40
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	37.6	58
4.2.1 Ease of protecting investors*	56.7	55
4.2.2 Market capitalization, % GDP	10.7	88 ○
4.2.3 Total value of stocks traded, % GDP	0.8	71 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.3	12

4.3 Trade & competition	78.5	36
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	76.5	20

5 Business sophistication	46.3	19
5.1 Knowledge workers	68.6	12 ●
5.1.1 Knowledge-intensive employment, %	41.8	20
5.1.2 Firms offering formal training, % firms	69.3	5 ●
5.1.3 GERD performed by business, % GDP	1.3	18
5.1.4 GERD performed by business, %	57.4	25
5.1.5 GMAT test takers/mn pop. 20–34	144.7	38

5.2 Innovation linkages	31.9	68
5.2.1 University/industry research collaboration†	56.5	35
5.2.2 State of cluster development†	44.7	76 ○
5.2.3 GERD financed by abroad, %	10.0	42
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	69 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.5	25
5.3 Knowledge absorption	38.5	20
5.3.1 Royalty & license fees payments, % total trade	0.3	71 ○
5.3.2 High-tech imports less re-imports, %	12.0	22
5.3.3 Comm., computer & info. services imp., % total trade	1.7	23
5.3.4 FDI net inflows, % GDP	7.4	24

6 Knowledge & technology outputs	39.1	29
6.1 Knowledge creation	29.8	34
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.7	73 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	1.2	31
6.1.3 Domestic res utility model app/tr PPP\$ GDP	2.2	15
6.1.4 Scientific & technical articles/bn PPP\$ GDP	53.1	9 ●
6.1.5 Citable documents H index	130.0	50

6.2 Knowledge impact	49.1	30
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.0	55
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	30.3	14 ●
6.2.5 High- & medium-high-tech manufactures, %	31.4	34
6.3 Knowledge diffusion	38.5	36
6.3.1 Royalty & license fees receipts, % total trade	0.1	62
6.3.2 High-tech exports less re-exports, %	11.1	20
6.3.3 Comm., computer & info. services exp., % total trade	2.3	32
6.3.4 FDI net outflows, % GDP	4.9	14

7 Creative outputs	53.4	11 ●
7.1 Intangible assets	58.5	12 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	81.1	27
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.7	10
7.1.3 ICTs & business model creation†	74.8	9 ●
7.1.4 ICTs & organizational model creation†	74.3	3 ●

7.2 Creative goods & services	38.8	21
7.2.1 Cultural & creative services exports, % total trade	0.1	59 ○
7.2.2 National feature films/mn pop. 15–69	14.0	7 ●
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	22
7.2.5 Creative goods exports, % total trade	1.3	36

7.3 Online creativity	57.9	21
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	14.3	37
7.3.2 Country-code TLDs/th pop. 15–69	59.2	21
7.3.3 Wikipedia edits/pop. 15–69	58,894.5	1 ●
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	91.7
GDP (US\$ billions)	48.1
GDP per capita, PPP\$	1,366.0
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.4	126
Innovation Output Sub-Index	20.4	118
Innovation Input Sub-Index	30.4	128
Innovation Efficiency Ratio	0.7	97
Global Innovation Index 2013 (out of 142)	24.8	129

1 Institutions	48.7	113
1.1 Political environment	39.2	126
1.1.1 Political stability*	28.1	136
1.1.2 Government effectiveness*	29.2	93
1.1.3 Press freedom*	60.4	112
1.2 Regulatory environment	51.1	112
1.2.1 Regulatory quality*	21.0	134
1.2.2 Rule of law*	28.3	102
1.2.3 Cost of redundancy dismissal, salary weeks	19.1	90
1.3 Business environment	55.7	97
1.3.1 Ease of starting a business*	61.4	130
1.3.2 Ease of resolving insolvency*	39.1	67 ●
1.3.3 Ease of paying taxes*	66.5	84
2 Human capital & research	11.4	137
2.1 Education	14.8	136
2.1.1 Expenditure on education, % GDP	4.7	68
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	10.4	95
2.1.3 School life expectancy, years	6.6	127 ○
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	39.7	113 ○
2.2 Tertiary education	17.3	106
2.2.1 Tertiary enrolment, % gross	2.8	131 ○
2.2.2 Graduates in science & engineering, %	15.2	85
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	2.0	107
2.3.1 Researchers, headcounts/mn pop.	83.6	105
2.3.2 Gross expenditure on R&D, % GDP	0.2	82
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	25.2	117
3.1 Information & communication technologies (ICTs)	24.6	101
3.1.1 ICT access*	16.4	133 ○
3.1.2 ICT use*	0.7	131 ○
3.1.3 Government's online service*	47.1	78
3.1.4 E-participation*	34.2	45 ●
3.2 General infrastructure	31.2	78
3.2.1 Electricity output, kWh/cap	60.9	122 ○
3.2.2 Logistics performance*	25.0	133 ○
3.2.3 Gross capital formation, % GDP	32.6	18 ●
3.3 Ecological sustainability	19.7	136
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.4	116
3.3.2 Environmental performance*	39.4	110
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.0	129 ○
4 Market sophistication	41.0	119
4.1 Credit	23.6	114
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	17.8	125
4.1.3 Microfinance gross loans, % GDP	1.3	31 ●

4.2 Investment	33.3	76
4.2.1 Ease of protecting investors*	33.3	125
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	65.9	123
4.3.1 Applied tariff rate, weighted mean, %	10.4	127
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	22 ●
4.3.3 Intensity of local competition†	50.5	125

5 Business sophistication **25.6** **109**

5.1 Knowledge workers	18.0	128
5.1.1 Knowledge-intensive employment, %	15.9	87
5.1.2 Firms offering formal training, % firms	23.0	85
5.1.3 GERD performed by business, % GDP	0.0	71
5.1.4 GERD performed by business, %	15.5	69
5.1.5 GMAT test takers/mn pop. 20–34	3.0	136
5.2 Innovation linkages	32.4	67 ●
5.2.1 University/industry research collaboration†	41.5	73
5.2.2 State of cluster development†	34.3	117
5.2.3 GERD financed by abroad, %	30.0	75 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	73
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	26.6	60 ●
5.3.1 Royalty & license fees payments, % total trade	0.0	116
5.3.2 High-tech imports less re-imports, %	5.9	87
5.3.3 Comm., computer & info. services imp., % total trade	2.4	8 ●
5.3.4 FDI net inflows, % GDP	2.0	88

6 Knowledge & technology outputs **17.5** **120**

6.1 Knowledge creation	9.8	82
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.2	88
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.2	31
6.1.4 Scientific & technical articles/bn PPP\$ GDP	7.0	90
6.1.5 Citable documents H index	73.0	85
6.2 Knowledge impact	32.1	96
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.7	23 ●
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.6	128
6.2.5 High- & medium-high-tech manufactures, %	10.9	73
6.3 Knowledge diffusion	10.5	134
6.3.1 Royalty & license fees receipts, % total trade	0.0	100
6.3.2 High-tech exports less re-exports, %	0.1	113
6.3.3 Comm., computer & info. services exp., % total trade	1.9	44 ●
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs **23.2** **111**

7.1 Intangible assets	38.8	98
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	40.2	126
7.1.4 ICTs & organizational model creation†	37.5	124
7.2 Creative goods & services	15.1	80
7.2.1 Cultural & creative services exports, % total trade	0.0	98
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	20 ●
7.2.5 Creative goods exports, % total trade	0.0	113
7.3 Online creativity	0.1	141 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.0	143 ○
7.3.2 Country-code TLDs/th pop. 15–69	0.3	134
7.3.3 Wikipedia edits/pop. 15–69	28.6	136
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Fiji

Key indicators

Population (millions)	0.9
GDP (US\$ billions)	4.0
GDP per capita, PPP\$	5,084.6
Income group	Upper-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.4	95
Innovation Output Sub-Index	15.6	136 ○
Innovation Input Sub-Index	45.2	49
Innovation Efficiency Ratio	0.3	141 ○
Global Innovation Index 2013 (out of 142)	28.1	97

1 Institutions	57.9	82
1.1 Political environment	49.6	90
1.1.1 Political stability*	64.7	76
1.1.2 Government effectiveness*	16.8	124 ○
1.1.3 Press freedom*	67.3	86
1.2 Regulatory environment	62.7	81
1.2.1 Regulatory quality*	33.1	113
1.2.2 Rule of law*	24.3	114
1.2.3 Cost of redundancy dismissal, salary weeks	9.7	34 ●
1.3 Business environment	61.3	78
1.3.1 Ease of starting a business*	66.6	124 ○
1.3.2 Ease of resolving insolvency*	48.2	44 ●
1.3.3 Ease of paying taxes*	69.2	74

2 Human capital & research	38.9	40 ●
2.1 Education	35.4	98
2.1.1 Expenditure on education, % GDP	4.2	86
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	5.8	109 ○
2.1.3 School life expectancy, years	15.7	26 ●
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	26.5	96
2.2 Tertiary education	81.3	3 ●
2.2.1 Tertiary enrolment, % gross	61.9	32 ●
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	32.9	1 ●
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	31.2	91
3.1 Information & communication technologies (ICTs)	25.6	100
3.1.1 ICT access*	38.6	87
3.1.2 ICT use*	19.9	82
3.1.3 Government's online service*	36.0	104
3.1.4 E-participation*	7.9	98
3.2 General infrastructure	31.0	80
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	32.1	118 ○
3.2.3 Gross capital formation, % GDP	23.4	68
3.3 Ecological sustainability	36.9	61
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	53.1	69
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.7	72

4 Market sophistication	46.8	82
4.1 Credit	31.3	88
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	78.4	41 ●
4.1.3 Microfinance gross loans, % GDP	0.0	82 ○

4.2 Investment	31.7	86
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	11.7	86
4.2.3 Total value of stocks traded, % GDP	0.2	94 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	77.5	50
4.3.1 Applied tariff rate, weighted mean, %	9.9	123 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	1.0	74
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication	51.3	12 ●
5.1 Knowledge workers	54.5	34 ●
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	58.1	10 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	18.1	111
5.2 Innovation linkages	n/a	n/a
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	48.1	5 ●
5.3.1 Royalty & license fees payments, % total trade	0.0	112 ○
5.3.2 High-tech imports less re-imports, %	8.5	48
5.3.3 Comm., computer & info. services imp., % total trade	4.5	1 ●
5.3.4 FDI net inflows, % GDP	5.4	35 ●

6 Knowledge & technology outputs	16.8	123
6.1 Knowledge creation	19.9	50
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	24.5	40 ●
6.1.5 Citable documents H index	40.0	122
6.2 Knowledge impact	7.6	127 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.1	86
6.2.5 High- & medium-high-tech manufactures, %	6.9	83 ○
6.3 Knowledge diffusion	22.9	118
6.3.1 Royalty & license fees receipts, % total trade	0.0	77
6.3.2 High-tech exports less re-exports, %	0.2	99
6.3.3 Comm., computer & info. services exp., % total trade	0.6	97
6.3.4 FDI net outflows, % GDP	0.2	82

7 Creative outputs	14.3	135 ○
7.1 Intangible assets	n/a	n/a
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	17.7	71
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	1.7	57
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	30
7.2.5 Creative goods exports, % total trade	0.3	75
7.3 Online creativity	10.9	88
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.9	78
7.3.2 Country-code TLDs/th pop. 15–69	27.2	67
7.3.3 Wikipedia edits/pop. 15–69	1,651.0	85
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	5.4
GDP (US\$ billions)	256.9
GDP per capita, PPP\$	35,616.6
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	60.7	4
Innovation Output Sub-Index	53.8	6
Innovation Input Sub-Index	67.5	5
Innovation Efficiency Ratio	0.8	41
Global Innovation Index 2013 (out of 142)	59.5	6
1 Institutions	95.3	1 ●
1.1 Political environment	97.7	1 ●
1.1.1 Political stability*	99.5	2 ●
1.1.2 Government effectiveness*	100.0	1 ●
1.1.3 Press freedom*	93.6	1 ●
1.2 Regulatory environment	96.9	6
1.2.1 Regulatory quality*	96.3	5
1.2.2 Rule of law*	99.8	2 ●
1.2.3 Cost of redundancy dismissal, salary weeks	10.1	38
1.3 Business environment	91.2	7
1.3.1 Ease of starting a business*	93.0	20
1.3.2 Ease of resolving insolvency*	95.6	3
1.3.3 Ease of paying taxes*	85.0	22
2 Human capital & research	66.5	1 ●
2.1 Education	63.8	4
2.1.1 Expenditure on education, % GDP	6.8	16
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	36.5	9
2.1.3 School life expectancy, years	17.0	8
2.1.4 PISA scales in reading, maths, & science	529.4	6
2.1.5 Pupil-teacher ratio, secondary	9.5	18
2.2 Tertiary education	55.5	15
2.2.1 Tertiary enrolment, % gross	95.5	2 ●
2.2.2 Graduates in science & engineering, %	27.7	15
2.2.3 Tertiary inbound mobility, %	5.1	34
2.3 Research & development (R&D)	80.2	3
2.3.1 Researchers, headcounts/mn pop.	10,678.8	1 ●
2.3.2 Gross expenditure on R&D, % GDP	3.5	3
2.3.3 QS university ranking, average score top 3*	59.4	17
3 Infrastructure	59.7	8
3.1 Information & communication technologies (ICTs)	79.8	6
3.1.1 ICT access*	76.6	19
3.1.2 ICT use*	80.5	4
3.1.3 Government's online service*	88.2	7
3.1.4 E-participation*	73.7	11
3.2 General infrastructure	50.8	15
3.2.1 Electricity output, kWh/cap	13,007.8	8
3.2.2 Logistics performance*	96.8	3
3.2.3 Gross capital formation, % GDP	19.0	102 ○
3.3 Ecological sustainability	48.5	32
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.1	81 ○
3.3.2 Environmental performance*	75.7	18
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	6.7	20
4 Market sophistication	61.4	22
4.1 Credit	53.2	27
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	98.2	31
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	59.1	18
4.2.1 Ease of protecting investors*	56.7	55 ○
4.2.2 Market capitalization, % GDP	63.5	29
4.2.3 Total value of stocks traded, % GDP	50.4	17
4.2.4 Venture capital deals/tr PPP\$ GDP	0.4	6
4.3 Trade & competition	71.8	99 ○
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	63.0	83 ○
5 Business sophistication	54.8	7
5.1 Knowledge workers	75.9	5
5.1.1 Knowledge-intensive employment, %	43.9	12
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	2.4	4
5.1.4 GERD performed by business, %	68.7	11
5.1.5 GMAT test takers/mn pop. 20–34	338.0	13
5.2 Innovation linkages	50.3	16
5.2.1 University/industry research collaboration†	80.3	2 ●
5.2.2 State of cluster development†	68.0	11
5.2.3 GERD financed by abroad, %	8.8	46 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	36
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	3.3	5
5.3 Knowledge absorption	38.1	21
5.3.1 Royalty & license fees payments, % total trade	1.4	13
5.3.2 High-tech imports less re-imports, %	7.4	61 ○
5.3.3 Comm., computer & info. services imp., % total trade	3.2	3
5.3.4 FDI net inflows, % GDP	0.7	121 ○
6 Knowledge & technology outputs	54.2	8
6.1 Knowledge creation	53.9	10
6.1.1 Domestic resident patent app./tr PPP\$ GDP	8.7	10
6.1.2 PCT resident patent app./tr PPP\$ GDP	12.0	2 ●
6.1.3 Domestic res utility model app./tr PPP\$ GDP	2.3	12
6.1.4 Scientific & technical articles/bn PPP\$ GDP	55.5	8
6.1.5 Citable documents H index	372.0	18
6.2 Knowledge impact	46.5	41
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.2	87 ○
6.2.2 New businesses/th pop. 15–64	2.3	39
6.2.3 Computer software spending, % GDP	0.6	17
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	12.4	43
6.2.5 High- & medium-high-tech manufactures, %	45.0	13
6.3 Knowledge diffusion	62.3	4
6.3.1 Royalty & license fees receipts, % total trade	3.5	4
6.3.2 High-tech exports less re-exports, %	5.3	28
6.3.3 Comm., computer & info. services exp., % total trade	6.0	1
6.3.4 FDI net outflows, % GDP	3.4	21
7 Creative outputs	53.4	10
7.1 Intangible assets	58.7	11
7.1.1 Domestic res trademark app./bn PPP\$ GDP	69.3	35
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.1	14
7.1.3 ICTs & business model creation†	80.5	1 ●
7.1.4 ICTs & organizational model creation†	79.0	1 ●
7.2 Creative goods & services	32.2	35
7.2.1 Cultural & creative services exports, % total trade	0.2	40
7.2.2 National feature films/mn pop. 15–69	11.0	10
7.2.3 Global ent. & media output/th pop. 15–69	1.8	10
7.2.4 Printing & publishing manufactures, %	0.0	54 ○
7.2.5 Creative goods exports, % total trade	0.7	47
7.3 Online creativity	64.2	14
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	28.8	26
7.3.2 Country-code TLDs/th pop. 15–69	60.4	18
7.3.3 Wikipedia edits/pop. 15–69	42,876.2	3
7.3.4 Video uploads on YouTube/pop. 15–69	94.7	5

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

France

Key indicators

Population (millions)	65.7
GDP (US\$ billions)	2,737.4
GDP per capita, PPP\$	35,784.0
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	52.2	22
Innovation Output Sub-Index	44.8	26
Innovation Input Sub-Index	59.5	20
Innovation Efficiency Ratio	0.8	64
Global Innovation Index 2013 (out of 142)	52.8	20
1 Institutions	78.6	25
1.1 Political environment	78.0	30
1.1.1 Political stability*	79.2	45
1.1.2 Government effectiveness*	76.4	23
1.1.3 Press freedom*	78.4	33
1.2 Regulatory environment	87.0	21
1.2.1 Regulatory quality*	77.8	26
1.2.2 Rule of law*	85.7	19
1.2.3 Cost of redundancy dismissal, salary weeks	11.8	50
1.3 Business environment	70.7	47
1.3.1 Ease of starting a business*	91.4	27
1.3.2 Ease of resolving insolvency*	51.2	41
1.3.3 Ease of paying taxes*	69.5	71
2 Human capital & research	55.9	15
2.1 Education	55.1	26
2.1.1 Expenditure on education, % GDP	5.9	32
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	29.2	25
2.1.3 School life expectancy, years	16.0	23
2.1.4 PISA scales in reading, maths, & science	499.8	20
2.1.5 Pupil-teacher ratio, secondary	12.8	41
2.2 Tertiary education	52.5	18
2.2.1 Tertiary enrolment, % gross	57.1	42
2.2.2 Graduates in science & engineering, %	26.1	21
2.2.3 Tertiary inbound mobility, %	11.9	14
2.3 Research & development (R&D)	60.0	15
2.3.1 Researchers, headcounts/mn pop.	5,327.9	20
2.3.2 Gross expenditure on R&D, % GDP	2.3	14
2.3.3 QS university ranking, average score top 3*	78.3	8 ●
3 Infrastructure	54.7	19
3.1 Information & communication technologies (ICTs)	72.7	17
3.1.1 ICT access*	79.5	14 ●
3.1.2 ICT use*	66.0	16
3.1.3 Government's online service*	87.6	8 ●
3.1.4 E-participation*	57.9	25
3.2 General infrastructure	43.9	30
3.2.1 Electricity output, kWh/cap	8,506.4	20
3.2.2 Logistics performance*	88.9	12 ●
3.2.3 Gross capital formation, % GDP	19.6	94 ○
3.3 Ecological sustainability	47.4	34
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.8	41
3.3.2 Environmental performance*	71.1	27
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	3.6	29
4 Market sophistication	61.0	24
4.1 Credit	53.1	28
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	116.0	27
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	52.0	25
4.2.1 Ease of protecting investors*	53.3	66 ○
4.2.2 Market capitalization, % GDP	69.8	26
4.2.3 Total value of stocks traded, % GDP	43.1	20
4.2.4 Venture capital deals/tr PPP\$ GDP	0.3	10
4.3 Trade & competition	77.9	42
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	75.3	24
5 Business sophistication	47.4	16
5.1 Knowledge workers	69.1	10 ●
5.1.1 Knowledge-intensive employment, %	44.8	10 ●
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.5	14
5.1.4 GERD performed by business, %	64.2	18
5.1.5 GMAT test takers/mn pop. 20–34	300.6	17
5.2 Innovation linkages	39.5	43
5.2.1 University/industry research collaboration†	57.7	31
5.2.2 State of cluster development†	56.8	29
5.2.3 GERD financed by abroad, %	7.7	51 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	46
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.6	10 ●
5.3 Knowledge absorption	33.7	31
5.3.1 Royalty & license fees payments, % total trade	1.1	25
5.3.2 High-tech imports less re-imports, %	11.9	23
5.3.3 Comm., computer & info. services imp., % total trade	1.3	46
5.3.4 FDI net inflows, % GDP	2.5	73 ○
6 Knowledge & technology outputs	44.2	20
6.1 Knowledge creation	36.7	25
6.1.1 Domestic resident patent app/tr PPP\$ GDP	6.5	20
6.1.2 PCT resident patent app/tr PPP\$ GDP	3.5	14
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.1	59 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	28.5	33
6.1.5 Citable documents H index	681.0	4 ●
6.2 Knowledge impact	47.2	36
6.2.1 Growth rate of PPP\$ GDP/worker, %	–0.3	95 ○
6.2.2 New businesses/th pop. 15–64	2.9	34
6.2.3 Computer software spending, % GDP	0.6	11
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	14.1	32
6.2.5 High- & medium-high-tech manufactures, %	42.6	18
6.3 Knowledge diffusion	48.7	16
6.3.1 Royalty & license fees receipts, % total trade	1.6	12 ●
6.3.2 High-tech exports less re-exports, %	14.3	12 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.3	72 ○
6.3.4 FDI net outflows, % GDP	1.5	40
7 Creative outputs	45.5	23
7.1 Intangible assets	42.9	76 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	10.9	94 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.8	17
7.1.3 ICTs & business model creation†	70.2	20
7.1.4 ICTs & organizational model creation†	59.5	40
7.2 Creative goods & services	36.7	23
7.2.1 Cultural & creative services exports, % total trade	0.8	12
7.2.2 National feature films/mn pop. 15–69	6.2	20
7.2.3 Global ent. & media output/th pop. 15–69	1.6	14
7.2.4 Printing & publishing manufactures, %	0.0	53 ○
7.2.5 Creative goods exports, % total trade	1.7	34
7.3 Online creativity	59.5	18
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	48.6	20
7.3.2 Country-code TLDs/th pop. 15–69	55.7	29
7.3.3 Wikipedia edits/pop. 15–69	27,124.1	13 ●
7.3.4 Video uploads on YouTube/pop. 15–69	87.6	13

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	1.8
GDP (US\$ billions)	0.9
GDP per capita, PPP\$	1,962.2
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143).....	29.0	104
Innovation Output Sub-Index	25.1	93
Innovation Input Sub-Index	32.9	111
Innovation Efficiency Ratio	0.8	58 ●
Global Innovation Index 2013 (out of 142)	26.4	122
1 Institutions.....	45.8	126
1.1 Political environment.....	49.3	92
1.1.1 Political stability*.....	65.8	71
1.1.2 Government effectiveness*.....	27.2	100
1.1.3 Press freedom*.....	54.9	124
1.2 Regulatory environment.....	50.5	114
1.2.1 Regulatory quality*.....	42.8	90
1.2.2 Rule of law*.....	31.4	93
1.2.3 Cost of redundancy dismissal, salary weeks.....	26.0	113
1.3 Business environment.....	37.7	139 ○
1.3.1 Ease of starting a business*.....	60.8	132
1.3.2 Ease of resolving insolvency*.....	29.4	96
1.3.3 Ease of paying taxes*.....	23.0	138 ○
2 Human capital & research.....	15.5	118
2.1 Education.....	21.4	131
2.1.1 Expenditure on education, % GDP.....	4.1	90
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap.....	13.1	89
2.1.3 School life expectancy, years.....	9.1	119 ○
2.1.4 PISA scales in reading, maths, & science.....	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary.....	n/a	n/a
2.2 Tertiary education.....	24.1	91
2.2.1 Tertiary enrolment, % gross.....	4.5	126 ○
2.2.2 Graduates in science & engineering, %.....	20.0	57
2.2.3 Tertiary inbound mobility, %.....	n/a	n/a
2.3 Research & development (R&D).....	1.0	117
2.3.1 Researchers, headcounts/mn pop.....	34.6	117 ○
2.3.2 Gross expenditure on R&D, % GDP.....	0.1	98
2.3.3 QS university ranking, average score top 3*.....	0.0	70 ○
3 Infrastructure.....	22.5	122
3.1 Information & communication technologies (ICTs).....	15.2	125
3.1.1 ICT access*.....	24.2	114
3.1.2 ICT use*.....	4.6	119
3.1.3 Government's online service*.....	32.0	114
3.1.4 E-participation*.....	0.0	129 ○
3.2 General infrastructure.....	23.0	120
3.2.1 Electricity output, kWh/cap.....	n/a	n/a
3.2.2 Logistics performance*.....	33.7	113
3.2.3 Gross capital formation, % GDP.....	17.3	115
3.3 Ecological sustainability.....	29.3	96
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq.....	n/a	n/a
3.3.2 Environmental performance*.....	29.3	131
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP.....	n/a	n/a
4 Market sophistication.....	47.4	75
4.1 Credit.....	45.0	45 ●
4.1.1 Ease of getting credit*.....	31.3	133 ○
4.1.2 Domestic credit to private sector, % GDP.....	15.5	129
4.1.3 Microfinance gross loans, % GDP.....	14.3	1 ●

4.2 Investment.....	26.7	115
4.2.1 Ease of protecting investors*.....	26.7	140 ○
4.2.2 Market capitalization, % GDP.....	n/a	n/a
4.2.3 Total value of stocks traded, % GDP.....	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP.....	n/a	n/a
4.3 Trade & competition.....	70.7	106
4.3.1 Applied tariff rate, weighted mean, %.....	12.5	134 ○
4.3.2 Non-agricultural mkt access weighted tariff, %.....	0.0	10 ●
4.3.3 Intensity of local competition†.....	63.5	81
5 Business sophistication.....	33.3	65 ●
5.1 Knowledge workers.....	27.2	104
5.1.1 Knowledge-intensive employment, %.....	n/a	n/a
5.1.2 Firms offering formal training, % firms.....	25.6	77
5.1.3 GERD performed by business, % GDP.....	n/a	n/a
5.1.4 GERD performed by business, %.....	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34.....	25.6	104
5.2 Innovation linkages.....	35.8	55 ●
5.2.1 University/industry research collaboration†.....	44.2	61 ●
5.2.2 State of cluster development†.....	47.2	69
5.2.3 GERD financed by abroad, %.....	15.9	25 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP.....	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP.....	n/a	n/a
5.3 Knowledge absorption.....	36.9	24 ●
5.3.1 Royalty & license fees payments, % total trade.....	n/a	n/a
5.3.2 High-tech imports less re-imports, %.....	4.0	114
5.3.3 Comm., computer & info. services imp., % total trade.....	3.2	2 ●
5.3.4 FDI net inflows, % GDP.....	4.0	55 ●
6 Knowledge & technology outputs.....	29.4	60 ●
6.1 Knowledge creation.....	26.1	38 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP.....	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP.....	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP.....	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP.....	29.1	32 ●
6.1.5 Citable documents H index.....	80.0	79
6.2 Knowledge impact.....	12.3	124
6.2.1 Growth rate of PPP\$ GDP/worker, %.....	n/a	n/a
6.2.2 New businesses/th pop. 15–64.....	n/a	n/a
6.2.3 Computer software spending, % GDP.....	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP.....	0.9	123
6.2.5 High- & medium-high-tech manufactures, %.....	16.8	59
6.3 Knowledge diffusion.....	49.8	12 ●
6.3.1 Royalty & license fees receipts, % total trade.....	n/a	n/a
6.3.2 High-tech exports less re-exports, %.....	0.0	119 ○
6.3.3 Comm., computer & info. services exp., % total trade.....	6.0	6 ●
6.3.4 FDI net outflows, % GDP.....	n/a	n/a
7 Creative outputs.....	20.9	121
7.1 Intangible assets.....	40.0	90
7.1.1 Domestic res trademark app./bn PPP\$ GDP.....	16.1	88
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP.....	n/a	n/a
7.1.3 ICTs & business model creation†.....	59.2	59 ●
7.1.4 ICTs & organizational model creation†.....	54.5	62 ●
7.2 Creative goods & services.....	0.2	139 ○
7.2.1 Cultural & creative services exports, % total trade.....	n/a	n/a
7.2.2 National feature films/mn pop. 15–69.....	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69.....	n/a	n/a
7.2.4 Printing & publishing manufactures, %.....	0.0	93 ○
7.2.5 Creative goods exports, % total trade.....	0.0	117
7.3 Online creativity.....	3.6	115
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69.....	0.2	128
7.3.2 Country-code TLDs/th pop. 15–69.....	10.5	102
7.3.3 Wikipedia edits/pop. 15–69.....	61.6	130
7.3.4 Video uploads on YouTube/pop. 15–69.....	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Georgia

Key indicators

Population (millions)	4.5
GDP (US\$ billions)	16.2
GDP per capita, PPP\$	6,144.8
Income group	Lower-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	34.5	74
Innovation Output Sub-Index	28.0	75
Innovation Input Sub-Index	41.1	68
Innovation Efficiency Ratio	0.7	90
Global Innovation Index 2013 (out of 142)	35.6	73

1 Institutions	69.7	46
1.1 Political environment	58.4	67
1.1.1 Political stability*	49.2	106
1.1.2 Government effectiveness*	56.0	44
1.1.3 Press freedom*	69.9	80
1.2 Regulatory environment	78.0	34
1.2.1 Regulatory quality*	66.5	42
1.2.2 Rule of law*	45.6	61
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	72.8	37
1.3.1 Ease of starting a business*	97.5	4 ●
1.3.2 Ease of resolving insolvency*	35.5	78
1.3.3 Ease of paying taxes*	85.5	20 ●

2 Human capital & research	23.5	90
2.1 Education	36.5	90
2.1.1 Expenditure on education, % GDP	2.0	129 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	15.5	82
2.1.3 School life expectancy, years	13.2	67
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	7.6	2 ●
2.2 Tertiary education	26.9	84
2.2.1 Tertiary enrolment, % gross	27.9	79
2.2.2 Graduates in science & engineering, %	20.7	48
2.2.3 Tertiary inbound mobility, %	1.7	68
2.3 Research & development (R&D)	6.9	76
2.3.1 Researchers, headcounts/mn pop.	1,812.6	44
2.3.2 Gross expenditure on R&D, % GDP	0.2	89
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	33.3	82
3.1 Information & communication technologies (ICTs)	40.0	64
3.1.1 ICT access*	50.6	68
3.1.2 ICT use*	28.2	62
3.1.3 Government's online service*	60.1	42
3.1.4 E-participation*	21.1	65
3.2 General infrastructure	29.7	88
3.2.1 Electricity output, kWh/cap	2,270.4	73
3.2.2 Logistics performance*	46.0	78
3.2.3 Gross capital formation, % GDP	23.6	65
3.3 Ecological sustainability	30.1	93
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.1	67
3.3.2 Environmental performance*	47.2	91
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	117 ○

4 Market sophistication	55.2	37
4.1 Credit	54.3	25
4.1.1 Ease of getting credit*	93.8	3 ●
4.1.2 Domestic credit to private sector, % GDP	34.5	91
4.1.3 Microfinance gross loans, % GDP	4.7	11 ●

4.2 Investment	35.8	65
4.2.1 Ease of protecting investors*	70.0	16 ●
4.2.2 Market capitalization, % GDP	6.0	99 ○
4.2.3 Total value of stocks traded, % GDP	0.0	105 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	75.4	73
4.3.1 Applied tariff rate, weighted mean, %	0.7	6 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.6	55
4.3.3 Intensity of local competition†	55.3	116 ○

5 Business sophistication	23.9	119
5.1 Knowledge workers	29.4	97
5.1.1 Knowledge-intensive employment, %	22.2	65
5.1.2 Firms offering formal training, % firms	14.9	98 ○
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	74.4	58
5.2 Innovation linkages	23.2	115
5.2.1 University/industry research collaboration†	27.8	126 ○
5.2.2 State of cluster development†	37.2	108
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	83
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	56
5.3 Knowledge absorption	19.1	108
5.3.1 Royalty & license fees payments, % total trade	0.1	106 ○
5.3.2 High-tech imports less re-imports, %	6.6	76
5.3.3 Comm., computer & info. services imp., % total trade	0.4	102
5.3.4 FDI net inflows, % GDP	5.0	39

6 Knowledge & technology outputs	30.0	58
6.1 Knowledge creation	20.4	49
6.1.1 Domestic resident patent app/tr PPP\$ GDP	5.3	24
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.2	64
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.8	18
6.1.4 Scientific & technical articles/bn PPP\$ GDP	19.3	47
6.1.5 Citable documents H index	78.0	82
6.2 Knowledge impact	45.4	44
6.2.1 Growth rate of PPP\$ GDP/worker, %	6.7	3 ●
6.2.2 New businesses/th pop. 15–64	4.9	20
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.0	87
6.2.5 High- & medium-high-tech manufactures, %	13.2	69
6.3 Knowledge diffusion	24.1	116
6.3.1 Royalty & license fees receipts, % total trade	0.0	69
6.3.2 High-tech exports less re-exports, %	0.3	91
6.3.3 Comm., computer & info. services exp., % total trade	0.7	91
6.3.4 FDI net outflows, % GDP	1.4	42

7 Creative outputs	25.9	99
7.1 Intangible assets	32.5	122 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	46.2	59
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.5	38
7.1.3 ICTs & business model creation†	48.8	99
7.1.4 ICTs & organizational model creation†	42.3	114 ○
7.2 Creative goods & services	22.1	55
7.2.1 Cultural & creative services exports, % total trade	0.1	63
7.2.2 National feature films/mn pop. 15–69	4.5	29
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	13 ●
7.2.5 Creative goods exports, % total trade	0.1	100
7.3 Online creativity	16.5	75
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.0	93
7.3.2 Country-code TLDs/th pop. 15–69	27.4	64
7.3.3 Wikipedia edits/pop. 15–69	11,912.3	41
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	81.9
GDP (US\$ billions)	3,636.0
GDP per capita, PPP\$	40,006.7
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	56.0	13
Innovation Output Sub-Index	51.7	8 ●
Innovation Input Sub-Index	60.3	19
Innovation Efficiency Ratio	0.9	19
Global Innovation Index 2013 (out of 142)	55.8	15

1 Institutions	82.7	21
1.1 Political environment	85.8	16
1.1.1 Political stability*	84.6	32
1.1.2 Government effectiveness*	82.9	14
1.1.3 Press freedom*	89.8	15
1.2 Regulatory environment	81.5	29
1.2.1 Regulatory quality*	88.8	15
1.2.2 Rule of law*	91.4	16
1.2.3 Cost of redundancy dismissal, salary weeks	21.6	99 ○
1.3 Business environment	81.0	19
1.3.1 Ease of starting a business*	82.1	76
1.3.2 Ease of resolving insolvency*	87.8	13
1.3.3 Ease of paying taxes*	73.1	54

2 Human capital & research	56.3	14
2.1 Education	53.4	36
2.1.1 Expenditure on education, % GDP	5.1	58
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	24.7	41
2.1.3 School life expectancy, years	16.3	19
2.1.4 PISA scales in reading, maths, & science	515.1	13
2.1.5 Pupil-teacher ratio, secondary	12.9	42
2.2 Tertiary education	47.7	27
2.2.1 Tertiary enrolment, % gross	56.5	43
2.2.2 Graduates in science & engineering, %	26.9	19
2.2.3 Tertiary inbound mobility, %	7.5	24
2.3 Research & development (R&D)	67.7	10
2.3.1 Researchers, headcounts/mn pop.	6,279.9	13
2.3.2 Gross expenditure on R&D, % GDP	2.9	7 ●
2.3.3 QS university ranking, average score top 3*	77.4	9

3 Infrastructure	56.3	17
3.1 Information & communication technologies (ICTs)	74.3	15
3.1.1 ICT access*	85.1	5 ●
3.1.2 ICT use*	60.5	21
3.1.3 Government's online service*	75.2	24
3.1.4 E-participation*	76.3	8
3.2 General infrastructure	42.3	35
3.2.1 Electricity output, kWh/cap	7,483.4	27
3.2.2 Logistics performance*	96.0	4 ●
3.2.3 Gross capital formation, % GDP	17.6	112 ○
3.3 Ecological sustainability	52.2	21
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.3	21
3.3.2 Environmental performance*	80.5	6 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.2	44

4 Market sophistication	60.1	25
4.1 Credit	57.0	22
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	101.9	29
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	42.7	47
4.2.1 Ease of protecting investors*	50.0	81 ○
4.2.2 Market capitalization, % GDP	43.7	46
4.2.3 Total value of stocks traded, % GDP	36.0	25
4.2.4 Venture capital deals/tr PPP\$ GDP	0.2	14
4.3 Trade & competition	80.8	26
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	81.0	8 ●

5 Business sophistication	46.1	21
5.1 Knowledge workers	62.8	23
5.1.1 Knowledge-intensive employment, %	43.5	14
5.1.2 Firms offering formal training, % firms	35.4	49
5.1.3 GERD performed by business, % GDP	2.0	9
5.1.4 GERD performed by business, %	66.9	15
5.1.5 GMAT test takers/mn pop. 20–34	270.0	21
5.2 Innovation linkages	46.4	24
5.2.1 University/industry research collaboration†	73.2	9
5.2.2 State of cluster development†	73.0	3 ●
5.2.3 GERD financed by abroad, %	4.2	64 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	59 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	2.8	7 ●
5.3 Knowledge absorption	29.2	46
5.3.1 Royalty & license fees payments, % total trade	0.7	41
5.3.2 High-tech imports less re-imports, %	9.6	36
5.3.3 Comm., computer & info. services imp., % total trade	1.7	20
5.3.4 FDI net inflows, % GDP	0.8	120 ○

6 Knowledge & technology outputs	53.1	11
6.1 Knowledge creation	65.0	6 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	14.7	5 ●
6.1.2 PCT resident patent app./tr PPP\$ GDP	5.9	9
6.1.3 Domestic res utility model app./tr PPP\$ GDP	3.8	10
6.1.4 Scientific & technical articles/bn PPP\$ GDP	29.1	31
6.1.5 Citable documents H index	740.0	1 ●
6.2 Knowledge impact	48.4	35
6.2.1 Growth rate of PPP\$ GDP/worker, %	–0.3	97 ○
6.2.2 New businesses/th pop. 15–64	1.3	52
6.2.3 Computer software spending, % GDP	0.6	16
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	16.4	29
6.2.5 High- & medium-high-tech manufactures, %	53.6	6 ●
6.3 Knowledge diffusion	45.9	20
6.3.1 Royalty & license fees receipts, % total trade	0.8	18
6.3.2 High-tech exports less re-exports, %	11.9	19
6.3.3 Comm., computer & info. services exp., % total trade	1.9	43
6.3.4 FDI net outflows, % GDP	2.6	28

7 Creative outputs	50.4	14
7.1 Intangible assets	53.6	25
7.1.1 Domestic res trademark app./bn PPP\$ GDP	75.5	30
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.1	15
7.1.3 ICTs & business model creation†	72.2	14
7.1.4 ICTs & organizational model creation†	67.8	16
7.2 Creative goods & services	27.6	42
7.2.1 Cultural & creative services exports, % total trade	0.1	68 ○
7.2.2 National feature films/mn pop. 15–69	3.6	40
7.2.3 Global ent. & media output/th pop. 15–69	1.7	11
7.2.4 Printing & publishing manufactures, %	0.0	56 ○
7.2.5 Creative goods exports, % total trade	1.9	29
7.3 Online creativity	66.7	11
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	65.7	15
7.3.2 Country-code TLDs/th pop. 15–69	75.3	5 ●
7.3.3 Wikipedia edits/pop. 15–69	24,636.9	15
7.3.4 Video uploads on YouTube/pop. 15–69	83.9	20

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Ghana

Key indicators

Population (millions)	25.4
GDP (US\$ billions)	44.2
GDP per capita, PPP\$	3,461.1
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.3	96
Innovation Output Sub-Index	27.0	82
Innovation Input Sub-Index	33.5	106
Innovation Efficiency Ratio	0.8	37 ●
Global Innovation Index 2013 (out of 142)	30.6	94
1 Institutions	52.3	104
1.1 Political environment	63.3	55 ●
1.1.1 Political stability*	68.1	64
1.1.2 Government effectiveness*	38.9	74
1.1.3 Press freedom*	82.7	28 ●
1.2 Regulatory environment	32.4	137 ○
1.2.1 Regulatory quality*	51.9	68
1.2.2 Rule of law*	45.5	62 ●
1.2.3 Cost of redundancy dismissal, salary weeks	49.8	137 ○
1.3 Business environment	61.2	80
1.3.1 Ease of starting a business*	82.5	75
1.3.2 Ease of resolving insolvency*	27.7	102
1.3.3 Ease of paying taxes*	73.4	53 ●
2 Human capital & research	22.8	94
2.1 Education	47.1	56 ●
2.1.1 Expenditure on education, % GDP	8.1	7 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	26.1	32 ●
2.1.3 School life expectancy, years	11.5	96
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	17.5	73
2.2 Tertiary education	18.2	103
2.2.1 Tertiary enrolment, % gross	12.2	102
2.2.2 Graduates in science & engineering, %	14.2	87
2.2.3 Tertiary inbound mobility, %	3.1	51
2.3 Research & development (R&D)	3.1	94
2.3.1 Researchers, headcounts/mn pop.	104.8	102
2.3.2 Gross expenditure on R&D, % GDP	0.4	71
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	20.6	129
3.1 Information & communication technologies (ICTs)	20.4	108
3.1.1 ICT access*	24.0	115
3.1.2 ICT use*	17.1	89
3.1.3 Government's online service*	30.1	120
3.1.4 E-participation*	10.5	94
3.2 General infrastructure	21.5	127
3.2.1 Electricity output, kWh/cap	448.5	107
3.2.2 Logistics performance*	35.7	106
3.2.3 Gross capital formation, % GDP	20.3	88
3.3 Ecological sustainability	19.8	133 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.9	98
3.3.2 Environmental performance*	32.1	126
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	112
4 Market sophistication	42.5	112
4.1 Credit	28.9	97
4.1.1 Ease of getting credit*	81.3	27 ●
4.1.2 Domestic credit to private sector, % GDP	16.1	128
4.1.3 Microfinance gross loans, % GDP	0.1	65

4.2 Investment	27.7	110
4.2.1 Ease of protecting investors*	63.3	32 ●
4.2.2 Market capitalization, % GDP	8.5	93
4.2.3 Total value of stocks traded, % GDP	0.1	97
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	41
4.3 Trade & competition	70.8	104
4.3.1 Applied tariff rate, weighted mean, %	8.6	116
4.3.2 Non-agricultural mkt access weighted tariff, %	1.9	91
4.3.3 Intensity of local competition†	67.0	64
5 Business sophistication	29.3	84
5.1 Knowledge workers	22.1	117
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	31.1	61
5.1.3 GERD performed by business, % GDP	0.0	84 ○
5.1.4 GERD performed by business, %	0.2	86 ○
5.1.5 GMAT test takers/mn pop. 20–34	61.4	68
5.2 Innovation linkages	30.1	76
5.2.1 University/industry research collaboration†	40.5	76
5.2.2 State of cluster development†	44.2	78
5.2.3 GERD financed by abroad, %	31.2	14 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	94
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	35.7	27 ●
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	6.9	67
5.3.3 Comm., computer & info. services imp., % total trade	n/a	n/a
5.3.4 FDI net inflows, % GDP	8.1	19 ●
6 Knowledge & technology outputs	31.1	54 ●
6.1 Knowledge creation	6.2	102
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	109 ○
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.9	91
6.1.5 Citable documents H index	73.0	85
6.2 Knowledge impact	54.2	14 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	5.6	5 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.5	129 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.0	61 ●
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.4	84
6.3.3 Comm., computer & info. services exp., % total trade	n/a	n/a
6.3.4 FDI net outflows, % GDP	0.0	103
7 Creative outputs	22.9	112
7.1 Intangible assets	42.6	78
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.3	51
7.1.3 ICTs & business model creation†	55.3	72
7.1.4 ICTs & organizational model creation†	48.5	85
7.2 Creative goods & services	0.6	136 ○
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	114 ○
7.3 Online creativity	6.0	105
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.8	107
7.3.2 Country-code TLDs/th pop. 15–69	0.0	141 ○
7.3.3 Wikipedia edits/pop. 15–69	278.4	113
7.3.4 Video uploads on YouTube/pop. 15–69	22.6	62 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	11.3
GDP (US\$ billions)	241.8
GDP per capita, PPP\$	24,012.0
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	38.9	50
Innovation Output Sub-Index	32.0	58
Innovation Input Sub-Index	45.9	44
Innovation Efficiency Ratio	0.7	85
Global Innovation Index 2013 (out of 142)	37.7	55

1 Institutions 66.6 57

1.1 Political environment	60.2	60
1.1.1 Political stability*	60.1	84
1.1.2 Government effectiveness*	49.1	57
1.1.3 Press freedom*	71.5	70
1.2 Regulatory environment	71.8	46
1.2.1 Regulatory quality*	61.8	49
1.2.2 Rule of law*	57.2	48
1.2.3 Cost of redundancy dismissal, salary weeks	15.9	74
1.3 Business environment	67.7	59
1.3.1 Ease of starting a business*	89.4	43
1.3.2 Ease of resolving insolvency*	36.0	77
1.3.3 Ease of paying taxes*	77.9	41

2 Human capital & research 43.5 31

2.1 Education	50.1	46
2.1.1 Expenditure on education, % GDP	4.1	89
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	21.5	52
2.1.3 School life expectancy, years	16.5	14 ●
2.1.4 PISA scales in reading, maths, & science	465.6	39
2.1.5 Pupil-teacher ratio, secondary	7.9	3 ●
2.2 Tertiary education	53.1	17 ●
2.2.1 Tertiary enrolment, % gross	91.4	5 ●
2.2.2 Graduates in science & engineering, %	27.5	16 ●
2.2.3 Tertiary inbound mobility, %	4.2	39
2.3 Research & development (R&D)	27.3	37
2.3.1 Researchers, headcounts/mn pop.	4,068.8	26
2.3.2 Gross expenditure on R&D, % GDP	0.7	50
2.3.3 QS university ranking, average score top 3*	28.3	43

3 Infrastructure 41.1 52

3.1 Information & communication technologies (ICTs)	51.3	42
3.1.1 ICT access*	66.9	36
3.1.2 ICT use*	46.5	38
3.1.3 Government's online service*	57.5	48
3.1.4 E-participation*	34.2	45
3.2 General infrastructure	22.9	124 ○
3.2.1 Electricity output, kWh/cap	5,080.8	45
3.2.2 Logistics performance*	48.4	69
3.2.3 Gross capital formation, % GDP	13.2	137 ○
3.3 Ecological sustainability	49.2	30
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.1	22
3.3.2 Environmental performance*	73.3	23 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.4	40

4 Market sophistication 47.9 73

4.1 Credit	47.6	37
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	120.7	23 ●
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	24.6	122
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	17.9	76
4.2.3 Total value of stocks traded, % GDP	6.0	46
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	69 ○
4.3 Trade & competition	71.5	101
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	62.5	84

5 Business sophistication 30.6 78

5.1 Knowledge workers	39.7	67
5.1.1 Knowledge-intensive employment, %	31.1	43
5.1.2 Firms offering formal training, % firms	20.0	92 ○
5.1.3 GERD performed by business, % GDP	0.2	45
5.1.4 GERD performed by business, %	34.3	52
5.1.5 GMAT test takers/mn pop. 20–34	534.2	8 ●
5.2 Innovation linkages	29.0	83
5.2.1 University/industry research collaboration†	33.5	115
5.2.2 State of cluster development†	33.0	121 ○
5.2.3 GERD financed by abroad, %	15.8	26
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	13 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	61
5.3 Knowledge absorption	23.0	84
5.3.1 Royalty & license fees payments, % total trade	0.6	48
5.3.2 High-tech imports less re-imports, %	6.8	71
5.3.3 Comm., computer & info. services imp., % total trade	1.4	40
5.3.4 FDI net inflows, % GDP	1.2	109

6 Knowledge & technology outputs 30.6 55

6.1 Knowledge creation	18.6	55
6.1.1 Domestic resident patent app./tr PPP\$ GDP	2.3	49
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.3	46
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.1	60 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	36.2	21 ●
6.1.5 Citable documents H index	266.0	29
6.2 Knowledge impact	44.0	50
6.2.1 Growth rate of PPP\$ GDP/worker, %	–1.3	106 ○
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.6	15
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	17.8	26
6.2.5 High- & medium-high-tech manufactures, %	14.1	65
6.3 Knowledge diffusion	29.3	82
6.3.1 Royalty & license fees receipts, % total trade	0.1	50
6.3.2 High-tech exports less re-exports, %	1.8	55
6.3.3 Comm., computer & info. services exp., % total trade	1.4	66
6.3.4 FDI net outflows, % GDP	0.3	76

7 Creative outputs 33.3 65

7.1 Intangible assets	24.1	135 ○
7.1.1 Domestic res trademark app./bn PPP\$ GDP	5.0	98 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.3	45
7.1.3 ICTs & business model creation†	41.7	123 ○
7.1.4 ICTs & organizational model creation†	37.8	123 ○
7.2 Creative goods & services	40.9	17 ●
7.2.1 Cultural & creative services exports, % total trade	0.0	77
7.2.2 National feature films/mn pop. 15–69	5.5	26
7.2.3 Global ent. & media output/th pop. 15–69	0.6	28
7.2.4 Printing & publishing manufactures, %	0.1	1 ●
7.2.5 Creative goods exports, % total trade	0.5	55
7.3 Online creativity	43.9	33
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	14.0	38
7.3.2 Country-code TLDs/th pop. 15–69	53.8	31
7.3.3 Wikipedia edits/pop. 15–69	14,207.3	35
7.3.4 Video uploads on YouTube/pop. 15–69	83.7	21

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Guatemala

Key indicators

Population (millions)	15.1
GDP (US\$ billions)	54.4
GDP per capita, PPP\$	5,282.4
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.8	93
Innovation Output Sub-Index	24.8	97
Innovation Input Sub-Index	36.7	94
Innovation Efficiency Ratio	0.7	95
Global Innovation Index 2013 (out of 142)	31.5	87
1 Institutions	57.8	83
1.1 Political environment	46.9	99
1.1.1 Political stability*	49.7	105
1.1.2 Government effectiveness*	20.5	117
1.1.3 Press freedom*	70.6	76
1.2 Regulatory environment	46.0	121
1.2.1 Regulatory quality*	44.2	87
1.2.2 Rule of law*	16.2	129
1.2.3 Cost of redundancy dismissal, salary weeks	27.0	117
1.3 Business environment	80.4	20 ●
1.3.1 Ease of starting a business*	80.4	89
1.3.2 Ease of resolving insolvency*	n/a	n/a
1.3.3 Ease of paying taxes*	n/a	n/a
2 Human capital & research	17.3	113
2.1 Education	27.1	124
2.1.1 Expenditure on education, % GDP	3.0	112
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	4.8	110 ○
2.1.3 School life expectancy, years	10.6	109
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	14.5	54
2.2 Tertiary education	24.4	90
2.2.1 Tertiary enrolment, % gross	17.9	93
2.2.2 Graduates in science & engineering, %	16.8	71
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	0.4	126
2.3.1 Researchers, headcounts/mn pop.	40.9	115 ○
2.3.2 Gross expenditure on R&D, % GDP	0.0	111 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	28.1	100
3.1 Information & communication technologies (ICTs)	35.0	77
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	46.4	79
3.1.4 E-participation*	23.7	60
3.2 General infrastructure	18.4	133 ○
3.2.1 Electricity output, kWh/cap	551.9	105
3.2.2 Logistics performance*	47.2	75
3.2.3 Gross capital formation, % GDP	14.6	129
3.3 Ecological sustainability	30.8	89
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.3	60
3.3.2 Environmental performance*	48.1	88
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	114
4 Market sophistication	49.5	61
4.1 Credit	34.0	77
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	31.8	94
4.1.3 Microfinance gross loans, % GDP	0.4	50

4.2 Investment	33.3	76
4.2.1 Ease of protecting investors*	33.3	125 ○
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	81.2	24 ●
4.3.1 Applied tariff rate, weighted mean, %	2.3	50 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.7	58
4.3.3 Intensity of local competition†	70.0	50
5 Business sophistication	30.7	77
5.1 Knowledge workers	22.8	115
5.1.1 Knowledge-intensive employment, %	9.4	98
5.1.2 Firms offering formal training, % firms	43.6	38 ●
5.1.3 GERD performed by business, % GDP	0.0	87 ○
5.1.4 GERD performed by business, %	0.3	84 ○
5.1.5 GMAT test takers/mn pop. 20–34	23.5	108
5.2 Innovation linkages	47.9	20 ●
5.2.1 University/industry research collaboration†	45.8	55
5.2.2 State of cluster development†	52.0	43 ●
5.2.3 GERD financed by abroad, %	52.4	4 ●
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	82
5.3 Knowledge absorption	21.5	92
5.3.1 Royalty & license fees payments, % total trade	0.7	40 ●
5.3.2 High-tech imports less re-imports, %	8.6	46 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.4	103
5.3.4 FDI net inflows, % GDP	2.3	82
6 Knowledge & technology outputs	22.3	98
6.1 Knowledge creation	2.1	139 ○
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.1	103 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	108 ○
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.2	50
6.1.4 Scientific & technical articles/bn PPP\$ GDP	1.6	135 ○
6.1.5 Citable documents H index	53.0	106
6.2 Knowledge impact	31.1	100
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.1	88
6.2.2 New businesses/th pop. 15–64	0.5	75
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	2.3	94
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.9	51 ●
6.3.1 Royalty & license fees receipts, % total trade	0.1	45
6.3.2 High-tech exports less re-exports, %	1.3	62
6.3.3 Comm., computer & info. services exp., % total trade	2.8	22 ●
6.3.4 FDI net outflows, % GDP	0.0	109
7 Creative outputs	27.3	94
7.1 Intangible assets	46.2	60
7.1.1 Domestic res trademark app/bn PPP\$ GDP	54.0	50
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	59.5	56
7.1.4 ICTs & organizational model creation†	58.0	48 ●
7.2 Creative goods & services	9.8	97
7.2.1 Cultural & creative services exports, % total trade	0.0	75
7.2.2 National feature films/mn pop. 15–69	1.3	65
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.5	57
7.3 Online creativity	7.1	101
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	6.7	55 ●
7.3.2 Country-code TLDs/th pop. 15–69	12.4	94
7.3.3 Wikipedia edits/pop. 15–69	1,239.7	92
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	11.5
GDP (US\$ billions)	6.3
GDP per capita, PPP\$	1,125.1
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	20.2	139
Innovation Output Sub-Index	15.4	138
Innovation Input Sub-Index	25.1	140
Innovation Efficiency Ratio	0.6	109
Global Innovation Index 2013 (out of 142)	25.7	126

1	Institutions	42.6	132
1.1	Political environment	37.6	131
1.1.1	Political stability*	34.3	128
1.1.2	Government effectiveness*	6.9	138
1.1.3	Press freedom*	71.5	71 ●
1.2	Regulatory environment	57.3	96 ●
1.2.1	Regulatory quality*	22.2	132
1.2.2	Rule of law*	6.8	141 ○
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	33.0	142 ○
1.3.1	Ease of starting a business*	64.3	126
1.3.2	Ease of resolving insolvency*	18.7	124
1.3.3	Ease of paying taxes*	16.1	140 ○
2	Human capital & research	7.7	140
2.1	Education	16.2	135
2.1.1	Expenditure on education, % GDP	2.5	121
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	9.9	99
2.1.3	School life expectancy, years	8.7	121
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	33.1	109
2.2	Tertiary education	7.0	131
2.2.1	Tertiary enrolment, % gross	9.9	110
2.2.2	Graduates in science & engineering, %	n/a	n/a
2.2.3	Tertiary inbound mobility, %	0.9	82
2.3	Research & development (R&D)	0.0	131 ○
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	16.5	139
3.1	Information & communication technologies (ICTs)	4.4	143 ○
3.1.1	ICT access*	17.1	130
3.1.2	ICT use*	0.5	134 ○
3.1.3	Government's online service*	0.0	142 ○
3.1.4	E-participation*	0.0	129 ○
3.2	General infrastructure	26.0	106
3.2.1	Electricity output, kWh/cap	n/a	n/a
3.2.2	Logistics performance*	34.5	110
3.2.3	Gross capital formation, % GDP	19.2	100
3.3	Ecological sustainability	19.2	137
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2	Environmental performance*	28.0	133
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	105
4	Market sophistication	32.5	142 ○
4.1	Credit	13.9	139
4.1.1	Ease of getting credit*	37.5	130
4.1.2	Domestic credit to private sector, % GDP	9.1	140 ○
4.1.3	Microfinance gross loans, % GDP	0.2	57 ●

4.2	Investment	26.7	115
4.2.1	Ease of protecting investors*	26.7	140 ○
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	56.9	134
4.3.1	Applied tariff rate, weighted mean, %	11.9	131
4.3.2	Non-agricultural mkt access weighted tariff, %	3.1	95 ●
4.3.3	Intensity of local competition†	51.0	123

5 Business sophistication **26.3** **107**

5.1	Knowledge workers	9.9	140
5.1.1	Knowledge-intensive employment, %	0.7	110 ○
5.1.2	Firms offering formal training, % firms	21.1	91
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	4.0	134
5.2	Innovation linkages	27.2	91 ●
5.2.1	University/industry research collaboration†	19.8	132
5.2.2	State of cluster development†	36.2	113
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	44 ●
5.3	Knowledge absorption	41.9	10 ●
5.3.1	Royalty & license fees payments, % total trade	0.0	114
5.3.2	High-tech imports less re-imports, %	n/a	n/a
5.3.3	Comm., computer & info. services imp., % total trade	0.6	88 ●
5.3.4	FDI net inflows, % GDP	18.8	5 ●

6 Knowledge & technology outputs **12.5** **138**

6.1	Knowledge creation	3.2	130
6.1.1	Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	75 ●
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	2.9	125
6.1.5	Citable documents H index	34.0	130
6.2	Knowledge impact	3.0	137
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	0.2	84
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.1	97 ●
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	31.2	70 ●
6.3.1	Royalty & license fees receipts, % total trade	0.0	96
6.3.2	High-tech exports less re-exports, %	n/a	n/a
6.3.3	Comm., computer & info. services exp., % total trade	1.6	57 ●
6.3.4	FDI net outflows, % GDP	0.0	100

7 Creative outputs **18.2** **126**

7.1	Intangible assets	34.7	117
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	38.0	129
7.1.4	ICTs & organizational model creation†	31.3	134 ○
7.2	Creative goods & services	3.4	116
7.2.1	Cultural & creative services exports, % total trade	0.0	82
7.2.2	National feature films/mn pop. 15–69	0.8	77
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	n/a	n/a
7.3	Online creativity	0.1	139
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.1	137
7.3.2	Country-code TLDs/th pop. 15–69	0.3	135
7.3.3	Wikipedia edits/pop. 15–69	5.3	142 ○
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Guyana

Key indicators

Population (millions)	0.8
GDP (US\$ billions)	3.0
GDP per capita, PPP\$	8,250.2
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.5	80
Innovation Output Sub-Index	27.7	76
Innovation Input Sub-Index	37.3	92
Innovation Efficiency Ratio	0.7	68
Global Innovation Index 2013 (out of 142)	34.4	78

1	Institutions	55.9	89
1.1	Political environment	54.6	79
1.1.1	Political stability*	53.9	94
1.1.2	Government effectiveness*	37.1	79
1.1.3	Press freedom*	72.9	56
1.2	Regulatory environment	57.4	95
1.2.1	Regulatory quality*	32.3	116
1.2.2	Rule of law*	32.1	92
1.2.3	Cost of redundancy dismissal, salary weeks	16.7	78
1.3	Business environment	55.8	96
1.3.1	Ease of starting a business*	81.8	79
1.3.2	Ease of resolving insolvency*	19.0	121
1.3.3	Ease of paying taxes*	66.7	81
2	Human capital & research	13.5	130 ○
2.1	Education	26.3	126
2.1.1	Expenditure on education, % GDP	3.2	107
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	9.8	100
2.1.3	School life expectancy, years	10.3	112
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	20.3	82
2.2	Tertiary education	14.2	114
2.2.1	Tertiary enrolment, % gross	12.9	100
2.2.2	Graduates in science & engineering, %	13.4	91
2.2.3	Tertiary inbound mobility, %	0.4	96
2.3	Research & development (R&D)	0.0	131
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	0.0	70
3	Infrastructure	25.3	116
3.1	Information & communication technologies (ICTs)	17.7	119
3.1.1	ICT access*	31.8	99
3.1.2	ICT use*	13.6	97
3.1.3	Government's online service*	25.5	128
3.1.4	E-participation*	0.0	129
3.2	General infrastructure	32.6	72
3.2.1	Electricity output, kWh/cap	n/a	n/a
3.2.2	Logistics performance*	28.6	123
3.2.3	Gross capital formation, % GDP	25.3	48
3.3	Ecological sustainability	25.7	114
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2	Environmental performance*	38.1	115
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	115
4	Market sophistication	40.4	123
4.1	Credit	14.0	138
4.1.1	Ease of getting credit*	25.0	134
4.1.2	Domestic credit to private sector, % GDP	41.0	81
4.1.3	Microfinance gross loans, % GDP	0.4	52

4.2	Investment	29.8	99
4.2.1	Ease of protecting investors*	53.3	66
4.2.2	Market capitalization, % GDP	21.4	67
4.2.3	Total value of stocks traded, % GDP	0.0	104
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	77.5	49
4.3.1	Applied tariff rate, weighted mean, %	6.5	101
4.3.2	Non-agricultural mkt access weighted tariff, %	0.0	8
4.3.3	Intensity of local competition [†]	66.5	66

5	Business sophistication	51.2	13 ●
5.1	Knowledge workers	59.7	28
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	53.4	18
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	99.1	52
5.2	Innovation linkages	47.9	21
5.2.1	University/industry research collaboration [†]	44.3	60
5.2.2	State of cluster development [†]	49.7	56
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	46.0	7
5.3.1	Royalty & license fees payments, % total trade	2.0	7
5.3.2	High-tech imports less re-imports, %	8.4	50
5.3.3	Comm., computer & info. services imp., % total trade	2.6	5
5.3.4	FDI net inflows, % GDP	6.4	30

6	Knowledge & technology outputs	18.6	117
6.1	Knowledge creation	2.4	137
6.1.1	Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	2.1	132
6.1.5	Citable documents H index	27.0	136
6.2	Knowledge impact	3.1	136
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	1.5	115
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	50.3	11
6.3.1	Royalty & license fees receipts, % total trade	3.4	5
6.3.2	High-tech exports less re-exports, %	0.0	123
6.3.3	Comm., computer & info. services exp., % total trade	3.7	14
6.3.4	FDI net outflows, % GDP	n/a	n/a

7	Creative outputs	36.7	52 ●
7.1	Intangible assets	51.7	33
7.1.1	Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation [†]	51.2	90
7.1.4	ICTs & organizational model creation [†]	52.2	71
7.2	Creative goods & services	33.6	34
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	22.9	1
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.0	120
7.3	Online creativity	10.0	92
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	3.2	69
7.3.2	Country-code TLDs/th pop. 15–69	25.8	68
7.3.3	Wikipedia edits/pop. 15–69	541.4	105
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	7.9
GDP (US\$ billions)	18.8
GDP per capita, PPP\$	4,839.4
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	26.7	118
Innovation Output Sub-Index	18.6	126 ○
Innovation Input Sub-Index	34.8	102
Innovation Efficiency Ratio	0.5	128 ○
Global Innovation Index 2013 (out of 142)	28.8	107

1 Institutions	46.1	125 ○
1.1 Political environment	46.9	100
1.1.1 Political stability*	55.9	88
1.1.2 Government effectiveness*	21.7	116
1.1.3 Press freedom*	63.1	104
1.2 Regulatory environment	42.0	127 ○
1.2.1 Regulatory quality*	43.6	88
1.2.2 Rule of law*	14.2	133 ○
1.2.3 Cost of redundancy dismissal, salary weeks	30.3	129 ○
1.3 Business environment	49.3	119
1.3.1 Ease of starting a business*	69.4	116
1.3.2 Ease of resolving insolvency*	20.6	118
1.3.3 Ease of paying taxes*	57.8	109

2 Human capital & research	19.7	103
2.1 Education	41.4	80
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	11.4	97
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	17.5	105
2.2.1 Tertiary enrolment, % gross	20.4	91
2.2.2 Graduates in science & engineering, %	14.1	88
2.2.3 Tertiary inbound mobility, %	0.9	83
2.3 Research & development (R&D)	0.3	127 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	0.0	113 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	26.6	111
3.1 Information & communication technologies (ICTs)	22.4	102
3.1.1 ICT access*	30.5	102
3.1.2 ICT use*	8.1	108
3.1.3 Government's online service*	37.9	97
3.1.4 E-participation*	13.2	84
3.2 General infrastructure	26.9	103
3.2.1 Electricity output, kWh/cap	918.3	93
3.2.2 Logistics performance*	36.5	103
3.2.3 Gross capital formation, % GDP	24.7	51 ●
3.3 Ecological sustainability	30.6	90
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.8	71
3.3.2 Environmental performance*	48.9	87
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.5	85

4 Market sophistication	48.9	64 ●
4.1 Credit	42.8	52 ●
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	51.8	64 ●
4.1.3 Microfinance gross loans, % GDP	2.0	25 ●

4.2 Investment	30.0	95
4.2.1 Ease of protecting investors*	30.0	133 ○
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	73.9	85
4.3.1 Applied tariff rate, weighted mean, %	6.5	100
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	15 ●
4.3.3 Intensity of local competition†	59.3	99

5 Business sophistication	32.9	67 ●
5.1 Knowledge workers	30.5	93
5.1.1 Knowledge-intensive employment, %	12.8	95 ○
5.1.2 Firms offering formal training, % firms	33.8	52 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	38.0	82
5.2 Innovation linkages	45.7	29 ●
5.2.1 University/industry research collaboration†	39.0	83
5.2.2 State of cluster development†	49.0	60 ●
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	22.4	89
5.3.1 Royalty & license fees payments, % total trade	0.4	64 ●
5.3.2 High-tech imports less re-imports, %	6.4	80
5.3.3 Comm., computer & info. services imp., % total trade	0.7	81
5.3.4 FDI net inflows, % GDP	5.9	33 ●

6 Knowledge & technology outputs	16.2	125 ○
6.1 Knowledge creation	2.1	138 ○
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.2	87
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	101 ○
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.2	45
6.1.4 Scientific & technical articles/bn PPP\$ GDP	1.4	137 ○
6.1.5 Citable documents H index	39.0	124 ○
6.2 Knowledge impact	12.8	123 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.3	46
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.7	79
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.6	53 ●
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.4	86
6.3.3 Comm., computer & info. services exp., % total trade	2.1	37 ●
6.3.4 FDI net outflows, % GDP	0.1	91

7 Creative outputs	21.1	120
7.1 Intangible assets	38.4	101
7.1.1 Domestic res trademark app./bn PPP\$ GDP	51.3	55
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	47.8	105
7.1.4 ICTs & organizational model creation†	47.3	91
7.2 Creative goods & services	2.7	119
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.2	96 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	91
7.3 Online creativity	4.9	110
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.8	109
7.3.2 Country-code TLDs/th pop. 15–69	11.6	98
7.3.3 Wikipedia edits/pop. 15–69	1,398.7	87
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Hong Kong (China)

Key indicators

Population (millions)	7.2
GDP (US\$ billions)	273.7
GDP per capita, PPP\$	52,722.0
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	56.8	10
Innovation Output Sub-Index	45.1	24
Innovation Input Sub-Index	68.6	2 ●
Innovation Efficiency Ratio	0.7	99 ○
Global Innovation Index 2013 (out of 142)	44.7	7

1 Institutions	91.4	8
1.1 Political environment	84.3	18
1.1.1 Political stability*	89.6	20
1.1.2 Government effectiveness*	89.6	7
1.1.3 Press freedom*	73.8	49
1.2 Regulatory environment	97.2	5
1.2.1 Regulatory quality*	99.5	2 ●
1.2.2 Rule of law*	89.2	18
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	92.7	4
1.3.1 Ease of starting a business*	95.9	10
1.3.2 Ease of resolving insolvency*	86.0	18
1.3.3 Ease of paying taxes*	96.3	4

2 Human capital & research	49.5	23
2.1 Education	46.9	57
2.1.1 Expenditure on education, % GDP	3.5	97 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	17.3	70 ○
2.1.3 School life expectancy, years	15.6	31
2.1.4 PISA scales in reading, maths, & science	553.6	3
2.1.5 Pupil-teacher ratio, secondary	17.8	75 ○
2.2 Tertiary education	56.7	11
2.2.1 Tertiary enrolment, % gross	60.1	37
2.2.2 Graduates in science & engineering, %	34.7	8
2.2.3 Tertiary inbound mobility, %	7.8	22
2.3 Research & development (R&D)	44.8	24
2.3.1 Researchers, headcounts/mn pop.	3,471.2	29
2.3.2 Gross expenditure on R&D, % GDP	0.7	45
2.3.3 QS university ranking, average score top 3*	85.1	6

3 Infrastructure	67.4	1 ●
3.1 Information & communication technologies (ICTs)	79.0	8
3.1.1 ICT access*	91.8	1 ●
3.1.2 ICT use*	66.2	15
3.1.3 Government's online service*	n/a	n/a
3.1.4 E-participation*	n/a	n/a
3.2 General infrastructure	50.0	18
3.2.1 Electricity output, kWh/cap	5,520.5	37
3.2.2 Logistics performance*	99.6	2 ●
3.2.3 Gross capital formation, % GDP	26.3	40
3.3 Ecological sustainability	73.2	1 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	21.2	1 ●
3.3.2 Environmental performance*	n/a	n/a
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.9	35

4 Market sophistication	79.7	3 ●
4.1 Credit	79.4	2 ●
4.1.1 Ease of getting credit*	93.8	3
4.1.2 Domestic credit to private sector, % GDP	198.1	4
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	77.4	5
4.2.1 Ease of protecting investors*	90.0	3 ●
4.2.2 Market capitalization, % GDP	420.9	1 ●
4.2.3 Total value of stocks traded, % GDP	467.0	1 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	40
4.3 Trade & competition	82.3	14
4.3.1 Applied tariff rate, weighted mean, %	0.0	1 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	96 ○
4.3.3 Intensity of local competition†	82.0	6

5 Business sophistication	54.9	6
5.1 Knowledge workers	57.2	30
5.1.1 Knowledge-intensive employment, %	36.2	29
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	0.3	42
5.1.4 GERD performed by business, %	43.3	42
5.1.5 GMAT test takers/mn pop. 20–34	1,326.1	2 ●
5.2 Innovation linkages	45.7	28
5.2.1 University/industry research collaboration†	64.3	20
5.2.2 State of cluster development†	68.8	10
5.2.3 GERD financed by abroad, %	4.9	63 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	8
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.3	28
5.3 Knowledge absorption	61.7	2 ●
5.3.1 Royalty & license fees payments, % total trade	0.4	63
5.3.2 High-tech imports less re-imports, %	41.8	1 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.5	98 ○
5.3.4 FDI net inflows, % GDP	38.7	1 ●

6 Knowledge & technology outputs	33.3	45
6.1 Knowledge creation	18.0	60
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.5	78 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.2	28
6.1.4 Scientific & technical articles/bn PPP\$ GDP	n/a	n/a
6.1.5 Citable documents H index	292.0	25
6.2 Knowledge impact	52.5	20
6.2.1 Growth rate of PPP\$ GDP/worker, %	1.7	58
6.2.2 New businesses/th pop. 15–64	28.1	1 ●
6.2.3 Computer software spending, % GDP	0.4	22
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	10.1	48
6.2.5 High- & medium-high-tech manufactures, %	23.5	46
6.3 Knowledge diffusion	29.4	80
6.3.1 Royalty & license fees receipts, % total trade	0.1	57
6.3.2 High-tech exports less re-exports, %	0.2	101 ○
6.3.3 Comm., computer & info. services exp., % total trade	0.5	103 ○
6.3.4 FDI net outflows, % GDP	31.9	3

7 Creative outputs	56.8	6
7.1 Intangible assets	55.1	21
7.1.1 Domestic res trademark app/bn PPP\$ GDP	68.8	37
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	71.0	17
7.1.4 ICTs & organizational model creation†	67.7	17
7.2 Creative goods & services	48.0	8
7.2.1 Cultural & creative services exports, % total trade	0.2	45
7.2.2 National feature films/mn pop. 15–69	9.5	14
7.2.3 Global ent. & media output/th pop. 15–69	1.4	18
7.2.4 Printing & publishing manufactures, %	0.2	1 ●
7.2.5 Creative goods exports, % total trade	0.3	73 ○
7.3 Online creativity	69.1	9
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	84.6	9
7.3.2 Country-code TLDs/th pop. 15–69	44.5	42
7.3.3 Wikipedia edits/pop. 15–69	30,069.0	8
7.3.4 Video uploads on YouTube/pop. 15–69	96.2	2

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	9.9
GDP (US\$ billions)	132.4
GDP per capita, PPP\$	20,065.1
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	44.6	35
Innovation Output Sub-Index	42.2	29
Innovation Input Sub-Index	47.0	41
Innovation Efficiency Ratio	0.9	15 ●
Global Innovation Index 2013 (out of 142)	46.9	31
1 Institutions	72.3	40
1.1 Political environment	71.1	45
1.1.1 Political stability*	82.0	37
1.1.2 Government effectiveness*	57.4	43
1.1.3 Press freedom*	73.9	47
1.2 Regulatory environment	78.8	33
1.2.1 Regulatory quality*	74.1	33
1.2.2 Rule of law*	62.7	40
1.2.3 Cost of redundancy dismissal, salary weeks	13.4	60
1.3 Business environment	67.0	63
1.3.1 Ease of starting a business*	92.2	25
1.3.2 Ease of resolving insolvency*	40.6	62
1.3.3 Ease of paying taxes*	68.4	78
2 Human capital & research	37.9	42
2.1 Education	50.1	45
2.1.1 Expenditure on education, % GDP	4.9	64
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	21.8	51
2.1.3 School life expectancy, years	15.4	37
2.1.4 PISA scales in reading, maths, & science	486.6	30
2.1.5 Pupil-teacher ratio, secondary	10.0	26
2.2 Tertiary education	34.2	65
2.2.1 Tertiary enrolment, % gross	59.5	40
2.2.2 Graduates in science & engineering, %	16.5	75
2.2.3 Tertiary inbound mobility, %	4.3	36
2.3 Research & development (R&D)	29.4	36
2.3.1 Researchers, headcounts/mn pop.	3,695.9	27
2.3.2 Gross expenditure on R&D, % GDP	1.3	28
2.3.3 QS university ranking, average score top 3*	24.1	46
3 Infrastructure	45.6	36
3.1 Information & communication technologies (ICTs)	55.7	34
3.1.1 ICT access*	64.6	42
3.1.2 ICT use*	44.8	39
3.1.3 Government's online service*	68.6	31
3.1.4 E-participation*	44.7	36
3.2 General infrastructure	28.0	97
3.2.1 Electricity output, kWh/cap	3,461.6	57
3.2.2 Logistics performance*	61.9	39
3.2.3 Gross capital formation, % GDP	16.7	117 ○
3.3 Ecological sustainability	53.2	18 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.2	47
3.3.2 Environmental performance*	70.3	28
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	8.9	13 ●
4 Market sophistication	42.1	115 ○
4.1 Credit	28.7	98
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	56.4	57
4.1.3 Microfinance gross loans, % GDP	0.0	90 ○

4.2 Investment	21.8	132 ○
4.2.1 Ease of protecting investors*	43.3	105 ○
4.2.2 Market capitalization, % GDP	16.8	78 ○
4.2.3 Total value of stocks traded, % GDP	8.7	43
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	47
4.3 Trade & competition	75.9	64
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	71.3	41
5 Business sophistication	37.2	45
5.1 Knowledge workers	43.2	55
5.1.1 Knowledge-intensive employment, %	35.4	32
5.1.2 Firms offering formal training, % firms	14.6	99 ○
5.1.3 GERD performed by business, % GDP	0.9	26
5.1.4 GERD performed by business, %	65.6	17
5.1.5 GMAT test takers/mn pop. 20–34	105.0	51
5.2 Innovation linkages	28.0	85
5.2.1 University/industry research collaboration†	54.3	40
5.2.2 State of cluster development†	37.8	106 ○
5.2.3 GERD financed by abroad, %	15.4	28
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	98 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	34
5.3 Knowledge absorption	40.5	15 ●
5.3.1 Royalty & license fees payments, % total trade	1.1	24
5.3.2 High-tech imports less re-imports, %	14.1	14 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.1	59
5.3.4 FDI net inflows, % GDP	6.8	28
6 Knowledge & technology outputs	41.9	24
6.1 Knowledge creation	24.8	42
6.1.1 Domestic resident patent app./tr PPP\$ GDP	3.6	33
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.8	34
6.1.3 Domestic res utility model app./tr PPP\$ GDP	1.2	29
6.1.4 Scientific & technical articles/bn PPP\$ GDP	30.7	29
6.1.5 Citable documents H index	254.0	30
6.2 Knowledge impact	52.7	18 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	–2.1	112 ○
6.2.2 New businesses/th pop. 15–64	4.8	21
6.2.3 Computer software spending, % GDP	0.3	38
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	37.5	9 ●
6.2.5 High- & medium-high-tech manufactures, %	56.4	4 ●
6.3 Knowledge diffusion	48.2	18 ●
6.3.1 Royalty & license fees receipts, % total trade	1.0	16 ●
6.3.2 High-tech exports less re-exports, %	15.4	8 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.4	64
6.3.4 FDI net outflows, % GDP	4.7	15 ●
7 Creative outputs	42.5	35
7.1 Intangible assets	40.8	87
7.1.1 Domestic res trademark app./bn PPP\$ GDP	53.5	51
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.3	25
7.1.3 ICTs & business model creation†	58.3	63
7.1.4 ICTs & organizational model creation†	52.2	71
7.2 Creative goods & services	39.6	19 ●
7.2.1 Cultural & creative services exports, % total trade	1.0	8 ●
7.2.2 National feature films/mn pop. 15–69	3.2	43
7.2.3 Global ent. & media output/th pop. 15–69	0.4	31
7.2.4 Printing & publishing manufactures, %	0.0	71 ○
7.2.5 Creative goods exports, % total trade	6.9	8 ●
7.3 Online creativity	48.6	27
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	12.5	44
7.3.2 Country-code TLDs/th pop. 15–69	60.4	17 ●
7.3.3 Wikipedia edits/pop. 15–69	21,090.5	23
7.3.4 Video uploads on YouTube/pop. 15–69	85.7	19

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Iceland

Key indicators

Population (millions)	0.3
GDP (US\$ billions)	14.7
GDP per capita, PPP\$	40,999.6
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	54.1	19
Innovation Output Sub-Index	51.3	9
Innovation Input Sub-Index	56.8	24
Innovation Efficiency Ratio	0.9	13
Global Innovation Index 2013 (out of 142)	56.4	13
1 Institutions	88.6	14
1.1 Political environment	89.2	10
1.1.1 Political stability*	95.5	8
1.1.2 Government effectiveness*	80.5	19
1.1.3 Press freedom*	91.5	7 ●
1.2 Regulatory environment	90.1	19
1.2.1 Regulatory quality*	76.6	28
1.2.2 Rule of law*	92.4	15
1.2.3 Cost of redundancy dismissal, salary weeks	10.1	38
1.3 Business environment	86.4	13
1.3.1 Ease of starting a business*	91.1	29
1.3.2 Ease of resolving insolvency*	89.5	11
1.3.3 Ease of paying taxes*	78.6	39
2 Human capital & research	49.4	24
2.1 Education	56.7	18
2.1.1 Expenditure on education, % GDP	7.6	8
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	21.1	54
2.1.3 School life expectancy, years	18.7	3 ●
2.1.4 PISA scales in reading, maths, & science	484.5	31
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	40.7	43
2.2.1 Tertiary enrolment, % gross	80.9	9
2.2.2 Graduates in science & engineering, %	15.6	81 ○
2.2.3 Tertiary inbound mobility, %	5.8	30
2.3 Research & development (R&D)	50.8	20
2.3.1 Researchers, headcounts/mn pop.	10,402.0	2 ●
2.3.2 Gross expenditure on R&D, % GDP	2.4	12
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	47.4	30
3.1 Information & communication technologies (ICTs)	58.2	30
3.1.1 ICT access*	87.7	3 ●
3.1.2 ICT use*	75.0	7
3.1.3 Government's online service*	54.3	53
3.1.4 E-participation*	15.8	79
3.2 General infrastructure	47.6	20
3.2.1 Electricity output, kWh/cap	54,840.6	1 ●
3.2.2 Logistics performance*	70.6	32
3.2.3 Gross capital formation, % GDP	13.6	136 ○
3.3 Ecological sustainability	36.4	66
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	1.8	121 ○
3.3.2 Environmental performance*	76.5	14
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.3	42
4 Market sophistication	54.1	41
4.1 Credit	53.0	29
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	96.8	32
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	30.7	92 ○
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	20.7	70 ○
4.2.3 Total value of stocks traded, % GDP	5.0	50
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	27
4.3 Trade & competition	78.6	34
4.3.1 Applied tariff rate, weighted mean, %	1.0	8
4.3.2 Non-agricultural mkt access weighted tariff, %	1.0	72
4.3.3 Intensity of local competition†	64.0	80 ○
5 Business sophistication	44.4	25
5.1 Knowledge workers	69.3	9
5.1.1 Knowledge-intensive employment, %	46.9	6
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.3	17
5.1.4 GERD performed by business, %	52.6	33
5.1.5 GMAT test takers/mn pop. 20–34	586.6	7 ●
5.2 Innovation linkages	35.0	59
5.2.1 University/industry research collaboration†	62.8	24
5.2.2 State of cluster development†	50.5	52
5.2.3 GERD financed by abroad, %	8.4	49
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	35
5.3 Knowledge absorption	28.9	48
5.3.1 Royalty & license fees payments, % total trade	1.3	17
5.3.2 High-tech imports less re-imports, %	5.8	88 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.6	32
5.3.4 FDI net inflows, % GDP	3.8	57
6 Knowledge & technology outputs	36.6	36
6.1 Knowledge creation	45.9	21
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.9	38
6.1.2 PCT resident patent app/tr PPP\$ GDP	3.4	15
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	67.5	1 ●
6.1.5 Citable documents H index	160.0	39
6.2 Knowledge impact	41.6	59
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.5	46
6.2.2 New businesses/th pop. 15–64	8.2	12
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.3	70
6.2.5 High- & medium-high-tech manufactures, %	7.1	82 ○
6.3 Knowledge diffusion	22.3	120 ○
6.3.1 Royalty & license fees receipts, % total trade	2.8	8
6.3.2 High-tech exports less re-exports, %	1.5	60
6.3.3 Comm., computer & info. services exp., % total trade	1.3	74
6.3.4 FDI net outflows, % GDP	–23.5	125 ○
7 Creative outputs	66.1	1 ●
7.1 Intangible assets	66.0	6 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	124.6	7
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	9.5	1 ●
7.1.3 ICTs & business model creation†	66.8	29
7.1.4 ICTs & organizational model creation†	65.7	20
7.2 Creative goods & services	50.9	6 ●
7.2.1 Cultural & creative services exports, % total trade	0.3	36
7.2.2 National feature films/mn pop. 15–69	57.2	1 ●
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.1	4 ●
7.2.5 Creative goods exports, % total trade	0.2	83 ○
7.3 Online creativity	81.4	1 ●
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	100.0	1 ●
7.3.2 Country-code TLDs/th pop. 15–69	71.6	8
7.3.3 Wikipedia edits/pop. 15–69	42,761.2	4 ●
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	1,236.7
GDP (US\$ billions)	1,870.7
GDP per capita, PPP\$	4,077.1
Income group	Lower-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	33.7	76
Innovation Output Sub-Index	30.4	65
Innovation Input Sub-Index	37.0	93
Innovation Efficiency Ratio	0.8	31 ●
Global Innovation Index 2013 (out of 142)	36.2	66
1 Institutions	50.8	106
1.1 Political environment	43.3	120
1.1.1 Political stability*	35.2	126 ○
1.1.2 Government effectiveness*	36.0	82
1.1.3 Press freedom*	58.8	115
1.2 Regulatory environment	62.2	83
1.2.1 Regulatory quality*	36.5	108
1.2.2 Rule of law*	43.5	64
1.2.3 Cost of redundancy dismissal, salary weeks	15.8	73
1.3 Business environment	47.0	128 ○
1.3.1 Ease of starting a business*	62.7	129 ○
1.3.2 Ease of resolving insolvency*	27.1	105
1.3.3 Ease of paying taxes*	51.0	120
2 Human capital & research	22.7	96
2.1 Education	24.2	128 ○
2.1.1 Expenditure on education, % GDP	3.2	109
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	12.6	90
2.1.3 School life expectancy, years	11.7	91
2.1.4 PISA scales in reading, maths, & science	336.0	62 ○
2.1.5 Pupil-teacher ratio, secondary	25.9	92
2.2 Tertiary education	11.7	122 ○
2.2.1 Tertiary enrolment, % gross	23.3	86
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	0.1	106 ○
2.3 Research & development (R&D)	32.0	31 ●
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	0.8	41
2.3.3 QS university ranking, average score top 3*	45.7	27 ●
3 Infrastructure	32.1	87
3.1 Information & communication technologies (ICTs)	25.9	99
3.1.1 ICT access*	25.0	111
3.1.2 ICT use*	6.5	112
3.1.3 Government's online service*	53.6	56
3.1.4 E-participation*	18.4	73
3.2 General infrastructure	43.1	33 ●
3.2.1 Electricity output, kWh/cap	847.6	95
3.2.2 Logistics performance*	58.3	46
3.2.3 Gross capital formation, % GDP	35.0	14 ●
3.3 Ecological sustainability	27.4	106
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.3	80
3.3.2 Environmental performance*	31.2	128 ○
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a
4 Market sophistication	51.2	50
4.1 Credit	33.3	80
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	51.5	65
4.1.3 Microfinance gross loans, % GDP	0.2	55

4.2 Investment	44.2	41
4.2.1 Ease of protecting investors*	63.3	32
4.2.2 Market capitalization, % GDP	68.6	27 ●
4.2.3 Total value of stocks traded, % GDP	33.8	26 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	24
4.3 Trade & competition	76.1	59
4.3.1 Applied tariff rate, weighted mean, %	8.2	113
4.3.2 Non-agricultural mkt access weighted tariff, %	1.8	89
4.3.3 Intensity of local competition†	75.8	22 ●
5 Business sophistication	28.0	93
5.1 Knowledge workers	25.0	110
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	15.9	97 ○
5.1.3 GERD performed by business, % GDP	0.3	43
5.1.4 GERD performed by business, %	35.5	50
5.1.5 GMAT test takers/mn pop. 20–34	78.7	57
5.2 Innovation linkages	38.9	46
5.2.1 University/industry research collaboration†	50.0	43
5.2.2 State of cluster development†	64.7	15 ●
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	54
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	84
5.3 Knowledge absorption	20.2	100
5.3.1 Royalty & license fees payments, % total trade	0.8	35
5.3.2 High-tech imports less re-imports, %	6.7	73
5.3.3 Comm., computer & info. services imp., % total trade	0.7	75
5.3.4 FDI net inflows, % GDP	1.7	89
6 Knowledge & technology outputs	32.2	50
6.1 Knowledge creation	18.4	57
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.0	52
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	59
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	9.8	74
6.1.5 Citable documents H index	301.0	24 ●
6.2 Knowledge impact	34.1	87
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.7	24 ●
6.2.2 New businesses/th pop. 15–64	0.1	87
6.2.3 Computer software spending, % GDP	0.1	74 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	6.2	59
6.2.5 High- & medium-high-tech manufactures, %	31.8	33
6.3 Knowledge diffusion	44.1	24 ●
6.3.1 Royalty & license fees receipts, % total trade	0.1	61
6.3.2 High-tech exports less re-exports, %	2.8	45
6.3.3 Comm., computer & info. services exp., % total trade	9.8	1 ●
6.3.4 FDI net outflows, % GDP	0.5	64
7 Creative outputs	28.6	82
7.1 Intangible assets	39.4	94
7.1.1 Domestic res trademark app/bn PPP\$ GDP	37.3	69
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.0	72 ○
7.1.3 ICTs & business model creation†	63.5	39
7.1.4 ICTs & organizational model creation†	60.0	38
7.2 Creative goods & services	21.1	58
7.2.1 Cultural & creative services exports, % total trade	0.1	65
7.2.2 National feature films/mn pop. 15–69	1.5	58
7.2.3 Global ent. & media output/th pop. 15–69	0.0	58 ○
7.2.4 Printing & publishing manufactures, %	0.0	82 ○
7.2.5 Creative goods exports, % total trade	4.3	13 ●
7.3 Online creativity	14.7	78
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.2	102
7.3.2 Country-code TLDs/th pop. 15–69	14.9	88
7.3.3 Wikipedia edits/pop. 15–69	536.9	106
7.3.4 Video uploads on YouTube/pop. 15–69	41.6	58 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Indonesia

Key indicators

Population (millions)	246.9
GDP (US\$ billions)	870.3
GDP per capita, PPP\$	5,214.1
Income group	Lower-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	31.8	87
Innovation Output Sub-Index	31.2	60
Innovation Input Sub-Index	32.4	117
Innovation Efficiency Ratio	1.0	4 ●
Global Innovation Index 2013 (out of 142)	35.8	85

1 Institutions	38.1	137	○
1.1 Political environment	47.9	96	
1.1.1 Political stability*	51.6	101	
1.1.2 Government effectiveness*	33.1	87	
1.1.3 Press freedom*	59.0	114	
1.2 Regulatory environment	17.9	140	○
1.2.1 Regulatory quality*	41.6	93	
1.2.2 Rule of law*	29.9	98	
1.2.3 Cost of redundancy dismissal, salary weeks	57.8	139	○
1.3 Business environment	48.5	123	
1.3.1 Ease of starting a business*	69.2	117	
1.3.2 Ease of resolving insolvency*	18.9	123	
1.3.3 Ease of paying taxes*	57.4	111	

2 Human capital & research	22.8	92	
2.1 Education	30.1	117	
2.1.1 Expenditure on education, % GDP	2.8	114	
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	7.7	105	○
2.1.3 School life expectancy, years	12.7	78	
2.1.4 PISA scales in reading, maths, & science	384.4	59	○
2.1.5 Pupil-teacher ratio, secondary	14.8	59	
2.2 Tertiary education	26.8	86	
2.2.1 Tertiary enrolment, % gross	27.2	81	
2.2.2 Graduates in science & engineering, %	22.8	35	
2.2.3 Tertiary inbound mobility, %	0.1	105	○
2.3 Research & development (R&D)	11.6	65	
2.3.1 Researchers, headcounts/mn pop.	173.2	91	
2.3.2 Gross expenditure on R&D, % GDP	0.1	105	
2.3.3 QS university ranking, average score top 3*	31.6	40	●

3 Infrastructure	33.1	83	
3.1 Information & communication technologies (ICTs)	30.8	88	
3.1.1 ICT access*	36.2	90	
3.1.2 ICT use*	16.4	90	
3.1.3 Government's online service*	49.7	68	
3.1.4 E-participation*	21.1	65	
3.2 General infrastructure	41.1	42	
3.2.1 Electricity output, kWh/cap	752.6	97	
3.2.2 Logistics performance*	52.8	59	
3.2.3 Gross capital formation, % GDP	34.6	15	●
3.3 Ecological sustainability	27.2	108	
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.7	86	
3.3.2 Environmental performance*	44.4	97	
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.9	66	

4 Market sophistication	45.3	88	
4.1 Credit	27.3	102	
4.1.1 Ease of getting credit*	56.3	81	
4.1.2 Domestic credit to private sector, % GDP	34.9	90	
4.1.3 Microfinance gross loans, % GDP	1.2	34	

4.2 Investment	31.4	89	
4.2.1 Ease of protecting investors*	60.0	42	
4.2.2 Market capitalization, % GDP	45.2	42	
4.2.3 Total value of stocks traded, % GDP	10.4	40	
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	67	○
4.3 Trade & competition	77.1	51	
4.3.1 Applied tariff rate, weighted mean, %	2.6	54	
4.3.2 Non-agricultural mkt access weighted tariff, %	1.6	87	
4.3.3 Intensity of local competition†	67.2	63	

5 Business sophistication	22.8	124	
5.1 Knowledge workers	7.6	142	○
5.1.1 Knowledge-intensive employment, %	8.6	99	
5.1.2 Firms offering formal training, % firms	4.8	105	○
5.1.3 GERD performed by business, % GDP	0.0	81	○
5.1.4 GERD performed by business, %	n/a	n/a	
5.1.5 GMAT test takers/mn pop. 20–34	14.3	113	

5.2 Innovation linkages	36.1	53	
5.2.1 University/industry research collaboration†	58.2	29	●
5.2.2 State of cluster development†	57.2	27	●
5.2.3 GERD financed by abroad, %	n/a	n/a	
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	71	
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	105	○
5.3 Knowledge absorption	24.7	76	
5.3.1 Royalty & license fees payments, % total trade	0.8	33	●
5.3.2 High-tech imports less re-imports, %	9.4	38	
5.3.3 Comm., computer & info. services imp., % total trade	0.7	78	
5.3.4 FDI net inflows, % GDP	2.3	83	

6 Knowledge & technology outputs	23.2	93	
6.1 Knowledge creation	3.8	127	
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.5	76	
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	110	○
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.2	47	
6.1.4 Scientific & technical articles/bn PPP\$ GDP	1.1	138	○
6.1.5 Citable documents H index	112.0	55	
6.2 Knowledge impact	40.5	63	
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.2	19	●
6.2.2 New businesses/th pop. 15–64	0.3	80	
6.2.3 Computer software spending, % GDP	0.4	21	●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.5	68	
6.2.5 High- & medium-high-tech manufactures, %	32.0	32	
6.3 Knowledge diffusion	25.3	108	
6.3.1 Royalty & license fees receipts, % total trade	0.0	78	
6.3.2 High-tech exports less re-exports, %	3.4	39	
6.3.3 Comm., computer & info. services exp., % total trade	0.6	98	
6.3.4 FDI net outflows, % GDP	0.6	60	

7 Creative outputs	39.2	43	
7.1 Intangible assets	61.9	8	●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a	
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a	
7.1.3 ICTs & business model creation†	64.2	37	●
7.1.4 ICTs & organizational model creation†	59.7	39	●
7.2 Creative goods & services	18.5	65	
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a	
7.2.2 National feature films/mn pop. 15–69	0.5	88	
7.2.3 Global ent. & media output/th pop. 15–69	0.1	53	
7.2.4 Printing & publishing manufactures, %	0.0	69	
7.2.5 Creative goods exports, % total trade	2.1	25	●
7.3 Online creativity	14.6	79	
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.9	96	
7.3.2 Country-code TLDs/th pop. 15–69	6.4	109	
7.3.3 Wikipedia edits/pop. 15–69	836.9	101	
7.3.4 Video uploads on YouTube/pop. 15–69	48.7	55	

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	76.4
GDP (US\$ billions)	366.3
GDP per capita, PPP\$	12,264.1
Income group	Upper-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	26.1	120
Innovation Output Sub-Index	19.0	125
Innovation Input Sub-Index	33.2	107
Innovation Efficiency Ratio	0.6	122
Global Innovation Index 2013 (out of 142)	27.3	113

1	Institutions	43.0	131
1.1	Political environment	28.8	140 ○
1.1.1	Political stability*	33.3	130
1.1.2	Government effectiveness*	26.4	102
1.1.3	Press freedom*	26.6	142 ○
1.2	Regulatory environment	43.1	126
1.2.1	Regulatory quality*	11.6	138 ○
1.2.2	Rule of law*	21.6	120
1.2.3	Cost of redundancy dismissal, salary weeks	23.1	108
1.3	Business environment	57.2	91
1.3.1	Ease of starting a business*	83.7	72
1.3.2	Ease of resolving insolvency*	23.7	111
1.3.3	Ease of paying taxes*	64.0	92
2	Human capital & research	36.4	46 ●
2.1	Education	35.6	95
2.1.1	Expenditure on education, % GDP	3.7	95
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	16.3	76
2.1.3	School life expectancy, years	15.2	41 ●
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	58.1	10 ●
2.2.1	Tertiary enrolment, % gross	55.2	46 ●
2.2.2	Graduates in science & engineering, %	47.2	2 ●
2.2.3	Tertiary inbound mobility, %	0.1	107 ○
2.3	Research & development (R&D)	15.4	55 ●
2.3.1	Researchers, headcounts/mn pop.	1,483.7	48
2.3.2	Gross expenditure on R&D, % GDP	0.7	46 ●
2.3.3	QS university ranking, average score top 3*	15.4	56 ●
3	Infrastructure	33.6	81
3.1	Information & communication technologies (ICTs)	31.4	87
3.1.1	ICT access*	46.8	71
3.1.2	ICT use*	11.4	103
3.1.3	Government's online service*	49.0	72
3.1.4	E-participation*	18.4	73
3.2	General infrastructure	41.3	41 ●
3.2.1	Electricity output, kWh/cap	3,204.6	60
3.2.2	Logistics performance*	34.9	107
3.2.3	Gross capital formation, % GDP	36.2	11 ●
3.3	Ecological sustainability	28.0	101
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.9	99
3.3.2	Environmental performance*	51.1	75
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.6	76
4	Market sophistication	35.9	139 ○
4.1	Credit	29.5	95
4.1.1	Ease of getting credit*	56.3	81
4.1.2	Domestic credit to private sector, % GDP	12.9	136 ○
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	22.3	131
4.2.1	Ease of protecting investors*	36.7	119
4.2.2	Market capitalization, % GDP	20.9	69
4.2.3	Total value of stocks traded, % GDP	3.9	52
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	56.0	136 ○
4.3.1	Applied tariff rate, weighted mean, %	21.8	141 ○
4.3.2	Non-agricultural mkt access weighted tariff, %	1.0	76
4.3.3	Intensity of local competition†	55.7	115
5	Business sophistication	17.3	136 ○
5.1	Knowledge workers	16.6	131
5.1.1	Knowledge-intensive employment, %	15.3	89
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.1	61
5.1.4	GERD performed by business, %	10.6	74
5.1.5	GMAT test takers/mn pop. 20–34	n/a	n/a
5.2	Innovation linkages	24.1	109
5.2.1	University/industry research collaboration†	38.7	86
5.2.2	State of cluster development†	40.7	95
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	106 ○
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	104
5.3	Knowledge absorption	11.2	136 ○
5.3.1	Royalty & license fees payments, % total trade	0.2	82
5.3.2	High-tech imports less re-imports, %	3.6	117
5.3.3	Comm., computer & info. services imp., % total trade	0.6	84
5.3.4	FDI net inflows, % GDP	0.8	119
6	Knowledge & technology outputs	20.0	113
6.1	Knowledge creation	25.3	40 ●
6.1.1	Domestic resident patent app./tr PPP\$ GDP	8.0	13 ●
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.0	113 ○
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	24.7	39 ●
6.1.5	Citable documents H index	135.0	45 ●
6.2	Knowledge impact	32.8	91
6.2.1	Growth rate of PPP\$ GDP/worker, %	–2.4	113 ○
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	0.2	66
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.8	89
6.2.5	High- & medium-high-tech manufactures, %	36.3	25 ●
6.3	Knowledge diffusion	1.9	139 ○
6.3.1	Royalty & license fees receipts, % total trade	0.0	94
6.3.2	High-tech exports less re-exports, %	0.5	81
6.3.3	Comm., computer & info. services exp., % total trade	0.2	128
6.3.4	FDI net outflows, % GDP	n/a	n/a
7	Creative outputs	18.1	128
7.1	Intangible assets	26.3	132
7.1.1	Domestic res trademark app./bn PPP\$ GDP	0.0	102 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.0	67
7.1.3	ICTs & business model creation†	48.3	102
7.1.4	ICTs & organizational model creation†	43.7	104
7.2	Creative goods & services	7.3	105
7.2.1	Cultural & creative services exports, % total trade	0.0	71
7.2.2	National feature films/mn pop. 15–69	1.4	61
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	92 ○
7.2.5	Creative goods exports, % total trade	0.5	59
7.3	Online creativity	12.3	85
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	2.3	84
7.3.2	Country-code TLDs/th pop. 15–69	30.0	60
7.3.3	Wikipedia edits/pop. 15–69	2,736.4	70
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Ireland

Key indicators

Population (millions)	4.6
GDP (US\$ billions)	217.9
GDP per capita, PPP\$	39,547.4
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	56.7	11
Innovation Output Sub-Index	50.0	11
Innovation Input Sub-Index	63.3	12
Innovation Efficiency Ratio	0.8	47
Global Innovation Index 2013 (out of 142)	57.9	10
1 Institutions	90.4	9
1.1 Political environment	86.7	13
1.1.1 Political stability*	88.4	24
1.1.2 Government effectiveness*	81.7	16
1.1.3 Press freedom*	89.9	13
1.2 Regulatory environment	91.7	15
1.2.1 Regulatory quality*	89.5	13
1.2.2 Rule of law*	94.0	13
1.2.3 Cost of redundancy dismissal, salary weeks	12.2	52
1.3 Business environment	92.8	3 ●
1.3.1 Ease of starting a business*	92.5	21
1.3.2 Ease of resolving insolvency*	92.8	8
1.3.3 Ease of paying taxes*	92.9	6 ●
2 Human capital & research	53.2	18
2.1 Education	58.1	14
2.1.1 Expenditure on education, % GDP	6.4	20
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	28.8	27
2.1.3 School life expectancy, years	18.6	4 ●
2.1.4 PISA scales in reading, maths, & science	515.6	12
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	52.4	19
2.2.1 Tertiary enrolment, % gross	73.5	20
2.2.2 Graduates in science & engineering, %	23.2	34
2.2.3 Tertiary inbound mobility, %	10.7	15
2.3 Research & development (R&D)	49.2	21
2.3.1 Researchers, headcounts/mn pop.	4,893.2	22
2.3.2 Gross expenditure on R&D, % GDP	1.7	22
2.3.3 QS university ranking, average score top 3*	62.3	16
3 Infrastructure	45.3	38
3.1 Information & communication technologies (ICTs)	50.9	44
3.1.1 ICT access*	75.9	22
3.1.2 ICT use*	60.8	20
3.1.3 Government's online service*	53.6	56
3.1.4 E-participation*	13.2	84 ○
3.2 General infrastructure	28.5	93 ○
3.2.1 Electricity output, kWh/cap	5,992.2	35
3.2.2 Logistics performance*	75.8	24
3.2.3 Gross capital formation, % GDP	11.0	139 ○
3.3 Ecological sustainability	56.4	10
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	12.6	4 ●
3.3.2 Environmental performance*	74.7	19
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.2	43
4 Market sophistication	70.3	7 ●
4.1 Credit	74.2	6 ●
4.1.1 Ease of getting credit*	87.5	13
4.1.2 Domestic credit to private sector, % GDP	186.1	7 ●
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	60.5	16
4.2.1 Ease of protecting investors*	83.3	6
4.2.2 Market capitalization, % GDP	51.8	38
4.2.3 Total value of stocks traded, % GDP	5.8	47 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.7	1 ●
4.3 Trade & competition	76.0	62 ○
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	71.5	40
5 Business sophistication	57.4	4 ●
5.1 Knowledge workers	73.1	8
5.1.1 Knowledge-intensive employment, %	41.2	22
5.1.2 Firms offering formal training, % firms	73.2	3 ●
5.1.3 GERD performed by business, % GDP	1.2	20
5.1.4 GERD performed by business, %	69.4	9
5.1.5 GMAT test takers/mn pop. 20–34	253.9	22
5.2 Innovation linkages	50.0	17
5.2.1 University/industry research collaboration†	70.0	12
5.2.2 State of cluster development†	63.3	20
5.2.3 GERD financed by abroad, %	20.4	19
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	14
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.8	23
5.3 Knowledge absorption	49.3	4 ●
5.3.1 Royalty & license fees payments, % total trade	20.4	1 ●
5.3.2 High-tech imports less re-imports, %	6.0	82 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.1	58
5.3.4 FDI net inflows, % GDP	15.7	8
6 Knowledge & technology outputs	53.2	10
6.1 Knowledge creation	34.9	28
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.6	42
6.1.2 PCT resident patent app/tr PPP\$ GDP	2.1	23
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	36.2	22
6.1.5 Citable documents H index	271.0	27
6.2 Knowledge impact	58.1	7 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	1.1	65 ○
6.2.2 New businesses/th pop. 15–64	4.5	23
6.2.3 Computer software spending, % GDP	0.8	2 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	12.5	42
6.2.5 High- & medium-high-tech manufactures, %	62.3	3 ●
6.3 Knowledge diffusion	66.7	1 ●
6.3.1 Royalty & license fees receipts, % total trade	2.4	9
6.3.2 High-tech exports less re-exports, %	12.2	18
6.3.3 Comm., computer & info. services exp., % total trade	23.7	1 ●
6.3.4 FDI net outflows, % GDP	10.1	4 ●
7 Creative outputs	46.9	19
7.1 Intangible assets	43.4	73 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	13.8	90 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.6	37 ○
7.1.3 ICTs & business model creation†	72.5	13
7.1.4 ICTs & organizational model creation†	68.2	14
7.2 Creative goods & services	35.3	28
7.2.1 Cultural & creative services exports, % total trade	0.1	51 ○
7.2.2 National feature films/mn pop. 15–69	10.0	13
7.2.3 Global ent. & media output/th pop. 15–69	1.4	17
7.2.4 Printing & publishing manufactures, %	0.0	49 ○
7.2.5 Creative goods exports, % total trade	2.2	23
7.3 Online creativity	65.4	13
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	74.1	13
7.3.2 Country-code TLDs/th pop. 15–69	55.0	30
7.3.3 Wikipedia edits/pop. 15–69	24,573.8	16
7.3.4 Video uploads on YouTube/pop. 15–69	90.7	10

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	7.9
GDP (US\$ billions)	291.5
GDP per capita, PPP\$	34,770.1
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	55.5	15
Innovation Output Sub-Index	49.1	13
Innovation Input Sub-Index	61.8	17
Innovation Efficiency Ratio	0.8	42
Global Innovation Index 2013 (out of 142)	56.0	14

1 Institutions	67.7	54
1.1 Political environment	60.3	59
1.1.1 Political stability*	39.6	119 ○
1.1.2 Government effectiveness*	74.3	25
1.1.3 Press freedom*	67.0	91 ○
1.2 Regulatory environment	68.1	61
1.2.1 Regulatory quality*	79.1	22
1.2.2 Rule of law*	71.6	34
1.2.3 Cost of redundancy dismissal, salary weeks	27.4	124 ○
1.3 Business environment	74.6	30
1.3.1 Ease of starting a business*	89.4	41
1.3.2 Ease of resolving insolvency*	64.2	31
1.3.3 Ease of paying taxes*	70.3	65
2 Human capital & research	61.9	5 ●
2.1 Education	49.7	51
2.1.1 Expenditure on education, % GDP	5.6	39
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	15.4	83 ○
2.1.3 School life expectancy, years	15.7	28
2.1.4 PISA scales in reading, maths, & science	474.1	36 ○
2.1.5 Pupil-teacher ratio, secondary	9.8	24
2.2 Tertiary education	63.0	6 ●
2.2.1 Tertiary enrolment, % gross	62.4	31
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	73.1	7 ●
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	3.9	2 ●
2.3.3 QS university ranking, average score top 3*	56.0	21
3 Infrastructure	53.7	20
3.1 Information & communication technologies (ICTs)	77.2	12
3.1.1 ICT access*	75.7	23
3.1.2 ICT use*	58.6	24
3.1.3 Government's online service*	85.0	15
3.1.4 E-participation*	89.5	7 ●
3.2 General infrastructure	37.5	53
3.2.1 Electricity output, kWh/cap	7,675.6	23
3.2.2 Logistics performance*	71.4	31
3.2.3 Gross capital formation, % GDP	18.6	106 ○
3.3 Ecological sustainability	46.4	38
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.0	23
3.3.2 Environmental performance*	65.8	39
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.7	37
4 Market sophistication	67.5	12
4.1 Credit	58.0	20
4.1.1 Ease of getting credit*	87.5	13
4.1.2 Domestic credit to private sector, % GDP	89.5	36
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	68.8	8 ●
4.2.1 Ease of protecting investors*	83.3	6 ●
4.2.2 Market capitalization, % GDP	59.7	33
4.2.3 Total value of stocks traded, % GDP	43.4	19
4.2.4 Venture capital deals/tr PPP\$ GDP	1.0	1 ●
4.3 Trade & competition	75.7	69
4.3.1 Applied tariff rate, weighted mean, %	3.5	62
4.3.2 Non-agricultural mkt access weighted tariff, %	0.7	62
4.3.3 Intensity of local competition†	61.5	91 ○

5 Business sophistication	58.2	3 ●
5.1 Knowledge workers	88.7	1 ●
5.1.1 Knowledge-intensive employment, %	42.4	19
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	3.3	1 ●
5.1.4 GERD performed by business, %	84.4	1 ●
5.1.5 GMAT test takers/mn pop. 20–34	1,112.8	3 ●
5.2 Innovation linkages	59.4	4 ●
5.2.1 University/industry research collaboration†	73.3	8 ●
5.2.2 State of cluster development†	52.8	37
5.2.3 GERD financed by abroad, %	47.3	7
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	25
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	2.9	6 ●
5.3 Knowledge absorption	26.4	63
5.3.1 Royalty & license fees payments, % total trade	1.2	21
5.3.2 High-tech imports less re-imports, %	9.5	37
5.3.3 Comm., computer & info. services imp., % total trade	0.3	115 ○
5.3.4 FDI net inflows, % GDP	4.3	49

6 Knowledge & technology outputs	54.3	7 ●
6.1 Knowledge creation	51.5	12
6.1.1 Domestic resident patent app./tr PPP\$ GDP	5.1	27
6.1.2 PCT resident patent app./tr PPP\$ GDP	5.3	11
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	42.9	16
6.1.5 Citable documents H index	414.0	15
6.2 Knowledge impact	48.7	32
6.2.1 Growth rate of PPP\$ GDP/worker, %	1.6	60 ○
6.2.2 New businesses/th pop. 15–64	3.0	33
6.2.3 Computer software spending, % GDP	0.3	29
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	32.0	13
6.2.5 High- & medium-high-tech manufactures, %	32.9	31
6.3 Knowledge diffusion	62.6	3 ●
6.3.1 Royalty & license fees receipts, % total trade	1.3	15
6.3.2 High-tech exports less re-exports, %	13.1	16
6.3.3 Comm., computer & info. services exp., % total trade	12.7	1 ●
6.3.4 FDI net outflows, % GDP	2.1	35

7 Creative outputs	43.9	30
7.1 Intangible assets	41.7	84 ○
7.1.1 Domestic res trademark app./bn PPP\$ GDP	12.4	92 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.7	36
7.1.3 ICTs & business model creation†	68.7	25
7.1.4 ICTs & organizational model creation†	66.5	18
7.2 Creative goods & services	31.4	38
7.2.1 Cultural & creative services exports, % total trade	0.1	53
7.2.2 National feature films/mn pop. 15–69	5.3	27
7.2.3 Global ent. & media output/th pop. 15–69	0.9	22
7.2.4 Printing & publishing manufactures, %	0.0	18
7.2.5 Creative goods exports, % total trade	1.8	31
7.3 Online creativity	61.0	17
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	32.1	23
7.3.2 Country-code TLDs/th pop. 15–69	51.9	34
7.3.3 Wikipedia edits/pop. 15–69	38,503.3	6 ●
7.3.4 Video uploads on YouTube/pop. 15–69	94.7	5

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	60.9
GDP (US\$ billions)	2,072.0
GDP per capita, PPP\$	30,289.4
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	45.7	31
Innovation Output Sub-Index	40.1	33
Innovation Input Sub-Index	51.2	32
Innovation Efficiency Ratio	0.8	52
Global Innovation Index 2013 (out of 142)	47.8	29

1	Institutions	73.2	39
1.1	Political environment	67.9	49
1.1.1	Political stability*	78.0	46
1.1.2	Government effectiveness*	51.8	50
1.1.3	Press freedom*	73.9	48
1.2	Regulatory environment	81.1	30
1.2.1	Regulatory quality*	67.9	39
1.2.2	Rule of law*	56.3	51
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	70.7	48
1.3.1	Ease of starting a business*	87.7	58
1.3.2	Ease of resolving insolvency*	66.4	29
1.3.3	Ease of paying taxes*	57.9	108 ○

2	Human capital & research	42.1	33
2.1	Education	52.1	40
2.1.1	Expenditure on education, % GDP	4.5	75
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	25.3	37
2.1.3	School life expectancy, years	16.3	18 ●
2.1.4	PISA scales in reading, maths, & science	489.5	28
2.1.5	Pupil-teacher ratio, secondary	10.1	28
2.2	Tertiary education	39.7	48
2.2.1	Tertiary enrolment, % gross	63.9	29
2.2.2	Graduates in science & engineering, %	21.7	41
2.2.3	Tertiary inbound mobility, %	3.7	46
2.3	Research & development (R&D)	34.5	29
2.3.1	Researchers, headcounts/mn pop.	2,496.3	36
2.3.2	Gross expenditure on R&D, % GDP	1.3	30
2.3.3	QS university ranking, average score top 3*	51.3	24

3	Infrastructure	49.8	26
3.1	Information & communication technologies (ICTs)	51.1	43
3.1.1	ICT access*	71.5	30
3.1.2	ICT use*	48.9	34
3.1.3	Government's online service*	57.5	48
3.1.4	E-participation*	26.3	56
3.2	General infrastructure	35.4	59
3.2.1	Electricity output, kWh/cap	4,871.2	46
3.2.2	Logistics performance*	81.7	22
3.2.3	Gross capital formation, % GDP	17.4	113 ○
3.3	Ecological sustainability	63.0	4 ●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	10.1	15 ●
3.3.2	Environmental performance*	74.4	22
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	10.9	7 ●

4	Market sophistication	51.0	52
4.1	Credit	45.1	44
4.1.1	Ease of getting credit*	50.0	96 ○
4.1.2	Domestic credit to private sector, % GDP	124.5	21 ●
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	34.7	71
4.2.1	Ease of protecting investors*	60.0	42
4.2.2	Market capitalization, % GDP	23.9	63
4.2.3	Total value of stocks traded, % GDP	37.7	22
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	50 ○
4.3	Trade & competition	73.2	89
4.3.1	Applied tariff rate, weighted mean, %	1.1	10
4.3.2	Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3	Intensity of local competition†	65.8	70

5	Business sophistication	40.0	35
5.1	Knowledge workers	53.1	37
5.1.1	Knowledge-intensive employment, %	34.5	35
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.7	28
5.1.4	GERD performed by business, %	54.5	30
5.1.5	GMAT test takers/mn pop. 20–34	187.4	26
5.2	Innovation linkages	39.4	44
5.2.1	University/industry research collaboration†	45.2	57
5.2.2	State of cluster development†	74.8	1 ●
5.2.3	GERD financed by abroad, %	9.1	44
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	70 ○
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.7	24
5.3	Knowledge absorption	27.4	56
5.3.1	Royalty & license fees payments, % total trade	1.0	26
5.3.2	High-tech imports less re-imports, %	7.5	60
5.3.3	Comm., computer & info. services imp., % total trade	1.7	19 ●
5.3.4	FDI net inflows, % GDP	0.4	129 ○

6	Knowledge & technology outputs	42.7	23
6.1	Knowledge creation	36.4	27
6.1.1	Domestic resident patent app/tr PPP\$ GDP	4.7	28
6.1.2	PCT resident patent app/tr PPP\$ GDP	1.6	28
6.1.3	Domestic res utility model app/tr PPP\$ GDP	1.4	23
6.1.4	Scientific & technical articles/bn PPP\$ GDP	31.0	28
6.1.5	Citable documents H index	588.0	7 ●
6.2	Knowledge impact	53.8	17 ●
6.2.1	Growth rate of PPP\$ GDP/worker, %	–1.5	108 ○
6.2.2	New businesses/th pop. 15–64	1.9	44
6.2.3	Computer software spending, % GDP	0.6	12
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	75.8	1 ●
6.2.5	High- & medium-high-tech manufactures, %	36.2	26
6.3	Knowledge diffusion	37.8	38
6.3.1	Royalty & license fees receipts, % total trade	0.6	21
6.3.2	High-tech exports less re-exports, %	5.0	30
6.3.3	Comm., computer & info. services exp., % total trade	1.4	65
6.3.4	FDI net outflows, % GDP	0.7	54

7	Creative outputs	37.5	48
7.1	Intangible assets	35.3	113 ○
7.1.1	Domestic res trademark app/bn PPP\$ GDP	56.0	48
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	1.5	24
7.1.3	ICTs & business model creation†	47.3	108 ○
7.1.4	ICTs & organizational model creation†	40.8	116 ○
7.2	Creative goods & services	28.6	41
7.2.1	Cultural & creative services exports, % total trade	0.3	29
7.2.2	National feature films/mn pop. 15–69	3.6	38
7.2.3	Global ent. & media output/th pop. 15–69	1.0	21
7.2.4	Printing & publishing manufactures, %	0.0	51
7.2.5	Creative goods exports, % total trade	2.1	24
7.3	Online creativity	51.0	25
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	25.1	27
7.3.2	Country-code TLDs/th pop. 15–69	55.7	28
7.3.3	Wikipedia edits/pop. 15–69	24,558.7	17 ●
7.3.4	Video uploads on YouTube/pop. 15–69	81.5	26

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.7
GDP (US\$ billions)	14.3
GDP per capita, PPP\$	9,048.1
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.4	82
Innovation Output Sub-Index	25.7	91
Innovation Input Sub-Index	39.2	84
Innovation Efficiency Ratio	0.7	100
Global Innovation Index 2013 (out of 142)	32.9	82
1 Institutions	67.9	53
1.1 Political environment	66.2	50
1.1.1 Political stability*	68.2	63
1.1.2 Government effectiveness*	40.3	69
1.1.3 Press freedom*	90.1	11 ●
1.2 Regulatory environment	66.4	68
1.2.1 Regulatory quality*	54.9	63
1.2.2 Rule of law*	35.0	86
1.2.3 Cost of redundancy dismissal, salary weeks	14.0	64
1.3 Business environment	71.0	44 ●
1.3.1 Ease of starting a business*	90.9	32 ●
1.3.2 Ease of resolving insolvency*	68.0	28 ●
1.3.3 Ease of paying taxes*	54.0	117
2 Human capital & research	25.1	84
2.1 Education	44.5	64
2.1.1 Expenditure on education, % GDP	6.1	27 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	25.8	35 ●
2.1.3 School life expectancy, years	12.5	80
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	16.8	71
2.2 Tertiary education	30.7	75
2.2.1 Tertiary enrolment, % gross	30.8	75
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	26.8	109
3.1 Information & communication technologies (ICTs)	22.1	104
3.1.1 ICT access*	39.3	86
3.1.2 ICT use*	18.4	85
3.1.3 Government's online service*	30.7	119
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	23.3	119
3.2.1 Electricity output, kWh/cap	1,897.0	79
3.2.2 Logistics performance*	32.1	118 ○
3.2.3 Gross capital formation, % GDP	21.2	78
3.3 Ecological sustainability	34.9	73
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.2	64
3.3.2 Environmental performance*	58.3	53
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	91
4 Market sophistication	44.6	94
4.1 Credit	22.2	121
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	28.8	101
4.1.3 Microfinance gross loans, % GDP	0.7	46

4.2 Investment	33.3	82
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	43.1	48
4.2.3 Total value of stocks traded, % GDP	1.4	62
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	78.4	38 ●
4.3.1 Applied tariff rate, weighted mean, %	7.5	109
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	1 ●
4.3.3 Intensity of local competition†	70.0	50
5 Business sophistication	31.5	72
5.1 Knowledge workers	37.8	77
5.1.1 Knowledge-intensive employment, %	20.1	73
5.1.2 Firms offering formal training, % firms	26.1	74
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	210.4	24 ●
5.2 Innovation linkages	36.0	54
5.2.1 University/industry research collaboration†	43.3	64
5.2.2 State of cluster development†	50.3	54
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	20.8	96
5.3.1 Royalty & license fees payments, % total trade	0.8	37 ●
5.3.2 High-tech imports less re-imports, %	3.4	118 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.7	28 ●
5.3.4 FDI net inflows, % GDP	1.2	108
6 Knowledge & technology outputs	21.9	100
6.1 Knowledge creation	6.2	101
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.8	71
6.1.2 PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.4	105
6.1.5 Citable documents H index	57.0	100
6.2 Knowledge impact	28.7	111
6.2.1 Growth rate of PPP\$ GDP/worker, %	–0.6	100 ○
6.2.2 New businesses/th pop. 15–64	1.1	56
6.2.3 Computer software spending, % GDP	0.3	28
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.1	121 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	30.9	72
6.3.1 Royalty & license fees receipts, % total trade	0.1	59
6.3.2 High-tech exports less re-exports, %	0.1	112 ○
6.3.3 Comm., computer & info. services exp., % total trade	2.5	25 ●
6.3.4 FDI net outflows, % GDP	–0.2	113 ○
7 Creative outputs	29.4	80
7.1 Intangible assets	53.8	24 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	53.0	82
7.1.4 ICTs & organizational model creation†	54.7	61
7.2 Creative goods & services	1.3	132 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	97 ○
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	104
7.3 Online creativity	8.6	99
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	3.2	71
7.3.2 Country-code TLDs/th pop. 15–69	20.0	80
7.3.3 Wikipedia edits/pop. 15–69	1,541.4	86
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Japan

Key indicators

Population (millions)	127.6
GDP (US\$ billions)	4,901.5
GDP per capita, PPP\$	36,899.4
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	52.4	21
Innovation Output Sub-Index	42.6	27
Innovation Input Sub-Index	62.2	15
Innovation Efficiency Ratio	0.7	88
Global Innovation Index 2013 (out of 142)	59.4	22

1	Institutions	84.1	18
1.1	Political environment	80.5	23
1.1.1	Political stability*	88.6	23
1.1.2	Government effectiveness*	78.2	21
1.1.3	Press freedom*	74.8	44
1.2	Regulatory environment	90.2	18
1.2.1	Regulatory quality*	78.1	25
1.2.2	Rule of law*	82.8	23
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	81.7	18
1.3.1	Ease of starting a business*	81.9	78
1.3.2	Ease of resolving insolvency*	98.3	1 ●
1.3.3	Ease of paying taxes*	64.8	88
2	Human capital & research	54.4	17
2.1	Education	50.8	42
2.1.1	Expenditure on education, % GDP	3.8	92 ○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	25.3	36
2.1.3	School life expectancy, years	15.3	38
2.1.4	PISA scales in reading, maths, & science	540.4	5
2.1.5	Pupil-teacher ratio, secondary	11.8	37
2.2	Tertiary education	37.5	57
2.2.1	Tertiary enrolment, % gross	59.9	38
2.2.2	Graduates in science & engineering, %	20.3	53
2.2.3	Tertiary inbound mobility, %	3.9	42
2.3	Research & development (R&D)	74.8	6 ●
2.3.1	Researchers, headcounts/mn pop.	7,011.4	10
2.3.2	Gross expenditure on R&D, % GDP	3.3	5 ●
2.3.3	QS university ranking, average score top 3*	82.2	7
3	Infrastructure	58.9	11
3.1	Information & communication technologies (ICTs)	78.1	10
3.1.1	ICT access*	77.3	15
3.1.2	ICT use*	75.1	6 ●
3.1.3	Government's online service*	86.3	9
3.1.4	E-participation*	73.7	11
3.2	General infrastructure	45.3	25
3.2.1	Electricity output, kWh/cap	8,060.6	22
3.2.2	Logistics performance*	92.1	8
3.2.3	Gross capital formation, % GDP	20.7	84
3.3	Ecological sustainability	53.4	15
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.9	24
3.3.2	Environmental performance*	72.4	26
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	6.1	22
4	Market sophistication	66.8	13
4.1	Credit	69.5	8
4.1.1	Ease of getting credit*	81.3	27
4.1.2	Domestic credit to private sector, % GDP	176.7	10
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	48.9	34
4.2.1	Ease of protecting investors*	70.0	16
4.2.2	Market capitalization, % GDP	61.8	32
4.2.3	Total value of stocks traded, % GDP	60.5	13
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	34
4.3	Trade & competition	82.1	18
4.3.1	Applied tariff rate, weighted mean, %	1.3	38
4.3.2	Non-agricultural mkt access weighted tariff, %	4.0	129 ○
4.3.3	Intensity of local competition†	87.3	1 ●
5	Business sophistication	46.8	17
5.1	Knowledge workers	61.7	25
5.1.1	Knowledge-intensive employment, %	24.9	55
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	2.6	3 ●
5.1.4	GERD performed by business, %	77.0	3 ●
5.1.5	GMAT test takers/mn pop. 20–34	128.0	41
5.2	Innovation linkages	46.3	26
5.2.1	University/industry research collaboration†	66.0	16
5.2.2	State of cluster development†	70.3	6 ●
5.2.3	GERD financed by abroad, %	0.5	89 ○
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	45
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	5.3	1 ●
5.3	Knowledge absorption	32.3	35
5.3.1	Royalty & license fees payments, % total trade	2.1	6
5.3.2	High-tech imports less re-imports, %	13.2	17
5.3.3	Comm., computer & info. services imp., % total trade	0.6	87 ○
5.3.4	FDI net inflows, % GDP	0.0	135 ○
6	Knowledge & technology outputs	47.2	12
6.1	Knowledge creation	52.8	11
6.1.1	Domestic resident patent app/tr PPP\$ GDP	62.7	1 ●
6.1.2	PCT resident patent app/tr PPP\$ GDP	9.5	4 ●
6.1.3	Domestic res utility model app/tr PPP\$ GDP	1.4	24
6.1.4	Scientific & technical articles/bn PPP\$ GDP	15.7	57
6.1.5	Citable documents H index	635.0	6 ●
6.2	Knowledge impact	40.5	65
6.2.1	Growth rate of PPP\$ GDP/worker, %	0.5	76 ○
6.2.2	New businesses/th pop. 15–64	1.2	54
6.2.3	Computer software spending, % GDP	0.3	47 ○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	11.0	46
6.2.5	High- & medium-high-tech manufactures, %	52.0	8
6.3	Knowledge diffusion	48.2	17
6.3.1	Royalty & license fees receipts, % total trade	3.3	6
6.3.2	High-tech exports less re-exports, %	13.4	15
6.3.3	Comm., computer & info. services exp., % total trade	0.2	119 ○
6.3.4	FDI net outflows, % GDP	2.1	34
7	Creative outputs	38.1	46
7.1	Intangible assets	38.8	99 ○
7.1.1	Domestic res trademark app/bn PPP\$ GDP	0.0	101 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.5	41
7.1.3	ICTs & business model creation†	70.7	19
7.1.4	ICTs & organizational model creation†	61.2	35
7.2	Creative goods & services	36.4	24
7.2.1	Cultural & creative services exports, % total trade	0.0	87 ○
7.2.2	National feature films/mn pop. 15–69	5.0	28
7.2.3	Global ent. & media output/th pop. 15–69	2.2	5
7.2.4	Printing & publishing manufactures, %	0.0	29
7.2.5	Creative goods exports, % total trade	2.7	20
7.3	Online creativity	38.2	37
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	20.3	31
7.3.2	Country-code TLDs/th pop. 15–69	37.7	47
7.3.3	Wikipedia edits/pop. 15–69	9,289.2	46
7.3.4	Video uploads on YouTube/pop. 15–69	79.0	30

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	6.3
GDP (US\$ billions)	33.9
GDP per capita, PPP\$	6,115.0
Income group	Upper-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.2	64
Innovation Output Sub-Index	32.1	57
Innovation Input Sub-Index	40.3	72
Innovation Efficiency Ratio	0.8	40
Global Innovation Index 2013 (out of 142)	37.3	61

1	Institutions	64.3	61
1.1	Political environment	51.5	83
1.1.1	Political stability*	53.0	96
1.1.2	Government effectiveness*	39.9	71
1.1.3	Press freedom*	61.5	109 ○
1.2	Regulatory environment	77.5	36 ●
1.2.1	Regulatory quality*	53.5	66
1.2.2	Rule of law*	56.6	50
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	64.0	73
1.3.1	Ease of starting a business*	84.1	71
1.3.2	Ease of resolving insolvency*	28.8	100
1.3.3	Ease of paying taxes*	79.2	36 ●
2	Human capital & research	28.3	72
2.1	Education	35.5	97
2.1.1	Expenditure on education, % GDP	n/a	n/a
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	22.0	50
2.1.3	School life expectancy, years	13.3	65
2.1.4	PISA scales in reading, maths, & science	398.0	54 ○
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	35.9	60
2.2.1	Tertiary enrolment, % gross	39.9	64
2.2.2	Graduates in science & engineering, %	16.1	77
2.2.3	Tertiary inbound mobility, %	9.9	17 ●
2.3	Research & development (R&D)	13.5	59
2.3.1	Researchers, headcounts/mn pop.	1,913.3	41
2.3.2	Gross expenditure on R&D, % GDP	0.4	64
2.3.3	QS university ranking, average score top 3*	13.0	57
3	Infrastructure	31.1	92
3.1	Information & communication technologies (ICTs)	29.6	91
3.1.1	ICT access*	49.5	69
3.1.2	ICT use*	19.2	84
3.1.3	Government's online service*	39.2	96
3.1.4	E-participation*	10.5	94
3.2	General infrastructure	31.7	75
3.2.1	Electricity output, kWh/cap	2,370.1	71
3.2.2	Logistics performance*	37.7	97
3.2.3	Gross capital formation, % GDP	27.3	32 ●
3.3	Ecological sustainability	31.9	85
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.6	88
3.3.2	Environmental performance*	55.8	56
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.1	63
4	Market sophistication	39.9	126 ○
4.1	Credit	19.0	127 ○
4.1.1	Ease of getting credit*	25.0	134 ○
4.1.2	Domestic credit to private sector, % GDP	72.4	45
4.1.3	Microfinance gross loans, % GDP	0.7	43

4.2	Investment	26.0	117 ○
4.2.1	Ease of protecting investors*	30.0	133 ○
4.2.2	Market capitalization, % GDP	86.4	19 ●
4.2.3	Total value of stocks traded, % GDP	8.9	42
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	29
4.3	Trade & competition	74.9	77
4.3.1	Applied tariff rate, weighted mean, %	5.2	85
4.3.2	Non-agricultural mkt access weighted tariff, %	2.3	93
4.3.3	Intensity of local competition†	71.2	42

5	Business sophistication	37.8	41
5.1	Knowledge workers	34.5	84
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	23.9	84 ○
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	119.0	43
5.2	Innovation linkages	53.4	9 ●
5.2.1	University/industry research collaboration†	39.3	81
5.2.2	State of cluster development†	58.3	25 ●
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.3	1 ●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	54
5.3	Knowledge absorption	25.5	69
5.3.1	Royalty & license fees payments, % total trade	n/a	n/a
5.3.2	High-tech imports less re-imports, %	5.4	94 ○
5.3.3	Comm., computer & info. services imp., % total trade	n/a	n/a
5.3.4	FDI net inflows, % GDP	5.1	38

6	Knowledge & technology outputs	29.4	59
6.1	Knowledge creation	19.6	52
6.1.1	Domestic resident patent app./tr PPP\$ GDP	1.3	62
6.1.2	PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	28.4	34 ●
6.1.5	Citable documents H index	82.0	78
6.2	Knowledge impact	35.3	80
6.2.1	Growth rate of PPP\$ GDP/worker, %	2.6	44
6.2.2	New businesses/th pop. 15–64	1.0	60
6.2.3	Computer software spending, % GDP	0.3	36
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	9.5	50
6.2.5	High- & medium-high-tech manufactures, %	19.8	55
6.3	Knowledge diffusion	33.3	57
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	0.6	76
6.3.3	Comm., computer & info. services exp., % total trade	n/a	n/a
6.3.4	FDI net outflows, % GDP	0.0	101 ○

7	Creative outputs	34.9	61
7.1	Intangible assets	49.8	44
7.1.1	Domestic res trademark app./bn PPP\$ GDP	59.8	43
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	64.7	34 ●
7.1.4	ICTs & organizational model creation†	61.5	31 ●
7.2	Creative goods & services	18.8	64
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	0.1	50 ○
7.2.4	Printing & publishing manufactures, %	0.0	34
7.2.5	Creative goods exports, % total trade	0.8	45
7.3	Online creativity	21.1	64
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	10.0	49
7.3.2	Country-code TLDs/th pop. 15–69	8.7	106 ○
7.3.3	Wikipedia edits/pop. 15–69	2,151.8	80
7.3.4	Video uploads on YouTube/pop. 15–69	62.1	49 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Kazakhstan

Key indicators

Population (millions)	16.8
GDP (US\$ billions)	220.3
GDP per capita, PPP\$	14,391.1
Income group	Upper-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.8	79
Innovation Output Sub-Index	24.4	101
Innovation Input Sub-Index	41.1	69
Innovation Efficiency Ratio	0.6	118
Global Innovation Index 2013 (out of 142)	32.7	84

1	Institutions	61.1	67
1.1	Political environment	43.5	119
1.1.1	Political stability*	56.5	86
1.1.2	Government effectiveness*	29.1	94
1.1.3	Press freedom*	44.9	132 ○
1.2	Regulatory environment	66.0	71
1.2.1	Regulatory quality*	38.7	101
1.2.2	Rule of law*	28.1	103
1.2.3	Cost of redundancy dismissal, salary weeks	8.7	25 ●
1.3	Business environment	73.9	35 ●
1.3.1	Ease of starting a business*	88.5	50
1.3.2	Ease of resolving insolvency*	45.7	48
1.3.3	Ease of paying taxes*	87.4	14 ●

2	Human capital & research	30.0	63
2.1	Education	49.8	49
2.1.1	Expenditure on education, % GDP	3.1	110
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3	School life expectancy, years	15.0	43
2.1.4	PISA scales in reading, maths, & science	416.4	48
2.1.5	Pupil-teacher ratio, secondary	8.6	11 ●
2.2	Tertiary education	25.8	88
2.2.1	Tertiary enrolment, % gross	44.5	58
2.2.2	Graduates in science & engineering, %	n/a	n/a
2.2.3	Tertiary inbound mobility, %	1.4	76
2.3	Research & development (R&D)	14.4	58
2.3.1	Researchers, headcounts/mn pop.	713.6	64
2.3.2	Gross expenditure on R&D, % GDP	0.2	91
2.3.3	QS university ranking, average score top 3*	33.4	38 ●

3	Infrastructure	43.8	44
3.1	Information & communication technologies (ICTs)	69.1	20 ●
3.1.1	ICT access*	66.0	38
3.1.2	ICT use*	37.1	49
3.1.3	Government's online service*	78.4	21 ●
3.1.4	E-participation*	94.7	3 ●
3.2	General infrastructure	31.9	74
3.2.1	Electricity output, kWh/cap	5,228.6	40
3.2.2	Logistics performance*	42.9	87
3.2.3	Gross capital formation, % GDP	23.0	70
3.3	Ecological sustainability	30.5	91
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.5	115 ○
3.3.2	Environmental performance*	51.1	76
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4	Market sophistication	44.1	98
4.1	Credit	23.2	116
4.1.1	Ease of getting credit*	56.3	81
4.1.2	Domestic credit to private sector, % GDP	37.2	87
4.1.3	Microfinance gross loans, % GDP	0.2	63

4.2	Investment	35.1	68
4.2.1	Ease of protecting investors*	66.7	21 ●
4.2.2	Market capitalization, % GDP	11.6	87
4.2.3	Total value of stocks traded, % GDP	0.6	77
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	74.2	83
4.3.1	Applied tariff rate, weighted mean, %	3.4	60
4.3.2	Non-agricultural mkt access weighted tariff, %	0.3	41
4.3.3	Intensity of local competition†	55.8	113 ○

5	Business sophistication	26.4	106
5.1	Knowledge workers	43.2	56
5.1.1	Knowledge-intensive employment, %	29.3	49
5.1.2	Firms offering formal training, % firms	41.7	40
5.1.3	GERD performed by business, % GDP	0.1	60
5.1.4	GERD performed by business, %	51.6	36
5.1.5	GMAT test takers/mn pop. 20–34	56.8	71
5.2	Innovation linkages	16.5	136 ○
5.2.1	University/industry research collaboration†	40.5	76
5.2.2	State of cluster development†	34.2	119 ○
5.2.3	GERD financed by abroad, %	0.3	91 ○
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	0.0	80
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	98 ○
5.3	Knowledge absorption	19.5	105
5.3.1	Royalty & license fees payments, % total trade	0.2	81
5.3.2	High-tech imports less re-imports, %	5.3	95
5.3.3	Comm., computer & info. services imp., % total trade	0.3	116 ○
5.3.4	FDI net inflows, % GDP	7.1	26 ●

6	Knowledge & technology outputs	24.8	82
6.1	Knowledge creation	9.7	83
6.1.1	Domestic resident patent app/tr PPP\$ GDP	6.6	19 ●
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	89
6.1.3	Domestic res utility model app/tr PPP\$ GDP	0.4	40
6.1.4	Scientific & technical articles/bn PPP\$ GDP	2.1	134 ○
6.1.5	Citable documents H index	52.0	109
6.2	Knowledge impact	35.5	79
6.2.1	Growth rate of PPP\$ GDP/worker, %	4.5	11 ●
6.2.2	New businesses/th pop. 15–64	1.7	46
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.5	93
6.2.5	High- & medium-high-tech manufactures, %	6.8	84 ○
6.3	Knowledge diffusion	29.4	81
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	4.5	36
6.3.3	Comm., computer & info. services exp., % total trade	0.2	127 ○
6.3.4	FDI net outflows, % GDP	1.3	44

7	Creative outputs	23.9	106
7.1	Intangible assets	34.8	116
7.1.1	Domestic res trademark app/bn PPP\$ GDP	28.9	74
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.3	46
7.1.3	ICTs & business model creation†	54.3	77
7.1.4	ICTs & organizational model creation†	53.2	68
7.2	Creative goods & services	13.4	84
7.2.1	Cultural & creative services exports, % total trade	0.1	67
7.2.2	National feature films/mn pop. 15–69	1.1	69
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	47
7.2.5	Creative goods exports, % total trade	0.4	64
7.3	Online creativity	12.9	82
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.5	117
7.3.2	Country-code TLDs/th pop. 15–69	30.9	57
7.3.3	Wikipedia edits/pop. 15–69	4,267.0	60
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	43.2
GDP (US\$ billions)	45.1
GDP per capita, PPP\$	1,812.0
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143).....	31.9	85
Innovation Output Sub-Index	29.0	73
Innovation Input Sub-Index	34.7	103
Innovation Efficiency Ratio	0.8	26 ●
Global Innovation Index 2013 (out of 142)	30.3	99
1 Institutions.....	53.6	97
1.1 Political environment.....	44.2	114
1.1.1 Political stability*.....	34.0	129 ○
1.1.2 Government effectiveness*.....	26.3	103
1.1.3 Press freedom*.....	72.2	58
1.2 Regulatory environment.....	65.8	74
1.2.1 Regulatory quality*.....	40.7	96
1.2.2 Rule of law*.....	22.6	117
1.2.3 Cost of redundancy dismissal, salary weeks.....	8.0	1 ●
1.3 Business environment.....	50.9	116
1.3.1 Ease of starting a business*.....	72.5	111
1.3.2 Ease of resolving insolvency*.....	26.2	107
1.3.3 Ease of paying taxes*.....	54.2	115
2 Human capital & research.....	15.8	117
2.1 Education.....	35.9	94
2.1.1 Expenditure on education, % GDP.....	6.7	18 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap.....	21.2	53
2.1.3 School life expectancy, years.....	11.0	105
2.1.4 PISA scales in reading, maths, & science.....	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary.....	29.7	103 ○
2.2 Tertiary education.....	3.3	134 ○
2.2.1 Tertiary enrolment, % gross.....	4.0	128 ○
2.2.2 Graduates in science & engineering, %.....	n/a	n/a
2.2.3 Tertiary inbound mobility, %.....	n/a	n/a
2.3 Research & development (R&D).....	8.4	73
2.3.1 Researchers, headcounts/mn pop.....	318.1	79
2.3.2 Gross expenditure on R&D, % GDP.....	1.0	35
2.3.3 QS university ranking, average score top 3*.....	0.0	70 ○
3 Infrastructure.....	21.1	127 ○
3.1 Information & communication technologies (ICTs).....	21.8	106
3.1.1 ICT access*.....	27.3	104
3.1.2 ICT use*.....	11.5	102
3.1.3 Government's online service*.....	43.1	88
3.1.4 E-participation*.....	5.3	111
3.2 General infrastructure.....	21.0	128 ○
3.2.1 Electricity output, kWh/cap.....	188.6	115 ○
3.2.2 Logistics performance*.....	32.5	117
3.2.3 Gross capital formation, % GDP.....	20.9	82
3.3 Ecological sustainability.....	20.6	131 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq.....	3.1	108
3.3.2 Environmental performance*.....	37.0	118
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP.....	0.4	87
4 Market sophistication.....	54.4	40
4.1 Credit.....	51.8	32 ●
4.1.1 Ease of getting credit*.....	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP.....	36.6	88
4.1.3 Microfinance gross loans, % GDP.....	4.6	12 ●

4.2 Investment.....	30.1	94
4.2.1 Ease of protecting investors*.....	50.0	81
4.2.2 Market capitalization, % GDP.....	39.7	50
4.2.3 Total value of stocks traded, % GDP.....	2.7	58
4.2.4 Venture capital deals/tr PPP\$ GDP.....	0.1	21
4.3 Trade & competition.....	81.2	25 ●
4.3.1 Applied tariff rate, weighted mean, %.....	6.1	95
4.3.2 Non-agricultural mkt access weighted tariff, %.....	0.0	1 ●
4.3.3 Intensity of local competition†.....	73.2	33 ●
5 Business sophistication.....	28.5	91
5.1 Knowledge workers.....	16.4	132 ○
5.1.1 Knowledge-intensive employment, %.....	n/a	n/a
5.1.2 Firms offering formal training, % firms.....	n/a	n/a
5.1.3 GERD performed by business, % GDP.....	0.1	58
5.1.4 GERD performed by business, %.....	8.7	76 ○
5.1.5 GMAT test takers/mn pop. 20–34.....	51.9	73
5.2 Innovation linkages.....	42.0	37
5.2.1 University/industry research collaboration†.....	54.7	37
5.2.2 State of cluster development†.....	50.8	50
5.2.3 GERD financed by abroad, %.....	47.1	8 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP.....	0.0	53
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP.....	0.0	76
5.3 Knowledge absorption.....	27.1	58
5.3.1 Royalty & license fees payments, % total trade.....	0.1	97
5.3.2 High-tech imports less re-imports, %.....	15.5	12 ●
5.3.3 Comm., computer & info. services imp., % total trade.....	0.5	100
5.3.4 FDI net inflows, % GDP.....	1.0	115
6 Knowledge & technology outputs.....	26.9	70
6.1 Knowledge creation.....	12.3	68
6.1.1 Domestic resident patent app./tr PPP\$ GDP.....	1.6	57
6.1.2 PCT resident patent app./tr PPP\$ GDP.....	0.1	84
6.1.3 Domestic res utility model app./tr PPP\$ GDP.....	0.9	34
6.1.4 Scientific & technical articles/bn PPP\$ GDP.....	15.8	54
6.1.5 Citable documents H index.....	131.0	49
6.2 Knowledge impact.....	29.3	108
6.2.1 Growth rate of PPP\$ GDP/worker, %.....	2.4	48
6.2.2 New businesses/th pop. 15–64.....	0.0	92 ○
6.2.3 Computer software spending, % GDP.....	0.3	54
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP.....	6.1	60
6.2.5 High- & medium-high-tech manufactures, %.....	9.9	77
6.3 Knowledge diffusion.....	39.0	35
6.3.1 Royalty & license fees receipts, % total trade.....	0.4	25 ●
6.3.2 High-tech exports less re-exports, %.....	1.1	66
6.3.3 Comm., computer & info. services exp., % total trade.....	3.1	20 ●
6.3.4 FDI net outflows, % GDP.....	0.0	96
7 Creative outputs.....	31.2	73
7.1 Intangible assets.....	48.6	48
7.1.1 Domestic res trademark app./bn PPP\$ GDP.....	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP.....	0.0	65
7.1.3 ICTs & business model creation†.....	63.5	39
7.1.4 ICTs & organizational model creation†.....	57.7	50
7.2 Creative goods & services.....	16.9	74
7.2.1 Cultural & creative services exports, % total trade.....	0.0	104 ○
7.2.2 National feature films/mn pop. 15–69.....	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69.....	0.1	55 ○
7.2.4 Printing & publishing manufactures, %.....	0.0	25
7.2.5 Creative goods exports, % total trade.....	0.5	56
7.3 Online creativity.....	10.5	90
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69.....	0.9	105
7.3.2 Country-code TLDs/th pop. 15–69.....	10.8	100
7.3.3 Wikipedia edits/pop. 15–69.....	234.3	116
7.3.4 Video uploads on YouTube/pop. 15–69.....	29.9	61 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Korea, Republic of

Key indicators

Population (millions)	50.0
GDP (US\$ billions)	1,221.8
GDP per capita, PPP\$	33,189.1
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	55.3	16
Innovation Output Sub-Index	48.4	15
Innovation Input Sub-Index	62.2	16
Innovation Efficiency Ratio	0.8	54
Global Innovation Index 2013 (out of 142)	54.5	18

1 Institutions	75.8	32
1.1 Political environment	72.7	40
1.1.1 Political stability*	69.7	60
1.1.2 Government effectiveness*	72.9	27
1.1.3 Press freedom*	75.5	42
1.2 Regulatory environment	66.8	67
1.2.1 Regulatory quality*	71.9	36
1.2.2 Rule of law*	73.0	32
1.2.3 Cost of redundancy dismissal, salary weeks	27.4	120 ○
1.3 Business environment	87.8	11
1.3.1 Ease of starting a business*	90.0	38
1.3.2 Ease of resolving insolvency*	87.1	15
1.3.3 Ease of paying taxes*	86.3	18

2 Human capital & research	64.1	3 ●
2.1 Education	54.4	31
2.1.1 Expenditure on education, % GDP	5.0	59
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	23.8	47
2.1.3 School life expectancy, years	17.0	9
2.1.4 PISA scales in reading, maths, & science	542.4	4
2.1.5 Pupil-teacher ratio, secondary	16.2	66
2.2 Tertiary education	55.3	16
2.2.1 Tertiary enrolment, % gross	98.5	1 ●
2.2.2 Graduates in science & engineering, %	31.1	11
2.2.3 Tertiary inbound mobility, %	1.8	66
2.3 Research & development (R&D)	82.6	1 ●
2.3.1 Researchers, headcounts/mn pop.	7,698.7	8
2.3.2 Gross expenditure on R&D, % GDP	4.4	1 ●
2.3.3 QS university ranking, average score top 3*	75.8	11

3 Infrastructure	62.8	5
3.1 Information & communication technologies (ICTs)	91.3	1 ●
3.1.1 ICT access*	82.8	9
3.1.2 ICT use*	82.2	2 ●
3.1.3 Government's online service*	100.0	1 ●
3.1.4 E-participation*	100.0	1 ●
3.2 General infrastructure	52.6	13
3.2.1 Electricity output, kWh/cap	10,576.6	11
3.2.2 Logistics performance*	82.9	19
3.2.3 Gross capital formation, % GDP	26.8	37
3.3 Ecological sustainability	44.6	41
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.3	79 ○
3.3.2 Environmental performance*	63.8	43
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	7.2	18

4 Market sophistication	65.4	14
4.1 Credit	67.8	10
4.1.1 Ease of getting credit*	87.5	13
4.1.2 Domestic credit to private sector, % GDP	148.0	15
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	57.3	19
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	104.5	16
4.2.3 Total value of stocks traded, % GDP	134.0	1 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	45

4.3 Trade & competition	71.2	103 ○
4.3.1 Applied tariff rate, weighted mean, %	8.7	120 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	4.5	130 ○
4.3.3 Intensity of local competition†	81.5	7

5 Business sophistication

5.1 Knowledge workers	61.2	27
5.1.1 Knowledge-intensive employment, %	21.5	67
5.1.2 Firms offering formal training, % firms	39.5	42
5.1.3 GERD performed by business, % GDP	3.1	2 ●
5.1.4 GERD performed by business, %	76.5	4
5.1.5 GMAT test takers/mn pop. 20–34	433.4	10

5.2 Innovation linkages	40.7	41
5.2.1 University/industry research collaboration†	61.3	25
5.2.2 State of cluster development†	57.7	26
5.2.3 GERD financed by abroad, %	0.2	92 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	66
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	5.0	2 ●

5.3 Knowledge absorption	26.3	64
5.3.1 Royalty & license fees payments, % total trade	1.3	16
5.3.2 High-tech imports less re-imports, %	12.2	20
5.3.3 Comm., computer & info. services imp., % total trade	0.3	114 ○
5.3.4 FDI net inflows, % GDP	0.4	127 ○

6 Knowledge & technology outputs

6.1 Knowledge creation	74.8	1 ●
6.1.1 Domestic resident patent app/tr PPP\$ GDP	92.7	1 ●
6.1.2 PCT resident patent app/tr PPP\$ GDP	7.4	6
6.1.3 Domestic res utility model app/tr PPP\$ GDP	7.4	6
6.1.4 Scientific & technical articles/bn PPP\$ GDP	29.5	30
6.1.5 Citable documents H index	333.0	19

6.2 Knowledge impact	44.3	47
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.8	72
6.2.2 New businesses/th pop. 15–64	2.0	42
6.2.3 Computer software spending, % GDP	0.3	30
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	16.1	30
6.2.5 High- & medium-high-tech manufactures, %	48.9	9

6.3 Knowledge diffusion	44.6	22
6.3.1 Royalty & license fees receipts, % total trade	0.5	22
6.3.2 High-tech exports less re-exports, %	20.4	4 ●
6.3.3 Comm., computer & info. services exp., % total trade	0.2	123 ○
6.3.4 FDI net outflows, % GDP	2.1	33

7 Creative outputs

7.1 Intangible assets	52.4	29
7.1.1 Domestic res trademark app/bn PPP\$ GDP	88.2	23
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.3	50 ○
7.1.3 ICTs & business model creation†	78.3	2 ●
7.1.4 ICTs & organizational model creation†	68.2	14

7.2 Creative goods & services	27.2	43
7.2.1 Cultural & creative services exports, % total trade	0.3	33
7.2.2 National feature films/mn pop. 15–69	5.8	24
7.2.3 Global ent. & media output/th pop. 15–69	1.2	20
7.2.4 Printing & publishing manufactures, %	0.0	89 ○
7.2.5 Creative goods exports, % total trade	2.5	22

7.3 Online creativity	36.7	40
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	10.2	48
7.3.2 Country-code TLDs/th pop. 15–69	45.4	40
7.3.3 Wikipedia edits/pop. 15–69	7,577.3	50
7.3.4 Video uploads on YouTube/pop. 15–69	78.6	32

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	3.3
GDP (US\$ billions)	185.3
GDP per capita, PPP\$	39,706.1
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	35.2	69
Innovation Output Sub-Index	30.9	62
Innovation Input Sub-Index	39.4	79
Innovation Efficiency Ratio	0.8	50
Global Innovation Index 2013 (out of 142)	40.0	50

1 Institutions	60.2	72
1.1 Political environment	60.2	61
1.1.1 Political stability*	70.1	59
1.1.2 Government effectiveness*	38.8	76
1.1.3 Press freedom*	71.7	63
1.2 Regulatory environment	55.9	100
1.2.1 Regulatory quality*	47.6	74
1.2.2 Rule of law*	57.0	49
1.2.3 Cost of redundancy dismissal, salary weeks	28.1	126 ○
1.3 Business environment	64.6	71
1.3.1 Ease of starting a business*	69.5	115
1.3.2 Ease of resolving insolvency*	33.9	84
1.3.3 Ease of paying taxes*	90.4	10 ●

2 Human capital & research	23.3	91
2.1 Education	45.1	61
2.1.1 Expenditure on education, % GDP	3.8	94
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	20.9	55
2.1.3 School life expectancy, years	14.6	45
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	8.2	6 ●
2.2 Tertiary education	22.0	97
2.2.1 Tertiary enrolment, % gross	22.3	88
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	2.6	98
2.3.1 Researchers, headcounts/mn pop.	131.5	96
2.3.2 Gross expenditure on R&D, % GDP	0.1	104 ○
2.3.3 QS university ranking, average score top 3*	4.9	67

3 Infrastructure	39.0	61
3.1 Information & communication technologies (ICTs)	38.3	69
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	58.2	47
3.1.4 E-participation*	18.4	73
3.2 General infrastructure	45.0	28 ●
3.2.1 Electricity output, kWh/cap	20,374.8	1 ●
3.2.2 Logistics performance*	48.4	69
3.2.3 Gross capital formation, % GDP	16.4	120 ○
3.3 Ecological sustainability	33.7	79
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.2	96
3.3.2 Environmental performance*	63.9	42 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.7	74

4 Market sophistication	47.0	79
4.1 Credit	31.5	87
4.1.1 Ease of getting credit*	43.8	112 ○
4.1.2 Domestic credit to private sector, % GDP	61.7	53
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	38.0	57
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	57.1	35
4.2.3 Total value of stocks traded, % GDP	12.1	37
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	71.6	100
4.3.1 Applied tariff rate, weighted mean, %	4.1	76
4.3.2 Non-agricultural mkt access weighted tariff, %	1.5	86
4.3.3 Intensity of local competition†	58.5	103

5 Business sophistication	27.7	98
5.1 Knowledge workers	47.9	46
5.1.1 Knowledge-intensive employment, %	18.7	77
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	510.3	9 ●
5.2 Innovation linkages	25.7	99
5.2.1 University/industry research collaboration†	32.8	116 ○
5.2.2 State of cluster development†	42.3	86
5.2.3 GERD financed by abroad, %	1.2	78 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	12 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	94
5.3 Knowledge absorption	9.5	138 ○
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.3	117 ○
5.3.4 FDI net inflows, % GDP	0.2	131 ○

6 Knowledge & technology outputs	33.8	43 ●
6.1 Knowledge creation	7.7	91
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	4.1	116
6.1.5 Citable documents H index	83.0	76
6.2 Knowledge impact	37.3	73
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.2	18 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.3	45
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	2.8	90
6.2.5 High- & medium-high-tech manufactures, %	10.0	76
6.3 Knowledge diffusion	56.4	6 ●
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	4.0	11 ●
6.3.4 FDI net outflows, % GDP	5.5	12 ●

7 Creative outputs	28.1	87
7.1 Intangible assets	36.6	107
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	38.7	128 ○
7.1.4 ICTs & organizational model creation†	34.5	127 ○
7.2 Creative goods & services	11.6	87
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	0.6	27
7.2.4 Printing & publishing manufactures, %	0.0	78 ○
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	27.4	55
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	12.3	45 ●
7.3.2 Country-code TLDs/th pop. 15–69	12.1	95
7.3.3 Wikipedia edits/pop. 15–69	5,220.2	54
7.3.4 Video uploads on YouTube/pop. 15–69	76.5	36

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Kyrgyzstan

Key indicators

Population (millions)	5.6
GDP (US\$ billions)	7.2
GDP per capita, PPP\$	2,610.6
Income group	Low income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.8	112
Innovation Output Sub-Index	17.6	131
Innovation Input Sub-Index	37.9	90
Innovation Efficiency Ratio	0.5	136 ○
Global Innovation Index 2013 (out of 142)	27.0	117

1 Institutions	52.9	102
1.1 Political environment	45.0	108
1.1.1 Political stability*	43.9	115
1.1.2 Government effectiveness*	23.3	113
1.1.3 Press freedom*	67.8	85
1.2 Regulatory environment	54.2	105
1.2.1 Regulatory quality*	39.8	98
1.2.2 Rule of law*	14.7	131
1.2.3 Cost of redundancy dismissal, salary weeks	17.3	81
1.3 Business environment	59.6	86
1.3.1 Ease of starting a business*	96.3	7 ●
1.3.2 Ease of resolving insolvency*	22.9	114
1.3.3 Ease of paying taxes*	59.6	104

2 Human capital & research	29.4	66
2.1 Education	54.8	27 ●
2.1.1 Expenditure on education, % GDP	6.8	17 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	12.5	79
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	15.2	63
2.2 Tertiary education	31.2	73
2.2.1 Tertiary enrolment, % gross	41.3	61
2.2.2 Graduates in science & engineering, %	15.6	80
2.2.3 Tertiary inbound mobility, %	6.3	26 ●
2.3 Research & development (R&D)	2.4	102
2.3.1 Researchers, headcounts/mn pop.	411.6	72
2.3.2 Gross expenditure on R&D, % GDP	0.2	94
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	31.3	90
3.1 Information & communication technologies (ICTs)	35.7	74
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	42.5	90
3.1.4 E-participation*	29.0	53
3.2 General infrastructure	29.7	86
3.2.1 Electricity output, kWh/cap	2,751.0	65
3.2.2 Logistics performance*	29.4	122
3.2.3 Gross capital formation, % GDP	27.0	36 ●
3.3 Ecological sustainability	28.4	99
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.8	100
3.3.2 Environmental performance*	40.6	106
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	53.6	43
4.1 Credit	55.1	24 ●
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	15.1	130
4.1.3 Microfinance gross loans, % GDP	5.9	7 ●

4.2 Investment	33.7	74
4.2.1 Ease of protecting investors*	66.7	21 ●
4.2.2 Market capitalization, % GDP	2.5	106 ○
4.2.3 Total value of stocks traded, % GDP	0.1	100
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	72.0	96
4.3.1 Applied tariff rate, weighted mean, %	2.4	52
4.3.2 Non-agricultural mkt access weighted tariff, %	1.2	81
4.3.3 Intensity of local competition†	54.7	118

5 Business sophistication	22.4	125
5.1 Knowledge workers	25.9	106
5.1.1 Knowledge-intensive employment, %	17.6	79
5.1.2 Firms offering formal training, % firms	29.7	67
5.1.3 GERD performed by business, % GDP	0.0	73
5.1.4 GERD performed by business, %	23.3	61
5.1.5 GMAT test takers/mn pop. 20–34	26.6	100
5.2 Innovation linkages	16.3	137 ○
5.2.1 University/industry research collaboration†	20.3	131 ○
5.2.2 State of cluster development†	28.3	131 ○
5.2.3 GERD financed by abroad, %	0.9	83
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	22 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	25.0	74
5.3.1 Royalty & license fees payments, % total trade	0.1	89
5.3.2 High-tech imports less re-imports, %	5.3	96
5.3.3 Comm., computer & info. services imp., % total trade	0.4	101
5.3.4 FDI net inflows, % GDP	11.2	12 ●

6 Knowledge & technology outputs	21.1	107
6.1 Knowledge creation	17.2	63
6.1.1 Domestic resident patent app/tr PPP\$ GDP	8.4	11 ●
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	52
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.3	25
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.4	96
6.1.5 Citable documents H index	31.0	132 ○
6.2 Knowledge impact	24.0	117
6.2.1 Growth rate of PPP\$ GDP/worker, %	−0.6	98
6.2.2 New businesses/th pop. 15–64	0.9	61
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.5	132
6.2.5 High- & medium-high-tech manufactures, %	3.3	90 ○
6.3 Knowledge diffusion	22.1	122
6.3.1 Royalty & license fees receipts, % total trade	0.0	74
6.3.2 High-tech exports less re-exports, %	0.3	89
6.3.3 Comm., computer & info. services exp., % total trade	0.3	117
6.3.4 FDI net outflows, % GDP	0.0	106

7 Creative outputs	14.1	137 ○
7.1 Intangible assets	22.6	136 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	17.5	85
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.2	53
7.1.3 ICTs & business model creation†	37.5	131 ○
7.1.4 ICTs & organizational model creation†	32.7	128 ○
7.2 Creative goods & services	6.1	109
7.2.1 Cultural & creative services exports, % total trade	0.1	56
7.2.2 National feature films/mn pop. 15–69	0.0	101 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	72
7.2.5 Creative goods exports, % total trade	0.1	92
7.3 Online creativity	4.9	109
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.5	120
7.3.2 Country-code TLDs/th pop. 15–69	12.0	97
7.3.3 Wikipedia edits/pop. 15–69	1,342.6	90
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.0
GDP (US\$ billions)	31.0
GDP per capita, PPP\$	19,119.5
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	44.8	34
Innovation Output Sub-Index	40.4	32
Innovation Input Sub-Index	49.2	35
Innovation Efficiency Ratio	0.8	32
Global Innovation Index 2013 (out of 142)	45.2	33

1 Institutions	76.8	29
1.1 Political environment	72.1	41
1.1.1 Political stability*	76.2	49
1.1.2 Government effectiveness*	63.0	38
1.1.3 Press freedom*	77.1	35
1.2 Regulatory environment	83.9	25
1.2.1 Regulatory quality*	75.0	31
1.2.2 Rule of law*	67.2	37
1.2.3 Cost of redundancy dismissal, salary weeks	9.7	34
1.3 Business environment	74.2	32
1.3.1 Ease of starting a business*	91.8	26
1.3.2 Ease of resolving insolvency*	51.3	38
1.3.3 Ease of paying taxes*	79.6	34
2 Human capital & research	34.1	51
2.1 Education	54.0	34
2.1.1 Expenditure on education, % GDP	5.0	61
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	29.3	24
2.1.3 School life expectancy, years	15.5	33
2.1.4 PISA scales in reading, maths, & science	493.8	24
2.1.5 Pupil-teacher ratio, secondary	8.3	7 ●
2.2 Tertiary education	32.3	71
2.2.1 Tertiary enrolment, % gross	67.3	26
2.2.2 Graduates in science & engineering, %	15.7	79 ○
2.2.3 Tertiary inbound mobility, %	1.9	61
2.3 Research & development (R&D)	16.0	52
2.3.1 Researchers, headcounts/mn pop.	3,557.9	28
2.3.2 Gross expenditure on R&D, % GDP	0.7	52
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	42.9	46
3.1 Information & communication technologies (ICTs)	49.2	47
3.1.1 ICT access*	62.5	49
3.1.2 ICT use*	54.5	28
3.1.3 Government's online service*	58.8	45
3.1.4 E-participation*	21.1	65
3.2 General infrastructure	32.6	71
3.2.1 Electricity output, kWh/cap	2,745.0	66
3.2.2 Logistics performance*	46.4	77
3.2.3 Gross capital formation, % GDP	25.7	45
3.3 Ecological sustainability	47.0	35
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.0	50
3.3.2 Environmental performance*	64.1	40
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	6.4	21
4 Market sophistication	54.0	42
4.1 Credit	57.5	21 ●
4.1.1 Ease of getting credit*	93.8	3 ●
4.1.2 Domestic credit to private sector, % GDP	67.7	50
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	27.7	112 ○
4.2.1 Ease of protecting investors*	56.7	55
4.2.2 Market capitalization, % GDP	3.9	104 ○
4.2.3 Total value of stocks traded, % GDP	0.1	98 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	22
4.3 Trade & competition	76.9	54
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	73.3	32

5 Business sophistication	38.2	39
5.1 Knowledge workers	46.2	51
5.1.1 Knowledge-intensive employment, %	39.5	24
5.1.2 Firms offering formal training, % firms	41.4	41
5.1.3 GERD performed by business, % GDP	0.1	53 ○
5.1.4 GERD performed by business, %	22.6	62 ○
5.1.5 GMAT test takers/mn pop. 20–34	153.0	34
5.2 Innovation linkages	44.8	30
5.2.1 University/industry research collaboration†	43.3	64
5.2.2 State of cluster development†	40.2	99 ○
5.2.3 GERD financed by abroad, %	50.4	5 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	45
5.3 Knowledge absorption	23.6	82
5.3.1 Royalty & license fees payments, % total trade	0.2	75
5.3.2 High-tech imports less re-imports, %	6.4	79 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.4	41
5.3.4 FDI net inflows, % GDP	3.2	63

6 Knowledge & technology outputs	36.8	35
6.1 Knowledge creation	21.0	47
6.1.1 Domestic resident patent app./tr PPP\$ GDP	5.2	25
6.1.2 PCT resident patent app./tr PPP\$ GDP	1.0	32
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	14.8	60
6.1.5 Citable documents H index	85.0	74
6.2 Knowledge impact	58.4	6 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.6	25
6.2.2 New businesses/th pop. 15–64	11.6	9 ●
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	21.5	20 ●
6.2.5 High- & medium-high-tech manufactures, %	15.2	62 ○
6.3 Knowledge diffusion	30.9	73
6.3.1 Royalty & license fees receipts, % total trade	0.1	66
6.3.2 High-tech exports less re-exports, %	4.4	37
6.3.3 Comm., computer & info. services exp., % total trade	1.8	47
6.3.4 FDI net outflows, % GDP	0.6	62

7 Creative outputs	44.1	29
7.1 Intangible assets	45.6	64
7.1.1 Domestic res trademark app./bn PPP\$ GDP	70.7	34
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.4	11 ●
7.1.3 ICTs & business model creation†	56.5	66
7.1.4 ICTs & organizational model creation†	54.2	63
7.2 Creative goods & services	49.0	7 ●
7.2.1 Cultural & creative services exports, % total trade	1.3	4 ●
7.2.2 National feature films/mn pop. 15–69	4.0	33
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	26
7.2.5 Creative goods exports, % total trade	3.2	16 ●
7.3 Online creativity	35.9	43
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	12.6	43
7.3.2 Country-code TLDs/th pop. 15–69	58.3	23 ●
7.3.3 Wikipedia edits/pop. 15–69	21,760.9	20 ●
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Lebanon

Key indicators

Population (millions)	4.4
GDP (US\$ billions)	44.3
GDP per capita, PPP\$	14,845.0
Income group	Upper-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	33.6	77
Innovation Output Sub-Index	25.0	95
Innovation Input Sub-Index	42.2	61
Innovation Efficiency Ratio	0.6	119 ○
Global Innovation Index 2013 (out of 142)	35.5	75

1 Institutions	58.1	81
1.1 Political environment	42.3	121 ○
1.1.1 Political stability*	25.3	137 ○
1.1.2 Government effectiveness*	31.7	89
1.1.3 Press freedom*	69.9	81
1.2 Regulatory environment	67.1	66
1.2.1 Regulatory quality*	45.6	84
1.2.2 Rule of law*	25.7	110
1.2.3 Cost of redundancy dismissal, salary weeks	8.7	25 ●
1.3 Business environment	64.9	70
1.3.1 Ease of starting a business*	80.1	90
1.3.2 Ease of resolving insolvency*	34.3	83
1.3.3 Ease of paying taxes*	80.4	32 ●

2 Human capital & research	34.4	50
2.1 Education	32.1	107
2.1.1 Expenditure on education, % GDP	2.2	126 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	3.7	111 ○
2.1.3 School life expectancy, years	13.2	69
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	9.3	17 ●
2.2 Tertiary education	48.3	26 ●
2.2.1 Tertiary enrolment, % gross	46.3	55
2.2.2 Graduates in science & engineering, %	23.3	32
2.2.3 Tertiary inbound mobility, %	12.8	13 ●
2.3 Research & development (R&D)	22.7	41
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	22.7	49

3 Infrastructure	34.9	77
3.1 Information & communication technologies (ICTs)	43.8	53
3.1.1 ICT access*	60.4	52
3.1.2 ICT use*	35.4	53
3.1.3 Government's online service*	47.7	76
3.1.4 E-participation*	31.6	48
3.2 General infrastructure	24.8	115 ○
3.2.1 Electricity output, kWh/cap	3,841.5	55
3.2.2 Logistics performance*	38.5	94
3.2.3 Gross capital formation, % GDP	18.8	104
3.3 Ecological sustainability	36.2	68
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.7	31
3.3.2 Environmental performance*	50.2	82
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	106 ○

4 Market sophistication	44.6	95
4.1 Credit	26.9	105
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	92.2	33 ●
4.1.3 Microfinance gross loans, % GDP	0.1	68

4.2 Investment	28.7	106
4.2.1 Ease of protecting investors*	50.0	81
4.2.2 Market capitalization, % GDP	24.0	62
4.2.3 Total value of stocks traded, % GDP	0.9	67
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	78.1	41
4.3.1 Applied tariff rate, weighted mean, %	4.8	82
4.3.2 Non-agricultural mkt access weighted tariff, %	n/a	n/a
4.3.3 Intensity of local competition†	75.7	23 ●

5 Business sophistication	39.1	38
5.1 Knowledge workers	65.5	18 ●
5.1.1 Knowledge-intensive employment, %	31.9	41
5.1.2 Firms offering formal training, % firms	52.4	21 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	804.8	5 ●
5.2 Innovation linkages	27.7	87
5.2.1 University/industry research collaboration†	35.5	106 ○
5.2.2 State of cluster development†	37.0	110 ○
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	39
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	64
5.3 Knowledge absorption	24.0	78
5.3.1 Royalty & license fees payments, % total trade	0.1	107 ○
5.3.2 High-tech imports less re-imports, %	2.7	123 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.4	42
5.3.4 FDI net inflows, % GDP	8.7	17 ●

6 Knowledge & technology outputs	22.6	96
6.1 Knowledge creation	16.3	64
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	14.4	61
6.1.5 Citable documents H index	97.0	67
6.2 Knowledge impact	24.7	116 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	8.3	53
6.2.5 High- & medium-high-tech manufactures, %	22.0	48
6.3 Knowledge diffusion	26.7	97
6.3.1 Royalty & license fees receipts, % total trade	0.0	79
6.3.2 High-tech exports less re-exports, %	0.2	93
6.3.3 Comm., computer & info. services exp., % total trade	1.7	50
6.3.4 FDI net outflows, % GDP	1.3	43

7 Creative outputs	27.4	93
7.1 Intangible assets	35.9	111 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	39.7	127 ○
7.1.4 ICTs & organizational model creation†	32.2	131 ○
7.2 Creative goods & services	29.5	39
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	4.3	30
7.2.3 Global ent. & media output/th pop. 15–69	0.2	45
7.2.4 Printing & publishing manufactures, %	0.0	9 ●
7.2.5 Creative goods exports, % total trade	0.5	60
7.3 Online creativity	8.2	100
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	11.6	46
7.3.2 Country-code TLDs/th pop. 15–69	9.1	105
7.3.3 Wikipedia edits/pop. 15–69	2,259.8	78
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.1
GDP (US\$ billions)	2.3
GDP per capita, PPP\$	2,255.2
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.0	117
Innovation Output Sub-Index	15.5	137 ○
Innovation Input Sub-Index	38.6	87
Innovation Efficiency Ratio	0.4	140 ○
Global Innovation Index 2013 (out of 142)	26.3	124

1 Institutions	59.8	74
1.1 Political environment	58.1	68 ●
1.1.1 Political stability*	71.9	55 ●
1.1.2 Government effectiveness*	30.7	91
1.1.3 Press freedom*	71.6	67 ●
1.2 Regulatory environment	61.3	85
1.2.1 Regulatory quality*	34.8	110
1.2.2 Rule of law*	38.5	77
1.2.3 Cost of redundancy dismissal, salary weeks	15.0	68 ●
1.3 Business environment	60.0	85
1.3.1 Ease of starting a business*	81.7	80
1.3.2 Ease of resolving insolvency*	30.3	93
1.3.3 Ease of paying taxes*	68.1	79

2 Human capital & research	25.5	81
2.1 Education	63.5	5 ●
2.1.1 Expenditure on education, % GDP	13.0	1 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	51.2	2 ●
2.1.3 School life expectancy, years	11.1	103
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	24.7	88
2.2 Tertiary education	13.0	118
2.2.1 Tertiary enrolment, % gross	10.8	106
2.2.2 Graduates in science & engineering, %	12.6	94
2.2.3 Tertiary inbound mobility, %	0.5	93
2.3 Research & development (R&D)	0.0	130
2.3.1 Researchers, headcounts/mn pop.	20.7	118 ○
2.3.2 Gross expenditure on R&D, % GDP	0.0	117 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	28.8	98
3.1 Information & communication technologies (ICTs)	15.0	127
3.1.1 ICT access*	22.6	118
3.1.2 ICT use*	4.8	117
3.1.3 Government's online service*	30.1	120
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	50.5	17 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	25.0	133 ○
3.2.3 Gross capital formation, % GDP	38.9	7 ●
3.3 Ecological sustainability	20.8	130
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	20.8	140 ○
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	47.5	74
4.1 Credit	21.1	126
4.1.1 Ease of getting credit*	37.5	130 ○
4.1.2 Domestic credit to private sector, % GDP	18.8	121
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	50.0	30 ●
4.2.1 Ease of protecting investors*	50.0	81
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	71.4	102
4.3.1 Applied tariff rate, weighted mean, %	10.7	129
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	24 ●
4.3.3 Intensity of local competition†	62.0	90

5 Business sophistication	31.3	73
5.1 Knowledge workers	49.3	42 ●
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	54.4	16 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	11.6	118
5.2 Innovation linkages	24.8	104
5.2.1 University/industry research collaboration†	28.7	122
5.2.2 State of cluster development†	43.3	83
5.2.3 GERD financed by abroad, %	3.4	70
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	19.8	102
5.3.1 Royalty & license fees payments, % total trade	0.3	72
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.5	93
5.3.4 FDI net inflows, % GDP	5.2	37 ●

6 Knowledge & technology outputs	14.6	129
6.1 Knowledge creation	4.5	117
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.4	104
6.1.5 Citable documents H index	22.0	140 ○
6.2 Knowledge impact	5.1	131
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	1.5	49 ●
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.2	138 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	34.3	47 ●
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	0.3	111
6.3.4 FDI net outflows, % GDP	0.1	88

7 Creative outputs	16.3	131
7.1 Intangible assets	31.5	126
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	34.0	133 ○
7.1.4 ICTs & organizational model creation†	29.0	135 ○
7.2 Creative goods & services	0.4	138 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	93
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	1.8	121
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.2	126
7.3.2 Country-code TLDs/th pop. 15–69	5.0	113
7.3.3 Wikipedia edits/pop. 15–69	43.5	131
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Lithuania

Key indicators

Population (millions)	3.0
GDP (US\$ billions)	47.6
GDP per capita, PPP\$	22,747.2
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	41.0	39
Innovation Output Sub-Index	33.3	52
Innovation Input Sub-Index	48.7	36
Innovation Efficiency Ratio	0.7	89
Global Innovation Index 2013 (out of 142)	41.4	40

1 Institutions	73.4	38
1.1 Political environment	76.2	31
1.1.1 Political stability*	84.0	34
1.1.2 Government effectiveness*	63.0	39
1.1.3 Press freedom*	81.8	30
1.2 Regulatory environment	69.9	55
1.2.1 Regulatory quality*	77.6	27
1.2.2 Rule of law*	68.6	36
1.2.3 Cost of redundancy dismissal, salary weeks	24.6	111 ○
1.3 Business environment	74.0	34
1.3.1 Ease of starting a business*	93.2	19 ●
1.3.2 Ease of resolving insolvency*	51.3	39
1.3.3 Ease of paying taxes*	77.6	42

2 Human capital & research	41.6	34
2.1 Education	54.3	32
2.1.1 Expenditure on education, % GDP	5.4	46
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	23.3	48
2.1.3 School life expectancy, years	16.7	12 ●
2.1.4 PISA scales in reading, maths, & science	483.9	32
2.1.5 Pupil-teacher ratio, secondary	8.6	10 ●
2.2 Tertiary education	40.0	44
2.2.1 Tertiary enrolment, % gross	76.6	13 ●
2.2.2 Graduates in science & engineering, %	21.5	43
2.2.3 Tertiary inbound mobility, %	1.6	69
2.3 Research & development (R&D)	30.5	33
2.3.1 Researchers, headcounts/mn pop.	5,702.4	19 ●
2.3.2 Gross expenditure on R&D, % GDP	0.9	36
2.3.3 QS university ranking, average score top 3*	17.6	54

3 Infrastructure	44.4	42
3.1 Information & communication technologies (ICTs)	56.2	32
3.1.1 ICT access*	64.7	41
3.1.2 ICT use*	37.6	47
3.1.3 Government's online service*	69.9	29
3.1.4 E-participation*	52.6	30
3.2 General infrastructure	24.6	116 ○
3.2.1 Electricity output, kWh/cap	1,326.9	87
3.2.2 Logistics performance*	53.2	58
3.2.3 Gross capital formation, % GDP	18.1	108 ○
3.3 Ecological sustainability	52.2	20 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.4	45
3.3.2 Environmental performance*	61.3	47
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	10.6	8 ●

4 Market sophistication	52.1	46
4.1 Credit	48.5	35
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	51.3	66
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	31.1	91
4.2.1 Ease of protecting investors*	56.7	55
4.2.2 Market capitalization, % GDP	9.4	91 ○
4.2.3 Total value of stocks traded, % GDP	0.4	81
4.2.4 Venture capital deals/tr PPP\$ GDP	0.2	16
4.3 Trade & competition	76.8	56
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	73.0	34

5 Business sophistication	32.2	70
5.1 Knowledge workers	50.1	41
5.1.1 Knowledge-intensive employment, %	42.8	18 ●
5.1.2 Firms offering formal training, % firms	46.8	33
5.1.3 GERD performed by business, % GDP	0.2	44
5.1.4 GERD performed by business, %	26.6	57
5.1.5 GMAT test takers/mn pop. 20–34	110.2	48
5.2 Innovation linkages	33.7	63
5.2.1 University/industry research collaboration†	59.3	27
5.2.2 State of cluster development†	38.5	105 ○
5.2.3 GERD financed by abroad, %	33.3	13 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	74
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	62
5.3 Knowledge absorption	12.7	132 ○
5.3.1 Royalty & license fees payments, % total trade	0.1	100 ○
5.3.2 High-tech imports less re-imports, %	4.5	107 ○
5.3.3 Comm., computer & info. services imp., % total trade	0.5	92
5.3.4 FDI net inflows, % GDP	1.6	96

6 Knowledge & technology outputs	30.3	56
6.1 Knowledge creation	18.5	56
6.1.1 Domestic resident patent app/tr PPP\$ GDP	1.7	55
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.5	40
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	26.4	37
6.1.5 Citable documents H index	109.0	57
6.2 Knowledge impact	46.8	40
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.3	50
6.2.2 New businesses/th pop. 15–64	4.7	22
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	18.1	24 ●
6.2.5 High- & medium-high-tech manufactures, %	19.6	57
6.3 Knowledge diffusion	25.7	106
6.3.1 Royalty & license fees receipts, % total trade	0.0	90 ○
6.3.2 High-tech exports less re-exports, %	4.8	31
6.3.3 Comm., computer & info. services exp., % total trade	0.6	100
6.3.4 FDI net outflows, % GDP	0.6	57

7 Creative outputs	36.2	56
7.1 Intangible assets	47.7	51
7.1.1 Domestic res trademark app/bn PPP\$ GDP	57.3	45
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.6	22
7.1.3 ICTs & business model creation†	66.0	31
7.1.4 ICTs & organizational model creation†	64.5	24 ●
7.2 Creative goods & services	16.0	78
7.2.1 Cultural & creative services exports, % total trade	0.0	96 ○
7.2.2 National feature films/mn pop. 15–69	0.9	74
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	74 ○
7.2.5 Creative goods exports, % total trade	1.6	35
7.3 Online creativity	33.5	44
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	15.1	34
7.3.2 Country-code TLDs/th pop. 15–69	57.9	26
7.3.3 Wikipedia edits/pop. 15–69	16,213.1	31
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	0.5
GDP (US\$ billions)	59.8
GDP per capita, PPP\$	78,669.8
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	56.9	9
Innovation Output Sub-Index	54.9	5 ●
Innovation Input Sub-Index	58.8	21
Innovation Efficiency Ratio	0.9	9
Global Innovation Index 2013 (out of 142)	56.6	12
1 Institutions	82.9	20
1.1 Political environment	92.3	6
1.1.1 Political stability*	98.4	5 ●
1.1.2 Government effectiveness*	85.2	11
1.1.3 Press freedom*	93.3	4 ●
1.2 Regulatory environment	83.7	26
1.2.1 Regulatory quality*	94.7	8
1.2.2 Rule of law*	95.2	9
1.2.3 Cost of redundancy dismissal, salary weeks	21.7	100 ○
1.3 Business environment	72.8	38
1.3.1 Ease of starting a business*	85.9	65
1.3.2 Ease of resolving insolvency*	46.1	47
1.3.3 Ease of paying taxes*	86.4	17
2 Human capital & research	47.2	27
2.1 Education	52.6	39
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	20.3	58
2.1.3 School life expectancy, years	13.9	58
2.1.4 PISA scales in reading, maths, & science	489.6	26
2.1.5 Pupil-teacher ratio, secondary	8.5	9
2.2 Tertiary education	59.0	8
2.2.1 Tertiary enrolment, % gross	18.2	92 ○
2.2.2 Graduates in science & engineering, %	32.5	10
2.2.3 Tertiary inbound mobility, %	41.4	1 ●
2.3 Research & development (R&D)	29.9	35
2.3.1 Researchers, headcounts/mn pop.	5,924.3	16
2.3.2 Gross expenditure on R&D, % GDP	1.5	25
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	53.4	22
3.1 Information & communication technologies (ICTs)	67.9	22
3.1.1 ICT access*	89.3	2 ●
3.1.2 ICT use*	72.9	10
3.1.3 Government's online service*	69.9	29
3.1.4 E-participation*	39.5	38
3.2 General infrastructure	41.4	40
3.2.1 Electricity output, kWh/cap	5,173.6	43
3.2.2 Logistics performance*	87.7	15
3.2.3 Gross capital formation, % GDP	21.3	75
3.3 Ecological sustainability	50.9	24
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.7	28
3.3.2 Environmental performance*	83.3	2 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.2	58
4 Market sophistication	49.7	59
4.1 Credit	39.5	58
4.1.1 Ease of getting credit*	25.0	134 ○
4.1.2 Domestic credit to private sector, % GDP	165.4	12
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	34.9	69
4.2.1 Ease of protecting investors*	43.3	105 ○
4.2.2 Market capitalization, % GDP	123.1	8
4.2.3 Total value of stocks traded, % GDP	0.2	91 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	28
4.3 Trade & competition	74.6	82
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	68.7	56
5 Business sophistication	60.8	2 ●
5.1 Knowledge workers	75.0	6
5.1.1 Knowledge-intensive employment, %	57.2	1 ●
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.0	23
5.1.4 GERD performed by business, %	67.6	14
5.1.5 GMAT test takers/mn pop. 20–34	233.6	23
5.2 Innovation linkages	55.0	6
5.2.1 University/industry research collaboration†	65.0	18
5.2.2 State of cluster development†	62.3	21
5.2.3 GERD financed by abroad, %	20.7	18
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	11
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	2.8	8
5.3 Knowledge absorption	52.4	3 ●
5.3.1 Royalty & license fees payments, % total trade	0.7	44
5.3.2 High-tech imports less re-imports, %	4.6	105 ○
5.3.3 Comm., computer & info. services imp., % total trade	2.7	4 ●
5.3.4 FDI net inflows, % GDP	31.0	1 ●
6 Knowledge & technology outputs	45.8	16
6.1 Knowledge creation	28.8	35
6.1.1 Domestic resident patent app./tr PPP\$ GDP	2.6	43
6.1.2 PCT resident patent app./tr PPP\$ GDP	6.4	8
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	19.2	48
6.1.5 Citable documents H index	80.0	79
6.2 Knowledge impact	42.6	54
6.2.1 Growth rate of PPP\$ GDP/worker, %	–1.6	109 ○
6.2.2 New businesses/th pop. 15–64	21.0	1 ●
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.9	76
6.2.5 High- & medium-high-tech manufactures, %	2.7	92 ○
6.3 Knowledge diffusion	66.1	2 ●
6.3.1 Royalty & license fees receipts, % total trade	0.9	17
6.3.2 High-tech exports less re-exports, %	1.2	65
6.3.3 Comm., computer & info. services exp., % total trade	4.7	7
6.3.4 FDI net outflows, % GDP	487.1	2 ●
7 Creative outputs	64.1	3 ●
7.1 Intangible assets	70.6	2 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	135.7	6
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	6.4	1 ●
7.1.3 ICTs & business model creation†	76.2	5
7.1.4 ICTs & organizational model creation†	68.3	13
7.2 Creative goods & services	42.1	14
7.2.1 Cultural & creative services exports, % total trade	3.9	1 ●
7.2.2 National feature films/mn pop. 15–69	42.9	1 ●
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	52
7.2.5 Creative goods exports, % total trade	0.2	80
7.3 Online creativity	73.0	5 ●
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	100.0	1 ●
7.3.2 Country-code TLDs/th pop. 15–69	71.9	7
7.3.3 Wikipedia edits/pop. 15–69	27,784.6	10
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Madagascar

Key indicators

Population (millions)	22.3
GDP (US\$ billions)	11.2
GDP per capita, PPP\$	970.1
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.5	124
Innovation Output Sub-Index	19.6	121
Innovation Input Sub-Index	31.4	123
Innovation Efficiency Ratio	0.6	105
Global Innovation Index 2013 (out of 142)	22.9	140

1	Institutions	55.1	91
1.1	Political environment	45.0	106
1.1.1	Political stability*	51.8	100
1.1.2	Government effectiveness*	11.9	134
1.1.3	Press freedom*	71.4	73
1.2	Regulatory environment	59.6	89
1.2.1	Regulatory quality*	33.7	112
1.2.2	Rule of law*	21.9	119
1.2.3	Cost of redundancy dismissal, salary weeks	12.3	53 ●
1.3	Business environment	60.8	83
1.3.1	Ease of starting a business*	95.0	12 ●
1.3.2	Ease of resolving insolvency*	12.4	134
1.3.3	Ease of paying taxes*	74.9	50 ●
2	Human capital & research	14.5	124
2.1	Education	21.8	129
2.1.1	Expenditure on education, % GDP	2.7	116
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	8.3	103
2.1.3	School life expectancy, years	10.3	111
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	27.6	99
2.2	Tertiary education	20.6	100
2.2.1	Tertiary enrolment, % gross	4.1	127
2.2.2	Graduates in science & engineering, %	20.5	51
2.2.3	Tertiary inbound mobility, %	1.7	67
2.3	Research & development (R&D)	1.0	116
2.3.1	Researchers, headcounts/mn pop.	109.0	101
2.3.2	Gross expenditure on R&D, % GDP	0.1	103
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	22.4	123
3.1	Information & communication technologies (ICTs)	12.5	135
3.1.1	ICT access*	14.8	135 ○
3.1.2	ICT use*	0.7	131 ○
3.1.3	Government's online service*	32.0	114
3.1.4	E-participation*	2.6	116
3.2	General infrastructure	36.6	55 ●
3.2.1	Electricity output, kWh/cap	n/a	n/a
3.2.2	Logistics performance*	44.0	85
3.2.3	Gross capital formation, % GDP	24.5	55 ●
3.3	Ecological sustainability	18.0	139 ○
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2	Environmental performance*	26.7	136 ○
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	123 ○
4	Market sophistication	41.8	116
4.1	Credit	9.7	141 ○
4.1.1	Ease of getting credit*	18.8	142 ○
4.1.2	Domestic credit to private sector, % GDP	11.0	139 ○
4.1.3	Microfinance gross loans, % GDP	0.7	45

4.2	Investment	41.0	49 ●
4.2.1	Ease of protecting investors*	56.7	55
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	33
4.3	Trade & competition	74.6	81
4.3.1	Applied tariff rate, weighted mean, %	6.1	97
4.3.2	Non-agricultural mkt access weighted tariff, %	0.8	67
4.3.3	Intensity of local competition†	64.2	78

5 Business sophistication 23.3 122

5.1	Knowledge workers	14.2	136
5.1.1	Knowledge-intensive employment, %	2.8	107 ○
5.1.2	Firms offering formal training, % firms	27.4	71
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	2.5	139 ○

5.2	Innovation linkages	26.2	95
5.2.1	University/industry research collaboration†	37.8	92
5.2.2	State of cluster development†	33.2	120
5.2.3	GERD financed by abroad, %	10.6	41 ●
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a

5.3	Knowledge absorption	29.4	45 ●
5.3.1	Royalty & license fees payments, % total trade	0.2	74
5.3.2	High-tech imports less re-imports, %	4.3	110
5.3.3	Comm., computer & info. services imp., % total trade	1.7	27 ●
5.3.4	FDI net inflows, % GDP	9.2	16 ●

6 Knowledge & technology outputs 16.7 124

6.1	Knowledge creation	5.8	107
6.1.1	Domestic resident patent app/tr PPP\$ GDP	0.2	89
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	73
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	9.3	81
6.1.5	Citable documents H index	56.0	102

6.2	Knowledge impact	22.0	118
6.2.1	Growth rate of PPP\$ GDP/worker, %	-1.4	107
6.2.2	New businesses/th pop. 15–64	0.1	90
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.0	98
6.2.5	High- & medium-high-tech manufactures, %	2.4	93 ○

6.3	Knowledge diffusion	22.4	119
6.3.1	Royalty & license fees receipts, % total trade	0.5	23 ●
6.3.2	High-tech exports less re-exports, %	0.1	116
6.3.3	Comm., computer & info. services exp., % total trade	1.3	71
6.3.4	FDI net outflows, % GDP	n/a	n/a

7 Creative outputs 22.5 115

7.1	Intangible assets	36.7	106
7.1.1	Domestic res trademark app/bn PPP\$ GDP	94.3	18 ●
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.1	57
7.1.3	ICTs & business model creation†	46.0	111
7.1.4	ICTs & organizational model creation†	44.7	102

7.2	Creative goods & services	15.7	79
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	32 ●
7.2.5	Creative goods exports, % total trade	0.1	89

7.3	Online creativity	0.7	130
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.2	132
7.3.2	Country-code TLDs/th pop. 15–69	2.0	124
7.3.3	Wikipedia edits/pop. 15–69	37.7	132
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	15.9
GDP (US\$ billions)	3.8
GDP per capita, PPP\$	878.7
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.6	113
Innovation Output Sub-Index	22.2	108
Innovation Input Sub-Index	33.0	109
Innovation Efficiency Ratio	0.7	96
Global Innovation Index 2013 (out of 142)	26.7	119

1 Institutions	54.2	95
1.1 Political environment	55.0	77
1.1.1 Political stability*	65.5	74
1.1.2 Government effectiveness*	27.6	97
1.1.3 Press freedom*	71.8	62 ●
1.2 Regulatory environment	58.7	93
1.2.1 Regulatory quality*	30.1	119
1.2.2 Rule of law*	39.7	75
1.2.3 Cost of redundancy dismissal, salary weeks	16.7	78
1.3 Business environment	48.8	121
1.3.1 Ease of starting a business*	60.9	131 ○
1.3.2 Ease of resolving insolvency*	16.5	128
1.3.3 Ease of paying taxes*	69.2	73 ●
2 Human capital & research	11.7	136 ○
2.1 Education	31.6	110
2.1.1 Expenditure on education, % GDP	5.4	49 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	33.2	14 ●
2.1.3 School life expectancy, years	10.8	108
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	41.5	114 ○
2.2 Tertiary education	2.8	136 ○
2.2.1 Tertiary enrolment, % gross	0.8	134 ○
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	1.1	80
2.3 Research & development (R&D)	0.5	123
2.3.1 Researchers, headcounts/mn pop.	122.8	98
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	24.1	118
3.1 Information & communication technologies (ICTs)	10.3	138 ○
3.1.1 ICT access*	17.2	129 ○
3.1.2 ICT use*	2.6	123
3.1.3 Government's online service*	21.6	133 ○
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	34.3	65 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	47.6	74
3.2.3 Gross capital formation, % GDP	22.0	73 ●
3.3 Ecological sustainability	27.6	103
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	40.1	108
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	88
4 Market sophistication	39.6	128
4.1 Credit	17.7	129
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	20.6	118
4.1.3 Microfinance gross loans, % GDP	0.3	53

4.2 Investment	29.3	101
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	17.7	77
4.2.3 Total value of stocks traded, % GDP	0.4	83
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	71.8	98
4.3.1 Applied tariff rate, weighted mean, %	6.2	99
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	1 ●
4.3.3 Intensity of local competition†	54.5	119

5 Business sophistication **35.3** **50 ●**

5.1 Knowledge workers	40.8	64 ●
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	47.6	32 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	5.3	130

5.2 Innovation linkages **41.3** **39 ●**

5.2.1 University/industry research collaboration†	35.0	107
5.2.2 State of cluster development†	44.5	77
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a

5.3 Knowledge absorption **23.8** **81**

5.3.1 Royalty & license fees payments, % total trade	0.0	118 ○
5.3.2 High-tech imports less re-imports, %	13.2	16 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.4	111
5.3.4 FDI net inflows, % GDP	1.6	93

6 Knowledge & technology outputs **24.7** **84**

6.1 Knowledge creation	19.9	51 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	20.8	43 ●
6.1.5 Citable documents H index	80.0	79

6.2 Knowledge impact **27.4** **112**

6.2.1 Growth rate of PPP\$ GDP/worker, %	1.1	63
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.4	116
6.2.5 High- & medium-high-tech manufactures, %	7.9	81

6.3 Knowledge diffusion **26.9** **96**

6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	1.0	68
6.3.3 Comm., computer & info. services exp., % total trade	0.3	115
6.3.4 FDI net outflows, % GDP	1.2	45 ●

7 Creative outputs **19.8** **125**

7.1 Intangible assets	33.2	120
7.1.1 Domestic res trademark app./bn PPP\$ GDP	25.5	80
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	45.8	112
7.1.4 ICTs & organizational model creation†	43.8	103

7.2 Creative goods & services **11.6** **88**

7.2.1 Cultural & creative services exports, % total trade	0.0	76
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	37 ●
7.2.5 Creative goods exports, % total trade	0.1	93

7.3 Online creativity **1.1** **127**

7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.2	127
7.3.2 Country-code TLDs/th pop. 15–69	3.0	120
7.3.3 Wikipedia edits/pop. 15–69	23.9	138 ○
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Malaysia

Key indicators

Population (millions)	29.2
GDP (US\$ billions)	312.4
GDP per capita, PPP\$	17,748.0
Income group	Upper-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	45.6	33
Innovation Output Sub-Index	38.7	35
Innovation Input Sub-Index	52.5	30
Innovation Efficiency Ratio	0.7	72
Global Innovation Index 2013 (out of 142)	46.9	32

1 Institutions	68.2	50
1.1 Political environment	63.6	52
1.1.1 Political stability*	65.6	72
1.1.2 Government effectiveness*	67.8	32
1.1.3 Press freedom*	57.3	119 ○
1.2 Regulatory environment	64.9	77
1.2.1 Regulatory quality*	63.1	46
1.2.2 Rule of law*	60.3	44
1.2.3 Cost of redundancy dismissal, salary weeks	23.9	110 ○
1.3 Business environment	76.2	25
1.3.1 Ease of starting a business*	94.3	15
1.3.2 Ease of resolving insolvency*	51.8	37
1.3.3 Ease of paying taxes*	82.4	28

2 Human capital & research	41.6	35
2.1 Education	42.2	72
2.1.1 Expenditure on education, % GDP	5.9	29
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	19.9	60
2.1.3 School life expectancy, years	12.7	76
2.1.4 PISA scales in reading, maths, & science	412.7	51 ○
2.1.5 Pupil-teacher ratio, secondary	13.6	46
2.2 Tertiary education	51.4	21
2.2.1 Tertiary enrolment, % gross	36.0	70
2.2.2 Graduates in science & engineering, %	37.7	6 ●
2.2.3 Tertiary inbound mobility, %	6.1	28
2.3 Research & development (R&D)	31.1	32
2.3.1 Researchers, headcounts/mn pop.	2,564.5	35
2.3.2 Gross expenditure on R&D, % GDP	1.1	34
2.3.3 QS university ranking, average score top 3*	45.2	28

3 Infrastructure	45.7	35
3.1 Information & communication technologies (ICTs)	55.3	35
3.1.1 ICT access*	60.9	51
3.1.2 ICT use*	31.1	59
3.1.3 Government's online service*	79.1	20
3.1.4 E-participation*	50.0	31
3.2 General infrastructure	43.3	31
3.2.1 Electricity output, kWh/cap	4,507.6	47
3.2.2 Logistics performance*	74.6	28
3.2.3 Gross capital formation, % GDP	27.1	34
3.3 Ecological sustainability	38.5	59
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.4	77 ○
3.3.2 Environmental performance*	59.3	49
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	3.9	28

4 Market sophistication	63.9	17
4.1 Credit	46.6	41
4.1.1 Ease of getting credit*	100.0	1 ●
4.1.2 Domestic credit to private sector, % GDP	118.2	25
4.1.3 Microfinance gross loans, % GDP	0.1	66 ○

4.2 Investment	62.9	15
4.2.1 Ease of protecting investors*	86.7	4 ●
4.2.2 Market capitalization, % GDP	156.9	4 ●
4.2.3 Total value of stocks traded, % GDP	41.0	21
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	35
4.3 Trade & competition	82.4	12 ●
4.3.1 Applied tariff rate, weighted mean, %	4.0	71
4.3.2 Non-agricultural mkt access weighted tariff, %	0.4	48
4.3.3 Intensity of local competition†	74.0	29

5 Business sophistication	42.9	29
5.1 Knowledge workers	48.1	44
5.1.1 Knowledge-intensive employment, %	27.5	50
5.1.2 Firms offering formal training, % firms	50.1	27
5.1.3 GERD performed by business, % GDP	0.6	31
5.1.4 GERD performed by business, %	56.7	27
5.1.5 GMAT test takers/mn pop. 20–34	45.9	78
5.2 Innovation linkages	33.8	62
5.2.1 University/industry research collaboration†	67.0	15
5.2.2 State of cluster development†	67.3	13
5.2.3 GERD financed by abroad, %	0.3	90 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	29
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	68
5.3 Knowledge absorption	46.8	6 ●
5.3.1 Royalty & license fees payments, % total trade	0.6	47
5.3.2 High-tech imports less re-imports, %	22.1	1 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.1	56
5.3.4 FDI net inflows, % GDP	4.2	51

6 Knowledge & technology outputs	35.5	39
6.1 Knowledge creation	11.5	72
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.3	50
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.6	35
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.1	58 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	16.9	53
6.1.5 Citable documents H index	125.0	52
6.2 Knowledge impact	48.9	31
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.6	42
6.2.2 New businesses/th pop. 15–64	2.3	40
6.2.3 Computer software spending, % GDP	0.4	23
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	23.7	18
6.2.5 High- & medium-high-tech manufactures, %	41.0	19
6.3 Knowledge diffusion	46.0	19
6.3.1 Royalty & license fees receipts, % total trade	0.1	65
6.3.2 High-tech exports less re-exports, %	26.9	2 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.1	80
6.3.4 FDI net outflows, % GDP	5.5	11 ●

7 Creative outputs	42.0	39
7.1 Intangible assets	51.8	32
7.1.1 Domestic res trademark app/bn PPP\$ GDP	28.2	75 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	73.7	11 ●
7.1.4 ICTs & organizational model creation†	70.8	11 ●
7.2 Creative goods & services	36.0	25
7.2.1 Cultural & creative services exports, % total trade	0.4	26
7.2.2 National feature films/mn pop. 15–69	2.4	52
7.2.3 Global ent. & media output/th pop. 15–69	0.4	33
7.2.4 Printing & publishing manufactures, %	0.0	76 ○
7.2.5 Creative goods exports, % total trade	10.6	4 ●
7.3 Online creativity	28.5	52
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	6.1	57
7.3.2 Country-code TLDs/th pop. 15–69	31.2	54
7.3.3 Wikipedia edits/pop. 15–69	4,707.5	57
7.3.4 Video uploads on YouTube/pop. 15–69	68.6	45 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	14.9
GDP (US\$ billions)	11.1
GDP per capita, PPP\$	1,103.4
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	26.2	119
Innovation Output Sub-Index	23.7	103
Innovation Input Sub-Index	28.7	132
Innovation Efficiency Ratio	0.8	30 ●
Global Innovation Index 2013 (out of 142)	28.8	106
1 Institutions	47.8	117
1.1 Political environment	33.9	135
1.1.1 Political stability*	17.2	139 ○
1.1.2 Government effectiveness*	14.5	131
1.1.3 Press freedom*	70.0	79
1.2 Regulatory environment	60.6	86
1.2.1 Regulatory quality*	37.8	104
1.2.2 Rule of law*	27.3	104
1.2.3 Cost of redundancy dismissal, salary weeks	13.7	62 ●
1.3 Business environment	48.9	120
1.3.1 Ease of starting a business*	66.8	123
1.3.2 Ease of resolving insolvency*	23.5	113
1.3.3 Ease of paying taxes*	56.3	114
2 Human capital & research	13.9	128
2.1 Education	32.0	108
2.1.1 Expenditure on education, % GDP	4.8	66
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	31.2	21 ●
2.1.3 School life expectancy, years	8.4	123
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	24.7	89
2.2 Tertiary education	4.7	133 ○
2.2.1 Tertiary enrolment, % gross	7.5	119
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	0.5	92
2.3 Research & development (R&D)	5.1	84
2.3.1 Researchers, headcounts/mn pop.	64.2	110
2.3.2 Gross expenditure on R&D, % GDP	0.7	51 ●
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	18.1	136
3.1 Information & communication technologies (ICTs)	14.4	130
3.1.1 ICT access*	24.4	112
3.1.2 ICT use*	1.0	129
3.1.3 Government's online service*	32.0	114
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	27.5	99
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	26.2	130
3.2.3 Gross capital formation, % GDP	22.2	72
3.3 Ecological sustainability	12.4	143 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	18.4	141 ○
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	124
4 Market sophistication	38.3	130
4.1 Credit	16.7	134
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	20.9	116
4.1.3 Microfinance gross loans, % GDP	0.1	75

4.2 Investment	36.7	59 ●
4.2.1 Ease of protecting investors*	36.7	119
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	61.7	128
4.3.1 Applied tariff rate, weighted mean, %	8.4	114
4.3.2 Non-agricultural mkt access weighted tariff, %	3.8	128
4.3.3 Intensity of local competition†	58.3	105
5 Business sophistication	25.1	112
5.1 Knowledge workers	19.4	125
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	36.7	45 ●
5.1.3 GERD performed by business, % GDP	0.0	79
5.1.4 GERD performed by business, %	3.0	79
5.1.5 GMAT test takers/mn pop. 20–34	5.3	129
5.2 Innovation linkages	26.1	98
5.2.1 University/industry research collaboration†	31.5	118
5.2.2 State of cluster development†	44.8	74
5.2.3 GERD financed by abroad, %	8.8	45 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	51 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	30.0	43 ●
5.3.1 Royalty & license fees payments, % total trade	0.1	109
5.3.2 High-tech imports less re-imports, %	8.2	54 ●
5.3.3 Comm., computer & info. services imp., % total trade	2.4	7 ●
5.3.4 FDI net inflows, % GDP	1.7	92
6 Knowledge & technology outputs	18.7	116
6.1 Knowledge creation	6.3	100
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.1	78
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	7.2	88
6.1.5 Citable documents H index	55.0	103
6.2 Knowledge impact	18.0	120
6.2.1 Growth rate of PPP\$ GDP/worker, %	–7.3	115 ○
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.2	139 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	31.9	68 ●
6.3.1 Royalty & license fees receipts, % total trade	0.0	95
6.3.2 High-tech exports less re-exports, %	0.2	100
6.3.3 Comm., computer & info. services exp., % total trade	3.9	12 ●
6.3.4 FDI net outflows, % GDP	–3.9	124 ○
7 Creative outputs	28.7	81
7.1 Intangible assets	56.4	15 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	59.0	61 ●
7.1.4 ICTs & organizational model creation†	53.8	66
7.2 Creative goods & services	1.8	127
7.2.1 Cultural & creative services exports, % total trade	0.1	57
7.2.2 National feature films/mn pop. 15–69	0.1	98
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	122 ○
7.3 Online creativity	0.1	142 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.2	134
7.3.2 Country-code TLDs/th pop. 15–69	0.0	142 ○
7.3.3 Wikipedia edits/pop. 15–69	26.7	137 ○
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Malta

Key indicators

Population (millions)	0.4
GDP (US\$ billions)	9.5
GDP per capita, PPP\$	27,840.2
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	50.4	25
Innovation Output Sub-Index	50.3	10 ●
Innovation Input Sub-Index	50.6	33
Innovation Efficiency Ratio	1.0	3 ●
Global Innovation Index 2013 (out of 142)	51.8	24

1 Institutions	79.2	22
1.1 Political environment	80.6	22
1.1.1 Political stability*	91.1	17
1.1.2 Government effectiveness*	74.0	26
1.1.3 Press freedom*	76.7	40
1.2 Regulatory environment	91.6	16
1.2.1 Regulatory quality*	83.1	19
1.2.2 Rule of law*	83.1	22
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	65.5	67
1.3.1 Ease of starting a business*	72.3	113 ○
1.3.2 Ease of resolving insolvency*	41.5	56
1.3.3 Ease of paying taxes*	82.7	27

2 Human capital & research	34.6	49
2.1 Education	57.4	15
2.1.1 Expenditure on education, % GDP	6.9	12
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	35.4	11
2.1.3 School life expectancy, years	14.5	48
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	7.9	4 ●
2.2 Tertiary education	30.6	76
2.2.1 Tertiary enrolment, % gross	39.4	66
2.2.2 Graduates in science & engineering, %	18.3	62 ○
2.2.3 Tertiary inbound mobility, %	4.1	41
2.3 Research & development (R&D)	15.7	54
2.3.1 Researchers, headcounts/mn pop.	2,985.8	31
2.3.2 Gross expenditure on R&D, % GDP	0.8	39
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	44.7	41
3.1 Information & communication technologies (ICTs)	57.7	31
3.1.1 ICT access*	82.8	9
3.1.2 ICT use*	60.4	22
3.1.3 Government's online service*	61.4	41
3.1.4 E-participation*	26.3	56
3.2 General infrastructure	25.7	107 ○
3.2.1 Electricity output, kWh/cap	5,223.8	41
3.2.2 Logistics performance*	61.5	42
3.2.3 Gross capital formation, % GDP	12.6	138 ○
3.3 Ecological sustainability	50.6	25
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	11.2	10 ●
3.3.2 Environmental performance*	67.4	34
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.1	48

4 Market sophistication	48.9	65
4.1 Credit	30.1	93 ○
4.1.1 Ease of getting credit*	18.8	142 ○
4.1.2 Domestic credit to private sector, % GDP	127.9	20
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	34.5	72
4.2.1 Ease of protecting investors*	56.7	55
4.2.2 Market capitalization, % GDP	41.6	49
4.2.3 Total value of stocks traded, % GDP	0.5	78 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	82.0	19
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	83.5	3 ●

5 Business sophistication	45.5	23
5.1 Knowledge workers	54.9	32
5.1.1 Knowledge-intensive employment, %	39.7	23
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	0.5	33
5.1.4 GERD performed by business, %	60.0	22
5.1.5 GMAT test takers/mn pop. 20–34	109.4	49
5.2 Innovation linkages	41.0	40
5.2.1 University/industry research collaboration†	46.2	53
5.2.2 State of cluster development†	48.5	61
5.2.3 GERD financed by abroad, %	17.3	23
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	20
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.9	21
5.3 Knowledge absorption	40.7	13
5.3.1 Royalty & license fees payments, % total trade	1.2	20
5.3.2 High-tech imports less re-imports, %	13.0	19
5.3.3 Comm., computer & info. services imp., % total trade	1.7	22
5.3.4 FDI net inflows, % GDP	4.7	43

6 Knowledge & technology outputs	45.1	18
6.1 Knowledge creation	17.4	61
6.1.1 Domestic resident patent app/tr PPP\$ GDP	1.0	69 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	1.6	27
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	19.0	49
6.1.5 Citable documents H index	60.0	98 ○
6.2 Knowledge impact	75.3	1 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.4	80 ○
6.2.2 New businesses/th pop. 15–64	13.6	6 ●
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	39.5	5 ●
6.2.5 High- & medium-high-tech manufactures, %	53.4	7 ●
6.3 Knowledge diffusion	42.5	26
6.3.1 Royalty & license fees receipts, % total trade	0.2	35
6.3.2 High-tech exports less re-exports, %	14.8	10 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.4	63
6.3.4 FDI net outflows, % GDP	6.2	9 ●

7 Creative outputs	55.5	8 ●
7.1 Intangible assets	57.8	13
7.1.1 Domestic res trademark app/bn PPP\$ GDP	107.8	13
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	68.8	24
7.1.4 ICTs & organizational model creation†	62.8	30
7.2 Creative goods & services	44.9	10 ●
7.2.1 Cultural & creative services exports, % total trade	0.2	46
7.2.2 National feature films/mn pop. 15–69	3.2	44
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.1	3 ●
7.2.5 Creative goods exports, % total trade	1.1	38
7.3 Online creativity	61.6	16
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	97.5	5 ●
7.3.2 Country-code TLDs/th pop. 15–69	40.6	46
7.3.3 Wikipedia edits/pop. 15–69	27,516.4	12
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	1.3
GDP (US\$ billions)	11.9
GDP per capita, PPP\$	16,056.1
Income group	Upper-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.9	40
Innovation Output Sub-Index	35.0	43
Innovation Input Sub-Index	46.9	42
Innovation Efficiency Ratio	0.7	65
Global Innovation Index 2013 (out of 142)	38.0	53

1	Institutions	78.3	27
1.1	Political environment	76.2	32
1.1.1	Political stability*	89.3	21 ●
1.1.2	Government effectiveness*	65.8	35
1.1.3	Press freedom*	73.5	52
1.2	Regulatory environment	84.0	24 ●
1.2.1	Regulatory quality*	74.5	32
1.2.2	Rule of law*	72.1	33
1.2.3	Cost of redundancy dismissal, salary weeks	10.6	43
1.3	Business environment	74.5	31
1.3.1	Ease of starting a business*	91.2	28
1.3.2	Ease of resolving insolvency*	43.5	53
1.3.3	Ease of paying taxes*	88.9	12 ●
2	Human capital & research	25.9	80
2.1	Education	43.0	70
2.1.1	Expenditure on education, % GDP	3.5	99 ○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	19.0	64
2.1.3	School life expectancy, years	15.6	32
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	14.7	58
2.2	Tertiary education	30.5	78
2.2.1	Tertiary enrolment, % gross	39.9	65
2.2.2	Graduates in science & engineering, %	20.4	52
2.2.3	Tertiary inbound mobility, %	2.3	57
2.3	Research & development (R&D)	4.1	88
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	0.4	72
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	37.1	67
3.1	Information & communication technologies (ICTs)	32.4	82
3.1.1	ICT access*	51.7	65
3.1.2	ICT use*	26.9	65
3.1.3	Government's online service*	43.1	88
3.1.4	E-participation*	7.9	98 ○
3.2	General infrastructure	38.7	47
3.2.1	Electricity output, kWh/cap	n/a	n/a
3.2.2	Logistics performance*	48.0	72
3.2.3	Gross capital formation, % GDP	25.1	49
3.3	Ecological sustainability	40.2	55
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2	Environmental performance*	58.1	54
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.7	75
4	Market sophistication	63.0	20 ●
4.1	Credit	53.6	26
4.1.1	Ease of getting credit*	75.0	40
4.1.2	Domestic credit to private sector, % GDP	100.7	30
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	48.9	33
4.2.1	Ease of protecting investors*	76.7	12 ●
4.2.2	Market capitalization, % GDP	67.6	28
4.2.3	Total value of stocks traded, % GDP	2.8	55
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	86.5	3 ●
4.3.1	Applied tariff rate, weighted mean, %	0.7	5 ●
4.3.2	Non-agricultural mkt access weighted tariff, %	0.0	12 ●
4.3.3	Intensity of local competition†	74.3	28
5	Business sophistication	30.2	80
5.1	Knowledge workers	38.3	73
5.1.1	Knowledge-intensive employment, %	20.4	71
5.1.2	Firms offering formal training, % firms	28.8	70
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	156.9	32
5.2	Innovation linkages	33.1	65
5.2.1	University/industry research collaboration†	38.0	91
5.2.2	State of cluster development†	50.7	51
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	72
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	39
5.3	Knowledge absorption	19.3	106
5.3.1	Royalty & license fees payments, % total trade	0.2	77
5.3.2	High-tech imports less re-imports, %	5.3	97 ○
5.3.3	Comm., computer & info. services imp., % total trade	1.2	53
5.3.4	FDI net inflows, % GDP	2.4	76
6	Knowledge & technology outputs	26.6	72
6.1	Knowledge creation	3.7	128 ○
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.1	99 ○
6.1.2	PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	4.6	111 ○
6.1.5	Citable documents H index	41.0	120 ○
6.2	Knowledge impact	26.7	114 ○
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	7.4	15 ●
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	12.0	44
6.2.5	High- & medium-high-tech manufactures, %	3.3	89 ○
6.3	Knowledge diffusion	49.5	13 ●
6.3.1	Royalty & license fees receipts, % total trade	0.0	88 ○
6.3.2	High-tech exports less re-exports, %	0.2	104 ○
6.3.3	Comm., computer & info. services exp., % total trade	2.6	24 ●
6.3.4	FDI net outflows, % GDP	655.2	1 ●
7	Creative outputs	43.4	31
7.1	Intangible assets	57.6	14 ●
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	59.5	56
7.1.4	ICTs & organizational model creation†	55.7	58
7.2	Creative goods & services	41.1	16 ●
7.2.1	Cultural & creative services exports, % total trade	0.0	78
7.2.2	National feature films/mn pop. 15–69	32.6	1 ●
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	11 ●
7.2.5	Creative goods exports, % total trade	0.9	41
7.3	Online creativity	17.1	71
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	17.5	32
7.3.2	Country-code TLDs/th pop. 15–69	29.6	62
7.3.3	Wikipedia edits/pop. 15–69	2,545.2	71
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Mexico

Key indicators

Population (millions)	120.8
GDP (US\$ billions)	1,258.5
GDP per capita, PPP\$	15,562.6
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.0	66
Innovation Output Sub-Index	29.9	70
Innovation Input Sub-Index	42.2	62
Innovation Efficiency Ratio	0.7	79
Global Innovation Index 2013 (out of 142)	36.8	63

1 Institutions	61.8	66
1.1 Political environment	51.1	85
1.1.1 Political stability*	49.2	107
1.1.2 Government effectiveness*	49.5	55
1.1.3 Press freedom*	54.7	125 ○
1.2 Regulatory environment	59.0	92
1.2.1 Regulatory quality*	61.1	52
1.2.2 Rule of law*	31.0	95
1.2.3 Cost of redundancy dismissal, salary weeks	22.0	104
1.3 Business environment	75.2	27 ●
1.3.1 Ease of starting a business*	87.5	59
1.3.2 Ease of resolving insolvency*	71.6	24 ●
1.3.3 Ease of paying taxes*	66.6	83

2 Human capital & research	32.5	56
2.1 Education	38.3	89
2.1.1 Expenditure on education, % GDP	5.2	52
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	15.9	78
2.1.3 School life expectancy, years	12.8	75
2.1.4 PISA scales in reading, maths, & science	417.3	47
2.1.5 Pupil-teacher ratio, secondary	17.7	74
2.2 Tertiary education	41.0	42
2.2.1 Tertiary enrolment, % gross	27.7	80
2.2.2 Graduates in science & engineering, %	26.8	20 ●
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	18.0	47
2.3.1 Researchers, headcounts/mn pop.	386.4	74
2.3.2 Gross expenditure on R&D, % GDP	0.4	66
2.3.3 QS university ranking, average score top 3*	41.0	33 ●

3 Infrastructure	39.9	55
3.1 Information & communication technologies (ICTs)	48.6	49
3.1.1 ICT access*	41.1	80
3.1.2 ICT use*	22.3	77
3.1.3 Government's online service*	73.2	28 ●
3.1.4 E-participation*	57.9	25 ●
3.2 General infrastructure	33.7	67
3.2.1 Electricity output, kWh/cap	2,687.1	68
3.2.2 Logistics performance*	57.5	47
3.2.3 Gross capital formation, % GDP	24.2	60
3.3 Ecological sustainability	37.3	60
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.9	38
3.3.2 Environmental performance*	55.0	60
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.6	77

4 Market sophistication	46.9	81
4.1 Credit	28.9	96
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	27.7	103
4.1.3 Microfinance gross loans, % GDP	0.3	54

4.2 Investment	30.4	93
4.2.1 Ease of protecting investors*	56.7	55
4.2.2 Market capitalization, % GDP	44.6	45
4.2.3 Total value of stocks traded, % GDP	10.0	41
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	49
4.3 Trade & competition	81.5	23 ●
4.3.1 Applied tariff rate, weighted mean, %	2.2	48
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	30 ●
4.3.3 Intensity of local competition†	67.5	62

5 Business sophistication	29.9	81
5.1 Knowledge workers	35.1	82
5.1.1 Knowledge-intensive employment, %	14.7	93 ○
5.1.2 Firms offering formal training, % firms	45.1	35
5.1.3 GERD performed by business, % GDP	0.2	50
5.1.4 GERD performed by business, %	39.0	46
5.1.5 GMAT test takers/mn pop. 20–34	50.3	76
5.2 Innovation linkages	24.3	107
5.2.1 University/industry research collaboration†	51.3	42
5.2.2 State of cluster development†	54.7	33
5.2.3 GERD financed by abroad, %	0.7	84 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	96 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	73
5.3 Knowledge absorption	30.4	41
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	16.9	9 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.0	138 ○
5.3.4 FDI net inflows, % GDP	1.1	112 ○

6 Knowledge & technology outputs	26.9	71
6.1 Knowledge creation	8.7	88
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.7	72
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.1	71
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.3	43
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.9	100
6.1.5 Citable documents H index	232.0	33 ●
6.2 Knowledge impact	33.5	88
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.7	73
6.2.2 New businesses/th pop. 15–64	0.9	64
6.2.3 Computer software spending, % GDP	0.2	68 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.1	85
6.2.5 High- & medium-high-tech manufactures, %	40.3	20 ●
6.3 Knowledge diffusion	38.3	37
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	14.7	11 ●
6.3.3 Comm., computer & info. services exp., % total trade	0.1	135 ○
6.3.4 FDI net outflows, % GDP	2.0	36

7 Creative outputs	32.9	68
7.1 Intangible assets	37.9	103
7.1.1 Domestic res trademark app/bn PPP\$ GDP	42.3	62
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.0	71 ○
7.1.3 ICTs & business model creation†	59.8	53
7.1.4 ICTs & organizational model creation†	56.5	54
7.2 Creative goods & services	28.6	40
7.2.1 Cultural & creative services exports, % total trade	0.0	80
7.2.2 National feature films/mn pop. 15–69	0.9	73
7.2.3 Global ent. & media output/th pop. 15–69	0.3	38
7.2.4 Printing & publishing manufactures, %	0.0	87 ○
7.2.5 Creative goods exports, % total trade	10.6	3 ●
7.3 Online creativity	26.9	57
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.9	75
7.3.2 Country-code TLDs/th pop. 15–69	30.1	59
7.3.3 Wikipedia edits/pop. 15–69	2,306.9	76
7.3.4 Video uploads on YouTube/pop. 15–69	70.9	40

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	3.6
GDP (US\$ billions)	7.9
GDP per capita, PPP\$	3,736.1
Income group	Lower-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.7	43
Innovation Output Sub-Index	42.1	30
Innovation Input Sub-Index	39.4	80
Innovation Efficiency Ratio	1.1	1 ●
Global Innovation Index 2013 (out of 142)	40.9	45

1 Institutions	58.4	80
1.1 Political environment	55.5	75
1.1.1 Political stability*	66.3	70
1.1.2 Government effectiveness*	26.1	105
1.1.3 Press freedom*	74.0	46
1.2 Regulatory environment	55.9	101
1.2.1 Regulatory quality*	45.8	81
1.2.2 Rule of law*	36.5	80
1.2.3 Cost of redundancy dismissal, salary weeks	22.6	105
1.3 Business environment	63.7	74
1.3.1 Ease of starting a business*	88.6	48
1.3.2 Ease of resolving insolvency*	34.7	81
1.3.3 Ease of paying taxes*	67.9	80

2 Human capital & research	28.6	71
2.1 Education	55.8	21 ●
2.1.1 Expenditure on education, % GDP	8.4	4 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	37.9	6 ●
2.1.3 School life expectancy, years	11.8	90
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	9.6	21
2.2 Tertiary education	24.0	92
2.2.1 Tertiary enrolment, % gross	40.1	63
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	1.6	71
2.3 Research & development (R&D)	6.0	81
2.3.1 Researchers, headcounts/mn pop.	951.8	57
2.3.2 Gross expenditure on R&D, % GDP	0.4	70
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	31.9	88
3.1 Information & communication technologies (ICTs)	43.0	58
3.1.1 ICT access*	58.1	55
3.1.2 ICT use*	22.7	74
3.1.3 Government's online service*	51.6	62
3.1.4 E-participation*	39.5	38
3.2 General infrastructure	25.2	111
3.2.1 Electricity output, kWh/cap	1,625.3	82
3.2.2 Logistics performance*	28.6	123 ○
3.2.3 Gross capital formation, % GDP	24.1	61
3.3 Ecological sustainability	27.5	104
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.2	107 ○
3.3.2 Environmental performance*	53.4	67
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.6	79

4 Market sophistication	51.4	49
4.1 Credit	42.9	51
4.1.1 Ease of getting credit*	87.5	13
4.1.2 Domestic credit to private sector, % GDP	38.1	85
4.1.3 Microfinance gross loans, % GDP	2.4	22

4.2 Investment	35.6	66
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	0.2	88
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	75.7	68
4.3.1 Applied tariff rate, weighted mean, %	2.5	53
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	1 ●
4.3.3 Intensity of local competition†	55.8	113 ○

5 Business sophistication **26.8** **102**

5.1 Knowledge workers	36.0	81
5.1.1 Knowledge-intensive employment, %	31.3	42
5.1.2 Firms offering formal training, % firms	32.4	55
5.1.3 GERD performed by business, % GDP	0.1	62
5.1.4 GERD performed by business, %	19.0	65
5.1.5 GMAT test takers/mn pop. 20–34	81.5	56
5.2 Innovation linkages	18.7	132 ○
5.2.1 University/industry research collaboration†	28.0	123 ○
5.2.2 State of cluster development†	22.2	135 ○
5.2.3 GERD financed by abroad, %	9.4	43
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	48
5.3 Knowledge absorption	25.8	66
5.3.1 Royalty & license fees payments, % total trade	0.4	62
5.3.2 High-tech imports less re-imports, %	7.0	64
5.3.3 Comm., computer & info. services imp., % total trade	1.7	26
5.3.4 FDI net inflows, % GDP	2.3	79

6 Knowledge & technology outputs **40.8** **26**

6.1 Knowledge creation	48.0	16 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	7.7	14 ●
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.2	62
6.1.3 Domestic res utility model app./tr PPP\$ GDP	14.2	1 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	18.9	50
6.1.5 Citable documents H index	60.0	98
6.2 Knowledge impact	36.8	74
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.0	20 ●
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	10.9	47
6.2.5 High- & medium-high-tech manufactures, %	8.2	80 ○
6.3 Knowledge diffusion	37.6	40
6.3.1 Royalty & license fees receipts, % total trade	0.1	53
6.3.2 High-tech exports less re-exports, %	0.6	77
6.3.3 Comm., computer & info. services exp., % total trade	4.3	9 ●
6.3.4 FDI net outflows, % GDP	0.4	68

7 Creative outputs **43.3** **32**

7.1 Intangible assets	68.4	3 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	257.8	1 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	5.7	1 ●
7.1.3 ICTs & business model creation†	45.7	113 ○
7.1.4 ICTs & organizational model creation†	43.7	104
7.2 Creative goods & services	22.6	53
7.2.1 Cultural & creative services exports, % total trade	0.8	13 ●
7.2.2 National feature films/mn pop. 15–69	0.4	92 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	21
7.2.5 Creative goods exports, % total trade	0.1	97
7.3 Online creativity	14.0	80
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.8	79
7.3.2 Country-code TLDs/th pop. 15–69	30.9	58
7.3.3 Wikipedia edits/pop. 15–69	4,845.8	55
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Mongolia

Key indicators

Population (millions)	2.8
GDP (US\$ billions)	11.5
GDP per capita, PPP\$	5,885.2
Income group	Lower-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	37.5	56
Innovation Output Sub-Index	30.3	67
Innovation Input Sub-Index	44.8	51
Innovation Efficiency Ratio	0.7	94
Global Innovation Index 2013 (out of 142)	37.6	72

1	Institutions	62.5	63
1.1	Political environment	56.9	72
1.1.1	Political stability*	76.7	48
1.1.2	Government effectiveness*	24.0	110
1.1.3	Press freedom*	70.1	78
1.2	Regulatory environment	69.4	56
1.2.1	Regulatory quality*	44.5	86
1.2.2	Rule of law*	35.9	81
1.2.3	Cost of redundancy dismissal, salary weeks	8.7	25
1.3	Business environment	61.1	81
1.3.1	Ease of starting a business*	90.4	36
1.3.2	Ease of resolving insolvency*	22.9	115
1.3.3	Ease of paying taxes*	70.0	67
2	Human capital & research	26.9	79
2.1	Education	45.7	60
2.1.1	Expenditure on education, % GDP	5.5	44
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	16.4	75
2.1.3	School life expectancy, years	15.0	44
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	14.5	53
2.2	Tertiary education	31.0	74
2.2.1	Tertiary enrolment, % gross	61.1	34
2.2.2	Graduates in science & engineering, %	17.6	66
2.2.3	Tertiary inbound mobility, %	0.6	89
2.3	Research & development (R&D)	4.0	90
2.3.1	Researchers, headcounts/mn pop.	653.2	66
2.3.2	Gross expenditure on R&D, % GDP	0.3	78
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	42.0	48
3.1	Information & communication technologies (ICTs)	44.0	51
3.1.1	ICT access*	40.4	81
3.1.2	ICT use*	16.4	90
3.1.3	Government's online service*	58.8	45
3.1.4	E-participation*	60.5	24 ●
3.2	General infrastructure	58.4	7 ●
3.2.1	Electricity output, kWh/cap	1,697.5	81
3.2.2	Logistics performance*	25.4	132 ○
3.2.3	Gross capital formation, % GDP	56.5	1 ●
3.3	Ecological sustainability	23.5	125
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.2	104
3.3.2	Environmental performance*	44.7	96
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	119 ○
4	Market sophistication	57.2	33
4.1	Credit	61.6	16 ●
4.1.1	Ease of getting credit*	68.8	53
4.1.2	Domestic credit to private sector, % GDP	52.3	63
4.1.3	Microfinance gross loans, % GDP	17.3	1 ●

4.2	Investment	35.2	67
4.2.1	Ease of protecting investors*	66.7	21
4.2.2	Market capitalization, % GDP	12.6	84
4.2.3	Total value of stocks traded, % GDP	0.4	82
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	74.8	79
4.3.1	Applied tariff rate, weighted mean, %	5.1	84
4.3.2	Non-agricultural mkt access weighted tariff, %	0.3	39
4.3.3	Intensity of local competition†	60.0	94
5	Business sophistication	35.2	51
5.1	Knowledge workers	42.4	58
5.1.1	Knowledge-intensive employment, %	24.0	60
5.1.2	Firms offering formal training, % firms	61.0	7 ●
5.1.3	GERD performed by business, % GDP	0.0	77 ○
5.1.4	GERD performed by business, %	6.8	78 ○
5.1.5	GMAT test takers/mn pop. 20–34	138.2	39
5.2	Innovation linkages	23.5	113
5.2.1	University/industry research collaboration†	34.2	109
5.2.2	State of cluster development†	30.0	129 ○
5.2.3	GERD financed by abroad, %	3.9	67
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	19
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	42
5.3	Knowledge absorption	39.8	18 ●
5.3.1	Royalty & license fees payments, % total trade	0.1	99
5.3.2	High-tech imports less re-imports, %	5.0	99
5.3.3	Comm., computer & info. services imp., % total trade	1.1	60
5.3.4	FDI net inflows, % GDP	53.8	1 ●
6	Knowledge & technology outputs	24.2	89
6.1	Knowledge creation	47.8	17 ●
6.1.1	Domestic resident patent app/tr PPP\$ GDP	10.0	9 ●
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	82
6.1.3	Domestic res utility model app/tr PPP\$ GDP	11.6	1 ●
6.1.4	Scientific & technical articles/bn PPP\$ GDP	12.4	68
6.1.5	Citable documents H index	55.0	103
6.2	Knowledge impact	2.9	138 ○
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	0.7	126 ○
6.2.5	High- & medium-high-tech manufactures, %	4.2	88 ○
6.3	Knowledge diffusion	21.9	123
6.3.1	Royalty & license fees receipts, % total trade	0.0	82
6.3.2	High-tech exports less re-exports, %	0.3	90
6.3.3	Comm., computer & info. services exp., % total trade	0.3	112
6.3.4	FDI net outflows, % GDP	0.4	66
7	Creative outputs	36.4	54
7.1	Intangible assets	56.0	16 ●
7.1.1	Domestic res trademark app/bn PPP\$ GDP	294.6	1 ●
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.1	58
7.1.3	ICTs & business model creation†	51.3	89
7.1.4	ICTs & organizational model creation†	43.3	107
7.2	Creative goods & services	22.6	54
7.2.1	Cultural & creative services exports, % total trade	0.0	101 ○
7.2.2	National feature films/mn pop. 15–69	6.7	18 ●
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	14 ●
7.2.5	Creative goods exports, % total trade	0.0	116 ○
7.3	Online creativity	10.9	89
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.9	106
7.3.2	Country-code TLDs/th pop. 15–69	24.2	70
7.3.3	Wikipedia edits/pop. 15–69	4,504.6	58
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	0.6
GDP (US\$ billions)	4.4
GDP per capita, PPP\$	11,912.6
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	37.0	59
Innovation Output Sub-Index	28.4	74
Innovation Input Sub-Index	45.6	46
Innovation Efficiency Ratio	0.6	106 ○
Global Innovation Index 2013 (out of 142)	41.0	44

1 Institutions	68.1	51
1.1 Political environment	63.6	53
1.1.1 Political stability*	79.3	44
1.1.2 Government effectiveness*	44.3	61
1.1.3 Press freedom*	67.0	91
1.2 Regulatory environment	70.6	51
1.2.1 Regulatory quality*	49.1	73
1.2.2 Rule of law*	46.2	60
1.2.3 Cost of redundancy dismissal, salary weeks	11.2	46
1.3 Business environment	70.2	50
1.3.1 Ease of starting a business*	88.8	45
1.3.2 Ease of resolving insolvency*	51.3	39
1.3.3 Ease of paying taxes*	70.5	64

2 Human capital & research	40.7	37
2.1 Education	55.4	25 ●
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	15.2	40
2.1.4 PISA scales in reading, maths, & science	413.9	49 ○
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	56.0	13 ●
2.2.1 Tertiary enrolment, % gross	55.5	44
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	10.8	66
2.3.1 Researchers, headcounts/mn pop.	2,491.0	37
2.3.2 Gross expenditure on R&D, % GDP	0.4	69
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	34.2	78
3.1 Information & communication technologies (ICTs)	41.3	61
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	51.0	65
3.1.4 E-participation*	31.6	48
3.2 General infrastructure	26.2	105
3.2.1 Electricity output, kWh/cap	4,215.9	50
3.2.2 Logistics performance*	33.3	115 ○
3.2.3 Gross capital formation, % GDP	21.0	81
3.3 Ecological sustainability	35.2	71
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.6	74
3.3.2 Environmental performance*	55.5	58
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.2	45

4 Market sophistication	50.6	53
4.1 Credit	39.4	59
4.1.1 Ease of getting credit*	93.8	3 ●
4.1.2 Domestic credit to private sector, % GDP	52.7	62
4.1.3 Microfinance gross loans, % GDP	0.7	47

4.2 Investment	45.1	38
4.2.1 Ease of protecting investors*	63.3	32
4.2.2 Market capitalization, % GDP	90.4	17 ●
4.2.3 Total value of stocks traded, % GDP	1.0	66
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	67.2	121 ○
4.3.1 Applied tariff rate, weighted mean, %	3.5	61
4.3.2 Non-agricultural mkt access weighted tariff, %	1.4	84
4.3.3 Intensity of local competition†	47.8	127 ○

5 Business sophistication	34.4	58
5.1 Knowledge workers	38.5	70
5.1.1 Knowledge-intensive employment, %	37.2	27 ●
5.1.2 Firms offering formal training, % firms	25.2	78 ○
5.1.3 GERD performed by business, % GDP	0.1	57
5.1.4 GERD performed by business, %	22.3	63
5.1.5 GMAT test takers/mn pop. 20–34	149.9	36 ●
5.2 Innovation linkages	31.2	71
5.2.1 University/industry research collaboration†	50.0	43
5.2.2 State of cluster development†	36.2	113 ○
5.2.3 GERD financed by abroad, %	15.3	29
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	33
5.3 Knowledge absorption	33.6	33 ●
5.3.1 Royalty & license fees payments, % total trade	0.1	98 ○
5.3.2 High-tech imports less re-imports, %	4.5	108 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.8	17 ●
5.3.4 FDI net inflows, % GDP	12.4	10 ●

6 Knowledge & technology outputs	20.9	109 ○
6.1 Knowledge creation	18.3	58
6.1.1 Domestic resident patent app./tr PPP\$ GDP	5.1	26 ●
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.3	58
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	23.2	41
6.1.5 Citable documents H index	17.0	142 ○
6.2 Knowledge impact	16.4	121 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	14.1	33 ●
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	28.1	88
6.3.1 Royalty & license fees receipts, % total trade	0.0	73
6.3.2 High-tech exports less re-exports, %	0.4	82
6.3.3 Comm., computer & info. services exp., % total trade	2.0	41
6.3.4 FDI net outflows, % GDP	0.6	58

7 Creative outputs	35.9	57
7.1 Intangible assets	45.0	68
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.4	42
7.1.3 ICTs & business model creation†	56.0	68
7.1.4 ICTs & organizational model creation†	52.8	69
7.2 Creative goods & services	12.0	86
7.2.1 Cultural & creative services exports, % total trade	0.4	25 ●
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	85
7.3 Online creativity	41.5	34 ●
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	3.3	68
7.3.2 Country-code TLDs/th pop. 15–69	100.0	1 ●
7.3.3 Wikipedia edits/pop. 15–69	12,433.8	38
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Morocco

Key indicators

Population (millions)	32.5
GDP (US\$ billions)	105.1
GDP per capita, PPP\$	5,455.8
Income group	Lower-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.2	84
Innovation Output Sub-Index	26.5	86
Innovation Input Sub-Index	38.0	89
Innovation Efficiency Ratio	0.7	83
Global Innovation Index 2013 (out of 142)	30.9	92

1	Institutions	59.6	77
1.1	Political environment	51.7	82
1.1.1	Political stability*	54.4	93
1.1.2	Government effectiveness*	39.7	72
1.1.3	Press freedom*	61.0	111
1.2	Regulatory environment	59.1	91
1.2.1	Regulatory quality*	46.4	78
1.2.2	Rule of law*	41.0	71
1.2.3	Cost of redundancy dismissal, salary weeks	20.7	96
1.3	Business environment	68.0	58
1.3.1	Ease of starting a business*	89.4	41 ●
1.3.2	Ease of resolving insolvency*	40.6	61
1.3.3	Ease of paying taxes*	73.9	51
2	Human capital & research	29.7	64
2.1	Education	41.9	76
2.1.1	Expenditure on education, % GDP	5.4	48
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	30.7	22 ●
2.1.3	School life expectancy, years	11.6	94
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	18.7	78
2.2	Tertiary education	38.2	53
2.2.1	Tertiary enrolment, % gross	16.2	95
2.2.2	Graduates in science & engineering, %	34.9	7 ●
2.2.3	Tertiary inbound mobility, %	1.9	60
2.3	Research & development (R&D)	9.1	70
2.3.1	Researchers, headcounts/mn pop.	1,145.7	55
2.3.2	Gross expenditure on R&D, % GDP	0.7	48
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	39.6	58
3.1	Information & communication technologies (ICTs)	40.8	62
3.1.1	ICT access*	46.7	72
3.1.2	ICT use*	22.8	73
3.1.3	Government's online service*	54.3	53
3.1.4	E-participation*	39.5	38 ●
3.2	General infrastructure	41.7	38 ●
3.2.1	Electricity output, kWh/cap	770.7	96
3.2.2	Logistics performance*	56.3	50
3.2.3	Gross capital formation, % GDP	34.3	16 ●
3.3	Ecological sustainability	36.3	67
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.3	35 ●
3.3.2	Environmental performance*	51.9	73
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	103
4	Market sophistication	42.8	109
4.1	Credit	26.6	106
4.1.1	Ease of getting credit*	50.0	96
4.1.2	Domestic credit to private sector, % GDP	73.3	43 ●
4.1.3	Microfinance gross loans, % GDP	0.5	48

4.2	Investment	25.8	118 ○
4.2.1	Ease of protecting investors*	46.7	97
4.2.2	Market capitalization, % GDP	54.4	37
4.2.3	Total value of stocks traded, % GDP	3.6	53
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	63 ○
4.3	Trade & competition	76.0	61
4.3.1	Applied tariff rate, weighted mean, %	7.1	106
4.3.2	Non-agricultural mkt access weighted tariff, %	0.8	66
4.3.3	Intensity of local competition†	68.7	56

5	Business sophistication	18.2	134 ○
5.1	Knowledge workers	20.9	121 ○
5.1.1	Knowledge-intensive employment, %	6.8	104 ○
5.1.2	Firms offering formal training, % firms	24.7	80
5.1.3	GERD performed by business, % GDP	0.2	47
5.1.4	GERD performed by business, %	29.9	54
5.1.5	GMAT test takers/mn pop. 20–34	33.0	92
5.2	Innovation linkages	20.4	124 ○
5.2.1	University/industry research collaboration†	34.0	111 ○
5.2.2	State of cluster development†	49.5	57
5.2.3	GERD financed by abroad, %	1.7	74
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	87 ○
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	96 ○
5.3	Knowledge absorption	13.3	130 ○
5.3.1	Royalty & license fees payments, % total trade	0.1	92
5.3.2	High-tech imports less re-imports, %	n/a	n/a
5.3.3	Comm., computer & info. services imp., % total trade	0.4	107
5.3.4	FDI net inflows, % GDP	2.5	72

6	Knowledge & technology outputs	25.5	78
6.1	Knowledge creation	9.3	86
6.1.1	Domestic resident patent app/tr PPP\$ GDP	1.2	63
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.2	63
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	8.4	84
6.1.5	Citable documents H index	99.0	65
6.2	Knowledge impact	31.0	101
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.3	61
6.2.2	New businesses/th pop. 15–64	0.0	92 ○
6.2.3	Computer software spending, % GDP	0.3	57
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	3.6	80
6.2.5	High- & medium-high-tech manufactures, %	27.4	39
6.3	Knowledge diffusion	36.3	43 ●
6.3.1	Royalty & license fees receipts, % total trade	0.0	99 ○
6.3.2	High-tech exports less re-exports, %	n/a	n/a
6.3.3	Comm., computer & info. services exp., % total trade	2.8	21 ●
6.3.4	FDI net outflows, % GDP	0.4	71

7	Creative outputs	27.4	92
7.1	Intangible assets	38.8	97
7.1.1	Domestic res trademark app/bn PPP\$ GDP	88.8	22 ●
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.4	44
7.1.3	ICTs & business model creation†	52.8	83
7.1.4	ICTs & organizational model creation†	45.5	95
7.2	Creative goods & services	12.8	85
7.2.1	Cultural & creative services exports, % total trade	0.4	23 ●
7.2.2	National feature films/mn pop. 15–69	1.1	68
7.2.3	Global ent. & media output/th pop. 15–69	0.1	54 ○
7.2.4	Printing & publishing manufactures, %	0.0	70
7.2.5	Creative goods exports, % total trade	n/a	n/a
7.3	Online creativity	19.2	68
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	2.1	90
7.3.2	Country-code TLDs/th pop. 15–69	14.4	89
7.3.3	Wikipedia edits/pop. 15–69	967.8	98
7.3.4	Video uploads on YouTube/pop. 15–69	58.9	52 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	25.2
GDP (US\$ billions)	15.3
GDP per capita, PPP\$	1,089.8
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	28.5	107
Innovation Output Sub-Index	20.6	115
Innovation Input Sub-Index	36.4	96
Innovation Efficiency Ratio	0.6	124
Global Innovation Index 2013 (out of 142)	26.5	121

1	Institutions	49.2	110
1.1	Political environment	56.6	73
1.1.1	Political stability*	74.1	52 ●
1.1.2	Government effectiveness*	23.8	112
1.1.3	Press freedom*	72.0	60 ●
1.2	Regulatory environment	37.0	134 ○
1.2.1	Regulatory quality*	36.8	106
1.2.2	Rule of law*	29.9	99
1.2.3	Cost of redundancy dismissal, salary weeks	37.5	136 ○
1.3	Business environment	54.1	104
1.3.1	Ease of starting a business*	80.7	87
1.3.2	Ease of resolving insolvency*	17.5	126
1.3.3	Ease of paying taxes*	63.9	93
2	Human capital & research	20.5	101
2.1	Education	50.2	44 ●
2.1.1	Expenditure on education, % GDP	5.0	62
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	86.0	1 ●
2.1.3	School life expectancy, years	9.5	116
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	33.1	107 ○
2.2	Tertiary education	7.6	128 ○
2.2.1	Tertiary enrolment, % gross	4.9	124
2.2.2	Graduates in science & engineering, %	8.9	101 ○
2.2.3	Tertiary inbound mobility, %	0.3	98
2.3	Research & development (R&D)	3.6	91
2.3.1	Researchers, headcounts/mn pop.	66.3	109
2.3.2	Gross expenditure on R&D, % GDP	0.5	63
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	27.5	105
3.1	Information & communication technologies (ICTs)	17.2	120
3.1.1	ICT access*	16.9	131 ○
3.1.2	ICT use*	2.3	125
3.1.3	Government's online service*	36.6	101
3.1.4	E-participation*	13.2	84
3.2	General infrastructure	49.5	19 ●
3.2.1	Electricity output, kWh/cap	703.3	100
3.2.2	Logistics performance*	27.0	126
3.2.3	Gross capital formation, % GDP	48.7	3 ●
3.3	Ecological sustainability	15.9	140 ○
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.0	120 ○
3.3.2	Environmental performance*	30.0	130
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.6	80
4	Market sophistication	49.9	58 ●
4.1	Credit	17.3	130
4.1.1	Ease of getting credit*	43.8	112
4.1.2	Domestic credit to private sector, % GDP	25.3	107
4.1.3	Microfinance gross loans, % GDP	0.1	71

4.2	Investment	60.0	17 ●
4.2.1	Ease of protecting investors*	60.0	42 ●
4.2.2	Market capitalization, % GDP	n/a	n/a
4.2.3	Total value of stocks traded, % GDP	n/a	n/a
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	72.3	94
4.3.1	Applied tariff rate, weighted mean, %	4.8	80
4.3.2	Non-agricultural mkt access weighted tariff, %	0.0	21 ●
4.3.3	Intensity of local competition†	53.3	120
5	Business sophistication	35.0	54 ●
5.1	Knowledge workers	15.6	133 ○
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	22.0	87
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	1.2	142 ○
5.2	Innovation linkages	57.5	5 ●
5.2.1	University/industry research collaboration†	37.8	92
5.2.2	State of cluster development†	40.5	97
5.2.3	GERD financed by abroad, %	78.1	1 ●
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	33 ●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	31.8	37 ●
5.3.1	Royalty & license fees payments, % total trade	0.1	95
5.3.2	High-tech imports less re-imports, %	3.0	121 ○
5.3.3	Comm., computer & info. services imp., % total trade	1.0	62
5.3.4	FDI net inflows, % GDP	16.5	7 ●
6	Knowledge & technology outputs	26.9	69
6.1	Knowledge creation	4.2	122
6.1.1	Domestic resident patent app./tr PPP\$ GDP	1.0	67
6.1.2	PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app./tr PPP\$ GDP	0.1	55
6.1.4	Scientific & technical articles/bn PPP\$ GDP	5.0	109
6.1.5	Citable documents H index	53.0	106
6.2	Knowledge impact	51.9	22 ●
6.2.1	Growth rate of PPP\$ GDP/worker, %	4.5	13 ●
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	1.7	108
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	24.6	114
6.3.1	Royalty & license fees receipts, % total trade	0.1	67
6.3.2	High-tech exports less re-exports, %	1.6	57
6.3.3	Comm., computer & info. services exp., % total trade	0.6	99
6.3.4	FDI net outflows, % GDP	0.1	93
7	Creative outputs	14.3	136 ○
7.1	Intangible assets	27.4	131 ○
7.1.1	Domestic res trademark app./bn PPP\$ GDP	30.2	72
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.1	60
7.1.3	ICTs & business model creation†	43.8	118
7.1.4	ICTs & organizational model creation†	39.7	120
7.2	Creative goods & services	1.3	131
7.2.1	Cultural & creative services exports, % total trade	0.0	70
7.2.2	National feature films/mn pop. 15–69	0.1	100 ○
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.0	115
7.3	Online creativity	1.2	124
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.1	140 ○
7.3.2	Country-code TLDs/th pop. 15–69	3.5	115
7.3.3	Wikipedia edits/pop. 15–69	79.2	124
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Myanmar

Key indicators

Population (millions)	52.8
GDP (US\$ billions)	56.4
GDP per capita, PPP\$	1,739.8
Income group	Low income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	19.6	140
Innovation Output Sub-Index	16.3	133
Innovation Input Sub-Index	23.0	143 ○
Innovation Efficiency Ratio	0.7	80 ●
Global Innovation Index 2013 (out of 142)	30.5	n/a

1 Institutions	35.3	140
1.1 Political environment	32.5	137
1.1.1 Political stability*	42.1	117
1.1.2 Government effectiveness*	0.0	143 ○
1.1.3 Press freedom*	55.3	123
1.2 Regulatory environment	40.0	130
1.2.1 Regulatory quality*	0.0	143 ○
1.2.2 Rule of law*	9.1	140
1.2.3 Cost of redundancy dismissal, salary weeks	20.2	93 ●
1.3 Business environment	33.4	141
1.3.1 Ease of starting a business*	20.3	143 ○
1.3.2 Ease of resolving insolvency*	15.5	132
1.3.3 Ease of paying taxes*	64.3	91 ●

2 Human capital & research	17.4	112
2.1 Education	13.4	139
2.1.1 Expenditure on education, % GDP	0.8	132 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	8.6	122
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	34.1	110
2.2 Tertiary education	38.9	51 ●
2.2.1 Tertiary enrolment, % gross	13.8	98
2.2.2 Graduates in science & engineering, %	38.7	5 ●
2.2.3 Tertiary inbound mobility, %	0.0	113 ○
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	16.7	138
3.1 Information & communication technologies (ICTs)	6.8	142
3.1.1 ICT access*	16.2	134
3.1.2 ICT use*	0.4	135 ○
3.1.3 Government's online service*	10.5	141
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	22.9	123
3.2.1 Electricity output, kWh/cap	151.6	118
3.2.2 Logistics performance*	30.2	121
3.2.3 Gross capital formation, % GDP	23.3	69 ●
3.3 Ecological sustainability	20.5	132
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.3	78 ●
3.3.2 Environmental performance*	27.4	135
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.0	125

4 Market sophistication	36.9	135
4.1 Credit	12.5	140
4.1.1 Ease of getting credit*	25.0	134
4.1.2 Domestic credit to private sector, % GDP	4.7	141
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	23.3	128
4.2.1 Ease of protecting investors*	23.3	142 ○
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	74.9	76 ●
4.3.1 Applied tariff rate, weighted mean, %	3.2	59 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.9	70 ●
4.3.3 Intensity of local competition†	60.2	93

5 Business sophistication	8.8	143
5.1 Knowledge workers	3.3	143 ○
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	3.0	135
5.2 Innovation linkages	23.0	116
5.2.1 University/industry research collaboration†	17.7	136 ○
5.2.2 State of cluster development†	24.2	134
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	15 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	88
5.3 Knowledge absorption	0.0	143 ○
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	2.0	126 ○
5.3.3 Comm., computer & info. services imp., % total trade	n/a	n/a
5.3.4 FDI net inflows, % GDP	n/a	n/a

6 Knowledge & technology outputs	17.7	118
6.1 Knowledge creation	1.9	140
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	0.5	141
6.1.5 Citable documents H index	38.0	126
6.2 Knowledge impact	51.2	24 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.6	10 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.4	134
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	0.0	142 ○
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.0	126
6.3.3 Comm., computer & info. services exp., % total trade	n/a	n/a
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	14.8	134
7.1 Intangible assets	28.3	130
7.1.1 Domestic res trademark app/bn PPP\$ GDP	43.1	60 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	35.7	132
7.1.4 ICTs & organizational model creation†	32.7	128
7.2 Creative goods & services	2.4	121
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.7	80
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	109
7.3 Online creativity	0.1	138
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.1	139
7.3.2 Country-code TLDs/th pop. 15–69	0.3	136
7.3.3 Wikipedia edits/pop. 15–69	35.2	134
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.3
GDP (US\$ billions)	12.3
GDP per capita, PPP\$	8,191.1
Income group	Upper-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	28.5	108
Innovation Output Sub-Index	20.3	119
Innovation Input Sub-Index	36.7	95
Innovation Efficiency Ratio	0.6	125 ○
Global Innovation Index 2013 (out of 142)	28.4	109

1 Institutions	68.2	49
1.1 Political environment	73.5	38 ●
1.1.1 Political stability*	88.8	22 ●
1.1.2 Government effectiveness*	44.2	62
1.1.3 Press freedom*	87.5	17 ●
1.2 Regulatory environment	74.2	43 ●
1.2.1 Regulatory quality*	50.5	71
1.2.2 Rule of law*	52.9	54
1.2.3 Cost of redundancy dismissal, salary weeks	9.7	34 ●
1.3 Business environment	57.1	92
1.3.1 Ease of starting a business*	67.9	121
1.3.2 Ease of resolving insolvency*	37.0	74
1.3.3 Ease of paying taxes*	66.4	85

2 Human capital & research	19.3	104
2.1 Education	40.8	81
2.1.1 Expenditure on education, % GDP	8.4	5 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	15.8	80
2.1.3 School life expectancy, years	11.3	98
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	24.6	87
2.2 Tertiary education	15.0	112
2.2.1 Tertiary enrolment, % gross	9.3	113
2.2.2 Graduates in science & engineering, %	2.6	104 ○
2.2.3 Tertiary inbound mobility, %	10.2	16 ●
2.3 Research & development (R&D)	2.1	106
2.3.1 Researchers, headcounts/mn pop.	343.3	77
2.3.2 Gross expenditure on R&D, % GDP	0.1	97
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	25.8	113
3.1 Information & communication technologies (ICTs)	19.8	111
3.1.1 ICT access*	30.9	101
3.1.2 ICT use*	15.5	94
3.1.3 Government's online service*	30.1	120 ○
3.1.4 E-participation*	2.6	116 ○
3.2 General infrastructure	23.6	118
3.2.1 Electricity output, kWh/cap	616.4	103
3.2.2 Logistics performance*	41.3	89
3.2.3 Gross capital formation, % GDP	20.8	83
3.3 Ecological sustainability	34.0	76
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.8	27 ●
3.3.2 Environmental performance*	43.7	101
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	93

4 Market sophistication	44.4	96
4.1 Credit	27.9	101
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	48.4	71
4.1.3 Microfinance gross loans, % GDP	0.0	81 ○

4.2 Investment	28.1	108
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	10.2	89
4.2.3 Total value of stocks traded, % GDP	0.2	95 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	77.1	52
4.3.1 Applied tariff rate, weighted mean, %	1.1	9 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.7	63
4.3.3 Intensity of local competition†	59.8	95

5 Business sophistication	25.7	108
5.1 Knowledge workers	29.4	98
5.1.1 Knowledge-intensive employment, %	16.9	83
5.1.2 Firms offering formal training, % firms	44.5	36
5.1.3 GERD performed by business, % GDP	0.0	78 ○
5.1.4 GERD performed by business, %	12.8	72
5.1.5 GMAT test takers/mn pop. 20–34	26.7	99
5.2 Innovation linkages	24.5	106
5.2.1 University/industry research collaboration†	42.0	71
5.2.2 State of cluster development†	44.2	78
5.2.3 GERD financed by abroad, %	1.5	77
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	50
5.3 Knowledge absorption	23.0	83
5.3.1 Royalty & license fees payments, % total trade	0.1	108
5.3.2 High-tech imports less re-imports, %	6.7	74
5.3.3 Comm., computer & info. services imp., % total trade	0.5	90
5.3.4 FDI net inflows, % GDP	7.7	22 ●

6 Knowledge & technology outputs	12.7	137 ○
6.1 Knowledge creation	11.6	70
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.8	33 ●
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	7.3	86
6.1.5 Citable documents H index	55.0	103
6.2 Knowledge impact	4.7	132 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	0.9	67
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.7	107
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	21.7	125 ○
6.3.1 Royalty & license fees receipts, % total trade	0.0	110 ○
6.3.2 High-tech exports less re-exports, %	2.0	52
6.3.3 Comm., computer & info. services exp., % total trade	0.2	120 ○
6.3.4 FDI net outflows, % GDP	0.2	84

7 Creative outputs	27.9	89
7.1 Intangible assets	48.3	49
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	51.0	91
7.1.4 ICTs & organizational model creation†	45.5	95
7.2 Creative goods & services	10.3	93
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.8	76
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.4	63
7.3 Online creativity	4.8	112
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	11.0	47 ●
7.3.2 Country-code TLDs/th pop. 15–69	1.9	125 ○
7.3.3 Wikipedia edits/pop. 15–69	853.6	100
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Nepal

Key indicators

Population (millions)	27.5
GDP (US\$ billions)	19.3
GDP per capita, PPP\$	1,508.2
Income group	Low income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	23.8	136 ○
Innovation Output Sub-Index	15.7	135 ○
Innovation Input Sub-Index	31.8	121
Innovation Efficiency Ratio	0.5	134 ○
Global Innovation Index 2013 (out of 142)	25.0	128

1 Institutions	46.1	123
1.1 Political environment	37.2	132 ○
1.1.1 Political stability*	31.8	133 ○
1.1.2 Government effectiveness*	14.5	130 ○
1.1.3 Press freedom*	65.4	97
1.2 Regulatory environment	43.8	124
1.2.1 Regulatory quality*	27.6	123
1.2.2 Rule of law*	24.7	111
1.2.3 Cost of redundancy dismissal, salary weeks	27.2	118
1.3 Business environment	57.3	90
1.3.1 Ease of starting a business*	81.5	82
1.3.2 Ease of resolving insolvency*	26.0	109
1.3.3 Ease of paying taxes*	64.4	90

2 Human capital & research	15.5	119
2.1 Education	31.1	112
2.1.1 Expenditure on education, % GDP	4.7	69
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	12.2	91
2.1.3 School life expectancy, years	12.4	83
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	29.2	102
2.2 Tertiary education	12.6	121
2.2.1 Tertiary enrolment, % gross	14.5	97
2.2.2 Graduates in science & engineering, %	11.8	98 ○
2.2.3 Tertiary inbound mobility, %	0.0	112 ○
2.3 Research & development (R&D)	2.8	95
2.3.1 Researchers, headcounts/mn pop.	190.8	88
2.3.2 Gross expenditure on R&D, % GDP	0.3	75
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	23.2	119
3.1 Information & communication technologies (ICTs)	15.7	124
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	28.8	127
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	28.4	94
3.2.1 Electricity output, kWh/cap	108.6	120 ○
3.2.2 Logistics performance*	17.1	136 ○
3.2.3 Gross capital formation, % GDP	31.8	19 ●
3.3 Ecological sustainability	25.3	115
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.2	105
3.3.2 Environmental performance*	37.0	117
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	43.1	105
4.1 Credit	31.9	86
4.1.1 Ease of getting credit*	68.8	53 ●
4.1.2 Domestic credit to private sector, % GDP	55.1	58 ●
4.1.3 Microfinance gross loans, % GDP	0.8	42 ●

4.2 Investment	29.8	98
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	21.4	68
4.2.3 Total value of stocks traded, % GDP	0.3	87
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	67.6	118
4.3.1 Applied tariff rate, weighted mean, %	12.0	133 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	0.4	46 ●
4.3.3 Intensity of local competition†	58.5	103

5 Business sophistication	31.3	74
5.1 Knowledge workers	38.3	74
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	31.9	58
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	68.6	63 ●
5.2 Innovation linkages	28.0	86
5.2.1 University/industry research collaboration†	29.2	121
5.2.2 State of cluster development†	39.7	103
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	91
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	27.6	54 ●
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	8.9	44 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.6	31 ●
5.3.4 FDI net inflows, % GDP	0.5	126

6 Knowledge & technology outputs	11.2	141 ○
6.1 Knowledge creation	11.4	73 ●
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	10.2	73 ●
6.1.5 Citable documents H index	71.0	89
6.2 Knowledge impact	2.4	141 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	0.7	71
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.2	119
6.2.5 High- & medium-high-tech manufactures, %	1.4	95 ○
6.3 Knowledge diffusion	19.9	131 ○
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.1	114
6.3.3 Comm., computer & info. services exp., % total trade	2.4	28 ●
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	20.3	124
7.1 Intangible assets	29.6	129 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	20.8	83
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	41.0	125 ○
7.1.4 ICTs & organizational model creation†	39.8	118
7.2 Creative goods & services	16.1	77
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	48 ●
7.2.5 Creative goods exports, % total trade	0.4	66
7.3 Online creativity	5.6	107
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.6	114
7.3.2 Country-code TLDs/th pop. 15–69	14.9	87
7.3.3 Wikipedia edits/pop. 15–69	751.4	102
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	16.8
GDP (US\$ billions)	800.0
GDP per capita, PPP\$	41,710.7
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143).....	60.6	5 ●
Innovation Output Sub-Index	57.7	2 ●
Innovation Input Sub-Index	63.5	11
Innovation Efficiency Ratio	0.9	12
Global Innovation Index 2013 (out of 142)	61.1	4
1 Institutions.....	93.3	5 ●
1.1 Political environment.....	92.3	7
1.1.1 Political stability*.....	94.3	11
1.1.2 Government effectiveness*.....	88.9	8
1.1.3 Press freedom*.....	93.5	2 ●
1.2 Regulatory environment.....	97.2	4 ●
1.2.1 Regulatory quality*.....	94.6	9
1.2.2 Rule of law*.....	97.0	7
1.2.3 Cost of redundancy dismissal, salary weeks.....	8.7	25
1.3 Business environment.....	90.4	9
1.3.1 Ease of starting a business*.....	93.3	18
1.3.2 Ease of resolving insolvency*.....	94.5	5 ●
1.3.3 Ease of paying taxes*.....	83.3	24
2 Human capital & research.....	50.5	22
2.1 Education.....	58.2	11
2.1.1 Expenditure on education, % GDP.....	5.9	30
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap.....	25.9	33
2.1.3 School life expectancy, years.....	17.9	5
2.1.4 PISA scales in reading, maths, & science.....	518.8	10
2.1.5 Pupil-teacher ratio, secondary.....	13.6	45
2.2 Tertiary education.....	36.5	59 ○
2.2.1 Tertiary enrolment, % gross.....	76.4	14
2.2.2 Graduates in science & engineering, %.....	13.7	89 ○
2.2.3 Tertiary inbound mobility, %.....	4.9	35
2.3 Research & development (R&D).....	56.6	18
2.3.1 Researchers, headcounts/mn pop.....	4,979.6	21
2.3.2 Gross expenditure on R&D, % GDP.....	2.2	18
2.3.3 QS university ranking, average score top 3*.....	74.0	12
3 Infrastructure.....	58.7	12
3.1 Information & communication technologies (ICTs).....	88.0	2 ●
3.1.1 ICT access*.....	82.8	9
3.1.2 ICT use*.....	73.2	9
3.1.3 Government's online service*.....	96.1	5 ●
3.1.4 E-participation*.....	100.0	1 ●
3.2 General infrastructure.....	38.5	48
3.2.1 Electricity output, kWh/cap.....	6,098.6	34
3.2.2 Logistics performance*.....	95.6	5
3.2.3 Gross capital formation, % GDP.....	15.7	124 ○
3.3 Ecological sustainability.....	49.4	29
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq.....	7.8	40
3.3.2 Environmental performance*.....	77.8	11
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP.....	3.0	34
4 Market sophistication.....	63.6	19
4.1 Credit.....	64.1	14
4.1.1 Ease of getting credit*.....	62.5	69 ○
4.1.2 Domestic credit to private sector, % GDP.....	200.2	3 ●
4.1.3 Microfinance gross loans, % GDP.....	n/a	n/a

4.2 Investment	44.7	39
4.2.1 Ease of protecting investors*.....	46.7	97 ○
4.2.2 Market capitalization, % GDP.....	84.3	21
4.2.3 Total value of stocks traded, % GDP.....	57.1	14
4.2.4 Venture capital deals/tr PPP\$ GDP.....	0.1	20
4.3 Trade & competition	81.9	20
4.3.1 Applied tariff rate, weighted mean, %.....	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %.....	3.3	97 ○
4.3.3 Intensity of local competition [†]	83.3	4 ●
5 Business sophistication.....	51.3	11
5.1 Knowledge workers.....	66.9	15
5.1.1 Knowledge-intensive employment, %.....	45.9	8
5.1.2 Firms offering formal training, % firms.....	n/a	n/a
5.1.3 GERD performed by business, % GDP.....	1.2	19
5.1.4 GERD performed by business, %.....	56.6	28
5.1.5 GMAT test takers/mn pop. 20–34.....	319.1	14
5.2 Innovation linkages.....	46.6	23
5.2.1 University/industry research collaboration [†]	70.8	11
5.2.2 State of cluster development [†]	69.5	8
5.2.3 GERD financed by abroad, %.....	10.9	40 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP.....	0.0	42 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP.....	1.5	12
5.3 Knowledge absorption.....	40.4	16
5.3.1 Royalty & license fees payments, % total trade.....	3.1	4 ●
5.3.2 High-tech imports less re-imports, %.....	12.2	21
5.3.3 Comm., computer & info. services imp., % total trade.....	1.5	33
5.3.4 FDI net inflows, % GDP.....	–1.1	140 ○
6 Knowledge & technology outputs.....	53.8	9
6.1 Knowledge creation.....	57.4	8
6.1.1 Domestic resident patent app./tr PPP\$ GDP.....	3.4	34
6.1.2 PCT resident patent app./tr PPP\$ GDP.....	5.9	10
6.1.3 Domestic res utility model app./tr PPP\$ GDP.....	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP.....	48.6	11
6.1.5 Citable documents H index.....	576.0	8
6.2 Knowledge impact.....	50.1	27
6.2.1 Growth rate of PPP\$ GDP/worker, %.....	–0.2	91 ○
6.2.2 New businesses/th pop. 15–64.....	4.4	24
6.2.3 Computer software spending, % GDP.....	0.7	5
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP.....	16.4	28
6.2.5 High- & medium-high-tech manufactures, %.....	36.7	24
6.3 Knowledge diffusion.....	53.9	7
6.3.1 Royalty & license fees receipts, % total trade.....	4.7	3 ●
6.3.2 High-tech exports less re-exports, %.....	12.6	17
6.3.3 Comm., computer & info. services exp., % total trade.....	1.8	49
6.3.4 FDI net outflows, % GDP.....	–0.9	117 ○
7 Creative outputs.....	61.7	4 ●
7.1 Intangible assets.....	55.1	20
7.1.1 Domestic res trademark app./bn PPP\$ GDP.....	70.8	33
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP.....	1.8	18
7.1.3 ICTs & business model creation [†]	75.8	6
7.1.4 ICTs & organizational model creation [†]	73.5	5 ●
7.2 Creative goods & services.....	55.5	3 ●
7.2.1 Cultural & creative services exports, % total trade.....	0.5	22
7.2.2 National feature films/mn pop. 15–69.....	6.1	22
7.2.3 Global ent. & media output/th pop. 15–69.....	1.6	12
7.2.4 Printing & publishing manufactures, %.....	0.0	8
7.2.5 Creative goods exports, % total trade.....	5.9	9
7.3 Online creativity.....	81.1	2 ●
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69.....	89.0	8
7.3.2 Country-code TLDs/th pop. 15–69.....	82.4	2 ●
7.3.3 Wikipedia edits/pop. 15–69.....	33,562.3	7
7.3.4 Video uploads on YouTube/pop. 15–69.....	95.9	3

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

New Zealand

Key indicators

Population (millions)	4.4
GDP (US\$ billions)	181.3
GDP per capita, PPP\$	30,493.3
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	54.5	18
Innovation Output Sub-Index	46.6	18
Innovation Input Sub-Index	62.5	13
Innovation Efficiency Ratio	0.7	66
Global Innovation Index 2013 (out of 142)	59.4	17

1	Institutions	94.3	2 ●
1.1	Political environment	93.1	4 ●
1.1.1	Political stability*	99.0	3 ●
1.1.2	Government effectiveness*	88.7	9 ●
1.1.3	Press freedom*	91.6	6 ●
1.2	Regulatory environment	98.7	2 ●
1.2.1	Regulatory quality*	96.9	4 ●
1.2.2	Rule of law*	98.0	4 ●
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1
1.3	Business environment	91.1	8 ●
1.3.1	Ease of starting a business*	100.0	1 ●
1.3.2	Ease of resolving insolvency*	88.3	12
1.3.3	Ease of paying taxes*	85.2	21
2	Human capital & research	55.5	16
2.1	Education	62.2	6 ●
2.1.1	Expenditure on education, % GDP	7.4	9
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	23.2	49
2.1.3	School life expectancy, years	19.4	2 ●
2.1.4	PISA scales in reading, maths, & science	509.2	16
2.1.5	Pupil-teacher ratio, secondary	14.4	52
2.2	Tertiary education	55.5	14
2.2.1	Tertiary enrolment, % gross	80.8	10
2.2.2	Graduates in science & engineering, %	18.3	64 ○
2.2.3	Tertiary inbound mobility, %	15.6	11
2.3	Research & development (R&D)	48.9	22
2.3.1	Researchers, headcounts/mn pop.	6,366.2	12
2.3.2	Gross expenditure on R&D, % GDP	1.3	29
2.3.3	QS university ranking, average score top 3*	58.1	19
3	Infrastructure	52.1	24
3.1	Information & communication technologies (ICTs)	70.1	19
3.1.1	ICT access*	76.9	17
3.1.2	ICT use*	67.2	14
3.1.3	Government's online service*	78.4	21
3.1.4	E-participation*	57.9	25
3.2	General infrastructure	42.3	36
3.2.1	Electricity output, kWh/cap	9,946.5	13
3.2.2	Logistics performance*	71.8	30
3.2.3	Gross capital formation, % GDP	20.4	87 ○
3.3	Ecological sustainability	43.8	46
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.1	65 ○
3.3.2	Environmental performance*	76.4	16
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.7	50
4	Market sophistication	68.9	8 ●
4.1	Credit	71.1	7 ●
4.1.1	Ease of getting credit*	93.8	3
4.1.2	Domestic credit to private sector, % GDP	149.0	14
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	51.4	26
4.2.1	Ease of protecting investors*	96.7	1 ●
4.2.2	Market capitalization, % GDP	51.4	39
4.2.3	Total value of stocks traded, % GDP	12.8	35
4.2.4	Venture capital deals/tr PPP\$ GDP	0.1	25
4.3	Trade & competition	84.2	7 ●
4.3.1	Applied tariff rate, weighted mean, %	1.6	43
4.3.2	Non-agricultural mkt access weighted tariff, %	0.5	53
4.3.3	Intensity of local competition†	74.0	29
5	Business sophistication	41.5	33
5.1	Knowledge workers	55.7	31
5.1.1	Knowledge-intensive employment, %	42.9	15
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.6	32
5.1.4	GERD performed by business, %	45.4	40
5.1.5	GMAT test takers/mn pop. 20–34	165.3	30
5.2	Innovation linkages	34.1	60
5.2.1	University/industry research collaboration†	64.5	19
5.2.2	State of cluster development†	46.8	70
5.2.3	GERD financed by abroad, %	6.3	57 ○
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	32
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.4	27
5.3	Knowledge absorption	34.8	30
5.3.1	Royalty & license fees payments, % total trade	1.8	10
5.3.2	High-tech imports less re-imports, %	9.8	32
5.3.3	Comm., computer & info. services imp., % total trade	1.4	36
5.3.4	FDI net inflows, % GDP	2.7	67
6	Knowledge & technology outputs	45.3	17
6.1	Knowledge creation	56.6	9 ●
6.1.1	Domestic resident patent app/tr PPP\$ GDP	10.9	8
6.1.2	PCT resident patent app/tr PPP\$ GDP	2.3	19
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	58.4	6 ●
6.1.5	Citable documents H index	282.0	26
6.2	Knowledge impact	46.8	39
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.1	64 ○
6.2.2	New businesses/th pop. 15–64	15.1	1 ●
6.2.3	Computer software spending, % GDP	0.3	39 ○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	7.5	54
6.2.5	High- & medium-high-tech manufactures, %	15.1	63 ○
6.3	Knowledge diffusion	32.4	65
6.3.1	Royalty & license fees receipts, % total trade	0.5	24
6.3.2	High-tech exports less re-exports, %	1.6	58
6.3.3	Comm., computer & info. services exp., % total trade	1.0	85 ○
6.3.4	FDI net outflows, % GDP	–0.3	116 ○
7	Creative outputs	47.9	17
7.1	Intangible assets	53.3	26
7.1.1	Domestic res trademark app/bn PPP\$ GDP	121.3	10
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.2	52 ○
7.1.3	ICTs & business model creation†	71.2	16
7.1.4	ICTs & organizational model creation†	66.3	19
7.2	Creative goods & services	26.2	45
7.2.1	Cultural & creative services exports, % total trade	0.2	44
7.2.2	National feature films/mn pop. 15–69	8.0	16
7.2.3	Global ent. & media output/th pop. 15–69	1.5	16
7.2.4	Printing & publishing manufactures, %	0.0	35
7.2.5	Creative goods exports, % total trade	0.3	67 ○
7.3	Online creativity	58.6	20
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	41.1	21
7.3.2	Country-code TLDs/th pop. 15–69	69.4	12
7.3.3	Wikipedia edits/pop. 15–69	21,448.6	22
7.3.4	Video uploads on YouTube/pop. 15–69	87.4	15

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	6.0
GDP (US\$ billions)	11.3
GDP per capita, PPP\$	4,554.0
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.5	125
Innovation Output Sub-Index	17.7	130 ○
Innovation Input Sub-Index	33.2	108
Innovation Efficiency Ratio	0.5	129 ○
Global Innovation Index 2013 (out of 142)	27.1	115

1 Institutions	53.4	98
1.1 Political environment	48.5	93
1.1.1 Political stability*	56.7	85
1.1.2 Government effectiveness*	17.1	123
1.1.3 Press freedom*	71.7	64 ●
1.2 Regulatory environment	59.8	88
1.2.1 Regulatory quality*	40.9	94
1.2.2 Rule of law*	26.1	107
1.2.3 Cost of redundancy dismissal, salary weeks	14.9	67 ●
1.3 Business environment	52.0	110
1.3.1 Ease of starting a business*	72.3	112
1.3.2 Ease of resolving insolvency*	37.0	74
1.3.3 Ease of paying taxes*	46.7	124

2 Human capital & research	10.5	138 ○
2.1 Education	20.7	133 ○
2.1.1 Expenditure on education, % GDP	4.6	72
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	7.6	106 ○
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	30.8	106 ○
2.2 Tertiary education	n/a	n/a
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	0.2	128 ○
2.3.1 Researchers, headcounts/mn pop.	60.5	111 ○
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	28.1	101
3.1 Information & communication technologies (ICTs)	20.1	109
3.1.1 ICT access*	29.9	103
3.1.2 ICT use*	5.8	115
3.1.3 Government's online service*	31.4	117
3.1.4 E-participation*	13.2	84
3.2 General infrastructure	32.1	73
3.2.1 Electricity output, kWh/cap	651.6	102
3.2.2 Logistics performance*	36.9	102
3.2.3 Gross capital formation, % GDP	29.9	23 ●
3.3 Ecological sustainability	32.2	84
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.5	56 ●
3.3.2 Environmental performance*	50.3	81
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	108

4 Market sophistication	47.1	78
4.1 Credit	30.5	89
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	26.9	105
4.1.3 Microfinance gross loans, % GDP	2.7	20 ●

4.2 Investment	40.0	51 ●
4.2.1 Ease of protecting investors*	40.0	113
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	70.8	105
4.3.1 Applied tariff rate, weighted mean, %	2.3	51 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.3	43 ●
4.3.3 Intensity of local competition†	47.3	128 ○

5 Business sophistication **27.0** **101**

5.1 Knowledge workers	29.5	96
5.1.1 Knowledge-intensive employment, %	14.8	92
5.1.2 Firms offering formal training, % firms	35.2	50 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	12.8	116
5.2 Innovation linkages	27.5	88
5.2.1 University/industry research collaboration†	38.7	86
5.2.2 State of cluster development†	40.7	95
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	44 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	23.9	80
5.3.1 Royalty & license fees payments, % total trade	0.0	120 ○
5.3.2 High-tech imports less re-imports, %	7.0	65
5.3.3 Comm., computer & info. services imp., % total trade	0.6	82
5.3.4 FDI net inflows, % GDP	7.7	20 ●

6 Knowledge & technology outputs **12.1** **140** ○

6.1 Knowledge creation	2.6	135 ○
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.2	97
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.1	83
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	2.3	130 ○
6.1.5 Citable documents H index	45.0	116
6.2 Knowledge impact	3.8	134 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.7	106
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	29.8	79
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.1	106
6.3.3 Comm., computer & info. services exp., % total trade	1.3	75
6.3.4 FDI net outflows, % GDP	0.4	67

7 Creative outputs **23.4** **109**

7.1 Intangible assets	42.7	77
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	42.5	121 ○
7.1.4 ICTs & organizational model creation†	42.8	113
7.2 Creative goods & services	1.8	128 ○
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.3	93 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	105
7.3 Online creativity	6.4	103
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.9	77
7.3.2 Country-code TLDs/th pop. 15–69	13.9	90
7.3.3 Wikipedia edits/pop. 15–69	1,360.0	89
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Niger

Key indicators

Population (millions)	17.2
GDP (US\$ billions)	7.4
GDP per capita, PPP\$	828.9
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	24.3	131
Innovation Output Sub-Index	16.2	134
Innovation Input Sub-Index	32.3	118
Innovation Efficiency Ratio	0.5	132
Global Innovation Index 2013 (out of 142)	24.0	131

1 Institutions 49.6 **109**

1.1 Political environment	45.3	105
1.1.1 Political stability*	37.0	123
1.1.2 Government effectiveness*	22.1	115
1.1.3 Press freedom*	76.9	38 ●
1.2 Regulatory environment	62.6	82
1.2.1 Regulatory quality*	32.9	114
1.2.2 Rule of law*	26.1	108
1.2.3 Cost of redundancy dismissal, salary weeks	10.1	41 ●
1.3 Business environment	40.8	133
1.3.1 Ease of starting a business*	52.8	137
1.3.2 Ease of resolving insolvency*	15.8	131
1.3.3 Ease of paying taxes*	53.9	118

2 Human capital & research 11.8 **135**

2.1 Education	26.8	125
2.1.1 Expenditure on education, % GDP	4.2	85
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	49.2	3 ●
2.1.3 School life expectancy, years	5.4	128 ○
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	34.7	111
2.2 Tertiary education	8.7	126
2.2.1 Tertiary enrolment, % gross	1.8	132 ○
2.2.2 Graduates in science & engineering, %	4.3	102 ○
2.2.3 Tertiary inbound mobility, %	5.4	32 ●
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	9.8	119 ○
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure 28.8 **97**

3.1 Information & communication technologies (ICTs)	9.2	140
3.1.1 ICT access*	16.5	132
3.1.2 ICT use*	0.7	131 ○
3.1.3 Government's online service*	19.6	134
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	52.3	14 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	42.9	87
3.2.3 Gross capital formation, % GDP	36.0	12 ●
3.3 Ecological sustainability	24.9	119
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	36.3	120
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	97

4 Market sophistication 43.2 **104**

4.1 Credit	16.1	135
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	14.9	132
4.1.3 Microfinance gross loans, % GDP	0.1	72

4.2 Investment	33.3	76
4.2.1 Ease of protecting investors*	33.3	125
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	80.3	29 ●
4.3.1 Applied tariff rate, weighted mean, %	9.7	122
4.3.2 Non-agricultural mkt access weighted tariff, %	0.5	52 ●
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication 28.3 **92**

5.1 Knowledge workers	28.4	101
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	36.1	47
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	1.5	141 ○
5.2 Innovation linkages	17.4	135
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	41 ●
5.3 Knowledge absorption	39.1	19 ●
5.3.1 Royalty & license fees payments, % total trade	0.1	101
5.3.2 High-tech imports less re-imports, %	4.9	101
5.3.3 Comm., computer & info. services imp., % total trade	1.7	24 ●
5.3.4 FDI net inflows, % GDP	16.8	6 ●

6 Knowledge & technology outputs 31.3 **52 ●**

6.1 Knowledge creation	5.9	106
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.2	66
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.0	99
6.1.5 Citable documents H index	47.0	115
6.2 Knowledge impact	66.9	2 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	10.2	1 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.5	131
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	21.0	127
6.3.1 Royalty & license fees receipts, % total trade	0.0	111
6.3.2 High-tech exports less re-exports, %	0.2	92
6.3.3 Comm., computer & info. services exp., % total trade	0.7	90
6.3.4 FDI net outflows, % GDP	–3.6	123 ○

7 Creative outputs 1.1 **142 ○**

7.1 Intangible assets	n/a	n/a
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	1.5	130
7.2.1 Cultural & creative services exports, % total trade	0.0	95
7.2.2 National feature films/mn pop. 15–69	0.7	79
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	119
7.3 Online creativity	0.8	129
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.0	91
7.3.2 Country-code TLDs/th pop. 15–69	0.2	138
7.3.3 Wikipedia edits/pop. 15–69	12.8	141 ○
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	168.8
GDP (US\$ billions)	286.5
GDP per capita, PPP\$	2,831.5
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	27.8	110
Innovation Output Sub-Index	27.0	83
Innovation Input Sub-Index	28.6	133
Innovation Efficiency Ratio	0.9	8 ●
Global Innovation Index 2013 (out of 142)	26.6	120

1 Institutions	44.0	129
1.1 Political environment	31.8	138 ○
1.1.1 Political stability*	15.4	140 ○
1.1.2 Government effectiveness*	14.2	132
1.1.3 Press freedom*	65.9	94
1.2 Regulatory environment	52.7	108
1.2.1 Regulatory quality*	29.9	120
1.2.2 Rule of law*	13.9	135 ○
1.2.3 Cost of redundancy dismissal, salary weeks	16.2	77
1.3 Business environment	47.4	127
1.3.1 Ease of starting a business*	74.5	106
1.3.2 Ease of resolving insolvency*	29.5	95
1.3.3 Ease of paying taxes*	38.3	132

2 Human capital & research	12.2	134
2.1 Education	24.9	127
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	9.0	120
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	33.1	108
2.2 Tertiary education	9.8	123
2.2.1 Tertiary enrolment, % gross	10.4	107
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	1.9	108
2.3.1 Researchers, headcounts/mn pop.	119.7	99
2.3.2 Gross expenditure on R&D, % GDP	0.2	84
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	21.8	125
3.1 Information & communication technologies (ICTs)	19.4	112
3.1.1 ICT access*	19.9	122
3.1.2 ICT use*	17.2	88
3.1.3 Government's online service*	22.2	132
3.1.4 E-participation*	18.4	73
3.2 General infrastructure	25.0	113
3.2.1 Electricity output, kWh/cap	166.4	117 ○
3.2.2 Logistics performance*	33.3	115
3.2.3 Gross capital formation, % GDP	24.6	53 ●
3.3 Ecological sustainability	20.9	129
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.1	109
3.3.2 Environmental performance*	39.2	112
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	122 ○

4 Market sophistication	43.9	101
4.1 Credit	32.8	83
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	20.8	117
4.1.3 Microfinance gross loans, % GDP	0.4	49

4.2 Investment	25.7	119
4.2.1 Ease of protecting investors*	56.7	55 ●
4.2.2 Market capitalization, % GDP	21.5	66
4.2.3 Total value of stocks traded, % GDP	1.6	61
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	58
4.3 Trade & competition	73.1	90
4.3.1 Applied tariff rate, weighted mean, %	10.6	128
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	20 ●
4.3.3 Intensity of local competition†	65.2	73

5 Business sophistication	21.3	128
5.1 Knowledge workers	28.8	99
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	25.7	76
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	34.2	89
5.2 Innovation linkages	20.2	127
5.2.1 University/industry research collaboration†	38.2	89
5.2.2 State of cluster development†	48.3	62 ●
5.2.3 GERD financed by abroad, %	1.0	79
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	89
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	102
5.3 Knowledge absorption	14.8	124
5.3.1 Royalty & license fees payments, % total trade	0.3	70
5.3.2 High-tech imports less re-imports, %	3.0	122 ○
5.3.3 Comm., computer & info. services imp., % total trade	0.7	79
5.3.4 FDI net inflows, % GDP	3.6	59 ●

6 Knowledge & technology outputs	21.1	108
6.1 Knowledge creation	5.4	109
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	103
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	3.7	120
6.1.5 Citable documents H index	89.0	70
6.2 Knowledge impact	33.0	90
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.3	16 ●
6.2.2 New businesses/th pop. 15–64	0.9	63
6.2.3 Computer software spending, % GDP	0.2	71 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.1	142 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	24.8	111
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.1	109
6.3.3 Comm., computer & info. services exp., % total trade	0.1	137 ○
6.3.4 FDI net outflows, % GDP	0.6	61 ●

7 Creative outputs	32.8	69
7.1 Intangible assets	55.2	19 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	59.8	53 ●
7.1.4 ICTs & organizational model creation†	50.5	77
7.2 Creative goods & services	20.4	59 ●
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	11.2	9 ●
7.2.3 Global ent. & media output/th pop. 15–69	0.0	56 ○
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	96
7.3 Online creativity	0.6	131
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.7	113
7.3.2 Country-code TLDs/th pop. 15–69	1.7	127
7.3.3 Wikipedia edits/pop. 15–69	62.0	129
7.3.4 Video uploads on YouTube/pop. 15–69	0.0	64 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Norway

Key indicators

Population (millions)	5.0
GDP (US\$ billions)	511.3
GDP per capita, PPP\$	54,946.7
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	55.6	14
Innovation Output Sub-Index	48.8	14
Innovation Input Sub-Index	62.4	14
Innovation Efficiency Ratio	0.8	51
Global Innovation Index 2013 (out of 142)	55.6	16

1	Institutions	94.1	3 ●
1.1	Political environment	94.2	2 ●
1.1.1	Political stability*	97.7	7
1.1.2	Government effectiveness*	91.4	5 ●
1.1.3	Press freedom*	93.5	3 ●
1.2	Regulatory environment	96.5	7
1.2.1	Regulatory quality*	88.8	16
1.2.2	Rule of law*	100.0	1 ●
1.2.3	Cost of redundancy dismissal, salary weeks	8.7	25
1.3	Business environment	91.6	5 ●
1.3.1	Ease of starting a business*	91.0	30
1.3.2	Ease of resolving insolvency*	96.7	2 ●
1.3.3	Ease of paying taxes*	87.2	15
2	Human capital & research	52.6	19
2.1	Education	55.5	23
2.1.1	Expenditure on education, % GDP	6.9	15
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	27.3	30
2.1.3	School life expectancy, years	17.6	6
2.1.4	PISA scales in reading, maths, & science	495.9	23
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	41.6	39
2.2.1	Tertiary enrolment, % gross	73.1	22
2.2.2	Graduates in science & engineering, %	16.8	70 ○
2.2.3	Tertiary inbound mobility, %	7.2	25
2.3	Research & development (R&D)	60.8	14
2.3.1	Researchers, headcounts/mn pop.	9,219.3	5 ●
2.3.2	Gross expenditure on R&D, % GDP	1.7	24
2.3.3	QS university ranking, average score top 3*	58.3	18
3	Infrastructure	63.9	3 ●
3.1	Information & communication technologies (ICTs)	77.9	11
3.1.1	ICT access*	77.2	16
3.1.2	ICT use*	80.5	4 ●
3.1.3	Government's online service*	85.6	13
3.1.4	E-participation*	68.4	15
3.2	General infrastructure	63.9	3 ●
3.2.1	Electricity output, kWh/cap	29,237.6	1 ●
3.2.2	Logistics performance*	82.1	21
3.2.3	Gross capital formation, % GDP	26.3	39
3.3	Ecological sustainability	49.9	26
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.0	37
3.3.2	Environmental performance*	78.0	10
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	3.0	33
4	Market sophistication	57.9	31
4.1	Credit	45.0	46
4.1.1	Ease of getting credit*	62.5	69 ○
4.1.2	Domestic credit to private sector, % GDP	86.2	38
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	44.3	40
4.2.1	Ease of protecting investors*	66.7	21
4.2.2	Market capitalization, % GDP	50.6	40
4.2.3	Total value of stocks traded, % GDP	26.6	28
4.2.4	Venture capital deals/tr PPP\$ GDP	0.1	18
4.3	Trade & competition	84.5	6
4.3.1	Applied tariff rate, weighted mean, %	0.5	4 ●
4.3.2	Non-agricultural mkt access weighted tariff, %	0.5	49
4.3.3	Intensity of local competition [†]	72.3	37
5	Business sophistication	43.2	28
5.1	Knowledge workers	63.4	21
5.1.1	Knowledge-intensive employment, %	46.0	7
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.9	25
5.1.4	GERD performed by business, %	52.4	34
5.1.5	GMAT test takers/mn pop. 20–34	290.4	19
5.2	Innovation linkages	43.5	34
5.2.1	University/industry research collaboration [†]	68.0	13
5.2.2	State of cluster development [†]	66.8	14
5.2.3	GERD financed by abroad, %	7.8	50 ○
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	30
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.8	22
5.3	Knowledge absorption	22.8	86 ○
5.3.1	Royalty & license fees payments, % total trade	0.3	68 ○
5.3.2	High-tech imports less re-imports, %	5.9	86 ○
5.3.3	Comm., computer & info. services imp., % total trade	1.7	25
5.3.4	FDI net inflows, % GDP	1.5	99 ○
6	Knowledge & technology outputs	40.1	28
6.1	Knowledge creation	40.2	23
6.1.1	Domestic resident patent app/tr PPP\$ GDP	3.7	32
6.1.2	PCT resident patent app/tr PPP\$ GDP	2.4	18
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	38.8	18
6.1.5	Citable documents H index	327.0	20
6.2	Knowledge impact	47.0	38
6.2.1	Growth rate of PPP\$ GDP/worker, %	2.2	51 ○
6.2.2	New businesses/th pop. 15–64	7.8	14
6.2.3	Computer software spending, % GDP	0.6	18
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	5.8	62 ○
6.2.5	High- & medium-high-tech manufactures, %	21.6	51 ○
6.3	Knowledge diffusion	33.1	60
6.3.1	Royalty & license fees receipts, % total trade	0.2	36
6.3.2	High-tech exports less re-exports, %	3.0	42
6.3.3	Comm., computer & info. services exp., % total trade	1.3	68 ○
6.3.4	FDI net outflows, % GDP	6.2	10
7	Creative outputs	57.5	5 ●
7.1	Intangible assets	51.1	37
7.1.1	Domestic res trademark app/bn PPP\$ GDP	59.9	42
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	1.2	27
7.1.3	ICTs & business model creation [†]	73.7	11
7.1.4	ICTs & organizational model creation [†]	71.8	8
7.2	Creative goods & services	54.7	4 ●
7.2.1	Cultural & creative services exports, % total trade	0.3	30
7.2.2	National feature films/mn pop. 15–69	10.0	12
7.2.3	Global ent. & media output/th pop. 15–69	3.3	1 ●
7.2.4	Printing & publishing manufactures, %	0.1	6
7.2.5	Creative goods exports, % total trade	0.5	54
7.3	Online creativity	73.1	3 ●
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	60.6	16
7.3.2	Country-code TLDs/th pop. 15–69	69.3	13
7.3.3	Wikipedia edits/pop. 15–69	43,209.9	2 ●
7.3.4	Video uploads on YouTube/pop. 15–69	89.1	11

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	3.3
GDP (US\$ billions)	80.6
GDP per capita, PPP\$	29,813.2
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	33.9	75
Innovation Output Sub-Index	24.9	96
Innovation Input Sub-Index	42.8	59
Innovation Efficiency Ratio	0.6	121
Global Innovation Index 2013 (out of 142)	33.3	80

1	Institutions	70.8	43
1.1	Political environment	61.2	58
1.1.1	Political stability*	77.1	47
1.1.2	Government effectiveness*	47.9	58
1.1.3	Press freedom*	58.5	116
1.2	Regulatory environment	80.9	31 ●
1.2.1	Regulatory quality*	61.2	51
1.2.2	Rule of law*	62.5	41 ●
1.2.3	Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3	Business environment	70.3	49
1.3.1	Ease of starting a business*	80.6	88
1.3.2	Ease of resolving insolvency*	39.5	64
1.3.3	Ease of paying taxes*	90.7	9 ●
2	Human capital & research	28.3	73
2.1	Education	33.4	103
2.1.1	Expenditure on education, % GDP	4.3	80
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	15.9	79
2.1.3	School life expectancy, years	13.6	63
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	45.8	32 ●
2.2.1	Tertiary enrolment, % gross	28.1	78
2.2.2	Graduates in science & engineering, %	38.9	4 ●
2.2.3	Tertiary inbound mobility, %	2.4	56
2.3	Research & development (R&D)	5.5	83
2.3.1	Researchers, headcounts/mn pop.	478.1	71
2.3.2	Gross expenditure on R&D, % GDP	0.1	99
2.3.3	QS university ranking, average score top 3*	9.4	59
3	Infrastructure	39.8	57
3.1	Information & communication technologies (ICTs)	52.4	38 ●
3.1.1	ICT access*	57.4	57
3.1.2	ICT use*	40.7	45
3.1.3	Government's online service*	66.7	35 ●
3.1.4	E-participation*	44.7	36 ●
3.2	General infrastructure	42.2	37 ●
3.2.1	Electricity output, kWh/cap	7,675.1	24 ●
3.2.2	Logistics performance*	50.8	62
3.2.3	Gross capital formation, % GDP	28.0	29 ●
3.3	Ecological sustainability	24.8	120
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.9	113 ○
3.3.2	Environmental performance*	47.8	89
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.7	71
4	Market sophistication	48.1	72
4.1	Credit	34.3	75
4.1.1	Ease of getting credit*	56.3	81
4.1.2	Domestic credit to private sector, % GDP	41.2	80
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	29.9	97
4.2.1	Ease of protecting investors*	50.0	81
4.2.2	Market capitalization, % GDP	27.5	60
4.2.3	Total value of stocks traded, % GDP	3.6	54
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	80.2	30 ●
4.3.1	Applied tariff rate, weighted mean, %	3.2	58
4.3.2	Non-agricultural mkt access weighted tariff, %	0.7	64
4.3.3	Intensity of local competition†	70.0	50
5	Business sophistication	27.2	100
5.1	Knowledge workers	19.2	126 ○
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.0	74 ○
5.1.4	GERD performed by business, %	23.9	60
5.1.5	GMAT test takers/mn pop. 20–34	31.7	95
5.2	Innovation linkages	53.4	10 ●
5.2.1	University/industry research collaboration†	50.0	43
5.2.2	State of cluster development†	54.5	34 ●
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.2	1 ●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	58
5.3	Knowledge absorption	8.9	139 ○
5.3.1	Royalty & license fees payments, % total trade	n/a	n/a
5.3.2	High-tech imports less re-imports, %	3.4	119 ○
5.3.3	Comm., computer & info. services imp., % total trade	0.2	132 ○
5.3.4	FDI net inflows, % GDP	1.1	110
6	Knowledge & technology outputs	21.2	105
6.1	Knowledge creation	5.3	111
6.1.1	Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	91
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	5.3	106
6.1.5	Citable documents H index	63.0	93
6.2	Knowledge impact	32.8	92
6.2.1	Growth rate of PPP\$ GDP/worker, %	2.4	47
6.2.2	New businesses/th pop. 15–64	0.0	92 ○
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	4.0	75
6.2.5	High- & medium-high-tech manufactures, %	14.9	64
6.3	Knowledge diffusion	25.6	107
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	0.4	85
6.3.3	Comm., computer & info. services exp., % total trade	0.2	126 ○
6.3.4	FDI net outflows, % GDP	0.8	51
7	Creative outputs	28.6	83
7.1	Intangible assets	47.4	52
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.0	68 ○
7.1.3	ICTs & business model creation†	62.0	48
7.1.4	ICTs & organizational model creation†	56.5	54
7.2	Creative goods & services	2.6	120 ○
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	0.0	101 ○
7.2.3	Global ent. & media output/th pop. 15–69	0.3	39
7.2.4	Printing & publishing manufactures, %	0.0	88 ○
7.2.5	Creative goods exports, % total trade	0.0	118 ○
7.3	Online creativity	17.0	72
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	3.0	74
7.3.2	Country-code TLDs/th pop. 15–69	6.1	110
7.3.3	Wikipedia edits/pop. 15–69	1,139.3	94
7.3.4	Video uploads on YouTube/pop. 15–69	56.8	54

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Pakistan

Key indicators

Population (millions)	179.2
GDP (US\$ billions)	238.7
GDP per capita, PPP\$	3,149.4
Income group	Lower-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	24.0	134 ○
Innovation Output Sub-Index	22.6	107
Innovation Input Sub-Index	25.4	139 ○
Innovation Efficiency Ratio	0.9	16 ●
Global Innovation Index 2013 (out of 142)	23.3	137

1 Institutions	40.1	135 ○
1.1 Political environment	22.8	141 ○
1.1.1 Political stability*	0.0	143 ○
1.1.2 Government effectiveness*	19.8	120
1.1.3 Press freedom*	48.7	131 ○
1.2 Regulatory environment	43.5	125
1.2.1 Regulatory quality*	29.8	121
1.2.2 Rule of law*	21.3	122
1.2.3 Cost of redundancy dismissal, salary weeks	27.2	118
1.3 Business environment	53.9	107
1.3.1 Ease of starting a business*	78.2	96
1.3.2 Ease of resolving insolvency*	40.0	63 ●
1.3.3 Ease of paying taxes*	43.5	128

2 Human capital & research	9.8	139 ○
2.1 Education	10.7	141 ○
2.1.1 Expenditure on education, % GDP	2.1	128 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	7.7	125 ○
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	41.9	115 ○
2.2 Tertiary education	8.9	124
2.2.1 Tertiary enrolment, % gross	9.5	111
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	9.8	68
2.3.1 Researchers, headcounts/mn pop.	294.9	80
2.3.2 Gross expenditure on R&D, % GDP	0.3	74
2.3.3 QS university ranking, average score top 3*	19.6	52 ●

3 Infrastructure	22.2	124
3.1 Information & communication technologies (ICTs)	19.8	110
3.1.1 ICT access*	25.6	109
3.1.2 ICT use*	3.8	121
3.1.3 Government's online service*	36.6	101
3.1.4 E-participation*	13.2	84
3.2 General infrastructure	18.4	134 ○
3.2.1 Electricity output, kWh/cap	538.9	106
3.2.2 Logistics performance*	48.4	69
3.2.3 Gross capital formation, % GDP	14.2	131 ○
3.3 Ecological sustainability	28.5	98
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.1	82
3.3.2 Environmental performance*	34.6	124
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	35.8	140 ○
4.1 Credit	22.6	119
4.1.1 Ease of getting credit*	62.5	69
4.1.2 Domestic credit to private sector, % GDP	16.4	126
4.1.3 Microfinance gross loans, % GDP	0.1	69

4.2 Investment	28.6	107
4.2.1 Ease of protecting investors*	63.3	32 ●
4.2.2 Market capitalization, % GDP	18.9	75
4.2.3 Total value of stocks traded, % GDP	5.2	49 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	65
4.3 Trade & competition	56.2	135 ○
4.3.1 Applied tariff rate, weighted mean, %	9.5	121
4.3.2 Non-agricultural mkt access weighted tariff, %	6.8	135 ○
4.3.3 Intensity of local competition†	64.8	76

5 Business sophistication	19.3	133 ○
5.1 Knowledge workers	17.5	129
5.1.1 Knowledge-intensive employment, %	19.5	74
5.1.2 Firms offering formal training, % firms	4.5	106 ○
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	19.3	110
5.2 Innovation linkages	20.1	128
5.2.1 University/industry research collaboration†	37.5	94
5.2.2 State of cluster development†	49.2	59 ●
5.2.3 GERD financed by abroad, %	0.9	82
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	101 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	103
5.3 Knowledge absorption	20.3	99
5.3.1 Royalty & license fees payments, % total trade	0.4	60
5.3.2 High-tech imports less re-imports, %	7.8	57 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.0	61 ●
5.3.4 FDI net inflows, % GDP	0.4	130

6 Knowledge & technology outputs	21.9	101
6.1 Knowledge creation	10.0	79
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.2	91
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	10.6	71
6.1.5 Citable documents H index	111.0	56 ●
6.2 Knowledge impact	29.7	105
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.9	71
6.2.2 New businesses/th pop. 15–64	0.0	91
6.2.3 Computer software spending, % GDP	0.3	55
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.9	78
6.2.5 High- & medium-high-tech manufactures, %	23.7	45
6.3 Knowledge diffusion	26.0	103
6.3.1 Royalty & license fees receipts, % total trade	0.0	89
6.3.2 High-tech exports less re-exports, %	0.8	73
6.3.3 Comm., computer & info. services exp., % total trade	1.5	59 ●
6.3.4 FDI net outflows, % GDP	0.0	97

7 Creative outputs	23.2	110
7.1 Intangible assets	36.0	110
7.1.1 Domestic res trademark app/bn PPP\$ GDP	28.0	76
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	49.7	95
7.1.4 ICTs & organizational model creation†	47.5	89
7.2 Creative goods & services	19.0	63 ●
7.2.1 Cultural & creative services exports, % total trade	0.1	55
7.2.2 National feature films/mn pop. 15–69	0.3	95 ○
7.2.3 Global ent. & media output/th pop. 15–69	0.0	59 ○
7.2.4 Printing & publishing manufactures, %	0.0	91 ○
7.2.5 Creative goods exports, % total trade	4.3	12 ●
7.3 Online creativity	1.9	119
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.6	115
7.3.2 Country-code TLDs/th pop. 15–69	4.4	114
7.3.3 Wikipedia edits/pop. 15–69	467.2	107
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	3.8
GDP (US\$ billions)	40.3
GDP per capita, PPP\$	16,658.1
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	38.3	52
Innovation Output Sub-Index	35.2	42
Innovation Input Sub-Index	41.4	64
Innovation Efficiency Ratio	0.9	20 ●
Global Innovation Index 2013 (out of 142)	31.8	86
1 Institutions	59.7	75
1.1 Political environment	59.4	64
1.1.1 Political stability*	61.9	80
1.1.2 Government effectiveness*	49.2	56
1.1.3 Press freedom*	67.1	90
1.2 Regulatory environment	64.6	79
1.2.1 Regulatory quality*	59.0	57
1.2.2 Rule of law*	40.0	72
1.2.3 Cost of redundancy dismissal, salary weeks	18.1	86
1.3 Business environment	55.0	101
1.3.1 Ease of starting a business*	90.8	33
1.3.2 Ease of resolving insolvency*	29.1	99
1.3.3 Ease of paying taxes*	45.1	126 ○
2 Human capital & research	25.1	86
2.1 Education	33.9	100
2.1.1 Expenditure on education, % GDP	3.5	98
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	10.3	97 ○
2.1.3 School life expectancy, years	12.4	81
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	14.2	49
2.2 Tertiary education	39.5	50
2.2.1 Tertiary enrolment, % gross	41.8	60
2.2.2 Graduates in science & engineering, %	22.0	39
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	1.8	109
2.3.1 Researchers, headcounts/mn pop.	136.2	95
2.3.2 Gross expenditure on R&D, % GDP	0.2	88
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	40.5	54
3.1 Information & communication technologies (ICTs)	39.4	65
3.1.1 ICT access*	55.1	62
3.1.2 ICT use*	24.6	71
3.1.3 Government's online service*	46.4	79
3.1.4 E-participation*	31.6	48
3.2 General infrastructure	36.5	56
3.2.1 Electricity output, kWh/cap	2,200.8	76
3.2.2 Logistics performance*	52.4	61
3.2.3 Gross capital formation, % GDP	28.6	25 ●
3.3 Ecological sustainability	45.6	39
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	12.1	6 ●
3.3.2 Environmental performance*	56.8	55
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	101
4 Market sophistication	44.1	100
4.1 Credit	36.3	66
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	89.6	35
4.1.3 Microfinance gross loans, % GDP	0.9	38

4.2 Investment	31.8	85
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	34.6	55
4.2.3 Total value of stocks traded, % GDP	0.3	85
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	64.2	126 ○
4.3.1 Applied tariff rate, weighted mean, %	7.6	110
4.3.2 Non-agricultural mkt access weighted tariff, %	4.6	131 ○
4.3.3 Intensity of local competition†	66.2	68
5 Business sophistication	37.7	42
5.1 Knowledge workers	19.4	124
5.1.1 Knowledge-intensive employment, %	24.4	56
5.1.2 Firms offering formal training, % firms	8.6	103 ○
5.1.3 GERD performed by business, % GDP	0.0	86 ○
5.1.4 GERD performed by business, %	0.2	85 ○
5.1.5 GMAT test takers/mn pop. 20–34	67.4	64
5.2 Innovation linkages	49.6	18 ●
5.2.1 University/industry research collaboration†	54.2	41
5.2.2 State of cluster development†	50.0	55
5.2.3 GERD financed by abroad, %	49.5	6 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	43
5.3 Knowledge absorption	44.0	9 ●
5.3.1 Royalty & license fees payments, % total trade	0.2	87
5.3.2 High-tech imports less re-imports, %	21.3	4 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.2	128 ○
5.3.4 FDI net inflows, % GDP	9.3	15 ●
6 Knowledge & technology outputs	25.4	79
6.1 Knowledge creation	5.4	110
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.4	82
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	57
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.1	57 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.6	103
6.1.5 Citable documents H index	106.0	60
6.2 Knowledge impact	29.3	109
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	14.1	5 ●
6.2.3 Computer software spending, % GDP	0.3	60
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	2.0	99
6.2.5 High- & medium-high-tech manufactures, %	5.2	85 ○
6.3 Knowledge diffusion	41.6	28
6.3.1 Royalty & license fees receipts, % total trade	0.0	71
6.3.2 High-tech exports less re-exports, %	19.4	5 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.9	45
6.3.4 FDI net outflows, % GDP	1.0	48
7 Creative outputs	45.0	27
7.1 Intangible assets	51.3	35
7.1.1 Domestic res trademark app/bn PPP\$ GDP	80.0	28
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	64.3	36
7.1.4 ICTs & organizational model creation†	58.5	45
7.2 Creative goods & services	46.9	9 ●
7.2.1 Cultural & creative services exports, % total trade	0.1	54
7.2.2 National feature films/mn pop. 15–69	0.4	90 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.1	7 ●
7.2.5 Creative goods exports, % total trade	4.7	11 ●
7.3 Online creativity	30.4	48
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	67.3	14 ●
7.3.2 Country-code TLDs/th pop. 15–69	20.2	79
7.3.3 Wikipedia edits/pop. 15–69	2,261.7	77
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Paraguay

Key indicators

Population (millions)	6.7
GDP (US\$ billions)	28.3
GDP per capita, PPP\$	6,823.2
Income group	Lower-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	31.6	89
Innovation Output Sub-Index	27.2	79
Innovation Input Sub-Index	36.0	99
Innovation Efficiency Ratio	0.8	63
Global Innovation Index 2013 (out of 142)	30.3	100

1	Institutions	47.9	116
1.1	Political environment	44.4	112
1.1.1	Political stability*	45.1	113
1.1.2	Government effectiveness*	16.8	125
1.1.3	Press freedom*	71.2	74
1.2	Regulatory environment	47.5	119
1.2.1	Regulatory quality*	40.4	97
1.2.2	Rule of law*	22.3	118
1.2.3	Cost of redundancy dismissal, salary weeks	26.1	115
1.3	Business environment	51.8	113
1.3.1	Ease of starting a business*	76.4	101
1.3.2	Ease of resolving insolvency*	16.1	130
1.3.3	Ease of paying taxes*	62.9	94
2	Human capital & research	25.3	83
2.1	Education	40.5	84
2.1.1	Expenditure on education, % GDP	4.8	67
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	17.0	72
2.1.3	School life expectancy, years	11.9	89
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	8.9	14 ●
2.2	Tertiary education	34.5	64
2.2.1	Tertiary enrolment, % gross	34.5	72
2.2.2	Graduates in science & engineering, %	n/a	n/a
2.2.3	Tertiary inbound mobility, %	n/a	n/a
2.3	Research & development (R&D)	0.9	119
2.3.1	Researchers, headcounts/mn pop.	195.2	87
2.3.2	Gross expenditure on R&D, % GDP	0.1	110 ○
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	27.6	104
3.1	Information & communication technologies (ICTs)	27.3	96
3.1.1	ICT access*	36.0	91
3.1.2	ICT use*	11.7	101
3.1.3	Government's online service*	45.8	82
3.1.4	E-participation*	15.8	79
3.2	General infrastructure	27.5	100
3.2.1	Electricity output, kWh/cap	8,771.1	18 ●
3.2.2	Logistics performance*	34.5	110
3.2.3	Gross capital formation, % GDP	16.6	119
3.3	Ecological sustainability	28.0	102
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.6	53 ●
3.3.2	Environmental performance*	39.3	111
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	99
4	Market sophistication	50.2	57 ●
4.1	Credit	43.2	49 ●
4.1.1	Ease of getting credit*	56.3	81
4.1.2	Domestic credit to private sector, % GDP	41.3	79
4.1.3	Microfinance gross loans, % GDP	4.9	10 ●

4.2	Investment	28.9	103
4.2.1	Ease of protecting investors*	56.7	55
4.2.2	Market capitalization, % GDP	3.8	105 ○
4.2.3	Total value of stocks traded, % GDP	0.2	90
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	78.4	39 ●
4.3.1	Applied tariff rate, weighted mean, %	4.5	79
4.3.2	Non-agricultural mkt access weighted tariff, %	1.0	73
4.3.3	Intensity of local competition†	69.7	54 ●
5	Business sophistication	29.1	86
5.1	Knowledge workers	27.3	103
5.1.1	Knowledge-intensive employment, %	15.4	88
5.1.2	Firms offering formal training, % firms	51.7	24 ●
5.1.3	GERD performed by business, % GDP	0.0	85 ○
5.1.4	GERD performed by business, %	0.8	82 ○
5.1.5	GMAT test takers/mn pop. 20–34	9.5	122
5.2	Innovation linkages	28.9	84
5.2.1	University/industry research collaboration†	29.3	120
5.2.2	State of cluster development†	36.0	115
5.2.3	GERD financed by abroad, %	16.9	24 ●
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	31.1	40 ●
5.3.1	Royalty & license fees payments, % total trade	0.0	117 ○
5.3.2	High-tech imports less re-imports, %	19.9	6 ●
5.3.3	Comm., computer & info. services imp., % total trade	0.0	136 ○
5.3.4	FDI net inflows, % GDP	1.6	98
6	Knowledge & technology outputs	17.5	121
6.1	Knowledge creation	3.0	132 ○
6.1.1	Domestic resident patent app/tr PPP\$ GDP	0.5	77
6.1.2	PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	1.4	136 ○
6.1.5	Citable documents H index	45.0	116
6.2	Knowledge impact	12.9	122
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	5.6	63
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	36.5	42 ●
6.3.1	Royalty & license fees receipts, % total trade	2.4	10 ●
6.3.2	High-tech exports less re-exports, %	0.5	79
6.3.3	Comm., computer & info. services exp., % total trade	0.1	130 ○
6.3.4	FDI net outflows, % GDP	0.4	72
7	Creative outputs	36.9	50 ●
7.1	Intangible assets	67.9	4 ●
7.1.1	Domestic res trademark app/bn PPP\$ GDP	347.6	1 ●
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	53.8	79
7.1.4	ICTs & organizational model creation†	49.8	82
7.2	Creative goods & services	3.2	117
7.2.1	Cultural & creative services exports, % total trade	0.0	99 ○
7.2.2	National feature films/mn pop. 15–69	1.3	66
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	0.1	101
7.3	Online creativity	8.6	98
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	2.2	87
7.3.2	Country-code TLDs/th pop. 15–69	20.3	78
7.3.3	Wikipedia edits/pop. 15–69	1,957.3	82
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	30.0
GDP (US\$ billions)	206.5
GDP per capita, PPP\$	11,123.7
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	34.7	73
Innovation Output Sub-Index	26.6	85
Innovation Input Sub-Index	42.8	60
Innovation Efficiency Ratio	0.6	107
Global Innovation Index 2013 (out of 142)	36.0	69

1	Institutions	61.1	68
1.1	Political environment	49.8	89
1.1.1	Political stability*	44.6	114
1.1.2	Government effectiveness*	36.7	81
1.1.3	Press freedom*	68.1	84
1.2	Regulatory environment	69.3	58
1.2.1	Regulatory quality*	61.6	50
1.2.2	Rule of law*	29.5	100
1.2.3	Cost of redundancy dismissal, salary weeks	11.4	47
1.3	Business environment	64.2	72
1.3.1	Ease of starting a business*	86.3	63
1.3.2	Ease of resolving insolvency*	29.3	97
1.3.3	Ease of paying taxes*	76.9	43
2	Human capital & research	27.2	76
2.1	Education	30.4	116
2.1.1	Expenditure on education, % GDP	2.8	115 ○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	10.1	98 ○
2.1.3	School life expectancy, years	13.1	72
2.1.4	PISA scales in reading, maths, & science	375.1	61 ○
2.1.5	Pupil-teacher ratio, secondary	16.8	69
2.2	Tertiary education	42.8	37 ●
2.2.1	Tertiary enrolment, % gross	42.6	59
2.2.2	Graduates in science & engineering, %	n/a	n/a
2.2.3	Tertiary inbound mobility, %	n/a	n/a
2.3	Research & development (R&D)	8.4	72
2.3.1	Researchers, headcounts/mn pop.	181.2	89
2.3.2	Gross expenditure on R&D, % GDP	0.1	96
2.3.3	QS university ranking, average score top 3*	20.6	50
3	Infrastructure	38.2	63
3.1	Information & communication technologies (ICTs)	36.5	72
3.1.1	ICT access*	38.5	88
3.1.2	ICT use*	16.3	92
3.1.3	Government's online service*	51.6	62
3.1.4	E-participation*	39.5	38
3.2	General infrastructure	34.8	62
3.2.1	Electricity output, kWh/cap	1,334.1	86
3.2.2	Logistics performance*	52.8	59
3.2.3	Gross capital formation, % GDP	27.9	30 ●
3.3	Ecological sustainability	43.3	48
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	12.9	3 ●
3.3.2	Environmental performance*	45.1	95
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.9	65
4	Market sophistication	58.5	29 ●
4.1	Credit	50.5	33 ●
4.1.1	Ease of getting credit*	81.3	27 ●
4.1.2	Domestic credit to private sector, % GDP	27.3	104
4.1.3	Microfinance gross loans, % GDP	5.0	9 ●

4.2	Investment	42.8	45
4.2.1	Ease of protecting investors*	70.0	16 ●
4.2.2	Market capitalization, % GDP	49.1	41
4.2.3	Total value of stocks traded, % GDP	2.5	59
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	82.4	13 ●
4.3.1	Applied tariff rate, weighted mean, %	1.5	40
4.3.2	Non-agricultural mkt access weighted tariff, %	0.2	33 ●
4.3.3	Intensity of local competition†	68.3	58
5	Business sophistication	29.1	88
5.1	Knowledge workers	38.5	72
5.1.1	Knowledge-intensive employment, %	15.3	90
5.1.2	Firms offering formal training, % firms	57.0	12 ●
5.1.3	GERD performed by business, % GDP	0.0	70
5.1.4	GERD performed by business, %	29.2	55
5.1.5	GMAT test takers/mn pop. 20–34	69.9	62
5.2	Innovation linkages	23.5	114
5.2.1	University/industry research collaboration†	35.7	105
5.2.2	State of cluster development†	40.3	98
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	105 ○
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	101 ○
5.3	Knowledge absorption	25.2	71
5.3.1	Royalty & license fees payments, % total trade	0.5	53
5.3.2	High-tech imports less re-imports, %	8.4	51
5.3.3	Comm., computer & info. services imp., % total trade	0.8	70
5.3.4	FDI net inflows, % GDP	4.7	45
6	Knowledge & technology outputs	20.2	112
6.1	Knowledge creation	4.4	119
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.2	96 ○
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.0	100 ○
6.1.3	Domestic res utility model app./tr PPP\$ GDP	0.4	41
6.1.4	Scientific & technical articles/bn PPP\$ GDP	2.1	133 ○
6.1.5	Citable documents H index	109.0	57
6.2	Knowledge impact	35.0	81
6.2.1	Growth rate of PPP\$ GDP/worker, %	4.5	14 ●
6.2.2	New businesses/th pop. 15–64	3.8	28 ●
6.2.3	Computer software spending, % GDP	0.3	61
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.9	88
6.2.5	High- & medium-high-tech manufactures, %	10.0	75
6.3	Knowledge diffusion	21.4	126 ○
6.3.1	Royalty & license fees receipts, % total trade	0.0	91
6.3.2	High-tech exports less re-exports, %	0.4	83
6.3.3	Comm., computer & info. services exp., % total trade	0.3	113
6.3.4	FDI net outflows, % GDP	0.0	110 ○
7	Creative outputs	33.1	66
7.1	Intangible assets	44.8	69
7.1.1	Domestic res trademark app./bn PPP\$ GDP	56.0	47
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	55.8	70
7.1.4	ICTs & organizational model creation†	56.8	53
7.2	Creative goods & services	17.3	72
7.2.1	Cultural & creative services exports, % total trade	0.1	61
7.2.2	National feature films/mn pop. 15–69	0.4	91 ○
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	17 ●
7.2.5	Creative goods exports, % total trade	0.3	71
7.3	Online creativity	25.4	59
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	4.8	61
7.3.2	Country-code TLDs/th pop. 15–69	20.8	75
7.3.3	Wikipedia edits/pop. 15–69	3,190.1	68
7.3.4	Video uploads on YouTube/pop. 15–69	70.4	41

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Philippines

Key indicators

Population (millions)	96.7
GDP (US\$ billions)	272.0
GDP per capita, PPP\$	4,682.0
Income group	Lower-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	29.9	100
Innovation Output Sub-Index	26.8	84
Innovation Input Sub-Index	32.9	110
Innovation Efficiency Ratio	0.8	35 ●
Global Innovation Index 2013 (out of 142)	35.5	90

1 Institutions	49.6	108
1.1 Political environment	45.7	104
1.1.1 Political stability*	37.3	121
1.1.2 Government effectiveness*	42.9	64
1.1.3 Press freedom*	56.9	120
1.2 Regulatory environment	50.1	115
1.2.1 Regulatory quality*	47.3	75
1.2.2 Rule of law*	31.4	94
1.2.3 Cost of redundancy dismissal, salary weeks	27.4	124 ○
1.3 Business environment	53.0	109
1.3.1 Ease of starting a business*	65.0	125 ○
1.3.2 Ease of resolving insolvency*	31.7	89
1.3.3 Ease of paying taxes*	62.3	95

2 Human capital & research	15.2	121
2.1 Education	20.8	132 ○
2.1.1 Expenditure on education, % GDP	2.7	117 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	9.1	101 ○
2.1.3 School life expectancy, years	11.3	101
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	34.8	112 ○
2.2 Tertiary education	14.3	113
2.2.1 Tertiary enrolment, % gross	28.2	77
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	0.1	108 ○
2.3 Research & development (R&D)	10.5	67
2.3.1 Researchers, headcounts/mn pop.	129.3	97
2.3.2 Gross expenditure on R&D, % GDP	0.1	102 ○
2.3.3 QS university ranking, average score top 3*	28.0	45 ●

3 Infrastructure	30.0	94
3.1 Information & communication technologies (ICTs)	29.9	90
3.1.1 ICT access*	34.1	95
3.1.2 ICT use*	14.6	95
3.1.3 Government's online service*	49.7	68
3.1.4 E-participation*	21.1	65
3.2 General infrastructure	25.1	112
3.2.1 Electricity output, kWh/cap	729.3	98
3.2.2 Logistics performance*	56.0	52
3.2.3 Gross capital formation, % GDP	18.6	107
3.3 Ecological sustainability	35.0	72
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.5	32 ●
3.3.2 Environmental performance*	44.0	99
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.3	57

4 Market sophistication	44.8	93
4.1 Credit	23.0	118
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	33.4	92
4.1.3 Microfinance gross loans, % GDP	0.2	56

4.2 Investment	34.0	73
4.2.1 Ease of protecting investors*	43.3	105
4.2.2 Market capitalization, % GDP	105.5	14 ●
4.2.3 Total value of stocks traded, % GDP	13.9	32 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	38
4.3 Trade & competition	77.6	47 ●
4.3.1 Applied tariff rate, weighted mean, %	4.8	81
4.3.2 Non-agricultural mkt access weighted tariff, %	0.8	68
4.3.3 Intensity of local competition†	67.8	60

5 Business sophistication	25.1	113
5.1 Knowledge workers	33.6	87
5.1.1 Knowledge-intensive employment, %	22.5	64
5.1.2 Firms offering formal training, % firms	31.1	61
5.1.3 GERD performed by business, % GDP	0.1	67
5.1.4 GERD performed by business, %	56.9	26 ●
5.1.5 GMAT test takers/mn pop. 20–34	15.5	112
5.2 Innovation linkages	26.2	97
5.2.1 University/industry research collaboration†	43.0	67
5.2.2 State of cluster development†	50.5	52
5.2.3 GERD financed by abroad, %	4.1	65
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	34 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	87
5.3 Knowledge absorption	15.4	123
5.3.1 Royalty & license fees payments, % total trade	0.7	42 ●
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.5	96
5.3.4 FDI net inflows, % GDP	1.1	111

6 Knowledge & technology outputs	27.1	68
6.1 Knowledge creation	10.4	76
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.4	84
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	93
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.6	21
6.1.4 Scientific & technical articles/bn PPP\$ GDP	2.1	131 ○
6.1.5 Citable documents H index	116.0	54
6.2 Knowledge impact	30.8	103
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.5	45
6.2.2 New businesses/th pop. 15–64	0.3	81
6.2.3 Computer software spending, % GDP	0.3	53
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.5	67
6.2.5 High- & medium-high-tech manufactures, %	16.3	60
6.3 Knowledge diffusion	40.2	31 ●
6.3.1 Royalty & license fees receipts, % total trade	0.0	92
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	3.6	15 ●
6.3.4 FDI net outflows, % GDP	0.7	53

7 Creative outputs	26.5	98
7.1 Intangible assets	40.7	88
7.1.1 Domestic res trademark app/bn PPP\$ GDP	39.2	64
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.0	64
7.1.3 ICTs & business model creation†	63.3	41 ●
7.1.4 ICTs & organizational model creation†	63.7	26 ●
7.2 Creative goods & services	4.4	112
7.2.1 Cultural & creative services exports, % total trade	0.1	62
7.2.2 National feature films/mn pop. 15–69	1.3	63
7.2.3 Global ent. & media output/th pop. 15–69	0.1	51 ○
7.2.4 Printing & publishing manufactures, %	0.0	90 ○
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	20.1	66
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.5	100
7.3.2 Country-code TLDs/th pop. 15–69	10.1	103
7.3.3 Wikipedia edits/pop. 15–69	2,190.9	79
7.3.4 Video uploads on YouTube/pop. 15–69	65.1	48

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	38.5
GDP (US\$ billions)	516.1
GDP per capita, PPP\$	21,214.3
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.6	45
Innovation Output Sub-Index	34.0	48
Innovation Input Sub-Index	47.3	40
Innovation Efficiency Ratio	0.7	76
Global Innovation Index 2013 (out of 142)	40.1	49

1 Institutions	74.7	35
1.1 Political environment	78.8	27
1.1.1 Political stability*	90.9	18 ●
1.1.2 Government effectiveness*	58.6	42
1.1.3 Press freedom*	86.9	20 ●
1.2 Regulatory environment	74.4	42
1.2.1 Regulatory quality*	73.9	34
1.2.2 Rule of law*	66.9	38
1.2.3 Cost of redundancy dismissal, salary weeks	18.8	88
1.3 Business environment	71.1	42
1.3.1 Ease of starting a business*	85.9	66
1.3.2 Ease of resolving insolvency*	58.0	33
1.3.3 Ease of paying taxes*	69.3	72
2 Human capital & research	37.9	43
2.1 Education	54.0	33
2.1.1 Expenditure on education, % GDP	5.2	53
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	24.7	43
2.1.3 School life expectancy, years	15.5	34
2.1.4 PISA scales in reading, maths, & science	520.5	9 ●
2.1.5 Pupil-teacher ratio, secondary	8.7	12 ●
2.2 Tertiary education	34.0	67
2.2.1 Tertiary enrolment, % gross	73.2	21 ●
2.2.2 Graduates in science & engineering, %	16.8	69
2.2.3 Tertiary inbound mobility, %	1.2	79 ○
2.3 Research & development (R&D)	25.7	38
2.3.1 Researchers, headcounts/mn pop.	2,636.4	33
2.3.2 Gross expenditure on R&D, % GDP	0.9	37
2.3.3 QS university ranking, average score top 3*	31.9	39
3 Infrastructure	41.9	49
3.1 Information & communication technologies (ICTs)	46.3	50
3.1.1 ICT access*	64.6	42
3.1.2 ICT use*	48.4	35
3.1.3 Government's online service*	53.6	56
3.1.4 E-participation*	18.4	73
3.2 General infrastructure	35.1	61
3.2.1 Electricity output, kWh/cap	4,202.9	51
3.2.2 Logistics performance*	72.2	29
3.2.3 Gross capital formation, % GDP	20.2	90
3.3 Ecological sustainability	44.5	43
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.3	46
3.3.2 Environmental performance*	69.5	30
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.5	38
4 Market sophistication	48.2	70
4.1 Credit	37.0	64
4.1.1 Ease of getting credit*	93.8	3 ●
4.1.2 Domestic credit to private sector, % GDP	53.8	61
4.1.3 Microfinance gross loans, % GDP	0.1	76 ○

4.2 Investment	31.2	90
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	36.3	54
4.2.3 Total value of stocks traded, % GDP	13.7	33
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	55 ○
4.3 Trade & competition	76.5	57
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	72.5	36

5 Business sophistication	33.7	64
5.1 Knowledge workers	50.6	40
5.1.1 Knowledge-intensive employment, %	35.1	33
5.1.2 Firms offering formal training, % firms	60.5	8 ●
5.1.3 GERD performed by business, % GDP	0.3	41
5.1.4 GERD performed by business, %	37.2	49
5.1.5 GMAT test takers/mn pop. 20–34	32.7	93
5.2 Innovation linkages	24.8	103 ○
5.2.1 University/industry research collaboration†	42.3	70
5.2.2 State of cluster development†	40.2	99 ○
5.2.3 GERD financed by abroad, %	13.3	35
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	95 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	49
5.3 Knowledge absorption	25.8	67
5.3.1 Royalty & license fees payments, % total trade	1.0	28
5.3.2 High-tech imports less re-imports, %	8.9	43
5.3.3 Comm., computer & info. services imp., % total trade	1.1	55
5.3.4 FDI net inflows, % GDP	0.6	123 ○

6 Knowledge & technology outputs	31.2	53
6.1 Knowledge creation	25.2	41
6.1.1 Domestic resident patent app/tr PPP\$ GDP	5.6	23
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	51
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.2	30
6.1.4 Scientific & technical articles/bn PPP\$ GDP	26.6	36
6.1.5 Citable documents H index	302.0	23
6.2 Knowledge impact	37.7	71
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.1	54
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	0.3	48
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	12.8	37
6.2.5 High- & medium-high-tech manufactures, %	33.8	30
6.3 Knowledge diffusion	30.7	75
6.3.1 Royalty & license fees receipts, % total trade	0.1	55
6.3.2 High-tech exports less re-exports, %	4.7	33
6.3.3 Comm., computer & info. services exp., % total trade	1.3	69
6.3.4 FDI net outflows, % GDP	0.3	75

7 Creative outputs	36.7	51
7.1 Intangible assets	34.1	118 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	53.2	52
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.5	40
7.1.3 ICTs & business model creation†	48.3	102 ○
7.1.4 ICTs & organizational model creation†	46.0	92
7.2 Creative goods & services	34.7	29
7.2.1 Cultural & creative services exports, % total trade	1.1	6 ●
7.2.2 National feature films/mn pop. 15–69	1.8	55
7.2.3 Global ent. & media output/th pop. 15–69	0.3	34
7.2.4 Printing & publishing manufactures, %	0.0	64 ○
7.2.5 Creative goods exports, % total trade	4.2	14 ●
7.3 Online creativity	44.1	32
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	8.7	51
7.3.2 Country-code TLDs/th pop. 15–69	60.2	19 ●
7.3.3 Wikipedia edits/pop. 15–69	14,003.0	36
7.3.4 Video uploads on YouTube/pop. 15–69	83.7	21

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Portugal

Key indicators

Population (millions)	10.5
GDP (US\$ billions)	220.0
GDP per capita, PPP\$	23,068.4
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	45.6	32
Innovation Output Sub-Index	38.7	36
Innovation Input Sub-Index	52.6	29
Innovation Efficiency Ratio	0.7	73
Global Innovation Index 2013 (out of 142)	45.1	34

1 Institutions	77.3	28
1.1 Political environment	78.6	28
1.1.1 Political stability*	84.0	35
1.1.2 Government effectiveness*	68.5	30
1.1.3 Press freedom*	83.3	26
1.2 Regulatory environment	71.1	47
1.2.1 Regulatory quality*	70.0	37
1.2.2 Rule of law*	74.9	27
1.2.3 Cost of redundancy dismissal, salary weeks	23.1	107 ○
1.3 Business environment	82.2	17 ●
1.3.1 Ease of starting a business*	95.7	11 ●
1.3.2 Ease of resolving insolvency*	75.8	21
1.3.3 Ease of paying taxes*	74.9	48

2 Human capital & research	51.3	21
2.1 Education	58.7	9 ●
2.1.1 Expenditure on education, % GDP	5.6	40
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	36.5	8 ●
2.1.3 School life expectancy, years	16.3	20
2.1.4 PISA scales in reading, maths, & science	488.0	29
2.1.5 Pupil-teacher ratio, secondary	7.3	1 ●
2.2 Tertiary education	42.0	38
2.2.1 Tertiary enrolment, % gross	65.9	27
2.2.2 Graduates in science & engineering, %	24.6	30
2.2.3 Tertiary inbound mobility, %	2.9	53
2.3 Research & development (R&D)	53.1	19
2.3.1 Researchers, headcounts/mn pop.	9,477.1	4 ●
2.3.2 Gross expenditure on R&D, % GDP	1.5	26
2.3.3 QS university ranking, average score top 3*	36.4	36

3 Infrastructure	46.6	32
3.1 Information & communication technologies (ICTs)	54.2	36
3.1.1 ICT access*	70.0	33
3.1.2 ICT use*	44.5	40
3.1.3 Government's online service*	65.4	38
3.1.4 E-participation*	36.8	42
3.2 General infrastructure	30.2	83
3.2.1 Electricity output, kWh/cap	4,279.7	48
3.2.2 Logistics performance*	75.0	27
3.2.3 Gross capital formation, % GDP	14.7	128 ○
3.3 Ecological sustainability	55.4	13 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	10.1	16 ●
3.3.2 Environmental performance*	75.8	17 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	4.8	25

4 Market sophistication	53.2	45
4.1 Credit	55.2	23
4.1.1 Ease of getting credit*	50.0	96 ○
4.1.2 Domestic credit to private sector, % GDP	184.2	8 ●
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	31.6	88
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	30.8	58
4.2.3 Total value of stocks traded, % GDP	12.5	36
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	39
4.3 Trade & competition	72.8	93 ○
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	65.0	74

5 Business sophistication	34.5	56
5.1 Knowledge workers	46.6	50
5.1.1 Knowledge-intensive employment, %	31.0	44
5.1.2 Firms offering formal training, % firms	31.9	58
5.1.3 GERD performed by business, % GDP	0.7	27
5.1.4 GERD performed by business, %	47.0	38
5.1.5 GMAT test takers/mn pop. 20–34	288.1	20
5.2 Innovation linkages	29.3	81
5.2.1 University/industry research collaboration†	60.0	26
5.2.2 State of cluster development†	52.7	38
5.2.3 GERD financed by abroad, %	5.9	59 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	76 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	40
5.3 Knowledge absorption	27.7	53
5.3.1 Royalty & license fees payments, % total trade	0.5	50
5.3.2 High-tech imports less re-imports, %	6.5	78 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.2	50
5.3.4 FDI net inflows, % GDP	6.5	29

6 Knowledge & technology outputs	32.7	46
6.1 Knowledge creation	23.1	44
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.5	44
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.5	38
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.3	44 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	50.1	10 ●
6.1.5 Citable documents H index	234.0	32
6.2 Knowledge impact	46.3	42
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.4	83 ○
6.2.2 New businesses/th pop. 15–64	0.0	92 ○
6.2.3 Computer software spending, % GDP	0.7	8 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	27.2	17 ●
6.2.5 High- & medium-high-tech manufactures, %	24.7	42
6.3 Knowledge diffusion	28.9	85
6.3.1 Royalty & license fees receipts, % total trade	0.1	64
6.3.2 High-tech exports less re-exports, %	2.3	50
6.3.3 Comm., computer & info. services exp., % total trade	1.5	61
6.3.4 FDI net outflows, % GDP	2.4	32

7 Creative outputs	44.7	28
7.1 Intangible assets	50.5	39
7.1.1 Domestic res trademark app/bn PPP\$ GDP	93.8	19
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.8	33
7.1.3 ICTs & business model creation†	69.2	21
7.1.4 ICTs & organizational model creation†	64.0	25
7.2 Creative goods & services	31.8	36
7.2.1 Cultural & creative services exports, % total trade	0.6	21
7.2.2 National feature films/mn pop. 15–69	3.9	34
7.2.3 Global ent. & media output/th pop. 15–69	0.9	23
7.2.4 Printing & publishing manufactures, %	0.0	39
7.2.5 Creative goods exports, % total trade	2.0	26
7.3 Online creativity	45.8	30
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	21.3	30
7.3.2 Country-code TLDs/th pop. 15–69	59.1	22
7.3.3 Wikipedia edits/pop. 15–69	11,967.6	40
7.3.4 Video uploads on YouTube/pop. 15–69	82.5	24

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.1
GDP (US\$ billions)	202.6
GDP per capita, PPP\$	98,813.7
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	40.3	47
Innovation Output Sub-Index	30.2	69
Innovation Input Sub-Index	50.4	34
Innovation Efficiency Ratio	0.6	114
Global Innovation Index 2013 (out of 142)	41.0	43

1	Institutions	75.5	33
1.1	Political environment	76.2	33
1.1.1	Political stability*	95.4	9 ●
1.1.2	Government effectiveness*	66.1	34
1.1.3	Press freedom*	67.1	89
1.2	Regulatory environment	70.8	49
1.2.1	Regulatory quality*	69.6	38
1.2.2	Rule of law*	74.8	28
1.2.3	Cost of redundancy dismissal, salary weeks	23.2	109
1.3	Business environment	79.5	24
1.3.1	Ease of starting a business*	82.1	77
1.3.2	Ease of resolving insolvency*	58.9	32
1.3.3	Ease of paying taxes*	97.5	2 ●
2	Human capital & research	33.6	53
2.1	Education	33.8	101
2.1.1	Expenditure on education, % GDP	2.5	122 ○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	10.3	96 ○
2.1.3	School life expectancy, years	13.8	59
2.1.4	PISA scales in reading, maths, & science	382.5	60 ○
2.1.5	Pupil-teacher ratio, secondary	9.7	23
2.2	Tertiary education	58.5	9 ●
2.2.1	Tertiary enrolment, % gross	12.1	103
2.2.2	Graduates in science & engineering, %	33.6	9 ●
2.2.3	Tertiary inbound mobility, %	41.4	1 ●
2.3	Research & development (R&D)	8.3	74
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	8.3	60
3	Infrastructure	53.1	23
3.1	Information & communication technologies (ICTs)	66.5	23
3.1.1	ICT access*	71.0	31
3.1.2	ICT use*	57.9	25
3.1.3	Government's online service*	73.9	27
3.1.4	E-participation*	63.2	22
3.2	General infrastructure	58.8	6 ●
3.2.1	Electricity output, kWh/cap	16,433.2	6 ●
3.2.2	Logistics performance*	67.9	33
3.2.3	Gross capital formation, % GDP	29.5	24
3.3	Ecological sustainability	34.0	77
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.4	93
3.3.2	Environmental performance*	63.0	44
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.8	67
4	Market sophistication	46.3	84
4.1	Credit	27.2	104
4.1.1	Ease of getting credit*	43.8	112 ○
4.1.2	Domestic credit to private sector, % GDP	36.1	89
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	28.8	105
4.2.1	Ease of protecting investors*	43.3	105
4.2.2	Market capitalization, % GDP	72.5	23
4.2.3	Total value of stocks traded, % GDP	13.4	34
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	54
4.3	Trade & competition	83.1	9 ●
4.3.1	Applied tariff rate, weighted mean, %	3.8	67
4.3.2	Non-agricultural mkt access weighted tariff, %	1.2	82
4.3.3	Intensity of local competition†	79.3	14
5	Business sophistication	43.4	27
5.1	Knowledge workers	37.2	80
5.1.1	Knowledge-intensive employment, %	24.2	58
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	32.1	94
5.2	Innovation linkages	71.8	1 ●
5.2.1	University/industry research collaboration†	74.5	7 ●
5.2.2	State of cluster development†	69.3	9 ●
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	6 ●
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	21.4	93
5.3.1	Royalty & license fees payments, % total trade	n/a	n/a
5.3.2	High-tech imports less re-imports, %	n/a	n/a
5.3.3	Comm., computer & info. services imp., % total trade	1.4	38
5.3.4	FDI net inflows, % GDP	–0.1	137 ○
6	Knowledge & technology outputs	20.4	110
6.1	Knowledge creation	4.7	115
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.0	110 ○
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.3	55
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	4.3	114
6.1.5	Citable documents H index	50.0	111
6.2	Knowledge impact	29.5	106
6.2.1	Growth rate of PPP\$ GDP/worker, %	0.6	75
6.2.2	New businesses/th pop. 15–64	1.7	45
6.2.3	Computer software spending, % GDP	0.2	67 ○
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	2.7	91
6.2.5	High- & medium-high-tech manufactures, %	20.8	53
6.3	Knowledge diffusion	27.0	94
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	0.0	125 ○
6.3.3	Comm., computer & info. services exp., % total trade	0.4	106
6.3.4	FDI net outflows, % GDP	3.5	19
7	Creative outputs	40.1	41
7.1	Intangible assets	60.5	9 ●
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.0	74 ○
7.1.3	ICTs & business model creation†	75.8	6 ●
7.1.4	ICTs & organizational model creation†	75.5	2 ●
7.2	Creative goods & services	11.0	89
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	0.8	24
7.2.4	Printing & publishing manufactures, %	0.0	63
7.2.5	Creative goods exports, % total trade	0.0	125 ○
7.3	Online creativity	28.3	53
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	4.9	60
7.3.2	Country-code TLDs/th pop. 15–69	31.0	56
7.3.3	Wikipedia edits/pop. 15–69	4,842.3	56
7.3.4	Video uploads on YouTube/pop. 15–69	68.9	44

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Romania

Key indicators

Population (millions)	21.3
GDP (US\$ billions)	189.7
GDP per capita, PPP\$	13,395.9
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	38.1	55
Innovation Output Sub-Index	34.8	44
Innovation Input Sub-Index	41.4	65
Innovation Efficiency Ratio	0.8	24 ●
Global Innovation Index 2013 (out of 142)	40.3	48

1 Institutions 65.9 59

1.1 Political environment	58.9	65
1.1.1 Political stability*	67.4	65
1.1.2 Government effectiveness*	32.5	88
1.1.3 Press freedom*	77.0	37
1.2 Regulatory environment	77.4	37
1.2.1 Regulatory quality*	62.8	48
1.2.2 Rule of law*	46.9	59
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	61.2	79
1.3.1 Ease of starting a business*	90.8	33 ●
1.3.2 Ease of resolving insolvency*	31.7	88
1.3.3 Ease of paying taxes*	61.2	99

2 Human capital & research 29.1 69

2.1 Education	41.9	75
2.1.1 Expenditure on education, % GDP	4.2	83
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	17.5	69
2.1.3 School life expectancy, years	14.1	54
2.1.4 PISA scales in reading, maths, & science	440.3	43
2.1.5 Pupil-teacher ratio, secondary	13.0	43
2.2 Tertiary education	32.6	70
2.2.1 Tertiary enrolment, % gross	51.6	50
2.2.2 Graduates in science & engineering, %	20.2	54
2.2.3 Tertiary inbound mobility, %	1.8	63
2.3 Research & development (R&D)	12.6	62
2.3.1 Researchers, headcounts/mn pop.	1,168.7	53
2.3.2 Gross expenditure on R&D, % GDP	0.5	60
2.3.3 QS university ranking, average score top 3*	16.1	55

3 Infrastructure 41.7 50

3.1 Information & communication technologies (ICTs)	37.8	71
3.1.1 ICT access*	58.1	55
3.1.2 ICT use*	33.4	56
3.1.3 Government's online service*	51.6	62
3.1.4 E-participation*	7.9	98 ○
3.2 General infrastructure	35.4	58
3.2.1 Electricity output, kWh/cap	2,898.5	64
3.2.2 Logistics performance*	55.2	53
3.2.3 Gross capital formation, % GDP	26.1	41
3.3 Ecological sustainability	52.0	22 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.5	55
3.3.2 Environmental performance*	50.5	78
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	31.8	1 ●

4 Market sophistication 42.9 108 ○

4.1 Credit	34.5	73
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	45.0	75
4.1.3 Microfinance gross loans, % GDP	0.2	59

4.2 Investment	25.5	120 ○
4.2.1 Ease of protecting investors*	60.0	42
4.2.2 Market capitalization, % GDP	9.4	90 ○
4.2.3 Total value of stocks traded, % GDP	1.3	64
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	61 ○

4.3 Trade & competition	68.6	116 ○
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	56.7	109 ○

5 Business sophistication 27.3 99

5.1 Knowledge workers	32.1	90
5.1.1 Knowledge-intensive employment, %	22.2	66
5.1.2 Firms offering formal training, % firms	25.9	75
5.1.3 GERD performed by business, % GDP	0.2	49
5.1.4 GERD performed by business, %	39.0	47
5.1.5 GMAT test takers/mn pop. 20–34	61.6	67

5.2 Innovation linkages 24.3 108 ○

5.2.1 University/industry research collaboration†	38.8	85
5.2.2 State of cluster development†	41.3	92
5.2.3 GERD financed by abroad, %	14.4	32
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	79
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	69

5.3 Knowledge absorption 25.6 68

5.3.1 Royalty & license fees payments, % total trade	0.6	46
5.3.2 High-tech imports less re-imports, %	9.3	39
5.3.3 Comm., computer & info. services imp., % total trade	1.2	52
5.3.4 FDI net inflows, % GDP	1.4	105 ○

6 Knowledge & technology outputs 36.6 37

6.1 Knowledge creation	14.5	66
6.1.1 Domestic resident patent app/tr PPP\$ GDP	3.8	31
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.1	77
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.2	46 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	27.1	35
6.1.5 Citable documents H index	135.0	45

6.2 Knowledge impact 57.5 9 ●

6.2.1 Growth rate of PPP\$ GDP/worker, %	0.3	84
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.3	35
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	67.8	1 ●
6.2.5 High- & medium-high-tech manufactures, %	35.0	27

6.3 Knowledge diffusion 37.8 39

6.3.1 Royalty & license fees receipts, % total trade	0.3	28 ●
6.3.2 High-tech exports less re-exports, %	5.1	29 ●
6.3.3 Comm., computer & info. services exp., % total trade	2.2	36
6.3.4 FDI net outflows, % GDP	0.1	94 ○

7 Creative outputs 33.0 67

7.1 Intangible assets	36.2	109 ○
7.1.1 Domestic res trademark app/bn PPP\$ GDP	83.5	24 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.3	49
7.1.3 ICTs & business model creation†	48.7	100
7.1.4 ICTs & organizational model creation†	43.0	111 ○

7.2 Creative goods & services 23.1 52

7.2.1 Cultural & creative services exports, % total trade	0.6	17 ●
7.2.2 National feature films/mn pop. 15–69	1.1	70
7.2.3 Global ent. & media output/th pop. 15–69	0.2	47 ○
7.2.4 Printing & publishing manufactures, %	0.0	62
7.2.5 Creative goods exports, % total trade	1.9	28 ●

7.3 Online creativity 36.4 41

7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	5.6	58
7.3.2 Country-code TLDs/th pop. 15–69	51.5	36
7.3.3 Wikipedia edits/pop. 15–69	4,163.9	61
7.3.4 Video uploads on YouTube/pop. 15–69	81.5	26

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	143.5
GDP (US\$ billions)	2,118.0
GDP per capita, PPP\$	17,884.5
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	39.1	49
Innovation Output Sub-Index	34.5	45
Innovation Input Sub-Index	43.8	56
Innovation Efficiency Ratio	0.8	49
Global Innovation Index 2013 (out of 142)	37.2	62

1 Institutions	56.4	88
1.1 Political environment	43.9	117 ○
1.1.1 Political stability*	45.6	112 ○
1.1.2 Government effectiveness*	29.5	92
1.1.3 Press freedom*	56.6	121 ○
1.2 Regulatory environment	56.5	98
1.2.1 Regulatory quality*	39.5	100
1.2.2 Rule of law*	23.8	116 ○
1.2.3 Cost of redundancy dismissal, salary weeks	17.3	81
1.3 Business environment	68.9	55
1.3.1 Ease of starting a business*	85.9	64
1.3.2 Ease of resolving insolvency*	45.4	49
1.3.3 Ease of paying taxes*	75.3	47

2 Human capital & research	44.5	30
2.1 Education	54.6	28
2.1.1 Expenditure on education, % GDP	4.1	87
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	14.0	55
2.1.4 PISA scales in reading, maths, & science	481.2	35
2.1.5 Pupil-teacher ratio, secondary	8.5	8 ●
2.2 Tertiary education	46.0	30
2.2.1 Tertiary enrolment, % gross	75.5	15 ●
2.2.2 Graduates in science & engineering, %	28.1	14 ●
2.2.3 Tertiary inbound mobility, %	1.4	74
2.3 Research & development (R&D)	33.0	30
2.3.1 Researchers, headcounts/mn pop.	2,602.6	34
2.3.2 Gross expenditure on R&D, % GDP	1.1	32
2.3.3 QS university ranking, average score top 3*	49.3	25

3 Infrastructure	41.1	51
3.1 Information & communication technologies (ICTs)	60.6	28
3.1.1 ICT access*	67.3	35
3.1.2 ICT use*	43.4	41
3.1.3 Government's online service*	66.0	37
3.1.4 E-participation*	65.8	19 ●
3.2 General infrastructure	36.1	57
3.2.1 Electricity output, kWh/cap	7,419.2	28
3.2.2 Logistics performance*	38.5	94
3.2.3 Gross capital formation, % GDP	25.4	47
3.3 Ecological sustainability	26.7	109
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.9	112 ○
3.3.2 Environmental performance*	53.5	66
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	86

4 Market sophistication	42.5	111 ○
4.1 Credit	21.6	124 ○
4.1.1 Ease of getting credit*	50.0	96 ○
4.1.2 Domestic credit to private sector, % GDP	48.5	70
4.1.3 Microfinance gross loans, % GDP	0.0	84 ○

4.2 Investment	32.0	84
4.2.1 Ease of protecting investors*	46.7	97
4.2.2 Market capitalization, % GDP	43.4	47
4.2.3 Total value of stocks traded, % GDP	36.3	24
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	43
4.3 Trade & competition	73.9	84
4.3.1 Applied tariff rate, weighted mean, %	5.2	86
4.3.2 Non-agricultural mkt access weighted tariff, %	0.2	36
4.3.3 Intensity of local competition†	58.2	106 ○

5 Business sophistication	34.3	60
5.1 Knowledge workers	54.7	33
5.1.1 Knowledge-intensive employment, %	42.8	17 ●
5.1.2 Firms offering formal training, % firms	44.3	37
5.1.3 GERD performed by business, % GDP	0.7	30
5.1.4 GERD performed by business, %	58.3	24
5.1.5 GMAT test takers/mn pop. 20–34	58.6	70
5.2 Innovation linkages	20.3	126 ○
5.2.1 University/industry research collaboration†	44.0	62
5.2.2 State of cluster development†	34.3	117 ○
5.2.3 GERD financed by abroad, %	4.0	66
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	62
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	57
5.3 Knowledge absorption	27.8	51
5.3.1 Royalty & license fees payments, % total trade	1.5	12 ●
5.3.2 High-tech imports less re-imports, %	7.5	59
5.3.3 Comm., computer & info. services imp., % total trade	1.1	57
5.3.4 FDI net inflows, % GDP	2.6	71

6 Knowledge & technology outputs	37.6	34
6.1 Knowledge creation	46.9	18 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	11.5	7 ●
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.4	41
6.1.3 Domestic res utility model app./tr PPP\$ GDP	5.4	8 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	10.7	70
6.1.5 Citable documents H index	325.0	21 ●
6.2 Knowledge impact	38.3	70
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.4	30
6.2.2 New businesses/th pop. 15–64	4.3	27
6.2.3 Computer software spending, % GDP	0.3	58 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	5.0	64
6.2.5 High- & medium-high-tech manufactures, %	23.9	44
6.3 Knowledge diffusion	27.5	91
6.3.1 Royalty & license fees receipts, % total trade	0.1	48
6.3.2 High-tech exports less re-exports, %	1.5	59
6.3.3 Comm., computer & info. services exp., % total trade	0.7	93
6.3.4 FDI net outflows, % GDP	2.4	31

7 Creative outputs	31.4	72
7.1 Intangible assets	35.2	114 ○
7.1.1 Domestic res trademark app./bn PPP\$ GDP	64.2	40
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.5	39
7.1.3 ICTs & business model creation†	46.2	110 ○
7.1.4 ICTs & organizational model creation†	47.5	89
7.2 Creative goods & services	17.9	70
7.2.1 Cultural & creative services exports, % total trade	0.8	11 ●
7.2.2 National feature films/mn pop. 15–69	1.3	64
7.2.3 Global ent. & media output/th pop. 15–69	0.2	40
7.2.4 Printing & publishing manufactures, %	0.0	58
7.2.5 Creative goods exports, % total trade	0.3	76
7.3 Online creativity	37.4	38
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	4.1	65
7.3.2 Country-code TLDs/th pop. 15–69	51.9	33
7.3.3 Wikipedia edits/pop. 15–69	9,098.5	47
7.3.4 Video uploads on YouTube/pop. 15–69	78.3	33

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Rwanda

Key indicators

Population (millions)	11.5
GDP (US\$ billions)	7.4
GDP per capita, PPP\$	1,538.2
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	29.3	102
Innovation Output Sub-Index	18.4	128
Innovation Input Sub-Index	40.2	74
Innovation Efficiency Ratio	0.5	137 ○
Global Innovation Index 2013 (out of 142)	27.6	112

1 Institutions	60.6	70
1.1 Political environment	48.1	94
1.1.1 Political stability*	60.5	82
1.1.2 Government effectiveness*	39.2	73
1.1.3 Press freedom*	44.5	133 ○
1.2 Regulatory environment	66.4	69
1.2.1 Regulatory quality*	46.2	80
1.2.2 Rule of law*	39.1	76
1.2.3 Cost of redundancy dismissal, salary weeks	13.0	55
1.3 Business environment	67.5	60
1.3.1 Ease of starting a business*	97.4	5 ●
1.3.2 Ease of resolving insolvency*	20.2	119
1.3.3 Ease of paying taxes*	84.8	23 ●

2 Human capital & research	20.4	102
2.1 Education	38.9	88
2.1.1 Expenditure on education, % GDP	5.1	57
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	36.4	10 ●
2.1.3 School life expectancy, years	10.2	113
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	22.9	84
2.2 Tertiary education	22.1	96
2.2.1 Tertiary enrolment, % gross	6.9	121
2.2.2 Graduates in science & engineering, %	22.5	36
2.2.3 Tertiary inbound mobility, %	0.8	87
2.3 Research & development (R&D)	0.2	129
2.3.1 Researchers, headcounts/mn pop.	53.6	112 ○
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	23.0	120
3.1 Information & communication technologies (ICTs)	15.0	128
3.1.1 ICT access*	19.6	123 ○
3.1.2 ICT use*	3.8	121
3.1.3 Government's online service*	34.0	109
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	30.2	82
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	26.2	130 ○
3.2.3 Gross capital formation, % GDP	24.2	59
3.3 Ecological sustainability	23.9	123
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	35.4	123
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.1	118 ○

4 Market sophistication	59.4	27 ●
4.1 Credit	35.1	71
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	11.2	138 ○
4.1.3 Microfinance gross loans, % GDP	1.2	33

4.2 Investment	67.4	9 ●
4.2.1 Ease of protecting investors*	66.7	21 ●
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	0.3	11 ●
4.3 Trade & competition	75.8	67
4.3.1 Applied tariff rate, weighted mean, %	6.1	98
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	1 ●
4.3.3 Intensity of local competition†	62.3	85

5 Business sophistication	37.5	44
5.1 Knowledge workers	47.3	47
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	52.3	22 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	11.0	119
5.2 Innovation linkages	42.5	36
5.2.1 University/industry research collaboration†	45.2	57
5.2.2 State of cluster development†	47.3	67
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.1	26
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	22.7	87
5.3.1 Royalty & license fees payments, % total trade	0.0	124 ○
5.3.2 High-tech imports less re-imports, %	10.2	27 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.9	64
5.3.4 FDI net inflows, % GDP	1.7	91

6 Knowledge & technology outputs	15.5	126
6.1 Knowledge creation	9.9	80
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.7	41
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.8	35
6.1.4 Scientific & technical articles/bn PPP\$ GDP	7.3	87
6.1.5 Citable documents H index	36.0	128
6.2 Knowledge impact	3.6	135 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	1.1	57
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.1	141 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.2	59
6.3.1 Royalty & license fees receipts, % total trade	2.1	11 ●
6.3.2 High-tech exports less re-exports, %	0.1	111
6.3.3 Comm., computer & info. services exp., % total trade	1.3	70
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	21.3	117
7.1 Intangible assets	41.8	83
7.1.1 Domestic res trademark app/bn PPP\$ GDP	7.3	97 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	65.3	33
7.1.4 ICTs & organizational model creation†	57.3	51
7.2 Creative goods & services	1.0	133 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	88
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	107
7.3 Online creativity	0.6	132 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.2	129
7.3.2 Country-code TLDs/th pop. 15–69	1.5	128
7.3.3 Wikipedia edits/pop. 15–69	90.1	122
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	28.3
GDP (US\$ billions)	745.3
GDP per capita, PPP\$	31,244.7
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	41.6	38
Innovation Output Sub-Index	35.4	41
Innovation Input Sub-Index	47.8	39
Innovation Efficiency Ratio	0.7	70
Global Innovation Index 2013 (out of 142)	41.2	42

1 Institutions	60.0	73
1.1 Political environment	46.4	102 ○
1.1.1 Political stability*	54.5	92
1.1.2 Government effectiveness*	41.6	65
1.1.3 Press freedom*	43.1	135 ○
1.2 Regulatory environment	64.6	78
1.2.1 Regulatory quality*	51.5	69
1.2.2 Rule of law*	53.0	53
1.2.3 Cost of redundancy dismissal, salary weeks	19.5	92
1.3 Business environment	69.1	53
1.3.1 Ease of starting a business*	80.8	86
1.3.2 Ease of resolving insolvency*	30.0	94
1.3.3 Ease of paying taxes*	96.6	3 ●

2 Human capital & research	35.6	47
2.1 Education	48.1	54
2.1.1 Expenditure on education, % GDP	5.1	56
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	18.1	65
2.1.3 School life expectancy, years	15.6	29
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	11.3	32
2.2 Tertiary education	43.7	36
2.2.1 Tertiary enrolment, % gross	50.9	52
2.2.2 Graduates in science & engineering, %	29.0	13 ●
2.2.3 Tertiary inbound mobility, %	3.9	44
2.3 Research & development (R&D)	15.1	57
2.3.1 Researchers, headcounts/mn pop.	47.4	114 ○
2.3.2 Gross expenditure on R&D, % GDP	0.1	107 ○
2.3.3 QS university ranking, average score top 3*	43.5	31

3 Infrastructure	47.0	31
3.1 Information & communication technologies (ICTs)	61.8	27
3.1.1 ICT access*	67.6	34
3.1.2 ICT use*	36.7	50
3.1.3 Government's online service*	79.7	19 ●
3.1.4 E-participation*	63.2	22 ●
3.2 General infrastructure	46.9	21 ●
3.2.1 Electricity output, kWh/cap	8,905.9	16 ●
3.2.2 Logistics performance*	62.3	37
3.2.3 Gross capital formation, % GDP	28.3	27
3.3 Ecological sustainability	32.3	83
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.2	106 ○
3.3.2 Environmental performance*	66.7	35
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	110 ○

4 Market sophistication	59.0	28
4.1 Credit	39.9	57
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	37.6	86
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	54.3	22 ●
4.2.1 Ease of protecting investors*	66.7	21
4.2.2 Market capitalization, % GDP	58.7	34
4.2.3 Total value of stocks traded, % GDP	50.8	16 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	82.8	11 ●
4.3.1 Applied tariff rate, weighted mean, %	3.9	69
4.3.2 Non-agricultural mkt access weighted tariff, %	1.1	77
4.3.3 Intensity of local competition†	78.2	16 ●

5 Business sophistication	37.6	43
5.1 Knowledge workers	49.2	43
5.1.1 Knowledge-intensive employment, %	22.9	63
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	293.3	18 ●
5.2 Innovation linkages	45.9	27
5.2.1 University/industry research collaboration†	57.8	30
5.2.2 State of cluster development†	61.5	22 ●
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	21
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	66
5.3 Knowledge absorption	17.7	113 ○
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	5.8	89 ○
5.3.3 Comm., computer & info. services imp., % total trade	0.7	77
5.3.4 FDI net inflows, % GDP	1.7	90

6 Knowledge & technology outputs	25.7	77
6.1 Knowledge creation	10.0	78
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.4	81 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	47
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	9.3	79
6.1.5 Citable documents H index	124.0	53
6.2 Knowledge impact	42.3	56
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.5	28
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.3	41
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	2.5	92
6.2.5 High- & medium-high-tech manufactures, %	30.4	35
6.3 Knowledge diffusion	25.0	109 ○
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.1	110 ○
6.3.3 Comm., computer & info. services exp., % total trade	0.1	132 ○
6.3.4 FDI net outflows, % GDP	0.6	59

7 Creative outputs	45.0	26
7.1 Intangible assets	67.3	5 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	69.0	23
7.1.4 ICTs & organizational model creation†	65.7	20 ●
7.2 Creative goods & services	19.5	61
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	0.5	29
7.2.4 Printing & publishing manufactures, %	0.0	19
7.2.5 Creative goods exports, % total trade	0.1	88 ○
7.3 Online creativity	25.9	58
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	4.4	63
7.3.2 Country-code TLDs/th pop. 15–69	13.3	92
7.3.3 Wikipedia edits/pop. 15–69	3,212.6	67
7.3.4 Video uploads on YouTube/pop. 15–69	80.5	28

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Senegal

Key indicators

Population (millions)	13.7
GDP (US\$ billions)	15.2
GDP per capita, PPP\$	1,958.2
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	30.1	98
Innovation Output Sub-Index	27.6	78
Innovation Input Sub-Index	32.6	116
Innovation Efficiency Ratio	0.8	23 ●
Global Innovation Index 2013 (out of 142)	30.5	96
1 Institutions	54.5	93
1.1 Political environment	55.2	76
1.1.1 Political stability*	63.2	78
1.1.2 Government effectiveness*	28.7	95
1.1.3 Press freedom*	73.8	50 ●
1.2 Regulatory environment	65.2	75
1.2.1 Regulatory quality*	46.3	79
1.2.2 Rule of law*	37.3	78
1.2.3 Cost of redundancy dismissal, salary weeks	13.7	63
1.3 Business environment	43.0	130 ○
1.3.1 Ease of starting a business*	76.2	102
1.3.2 Ease of resolving insolvency*	26.8	106
1.3.3 Ease of paying taxes*	25.8	137 ○
2 Human capital & research	14.7	123
2.1 Education	31.0	113
2.1.1 Expenditure on education, % GDP	5.6	42 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	29.0	26 ●
2.1.3 School life expectancy, years	7.9	124 ○
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	27.4	97
2.2 Tertiary education	7.0	130 ○
2.2.1 Tertiary enrolment, % gross	7.6	117
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	6.0	80
2.3.1 Researchers, headcounts/mn pop.	630.9	67
2.3.2 Gross expenditure on R&D, % GDP	0.5	56
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	27.3	106
3.1 Information & communication technologies (ICTs)	22.4	103
3.1.1 ICT access*	25.9	107
3.1.2 ICT use*	8.0	109
3.1.3 Government's online service*	34.6	108
3.1.4 E-participation*	21.1	65
3.2 General infrastructure	31.5	76
3.2.1 Electricity output, kWh/cap	236.0	113 ○
3.2.2 Logistics performance*	34.9	107
3.2.3 Gross capital formation, % GDP	30.3	21 ●
3.3 Ecological sustainability	28.0	100
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.3	61
3.3.2 Environmental performance*	40.8	105
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	104
4 Market sophistication	42.4	114
4.1 Credit	29.7	94
4.1.1 Ease of getting credit*	43.8	112 ○
4.1.2 Domestic credit to private sector, % GDP	29.6	100
4.1.3 Microfinance gross loans, % GDP	2.9	18 ●

4.2 Investment	30.0	95
4.2.1 Ease of protecting investors*	30.0	133 ○
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	67.6	119
4.3.1 Applied tariff rate, weighted mean, %	8.4	115
4.3.2 Non-agricultural mkt access weighted tariff, %	3.6	124
4.3.3 Intensity of local competition†	68.8	55 ●
5 Business sophistication	23.9	118
5.1 Knowledge workers	11.7	139 ○
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	19.9	93
5.1.3 GERD performed by business, % GDP	0.0	82 ○
5.1.4 GERD performed by business, %	0.3	83 ○
5.1.5 GMAT test takers/mn pop. 20–34	14.1	114
5.2 Innovation linkages	38.2	49 ●
5.2.1 University/industry research collaboration†	37.2	97
5.2.2 State of cluster development†	39.8	101
5.2.3 GERD financed by abroad, %	40.5	11 ●
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	68
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	22.0	91
5.3.1 Royalty & license fees payments, % total trade	0.1	90
5.3.2 High-tech imports less re-imports, %	3.8	116 ○
5.3.3 Comm., computer & info. services imp., % total trade	2.0	11 ●
5.3.4 FDI net inflows, % GDP	2.0	87
6 Knowledge & technology outputs	24.1	91
6.1 Knowledge creation	9.6	85
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	97
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	13.1	65
6.1.5 Citable documents H index	75.0	84
6.2 Knowledge impact	27.0	113
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.6	74
6.2.2 New businesses/th pop. 15–64	0.3	82
6.2.3 Computer software spending, % GDP	0.3	50
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.8	104
6.2.5 High- & medium-high-tech manufactures, %	15.3	61
6.3 Knowledge diffusion	35.6	45 ●
6.3.1 Royalty & license fees receipts, % total trade	0.0	76
6.3.2 High-tech exports less re-exports, %	0.2	98
6.3.3 Comm., computer & info. services exp., % total trade	4.4	8 ●
6.3.4 FDI net outflows, % GDP	0.1	90
7 Creative outputs	31.0	75
7.1 Intangible assets	52.5	28 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	60.0	52 ●
7.1.4 ICTs & organizational model creation†	45.0	101
7.2 Creative goods & services	9.8	96
7.2.1 Cultural & creative services exports, % total trade	0.0	72
7.2.2 National feature films/mn pop. 15–69	0.7	82
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	57
7.2.5 Creative goods exports, % total trade	0.2	79
7.3 Online creativity	9.4	94
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.1	104
7.3.2 Country-code TLDs/th pop. 15–69	5.1	112
7.3.3 Wikipedia edits/pop. 15–69	107.0	120
7.3.4 Video uploads on YouTube/pop. 15–69	31.1	60 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	7.2
GDP (US\$ billions)	42.5
GDP per capita, PPP\$	11,268.9
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	35.9	67
Innovation Output Sub-Index	31.7	59
Innovation Input Sub-Index	40.1	75
Innovation Efficiency Ratio	0.8	46
Global Innovation Index 2013 (out of 142)	37.9	54
1 Institutions	61.0	69
1.1 Political environment	57.1	71
1.1.1 Political stability*	60.2	83
1.1.2 Government effectiveness*	37.8	77
1.1.3 Press freedom*	73.4	53
1.2 Regulatory environment	70.6	50
1.2.1 Regulatory quality*	46.8	77
1.2.2 Rule of law*	35.8	82
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1
1.3 Business environment	55.3	99
1.3.1 Ease of starting a business*	87.8	56
1.3.2 Ease of resolving insolvency*	30.7	92
1.3.3 Ease of paying taxes*	47.2	123
2 Human capital & research	31.5	59
2.1 Education	43.0	69
2.1.1 Expenditure on education, % GDP	4.8	65
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	14.1	87
2.1.3 School life expectancy, years	13.6	62
2.1.4 PISA scales in reading, maths, & science	446.6	41
2.1.5 Pupil-teacher ratio, secondary	9.1	16
2.2 Tertiary education	40.0	45
2.2.1 Tertiary enrolment, % gross	52.4	49
2.2.2 Graduates in science & engineering, %	24.8	28
2.2.3 Tertiary inbound mobility, %	3.9	45
2.3 Research & development (R&D)	11.6	64
2.3.1 Researchers, headcounts/mn pop.	1,418.0	49
2.3.2 Gross expenditure on R&D, % GDP	0.8	42
2.3.3 QS university ranking, average score top 3*	3.9	69
3 Infrastructure	41.0	53
3.1 Information & communication technologies (ICTs)	43.7	54
3.1.1 ICT access*	58.2	54
3.1.2 ICT use*	35.2	54
3.1.3 Government's online service*	57.5	48
3.1.4 E-participation*	23.7	60
3.2 General infrastructure	30.0	85
3.2.1 Electricity output, kWh/cap	5,237.5	39
3.2.2 Logistics performance*	47.2	75
3.2.3 Gross capital formation, % GDP	20.1	91
3.3 Ecological sustainability	49.5	28
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.4	91
3.3.2 Environmental performance*	69.1	31
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	10.5	9
4 Market sophistication	37.0	134
4.1 Credit	38.1	62
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	53.9	60
4.1.3 Microfinance gross loans, % GDP	1.8	27

4.2 Investment	29.7	100
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	19.9	71
4.2.3 Total value of stocks traded, % GDP	0.8	73
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	43.3	143
4.3.1 Applied tariff rate, weighted mean, %	6.0	94
4.3.2 Non-agricultural mkt access weighted tariff, %	9.5	140
4.3.3 Intensity of local competition†	47.2	129
5 Business sophistication	29.7	83
5.1 Knowledge workers	35.0	83
5.1.1 Knowledge-intensive employment, %	30.4	45
5.1.2 Firms offering formal training, % firms	35.8	48
5.1.3 GERD performed by business, % GDP	0.1	64
5.1.4 GERD performed by business, %	9.4	75
5.1.5 GMAT test takers/mn pop. 20–34	73.7	59
5.2 Innovation linkages	20.4	123
5.2.1 University/industry research collaboration†	36.5	101
5.2.2 State of cluster development†	32.7	122
5.2.3 GERD financed by abroad, %	5.5	61
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	40
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	70
5.3 Knowledge absorption	33.7	32
5.3.1 Royalty & license fees payments, % total trade	0.9	30
5.3.2 High-tech imports less re-imports, %	7.2	62
5.3.3 Comm., computer & info. services imp., % total trade	1.8	18
5.3.4 FDI net inflows, % GDP	6.2	31
6 Knowledge & technology outputs	33.8	44
6.1 Knowledge creation	23.8	43
6.1.1 Domestic resident patent app./tr PPP\$ GDP	2.5	46
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.3	60
6.1.3 Domestic res utility model app./tr PPP\$ GDP	1.0	33
6.1.4 Scientific & technical articles/bn PPP\$ GDP	60.3	5
6.1.5 Citable documents H index	68.0	90
6.2 Knowledge impact	43.4	52
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	1.7	47
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	39.4	6
6.2.5 High- & medium-high-tech manufactures, %	19.8	56
6.3 Knowledge diffusion	34.2	49
6.3.1 Royalty & license fees receipts, % total trade	0.2	37
6.3.2 High-tech exports less re-exports, %	2.5	49
6.3.3 Comm., computer & info. services exp., % total trade	2.3	34
6.3.4 FDI net outflows, % GDP	0.1	87
7 Creative outputs	29.6	79
7.1 Intangible assets	32.3	123
7.1.1 Domestic res trademark app./bn PPP\$ GDP	32.3	71
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.3	12
7.1.3 ICTs & business model creation†	42.8	119
7.1.4 ICTs & organizational model creation†	37.2	125
7.2 Creative goods & services	33.8	32
7.2.1 Cultural & creative services exports, % total trade	1.2	5
7.2.2 National feature films/mn pop. 15–69	4.1	32
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	42
7.2.5 Creative goods exports, % total trade	0.8	43
7.3 Online creativity	20.1	67
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.5	121
7.3.2 Country-code TLDs/th pop. 15–69	34.2	52
7.3.3 Wikipedia edits/pop. 15–69	15,063.8	32
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Seychelles

Key indicators

Population (millions)	0.1
GDP (US\$ billions)	1.4
GDP per capita, PPP\$	26,492.1
Income group	Upper-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	38.6	51
Innovation Output Sub-Index	32.7	56
Innovation Input Sub-Index	44.5	53
Innovation Efficiency Ratio	0.7	74
Global Innovation Index 2013 (out of 142)	n/a	n/a

1 Institutions	67.0	55
1.1 Political environment	68.6	48
1.1.1 Political stability*	84.2	33 ●
1.1.2 Government effectiveness*	50.9	53
1.1.3 Press freedom*	70.8	75
1.2 Regulatory environment	66.0	72
1.2.1 Regulatory quality*	40.7	95
1.2.2 Rule of law*	45.3	63
1.2.3 Cost of redundancy dismissal, salary weeks	13.5	61
1.3 Business environment	66.2	65
1.3.1 Ease of starting a business*	74.2	107
1.3.2 Ease of resolving insolvency*	41.2	57
1.3.3 Ease of paying taxes*	83.3	25 ●

2 Human capital & research	21.6	97
2.1 Education	32.4	106
2.1.1 Expenditure on education, % GDP	3.6	96
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	7.1	107 ○
2.1.3 School life expectancy, years	11.6	93
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	11.8	36
2.2 Tertiary education	29.7	81
2.2.1 Tertiary enrolment, % gross	1.4	133 ○
2.2.2 Graduates in science & engineering, %	25.0	26 ●
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	2.7	97
2.3.1 Researchers, headcounts/mn pop.	160.7	92
2.3.2 Gross expenditure on R&D, % GDP	0.3	76
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	49.6	27 ●
3.1 Information & communication technologies (ICTs)	31.9	85
3.1.1 ICT access*	61.0	50
3.1.2 ICT use*	25.2	69
3.1.3 Government's online service*	33.3	110 ○
3.1.4 E-participation*	7.9	98 ○
3.2 General infrastructure	61.3	4 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	n/a	n/a
3.2.3 Gross capital formation, % GDP	38.0	9 ●
3.3 Ecological sustainability	55.6	12 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	55.6	57
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	41.7	117 ○
4.1 Credit	16.0	136 ○
4.1.1 Ease of getting credit*	25.0	134 ○
4.1.2 Domestic credit to private sector, % GDP	25.3	106
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	56.7	20 ●
4.2.1 Ease of protecting investors*	56.7	55
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	52.6	138 ○
4.3.1 Applied tariff rate, weighted mean, %	28.3	142 ○
4.3.2 Non-agricultural mkt access weighted tariff, %	0.9	71
4.3.3 Intensity of local competition†	59.8	95

5 Business sophistication	42.4	31 ●
5.1 Knowledge workers	47.9	45
5.1.1 Knowledge-intensive employment, %	26.3	51
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	130.3	40 ●
5.2 Innovation linkages	51.3	12 ●
5.2.1 University/industry research collaboration†	40.3	78
5.2.2 State of cluster development†	48.0	64
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.5	14 ●
5.3 Knowledge absorption	28.1	49
5.3.1 Royalty & license fees payments, % total trade	0.1	104 ○
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.1	134 ○
5.3.4 FDI net inflows, % GDP	13.1	9 ●

6 Knowledge & technology outputs	22.4	97
6.1 Knowledge creation	25.9	39 ●
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	3.9	12 ●
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	17.5	51
6.1.5 Citable documents H index	33.0	131 ○
6.2 Knowledge impact	8.9	126 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.9	77
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	32.4	66
6.3.1 Royalty & license fees receipts, % total trade	0.1	44
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	0.7	95
6.3.4 FDI net outflows, % GDP	0.1	95

7 Creative outputs	43.0	34 ●
7.1 Intangible assets	38.1	102
7.1.1 Domestic res trademark app/bn PPP\$ GDP	41.5	63
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	52.8	83
7.1.4 ICTs & organizational model creation†	45.5	95
7.2 Creative goods & services	n/a	n/a
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	52.6	23 ●
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	100.0	1 ●
7.3.2 Country-code TLDs/th pop. 15–69	56.2	27 ●
7.3.3 Wikipedia edits/pop. 15–69	920.7	99
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	5.3
GDP (US\$ billions)	295.7
GDP per capita, PPP\$	64,583.6
Income group	High income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	59.2	7
Innovation Output Sub-Index	44.9	25
Innovation Input Sub-Index	73.6	1 ●
Innovation Efficiency Ratio	0.6	110 ○
Global Innovation Index 2013 (out of 142)	53.3	8

1 Institutions	92.8	6
1.1 Political environment	84.5	17
1.1.1 Political stability*	98.6	4
1.1.2 Government effectiveness*	98.3	2 ●
1.1.3 Press freedom*	56.6	122 ○
1.2 Regulatory environment	98.8	1 ●
1.2.1 Regulatory quality*	100.0	1 ●
1.2.2 Rule of law*	95.1	10
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1
1.3 Business environment	95.0	1 ●
1.3.1 Ease of starting a business*	95.9	8
1.3.2 Ease of resolving insolvency*	94.7	4
1.3.3 Ease of paying taxes*	94.4	5

2 Human capital & research	64.9	2 ●
2.1 Education	39.1	86 ○
2.1.1 Expenditure on education, % GDP	3.0	111 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	17.0	73 ○
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	555.7	2
2.1.5 Pupil-teacher ratio, secondary	14.9	61 ○
2.2 Tertiary education	96.6	2 ●
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	19.2	8
2.3 Research & development (R&D)	58.8	16
2.3.1 Researchers, headcounts/mn pop.	7,321.2	9
2.3.2 Gross expenditure on R&D, % GDP	2.2	16
2.3.3 QS university ranking, average score top 3*	56.8	20

3 Infrastructure	65.6	2 ●
3.1 Information & communication technologies (ICTs)	87.6	3 ●
3.1.1 ICT access*	83.1	8
3.1.2 ICT use*	72.5	11
3.1.3 Government's online service*	100.0	1 ●
3.1.4 E-participation*	94.7	3
3.2 General infrastructure	54.3	10
3.2.1 Electricity output, kWh/cap	8,880.1	17
3.2.2 Logistics performance*	100.0	1 ●
3.2.3 Gross capital formation, % GDP	26.4	38
3.3 Ecological sustainability	54.8	14
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.3	35
3.3.2 Environmental performance*	81.8	4
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	5.1	24

4 Market sophistication	78.2	4
4.1 Credit	66.4	12
4.1.1 Ease of getting credit*	93.8	3
4.1.2 Domestic credit to private sector, % GDP	120.6	24
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	81.3	3 ●
4.2.1 Ease of protecting investors*	93.3	2 ●
4.2.2 Market capitalization, % GDP	150.8	5
4.2.3 Total value of stocks traded, % GDP	57.0	15
4.2.4 Venture capital deals/tr PPP\$ GDP	0.3	8
4.3 Trade & competition	86.8	2 ●
4.3.1 Applied tariff rate, weighted mean, %	0.0	1 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.7	60
4.3.3 Intensity of local competition†	77.3	17

5 Business sophistication	66.7	1 ●
5.1 Knowledge workers	76.4	4
5.1.1 Knowledge-intensive employment, %	51.0	2 ●
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.4	15
5.1.4 GERD performed by business, %	62.1	20
5.1.5 GMAT test takers/mn pop. 20–34	783.1	6
5.2 Innovation linkages	51.5	11
5.2.1 University/industry research collaboration†	77.0	4
5.2.2 State of cluster development†	70.0	7
5.2.3 GERD financed by abroad, %	5.0	62 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	9
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.1	16
5.3 Knowledge absorption	72.1	1 ●
5.3.1 Royalty & license fees payments, % total trade	3.2	1 ●
5.3.2 High-tech imports less re-imports, %	20.1	5
5.3.3 Comm., computer & info. services imp., % total trade	0.6	85 ○
5.3.4 FDI net inflows, % GDP	20.6	1 ●

6 Knowledge & technology outputs	46.7	13
6.1 Knowledge creation	34.6	29
6.1.1 Domestic resident patent app./tr PPP\$ GDP	3.3	35
6.1.2 PCT resident patent app./tr PPP\$ GDP	2.2	20
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	32.3	27
6.1.5 Citable documents H index	268.0	28
6.2 Knowledge impact	56.1	12
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.0	89 ○
6.2.2 New businesses/th pop. 15–64	8.0	13
6.2.3 Computer software spending, % GDP	0.4	26
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	18.0	25
6.2.5 High- & medium-high-tech manufactures, %	70.0	1 ●
6.3 Knowledge diffusion	49.3	14
6.3.1 Royalty & license fees receipts, % total trade	0.3	30
6.3.2 High-tech exports less re-exports, %	26.0	3 ●
6.3.3 Comm., computer & info. services exp., % total trade	0.7	96 ○
6.3.4 FDI net outflows, % GDP	8.4	5

7 Creative outputs	43.1	33
7.1 Intangible assets	46.1	61
7.1.1 Domestic res trademark app./bn PPP\$ GDP	21.6	82 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.7	35
7.1.3 ICTs & business model creation†	74.7	10
7.1.4 ICTs & organizational model creation†	71.8	8
7.2 Creative goods & services	33.9	31
7.2.1 Cultural & creative services exports, % total trade	0.3	34
7.2.2 National feature films/mn pop. 15–69	3.8	35
7.2.3 Global ent. & media output/th pop. 15–69	1.2	19
7.2.4 Printing & publishing manufactures, %	0.0	73 ○
7.2.5 Creative goods exports, % total trade	5.4	10
7.3 Online creativity	46.2	29
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	33.2	22
7.3.2 Country-code TLDs/th pop. 15–69	49.0	37
7.3.3 Wikipedia edits/pop. 15–69	8,573.6	48
7.3.4 Video uploads on YouTube/pop. 15–69	88.0	12

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Slovakia

Key indicators

Population (millions)	5.4
GDP (US\$ billions)	95.8
GDP per capita, PPP\$	24,605.3
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	41.9	37
Innovation Output Sub-Index	37.0	38
Innovation Input Sub-Index	46.7	43
Innovation Efficiency Ratio	0.8	45
Global Innovation Index 2013 (out of 142)	42.2	36

1	Institutions	74.5	36
1.1	Political environment	80.5	24 ●
1.1.1	Political stability*	91.7	15 ●
1.1.2	Government effectiveness*	62.9	40
1.1.3	Press freedom*	86.8	21 ●
1.2	Regulatory environment	72.9	45
1.2.1	Regulatory quality*	75.8	30
1.2.2	Rule of law*	58.9	47
1.2.3	Cost of redundancy dismissal, salary weeks	18.8	88
1.3	Business environment	70.1	51
1.3.1	Ease of starting a business*	84.2	70
1.3.2	Ease of resolving insolvency*	57.3	34
1.3.3	Ease of paying taxes*	68.8	75
2	Human capital & research	32.9	55
2.1	Education	41.7	77
2.1.1	Expenditure on education, % GDP	4.2	84
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	19.6	62
2.1.3	School life expectancy, years	12.4	82
2.1.4	PISA scales in reading, maths, & science	471.9	37
2.1.5	Pupil-teacher ratio, secondary	11.3	33
2.2	Tertiary education	36.5	58
2.2.1	Tertiary enrolment, % gross	55.1	47
2.2.2	Graduates in science & engineering, %	20.6	49
2.2.3	Tertiary inbound mobility, %	3.9	43
2.3	Research & development (R&D)	20.6	43
2.3.1	Researchers, headcounts/mn pop.	4,603.4	24
2.3.2	Gross expenditure on R&D, % GDP	0.8	40
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	43.5	45
3.1	Information & communication technologies (ICTs)	43.5	56
3.1.1	ICT access*	62.8	48
3.1.2	ICT use*	47.9	36
3.1.3	Government's online service*	50.3	67
3.1.4	E-participation*	13.2	84
3.2	General infrastructure	30.1	84
3.2.1	Electricity output, kWh/cap	5,184.1	42
3.2.2	Logistics performance*	56.3	50
3.2.3	Gross capital formation, % GDP	18.0	109 ○
3.3	Ecological sustainability	57.0	9 ●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.9	51
3.3.2	Environmental performance*	74.5	21 ●
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	10.9	6 ●
4	Market sophistication	48.6	67
4.1	Credit	44.3	47
4.1.1	Ease of getting credit*	75.0	40
4.1.2	Domestic credit to private sector, % GDP	45.0	74
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	24.1	123 ○
4.2.1	Ease of protecting investors*	46.7	97 ○
4.2.2	Market capitalization, % GDP	5.0	101 ○
4.2.3	Total value of stocks traded, % GDP	0.2	93 ○
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	77.5	48
4.3.1	Applied tariff rate, weighted mean, %	1.1	10
4.3.2	Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3	Intensity of local competition†	74.5	27

5	Business sophistication	34.2	61
5.1	Knowledge workers	42.0	61
5.1.1	Knowledge-intensive employment, %	32.9	38
5.1.2	Firms offering formal training, % firms	33.8	52
5.1.3	GERD performed by business, % GDP	0.3	40
5.1.4	GERD performed by business, %	41.3	44
5.1.5	GMAT test takers/mn pop. 20–34	71.8	60
5.2	Innovation linkages	32.8	66
5.2.1	University/industry research collaboration†	38.2	89
5.2.2	State of cluster development†	47.3	67
5.2.3	GERD financed by abroad, %	18.7	21
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	46
5.3	Knowledge absorption	27.7	52
5.3.1	Royalty & license fees payments, % total trade	0.2	85
5.3.2	High-tech imports less re-imports, %	13.6	15 ●
5.3.3	Comm., computer & info. services imp., % total trade	0.4	106 ○
5.3.4	FDI net inflows, % GDP	3.8	56

6	Knowledge & technology outputs	34.7	41
6.1	Knowledge creation	21.0	48
6.1.1	Domestic resident patent app/tr PPP\$ GDP	1.3	60
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.3	49
6.1.3	Domestic res utility model app/tr PPP\$ GDP	2.3	13
6.1.4	Scientific & technical articles/bn PPP\$ GDP	21.9	42
6.1.5	Citable documents H index	148.0	41
6.2	Knowledge impact	55.5	13 ●
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.6	59
6.2.2	New businesses/th pop. 15–64	5.1	19 ●
6.2.3	Computer software spending, % GDP	0.3	49
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	32.8	11 ●
6.2.5	High- & medium-high-tech manufactures, %	54.9	5 ●
6.3	Knowledge diffusion	27.4	92
6.3.1	Royalty & license fees receipts, % total trade	0.0	97 ○
6.3.2	High-tech exports less re-exports, %	7.5	25
6.3.3	Comm., computer & info. services exp., % total trade	0.8	88
6.3.4	FDI net outflows, % GDP	–1.5	121 ○

7	Creative outputs	39.4	42
7.1	Intangible assets	39.2	95
7.1.1	Domestic res trademark app/bn PPP\$ GDP	68.2	38
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.8	34
7.1.3	ICTs & business model creation†	53.3	81
7.1.4	ICTs & organizational model creation†	50.2	80
7.2	Creative goods & services	39.3	20 ●
7.2.1	Cultural & creative services exports, % total trade	0.3	32
7.2.2	National feature films/mn pop. 15–69	2.9	47
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	75 ○
7.2.5	Creative goods exports, % total trade	10.3	5 ●
7.3	Online creativity	39.9	35
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	4.5	62
7.3.2	Country-code TLDs/th pop. 15–69	58.1	24 ●
7.3.3	Wikipedia edits/pop. 15–69	12,016.7	39
7.3.4	Video uploads on YouTube/pop. 15–69	76.8	35

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.1
GDP (US\$ billions)	46.9
GDP per capita, PPP\$	27,899.8
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	47.2	28
Innovation Output Sub-Index	41.4	31
Innovation Input Sub-Index	53.1	28
Innovation Efficiency Ratio	0.8	53
Global Innovation Index 2013 (out of 142)	47.3	30
1 Institutions	78.7	23
1.1 Political environment	78.6	29
1.1.1 Political stability*	88.1	26
1.1.2 Government effectiveness*	68.1	31
1.1.3 Press freedom*	79.5	31
1.2 Regulatory environment	81.8	28
1.2.1 Regulatory quality*	64.6	44
1.2.2 Rule of law*	73.4	31
1.2.3 Cost of redundancy dismissal, salary weeks	10.7	44
1.3 Business environment	75.8	26
1.3.1 Ease of starting a business*	94.8	14
1.3.2 Ease of resolving insolvency*	53.1	36
1.3.3 Ease of paying taxes*	79.6	35
2 Human capital & research	49.2	25
2.1 Education	58.1	13 ●
2.1.1 Expenditure on education, % GDP	5.7	37
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	31.3	20
2.1.3 School life expectancy, years	16.8	11 ●
2.1.4 PISA scales in reading, maths, & science	498.9	21
2.1.5 Pupil-teacher ratio, secondary	9.0	15
2.2 Tertiary education	46.5	29
2.2.1 Tertiary enrolment, % gross	86.0	6 ●
2.2.2 Graduates in science & engineering, %	24.7	29
2.2.3 Tertiary inbound mobility, %	2.3	58
2.3 Research & development (R&D)	43.0	25
2.3.1 Researchers, headcounts/mn pop.	6,069.0	14
2.3.2 Gross expenditure on R&D, % GDP	2.8	10 ●
2.3.3 QS university ranking, average score top 3*	8.1	61
3 Infrastructure	46.4	34
3.1 Information & communication technologies (ICTs)	52.4	40
3.1.1 ICT access*	72.3	29
3.1.2 ICT use*	49.4	33
3.1.3 Government's online service*	66.7	35
3.1.4 E-participation*	21.1	65
3.2 General infrastructure	33.6	69
3.2.1 Electricity output, kWh/cap	7,537.4	26
3.2.2 Logistics performance*	66.7	34
3.2.3 Gross capital formation, % GDP	16.2	122 ○
3.3 Ecological sustainability	53.2	17
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.1	49
3.3.2 Environmental performance*	76.4	15
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	7.3	17
4 Market sophistication	51.1	51
4.1 Credit	38.9	60
4.1.1 Ease of getting credit*	50.0	96 ○
4.1.2 Domestic credit to private sector, % GDP	87.4	37
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	38.9	54
4.2.1 Ease of protecting investors*	73.3	14
4.2.2 Market capitalization, % GDP	14.2	82 ○
4.2.3 Total value of stocks traded, % GDP	0.9	69
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	75.5	72
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	70.5	46
5 Business sophistication	39.9	36
5.1 Knowledge workers	66.6	16
5.1.1 Knowledge-intensive employment, %	41.4	21
5.1.2 Firms offering formal training, % firms	48.6	29
5.1.3 GERD performed by business, % GDP	2.2	7 ●
5.1.4 GERD performed by business, %	77.2	2 ●
5.1.5 GMAT test takers/mn pop. 20–34	93.9	54
5.2 Innovation linkages	27.3	90
5.2.1 University/industry research collaboration†	46.2	53
5.2.2 State of cluster development†	41.7	90
5.2.3 GERD financed by abroad, %	8.6	48
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	50
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	31
5.3 Knowledge absorption	25.8	65
5.3.1 Royalty & license fees payments, % total trade	1.2	19
5.3.2 High-tech imports less re-imports, %	5.7	92 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.8	13 ●
5.3.4 FDI net inflows, % GDP	0.0	136 ○
6 Knowledge & technology outputs	40.6	27
6.1 Knowledge creation	33.4	31
6.1.1 Domestic resident patent app./tr PPP\$ GDP	8.1	12
6.1.2 PCT resident patent app./tr PPP\$ GDP	2.0	24
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.2	51 ○
6.1.4 Scientific & technical articles/bn PPP\$ GDP	64.0	4 ●
6.1.5 Citable documents H index	153.0	40
6.2 Knowledge impact	54.0	15
6.2.1 Growth rate of PPP\$ GDP/worker, %	–0.6	99 ○
6.2.2 New businesses/th pop. 15–64	4.4	25
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	28.2	15
6.2.5 High- & medium-high-tech manufactures, %	46.3	12
6.3 Knowledge diffusion	34.2	48
6.3.1 Royalty & license fees receipts, % total trade	0.3	33
6.3.2 High-tech exports less re-exports, %	4.5	35
6.3.3 Comm., computer & info. services exp., % total trade	1.6	54
6.3.4 FDI net outflows, % GDP	–1.0	118 ○
7 Creative outputs	42.2	36
7.1 Intangible assets	42.2	80
7.1.1 Domestic res trademark app./bn PPP\$ GDP	12.3	93 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	3.7	6 ●
7.1.3 ICTs & business model creation†	56.2	67
7.1.4 ICTs & organizational model creation†	53.8	66
7.2 Creative goods & services	40.1	18
7.2.1 Cultural & creative services exports, % total trade	0.9	10 ●
7.2.2 National feature films/mn pop. 15–69	12.5	8 ●
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	36
7.2.5 Creative goods exports, % total trade	0.8	44
7.3 Online creativity	44.3	31
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	29.1	25
7.3.2 Country-code TLDs/th pop. 15–69	58.0	25
7.3.3 Wikipedia edits/pop. 15–69	26,997.8	14
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

South Africa

Key indicators

Population (millions)	51.2
GDP (US\$ billions)	350.8
GDP per capita, PPP\$	11,259.1
Income group	Upper-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	38.2	53
Innovation Output Sub-Index	30.9	63
Innovation Input Sub-Index	45.6	47
Innovation Efficiency Ratio	0.7	93
Global Innovation Index 2013 (out of 142)	37.6	58
1 Institutions	69.9	44
1.1 Political environment	63.5	54
1.1.1 Political stability*	65.6	73
1.1.2 Government effectiveness*	49.5	54
1.1.3 Press freedom*	75.4	43
1.2 Regulatory environment	75.5	39
1.2.1 Regulatory quality*	58.7	59
1.2.2 Rule of law*	48.6	57
1.2.3 Cost of redundancy dismissal, salary weeks	9.3	32
1.3 Business environment	70.8	45
1.3.1 Ease of starting a business*	88.8	46
1.3.2 Ease of resolving insolvency*	37.6	73
1.3.3 Ease of paying taxes*	86.0	19 ●
2 Human capital & research	28.7	70
2.1 Education	34.5	99 ○
2.1.1 Expenditure on education, % GDP	6.0	28
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	19.7	61
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	25.0	90 ○
2.2 Tertiary education	n/a	n/a
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	22.8	40
2.3.1 Researchers, headcounts/mn pop.	736.6	62
2.3.2 Gross expenditure on R&D, % GDP	0.8	43
2.3.3 QS university ranking, average score top 3*	44.5	30 ●
3 Infrastructure	32.9	84
3.1 Information & communication technologies (ICTs)	31.6	86
3.1.1 ICT access*	41.4	78
3.1.2 ICT use*	23.5	72
3.1.3 Government's online service*	45.8	82
3.1.4 E-participation*	15.8	79
3.2 General infrastructure	37.6	52
3.2.1 Electricity output, kWh/cap	5,131.0	44
3.2.2 Logistics performance*	81.7	22 ●
3.2.3 Gross capital formation, % GDP	19.2	99 ○
3.3 Ecological sustainability	29.5	95
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	3.5	102 ○
3.3.2 Environmental performance*	53.5	65
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.6	51
4 Market sophistication	63.8	18 ●
4.1 Credit	47.2	39
4.1.1 Ease of getting credit*	81.3	27
4.1.2 Domestic credit to private sector, % GDP	151.1	13 ●
4.1.3 Microfinance gross loans, % GDP	0.9	39

4.2 Investment	66.6	12 ●
4.2.1 Ease of protecting investors*	80.0	10 ●
4.2.2 Market capitalization, % GDP	159.3	3 ●
4.2.3 Total value of stocks traded, % GDP	81.1	6 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	66 ○
4.3 Trade & competition	77.6	44
4.3.1 Applied tariff rate, weighted mean, %	4.5	78
4.3.2 Non-agricultural mkt access weighted tariff, %	1.5	85
4.3.3 Intensity of local competition [†]	71.0	43
5 Business sophistication	32.7	68
5.1 Knowledge workers	40.8	63
5.1.1 Knowledge-intensive employment, %	25.3	52
5.1.2 Firms offering formal training, % firms	38.7	44
5.1.3 GERD performed by business, % GDP	0.4	37
5.1.4 GERD performed by business, %	49.7	37
5.1.5 GMAT test takers/mn pop. 20–34	53.5	72
5.2 Innovation linkages	30.4	75
5.2.1 University/industry research collaboration [†]	59.0	28 ●
5.2.2 State of cluster development [†]	52.5	39
5.2.3 GERD financed by abroad, %	12.1	37
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	49
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	81 ○
5.3 Knowledge absorption	26.8	59
5.3.1 Royalty & license fees payments, % total trade	1.8	9 ●
5.3.2 High-tech imports less re-imports, %	9.8	33
5.3.3 Comm., computer & info. services imp., % total trade	0.4	104 ○
5.3.4 FDI net inflows, % GDP	1.5	100 ○
6 Knowledge & technology outputs	29.1	62
6.1 Knowledge creation	18.2	59
6.1.1 Domestic resident patent app/tr PPP\$ GDP	1.1	66
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.5	37
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	15.8	55
6.1.5 Citable documents H index	231.0	34
6.2 Knowledge impact	44.5	45
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.2	34
6.2.2 New businesses/th pop. 15–64	6.5	16 ●
6.2.3 Computer software spending, % GDP	0.4	25
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	6.8	56
6.2.5 High- & medium-high-tech manufactures, %	28.2	38
6.3 Knowledge diffusion	24.7	112 ○
6.3.1 Royalty & license fees receipts, % total trade	0.1	63
6.3.2 High-tech exports less re-exports, %	1.9	54
6.3.3 Comm., computer & info. services exp., % total trade	0.4	105 ○
6.3.4 FDI net outflows, % GDP	1.1	46
7 Creative outputs	32.7	70
7.1 Intangible assets	44.7	71
7.1.1 Domestic res trademark app/bn PPP\$ GDP	35.6	70
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation [†]	62.2	44
7.1.4 ICTs & organizational model creation [†]	58.0	48
7.2 Creative goods & services	18.2	68
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.6	84 ○
7.2.3 Global ent. & media output/th pop. 15–69	0.3	35
7.2.4 Printing & publishing manufactures, %	0.0	27
7.2.5 Creative goods exports, % total trade	0.5	53
7.3 Online creativity	23.1	62
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	4.2	64
7.3.2 Country-code TLDs/th pop. 15–69	43.9	43
7.3.3 Wikipedia edits/pop. 15–69	1,071.9	95
7.3.4 Video uploads on YouTube/pop. 15–69	42.5	57 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	46.2
GDP (US\$ billions)	1,358.7
GDP per capita, PPP\$	29,851.1
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	49.3	27
Innovation Output Sub-Index	42.6	28
Innovation Input Sub-Index	55.9	26
Innovation Efficiency Ratio	0.8	60
Global Innovation Index 2013 (out of 142)	49.4	26
1 Institutions	74.8	34
1.1 Political environment	71.8	43
1.1.1 Political stability*	65.4	75 ○
1.1.2 Government effectiveness*	70.5	29
1.1.3 Press freedom*	79.5	32
1.2 Regulatory environment	77.7	35
1.2.1 Regulatory quality*	73.5	35
1.2.2 Rule of law*	75.1	26
1.2.3 Cost of redundancy dismissal, salary weeks	17.4	85 ○
1.3 Business environment	75.0	28
1.3.1 Ease of starting a business*	77.8	97 ○
1.3.2 Ease of resolving insolvency*	76.6	20 ●
1.3.3 Ease of paying taxes*	70.7	63
2 Human capital & research	48.3	26
2.1 Education	54.5	30
2.1.1 Expenditure on education, % GDP	5.0	63
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	26.6	31
2.1.3 School life expectancy, years	17.1	7 ●
2.1.4 PISA scales in reading, maths, & science	489.6	27
2.1.5 Pupil-teacher ratio, secondary	11.4	34
2.2 Tertiary education	47.4	28
2.2.1 Tertiary enrolment, % gross	82.6	8 ●
2.2.2 Graduates in science & engineering, %	25.3	25
2.2.3 Tertiary inbound mobility, %	3.2	50
2.3 Research & development (R&D)	42.8	26
2.3.1 Researchers, headcounts/mn pop.	4,735.2	23
2.3.2 Gross expenditure on R&D, % GDP	1.3	27
2.3.3 QS university ranking, average score top 3*	54.6	22
3 Infrastructure	56.7	16 ●
3.1 Information & communication technologies (ICTs)	62.9	25
3.1.1 ICT access*	70.5	32
3.1.2 ICT use*	55.2	27
3.1.3 Government's online service*	75.8	23
3.1.4 E-participation*	50.0	31
3.2 General infrastructure	38.1	49
3.2.1 Electricity output, kWh/cap	6,369.4	32
3.2.2 Logistics performance*	82.9	19
3.2.3 Gross capital formation, % GDP	18.0	110 ○
3.3 Ecological sustainability	69.0	2 ●
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.8	18
3.3.2 Environmental performance*	79.8	7 ●
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	14.0	3 ●
4 Market sophistication	64.7	15 ●
4.1 Credit	65.3	13 ●
4.1.1 Ease of getting credit*	68.8	53
4.1.2 Domestic credit to private sector, % GDP	188.8	6 ●
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	51.1	28
4.2.1 Ease of protecting investors*	50.0	81 ○
4.2.2 Market capitalization, % GDP	73.7	22
4.2.3 Total value of stocks traded, % GDP	79.8	7 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.2	17
4.3 Trade & competition	77.6	45
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	74.7	25
5 Business sophistication	35.2	52
5.1 Knowledge workers	53.2	36
5.1.1 Knowledge-intensive employment, %	32.5	39
5.1.2 Firms offering formal training, % firms	51.3	25
5.1.3 GERD performed by business, % GDP	0.7	29
5.1.4 GERD performed by business, %	53.0	32
5.1.5 GMAT test takers/mn pop. 20–34	114.1	46
5.2 Innovation linkages	29.7	79 ○
5.2.1 University/industry research collaboration†	49.7	46
5.2.2 State of cluster development†	52.5	39
5.2.3 GERD financed by abroad, %	6.7	54 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	75 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	30
5.3 Knowledge absorption	22.9	85 ○
5.3.1 Royalty & license fees payments, % total trade	0.5	52
5.3.2 High-tech imports less re-imports, %	6.0	83 ○
5.3.3 Comm., computer & info. services imp., % total trade	1.3	47
5.3.4 FDI net inflows, % GDP	2.7	69
6 Knowledge & technology outputs	43.1	22
6.1 Knowledge creation	33.6	30
6.1.1 Domestic resident patent app/tr PPP\$ GDP	2.4	48
6.1.2 PCT resident patent app/tr PPP\$ GDP	1.2	30
6.1.3 Domestic res utility model app/tr PPP\$ GDP	1.8	19
6.1.4 Scientific & technical articles/bn PPP\$ GDP	36.7	20 ●
6.1.5 Citable documents H index	476.0	12 ●
6.2 Knowledge impact	60.2	5 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	2.3	49
6.2.2 New businesses/th pop. 15–64	2.7	36
6.2.3 Computer software spending, % GDP	0.6	10 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	42.8	1 ●
6.2.5 High- & medium-high-tech manufactures, %	34.5	28
6.3 Knowledge diffusion	35.4	46
6.3.1 Royalty & license fees receipts, % total trade	0.3	31
6.3.2 High-tech exports less re-exports, %	3.3	40
6.3.3 Comm., computer & info. services exp., % total trade	2.0	42
6.3.4 FDI net outflows, % GDP	0.4	73 ○
7 Creative outputs	42.1	38
7.1 Intangible assets	45.8	63
7.1.1 Domestic res trademark app/bn PPP\$ GDP	59.5	44
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.8	32
7.1.3 ICTs & business model creation†	68.3	26
7.1.4 ICTs & organizational model creation†	61.5	31
7.2 Creative goods & services	26.0	47
7.2.1 Cultural & creative services exports, % total trade	0.2	37
7.2.2 National feature films/mn pop. 15–69	5.9	23
7.2.3 Global ent. & media output/th pop. 15–69	0.8	25
7.2.4 Printing & publishing manufactures, %	0.0	33
7.2.5 Creative goods exports, % total trade	0.9	40
7.3 Online creativity	51.0	26
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	31.0	24
7.3.2 Country-code TLDs/th pop. 15–69	53.1	32
7.3.3 Wikipedia edits/pop. 15–69	19,110.7	28
7.3.4 Video uploads on YouTube/pop. 15–69	87.3	16

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Sri Lanka

Key indicators

Population (millions)	20.3
GDP (US\$ billions)	65.8
GDP per capita, PPP\$	6,530.5
Income group	Lower-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	29.0	105
Innovation Output Sub-Index	27.0	81
Innovation Input Sub-Index	30.9	125 ○
Innovation Efficiency Ratio	0.9	17 ●
Global Innovation Index 2013 (out of 142)	30.4	98

1	Institutions	40.9	134	○
1.1	Political environment	42.1	122	○
1.1.1	Political stability*	48.4	109	
1.1.2	Government effectiveness*	34.5	83	
1.1.3	Press freedom*	43.4	134	○
1.2	Regulatory environment	22.3	139	○
1.2.1	Regulatory quality*	45.7	82	
1.2.2	Rule of law*	43.4	65	
1.2.3	Cost of redundancy dismissal, salary weeks	69.3	139	○
1.3	Business environment	58.3	88	
1.3.1	Ease of starting a business*	87.0	60	
1.3.2	Ease of resolving insolvency*	44.4	51	●
1.3.3	Ease of paying taxes*	43.4	129	○

2	Human capital & research	17.1	115	
2.1	Education	29.9	119	
2.1.1	Expenditure on education, % GDP	1.7	130	○
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	6.9	108	○
2.1.3	School life expectancy, years	13.7	60	
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	17.3	72	
2.2	Tertiary education	18.2	104	
2.2.1	Tertiary enrolment, % gross	17.0	94	
2.2.2	Graduates in science & engineering, %	16.7	72	
2.2.3	Tertiary inbound mobility, %	0.1	103	○
2.3	Research & development (R&D)	3.4	92	
2.3.1	Researchers, headcounts/mn pop.	248.7	82	
2.3.2	Gross expenditure on R&D, % GDP	0.2	93	
2.3.3	QS university ranking, average score top 3*	4.6	68	

3	Infrastructure	36.6	69	
3.1	Information & communication technologies (ICTs)	22.0	105	
3.1.1	ICT access*	33.6	96	
3.1.2	ICT use*	8.7	107	
3.1.3	Government's online service*	37.9	97	
3.1.4	E-participation*	7.9	98	
3.2	General infrastructure	38.1	50	●
3.2.1	Electricity output, kWh/cap	558.0	104	○
3.2.2	Logistics performance*	45.2	81	
3.2.3	Gross capital formation, % GDP	33.7	17	●
3.3	Ecological sustainability	49.7	27	●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.9	17	●
3.3.2	Environmental performance*	53.9	63	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a	

4	Market sophistication	40.2	124	○
4.1	Credit	28.2	99	
4.1.1	Ease of getting credit*	62.5	69	
4.1.2	Domestic credit to private sector, % GDP	31.1	96	
4.1.3	Microfinance gross loans, % GDP	1.1	36	●

4.2	Investment	28.1	109	
4.2.1	Ease of protecting investors*	60.0	42	●
4.2.2	Market capitalization, % GDP	28.7	59	
4.2.3	Total value of stocks traded, % GDP	2.8	56	
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	60	○
4.3	Trade & competition	64.2	125	○
4.3.1	Applied tariff rate, weighted mean, %	5.7	92	
4.3.2	Non-agricultural mkt access weighted tariff, %	7.3	138	○
4.3.3	Intensity of local competition†	76.8	18	●

5	Business sophistication	19.8	132	○
5.1	Knowledge workers	23.6	113	
5.1.1	Knowledge-intensive employment, %	19.1	76	
5.1.2	Firms offering formal training, % firms	13.1	100	○
5.1.3	GERD performed by business, % GDP	0.1	65	
5.1.4	GERD performed by business, %	43.7	41	
5.1.5	GMAT test takers/mn pop. 20–34	23.6	107	
5.2	Innovation linkages	21.9	121	○
5.2.1	University/industry research collaboration†	33.7	114	○
5.2.2	State of cluster development†	49.3	58	
5.2.3	GERD financed by abroad, %	2.7	72	
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	65	
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	80	
5.3	Knowledge absorption	13.9	127	○
5.3.1	Royalty & license fees payments, % total trade	n/a	n/a	
5.3.2	High-tech imports less re-imports, %	5.0	98	
5.3.3	Comm., computer & info. services imp., % total trade	0.4	109	
5.3.4	FDI net inflows, % GDP	1.6	95	

6	Knowledge & technology outputs	26.5	75	
6.1	Knowledge creation	7.1	95	
6.1.1	Domestic resident patent app/tr PPP\$ GDP	1.7	56	
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	70	
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a	
6.1.4	Scientific & technical articles/bn PPP\$ GDP	3.7	119	
6.1.5	Citable documents H index	86.0	72	
6.2	Knowledge impact	34.9	83	
6.2.1	Growth rate of PPP\$ GDP/worker, %	6.1	4	●
6.2.2	New businesses/th pop. 15–64	0.5	76	
6.2.3	Computer software spending, % GDP	0.3	37	
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	4.2	71	
6.2.5	High- & medium-high-tech manufactures, %	8.9	78	
6.3	Knowledge diffusion	37.5	41	●
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a	
6.3.2	High-tech exports less re-exports, %	0.3	88	
6.3.3	Comm., computer & info. services exp., % total trade	3.1	19	●
6.3.4	FDI net outflows, % GDP	0.1	86	

7	Creative outputs	27.6	91	
7.1	Intangible assets	45.2	67	
7.1.1	Domestic res trademark app/bn PPP\$ GDP	37.7	67	
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a	
7.1.3	ICTs & business model creation†	62.2	44	●
7.1.4	ICTs & organizational model creation†	58.8	43	●
7.2	Creative goods & services	16.6	75	
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a	
7.2.2	National feature films/mn pop. 15–69	n/a	n/a	
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a	
7.2.4	Printing & publishing manufactures, %	0.0	41	
7.2.5	Creative goods exports, % total trade	0.3	69	
7.3	Online creativity	3.2	117	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.4	101	
7.3.2	Country-code TLDs/th pop. 15–69	6.1	111	
7.3.3	Wikipedia edits/pop. 15–69	1,282.5	91	
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a	

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	37.2
GDP (US\$ billions)	70.1
GDP per capita, PPP\$	2,631.1
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	12.7	143 ○
Innovation Output Sub-Index	2.1	143 ○
Innovation Input Sub-Index	23.2	142 ○
Innovation Efficiency Ratio	0.1	143 ○
Global Innovation Index 2013 (out of 142)	19.8	141

1 Institutions	36.4	139
1.1 Political environment	14.0	143 ○
1.1.1 Political stability*	10.2	141 ○
1.1.2 Government effectiveness*	1.9	142 ○
1.1.3 Press freedom*	29.9	139 ○
1.2 Regulatory environment	37.5	133
1.2.1 Regulatory quality*	9.3	139
1.2.2 Rule of law*	13.1	136
1.2.3 Cost of redundancy dismissal, salary weeks	26.0	113
1.3 Business environment	57.8	89 ●
1.3.1 Ease of starting a business*	73.7	108
1.3.2 Ease of resolving insolvency*	35.2	79 ●
1.3.3 Ease of paying taxes*	64.4	89 ●
2 Human capital & research	7.6	141 ○
2.1 Education	11.9	140 ○
2.1.1 Expenditure on education, % GDP	2.2	125
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	n/a	n/a
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	3.3	93
2.3.1 Researchers, headcounts/mn pop.	354.8	75 ●
2.3.2 Gross expenditure on R&D, % GDP	0.3	77
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	18.3	135
3.1 Information & communication technologies (ICTs)	18.0	118
3.1.1 ICT access*	26.2	106
3.1.2 ICT use*	12.6	98
3.1.3 Government's online service*	25.5	128
3.1.4 E-participation*	7.9	98
3.2 General infrastructure	17.1	137
3.2.1 Electricity output, kWh/cap	192.7	114
3.2.2 Logistics performance*	19.4	135 ○
3.2.3 Gross capital formation, % GDP	20.3	89 ●
3.3 Ecological sustainability	19.7	135
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	5.5	76 ●
3.3.2 Environmental performance*	24.6	139 ○
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.0	126 ○
4 Market sophistication	38.9	129
4.1 Credit	9.7	142 ○
4.1.1 Ease of getting credit*	25.0	134 ○
4.1.2 Domestic credit to private sector, % GDP	12.8	137
4.1.3 Microfinance gross loans, % GDP	0.1	70

4.2 Investment	33.3	76 ●
4.2.1 Ease of protecting investors*	33.3	125
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	73.8	87 ●
4.3.1 Applied tariff rate, weighted mean, %	14.7	136
4.3.2 Non-agricultural mkt access weighted tariff, %	0.0	16 ●
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication 14.8 139

5.1 Knowledge workers	14.6	135
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	0.1	56
5.1.4 GERD performed by business, %	33.7	53 ●
5.1.5 GMAT test takers/mn pop. 20–34	1.7	140 ○
5.2 Innovation linkages	10.7	139 ○
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	60 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	19.0	110
5.3.1 Royalty & license fees payments, % total trade	0.0	119
5.3.2 High-tech imports less re-imports, %	7.8	58 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.3	122
5.3.4 FDI net inflows, % GDP	4.8	41 ●

6 Knowledge & technology outputs 2.4 143 ○

6.1 Knowledge creation	2.6	134
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.0	106
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	104
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	3.1	123
6.1.5 Citable documents H index	52.0	109
6.2 Knowledge impact	0.7	142 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	–13.8	116 ○
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.0	122
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	3.8	137
6.3.1 Royalty & license fees receipts, % total trade	0.0	85
6.3.2 High-tech exports less re-exports, %	0.1	115
6.3.3 Comm., computer & info. services exp., % total trade	0.4	108
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs 1.9 141 ○

7.1 Intangible assets	2.7	140 ○
7.1.1 Domestic res trademark app./bn PPP\$ GDP	10.0	95
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.0	66
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	1.9	126
7.2.1 Cultural & creative services exports, % total trade	0.0	94
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	94
7.3 Online creativity	0.2	137
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.2	133
7.3.2 Country-code TLDs/th pop. 15–69	0.3	137
7.3.3 Wikipedia edits/pop. 15–69	75.8	125
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Swaziland

Key indicators

Population (millions)	1.2
GDP (US\$ billions)	3.6
GDP per capita, PPP\$	6,218.0
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.3	127
Innovation Output Sub-Index	18.4	127
Innovation Input Sub-Index	32.2	119
Innovation Efficiency Ratio	0.6	123
Global Innovation Index 2013 (out of 142)	29.6	104

1	Institutions	55.3	90
1.1	Political environment	44.9	109
1.1.1	Political stability*	55.8	89
1.1.2	Government effectiveness*	25.5	108
1.1.3	Press freedom*	53.2	127
1.2	Regulatory environment	60.3	87
1.2.1	Regulatory quality*	34.1	111
1.2.2	Rule of law*	33.6	89
1.2.3	Cost of redundancy dismissal, salary weeks	14.6	66 ●
1.3	Business environment	60.7	84
1.3.1	Ease of starting a business*	68.8	118
1.3.2	Ease of resolving insolvency*	40.8	60 ●
1.3.3	Ease of paying taxes*	72.5	55 ●
2	Human capital & research	18.4	106
2.1	Education	52.6	37 ●
2.1.1	Expenditure on education, % GDP	8.3	6 ●
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	40.8	4 ●
2.1.3	School life expectancy, years	11.3	99
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	16.4	67
2.2	Tertiary education	2.5	137 ○
2.2.1	Tertiary enrolment, % gross	6.0	122 ○
2.2.2	Graduates in science & engineering, %	2.7	103 ○
2.2.3	Tertiary inbound mobility, %	0.9	84
2.3	Research & development (R&D)	0.0	131 ○
2.3.1	Researchers, headcounts/mn pop.	n/a	n/a
2.3.2	Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	14.8	143 ○
3.1	Information & communication technologies (ICTs)	13.8	131 ○
3.1.1	ICT access*	24.3	113
3.1.2	ICT use*	11.1	104
3.1.3	Government's online service*	14.4	139 ○
3.1.4	E-participation*	5.3	111
3.2	General infrastructure	3.3	143 ○
3.2.1	Electricity output, kWh/cap	n/a	n/a
3.2.2	Logistics performance*	n/a	n/a
3.2.3	Gross capital formation, % GDP	10.4	141 ○
3.3	Ecological sustainability	27.4	105
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2	Environmental performance*	37.4	116
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.1	60
4	Market sophistication	38.1	131 ○
4.1	Credit	32.1	84
4.1.1	Ease of getting credit*	68.8	53
4.1.2	Domestic credit to private sector, % GDP	25.0	109
4.1.3	Microfinance gross loans, % GDP	1.7	30 ●

4.2	Investment	22.6	129
4.2.1	Ease of protecting investors*	43.3	105
4.2.2	Market capitalization, % GDP	6.7	96
4.2.3	Total value of stocks traded, % GDP	0.0	109 ○
4.2.4	Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3	Trade & competition	59.6	131 ○
4.3.1	Applied tariff rate, weighted mean, %	4.2	77
4.3.2	Non-agricultural mkt access weighted tariff, %	5.6	133 ○
4.3.3	Intensity of local competition†	56.0	111
5	Business sophistication	34.5	57 ●
5.1	Knowledge workers	51.2	38 ●
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	51.0	26 ●
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	33.6	90
5.2	Innovation linkages	37.5	50 ●
5.2.1	University/industry research collaboration†	36.0	102
5.2.2	State of cluster development†	43.7	81
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.2	32 ●
5.3	Knowledge absorption	14.6	125
5.3.1	Royalty & license fees payments, % total trade	0.7	43 ●
5.3.2	High-tech imports less re-imports, %	n/a	n/a
5.3.3	Comm., computer & info. services imp., % total trade	0.2	130 ○
5.3.4	FDI net inflows, % GDP	2.4	77
6	Knowledge & technology outputs	14.4	131 ○
6.1	Knowledge creation	6.7	97
6.1.1	Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.3	48 ●
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	6.7	93
6.1.5	Citable documents H index	28.0	135 ○
6.2	Knowledge impact	7.3	128
6.2.1	Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	3.2	83
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a
6.3	Knowledge diffusion	29.1	83
6.3.1	Royalty & license fees receipts, % total trade	0.0	93
6.3.2	High-tech exports less re-exports, %	n/a	n/a
6.3.3	Comm., computer & info. services exp., % total trade	1.0	84
6.3.4	FDI net outflows, % GDP	0.1	89
7	Creative outputs	22.5	114
7.1	Intangible assets	42.4	79
7.1.1	Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	41.7	123 ○
7.1.4	ICTs & organizational model creation†	43.2	110
7.2	Creative goods & services	0.4	137 ○
7.2.1	Cultural & creative services exports, % total trade	0.0	92
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	n/a	n/a
7.3	Online creativity	4.8	111
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.8	97
7.3.2	Country-code TLDs/th pop. 15–69	12.5	93
7.3.3	Wikipedia edits/pop. 15–69	145.1	119
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	9.5
GDP (US\$ billions)	557.9
GDP per capita, PPP\$	41,188.4
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	62.3	3 ●
Innovation Output Sub-Index	57.1	3 ●
Innovation Input Sub-Index	67.5	6
Innovation Efficiency Ratio	0.8	22
Global Innovation Index 2013 (out of 142)	61.4	2

1 Institutions	89.7	10
1.1 Political environment	92.5	5 ●
1.1.1 Political stability*	94.2	12
1.1.2 Government effectiveness*	92.7	4 ●
1.1.3 Press freedom*	90.8	8
1.2 Regulatory environment	93.0	14
1.2.1 Regulatory quality*	98.2	3 ●
1.2.2 Rule of law*	99.6	3 ●
1.2.3 Cost of redundancy dismissal, salary weeks	14.4	65 ○
1.3 Business environment	83.7	16
1.3.1 Ease of starting a business*	92.3	24
1.3.2 Ease of resolving insolvency*	80.0	19
1.3.3 Ease of paying taxes*	78.9	37

2 Human capital & research	61.9	6
2.1 Education	58.2	12
2.1.1 Expenditure on education, % GDP	7.0	11
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	31.9	18
2.1.3 School life expectancy, years	15.8	24
2.1.4 PISA scales in reading, maths, & science	482.1	34 ○
2.1.5 Pupil-teacher ratio, secondary	9.5	19
2.2 Tertiary education	51.6	20
2.2.1 Tertiary enrolment, % gross	73.9	18
2.2.2 Graduates in science & engineering, %	25.8	22
2.2.3 Tertiary inbound mobility, %	7.9	21
2.3 Research & development (R&D)	75.9	5 ●
2.3.1 Researchers, headcounts/mn pop.	8,470.7	6
2.3.2 Gross expenditure on R&D, % GDP	3.4	4 ●
2.3.3 QS university ranking, average score top 3*	70.3	14

3 Infrastructure	63.6	4 ●
3.1 Information & communication technologies (ICTs)	79.7	7
3.1.1 ICT access*	83.7	7
3.1.2 ICT use*	82.5	1 ●
3.1.3 Government's online service*	84.3	16
3.1.4 E-participation*	68.4	15
3.2 General infrastructure	53.8	11
3.2.1 Electricity output, kWh/cap	17,358.9	5 ●
3.2.2 Logistics performance*	88.9	12
3.2.3 Gross capital formation, % GDP	18.7	105 ○
3.3 Ecological sustainability	57.2	8
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.8	52 ○
3.3.2 Environmental performance*	78.1	9
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	10.1	10

4 Market sophistication	68.2	9
4.1 Credit	60.0	18
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	138.5	17
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	66.2	13
4.2.1 Ease of protecting investors*	63.3	32
4.2.2 Market capitalization, % GDP	106.6	13
4.2.3 Total value of stocks traded, % GDP	71.6	8
4.2.4 Venture capital deals/tr PPP\$ GDP	0.3	9
4.3 Trade & competition	78.3	40
4.3.1 Applied tariff rate, weighted mean, %	1.1	10
4.3.2 Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3 Intensity of local competition†	76.2	21

5 Business sophistication	53.9	9
5.1 Knowledge workers	77.7	3 ●
5.1.1 Knowledge-intensive employment, %	47.6	4 ●
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	2.3	5
5.1.4 GERD performed by business, %	67.8	12
5.1.5 GMAT test takers/mn pop. 20–34	346.7	12
5.2 Innovation linkages	48.1	19
5.2.1 University/industry research collaboration†	72.3	10
5.2.2 State of cluster development†	63.8	18
5.2.3 GERD financed by abroad, %	11.1	39 ○
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	31
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	2.5	9
5.3 Knowledge absorption	35.9	26
5.3.1 Royalty & license fees payments, % total trade	1.0	29
5.3.2 High-tech imports less re-imports, %	9.6	35
5.3.3 Comm., computer & info. services imp., % total trade	2.6	6
5.3.4 FDI net inflows, % GDP	0.7	122 ○

6 Knowledge & technology outputs	58.8	3 ●
6.1 Knowledge creation	65.5	5 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	5.9	22
6.1.2 PCT resident patent app./tr PPP\$ GDP	9.3	5
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	57.6	7
6.1.5 Citable documents H index	511.0	11
6.2 Knowledge impact	52.7	19
6.2.1 Growth rate of PPP\$ GDP/worker, %	1.0	66 ○
6.2.2 New businesses/th pop. 15–64	6.4	17
6.2.3 Computer software spending, % GDP	0.6	19
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	12.6	40
6.2.5 High- & medium-high-tech manufactures, %	47.8	11
6.3 Knowledge diffusion	58.3	5 ●
6.3.1 Royalty & license fees receipts, % total trade	2.8	7
6.3.2 High-tech exports less re-exports, %	9.5	21
6.3.3 Comm., computer & info. services exp., % total trade	4.2	10
6.3.4 FDI net outflows, % GDP	3.5	18

7 Creative outputs	55.4	9
7.1 Intangible assets	55.0	22
7.1.1 Domestic res trademark app./bn PPP\$ GDP	65.3	39 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.7	21
7.1.3 ICTs & business model creation†	78.2	3 ●
7.1.4 ICTs & organizational model creation†	74.0	4 ●
7.2 Creative goods & services	41.9	15
7.2.1 Cultural & creative services exports, % total trade	1.0	9
7.2.2 National feature films/mn pop. 15–69	6.4	19
7.2.3 Global ent. & media output/th pop. 15–69	2.2	6
7.2.4 Printing & publishing manufactures, %	0.0	50 ○
7.2.5 Creative goods exports, % total trade	1.8	30
7.3 Online creativity	69.7	7
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	49.0	19
7.3.2 Country-code TLDs/th pop. 15–69	71.6	9
7.3.3 Wikipedia edits/pop. 15–69	38,695.2	5 ●
7.3.4 Video uploads on YouTube/pop. 15–69	92.6	7

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Switzerland

Key indicators

Population (millions)	8.0
GDP (US\$ billions)	650.8
GDP per capita, PPP\$	46,430.1
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	64.8	1 ●
Innovation Output Sub-Index	63.1	1 ●
Innovation Input Sub-Index	66.4	7
Innovation Efficiency Ratio	0.9	6
Global Innovation Index 2013 (out of 142)	66.6	1

1	Institutions	87.6	16
1.1	Political environment	93.7	3 ●
1.1.1	Political stability*	100.0	1 ●
1.1.2	Government effectiveness*	91.0	6
1.1.3	Press freedom*	90.1	12
1.2	Regulatory environment	95.0	10
1.2.1	Regulatory quality*	92.2	11
1.2.2	Rule of law*	96.2	8
1.2.3	Cost of redundancy dismissal, salary weeks	10.1	38
1.3	Business environment	74.2	32
1.3.1	Ease of starting a business*	85.7	67 ○
1.3.2	Ease of resolving insolvency*	50.4	42
1.3.3	Ease of paying taxes*	86.6	16

2	Human capital & research	56.7	12
2.1	Education	49.5	52
2.1.1	Expenditure on education, % GDP	5.2	51
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	27.9	28
2.1.3	School life expectancy, years	15.7	27
2.1.4	PISA scales in reading, maths, & science	518.4	11
2.1.5	Pupil-teacher ratio, secondary	n/a	n/a
2.2	Tertiary education	51.1	23
2.2.1	Tertiary enrolment, % gross	54.3	48
2.2.2	Graduates in science & engineering, %	19.8	59 ○
2.2.3	Tertiary inbound mobility, %	16.2	10
2.3	Research & development (R&D)	69.3	9
2.3.1	Researchers, headcounts/mn pop.	5,994.2	15
2.3.2	Gross expenditure on R&D, % GDP	2.9	8
2.3.3	QS university ranking, average score top 3*	86.2	4

3	Infrastructure	59.0	10
3.1	Information & communication technologies (ICTs)	63.6	24
3.1.1	ICT access*	87.3	4
3.1.2	ICT use*	65.4	17
3.1.3	Government's online service*	67.3	32
3.1.4	E-participation*	34.2	45
3.2	General infrastructure	45.0	29
3.2.1	Electricity output, kWh/cap	8,573.1	19
3.2.2	Logistics performance*	86.9	16
3.2.3	Gross capital formation, % GDP	21.0	80 ○
3.3	Ecological sustainability	68.4	3 ●
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	12.3	5
3.3.2	Environmental performance*	87.7	1 ●
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	7.7	15

4	Market sophistication	74.7	6
4.1	Credit	69.4	9
4.1.1	Ease of getting credit*	81.3	27
4.1.2	Domestic credit to private sector, % GDP	176.1	11
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	71.8	7
4.2.1	Ease of protecting investors*	30.0	133 ○
4.2.2	Market capitalization, % GDP	170.7	1 ●
4.2.3	Total value of stocks traded, % GDP	101.4	5
4.2.4	Venture capital deals/tr PPP\$ GDP	0.4	1 ●
4.3	Trade & competition	83.0	10
4.3.1	Applied tariff rate, weighted mean, %	0.0	1 ●
4.3.2	Non-agricultural mkt access weighted tariff, %	2.1	92 ○
4.3.3	Intensity of local competition†	76.8	18

5	Business sophistication	54.2	8
5.1	Knowledge workers	79.3	2 ●
5.1.1	Knowledge-intensive employment, %	49.8	3
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	2.2	6
5.1.4	GERD performed by business, %	73.5	6
5.1.5	GMAT test takers/mn pop. 20–34	312.7	16
5.2	Innovation linkages	54.2	8
5.2.1	University/industry research collaboration†	80.7	1 ●
5.2.2	State of cluster development†	71.3	4
5.2.3	GERD financed by abroad, %	6.0	58 ○
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	0.1	17
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	4.6	4
5.3	Knowledge absorption	29.1	47
5.3.1	Royalty & license fees payments, % total trade	5.5	1 ●
5.3.2	High-tech imports less re-imports, %	8.0	56
5.3.3	Comm., computer & info. services imp., % total trade	0.2	127 ○
5.3.4	FDI net inflows, % GDP	1.5	101 ○

6	Knowledge & technology outputs	60.9	1 ●
6.1	Knowledge creation	70.0	2 ●
6.1.1	Domestic resident patent app/tr PPP\$ GDP	4.1	29
6.1.2	PCT resident patent app/tr PPP\$ GDP	11.7	3 ●
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	67.2	2 ●
6.1.5	Citable documents H index	569.0	9
6.2	Knowledge impact	61.7	4
6.2.1	Growth rate of PPP\$ GDP/worker, %	−0.2	94 ○
6.2.2	New businesses/th pop. 15–64	2.5	37
6.2.3	Computer software spending, % GDP	0.8	3
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	32.2	12
6.2.5	High- & medium-high-tech manufactures, %	63.2	2 ●
6.3	Knowledge diffusion	51.0	10
6.3.1	Royalty & license fees receipts, % total trade	5.0	2 ●
6.3.2	High-tech exports less re-exports, %	13.5	14
6.3.3	Comm., computer & info. services exp., % total trade	0.2	121 ○
6.3.4	FDI net outflows, % GDP	5.0	13

7	Creative outputs	65.3	2 ●
7.1	Intangible assets	63.9	7
7.1.1	Domestic res trademark app/bn PPP\$ GDP	101.8	16
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	8.1	1 ●
7.1.3	ICTs & business model creation†	71.0	17
7.1.4	ICTs & organizational model creation†	63.2	29
7.2	Creative goods & services	64.4	2 ●
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	14.5	1 ●
7.2.3	Global ent. & media output/th pop. 15–69	2.6	2 ●
7.2.4	Printing & publishing manufactures, %	0.0	10
7.2.5	Creative goods exports, % total trade	3.2	17
7.3	Online creativity	69.2	8
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	77.2	11
7.3.2	Country-code TLDs/th pop. 15–69	77.5	4
7.3.3	Wikipedia edits/pop. 15–69	23,126.3	18
7.3.4	Video uploads on YouTube/pop. 15–69	82.7	23

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	8.0
GDP (US\$ billions)	8.5
GDP per capita, PPP\$	2,354.1
Income group	Low income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	23.7	137 ○
Innovation Output Sub-Index	14.6	140 ○
Innovation Input Sub-Index	32.8	114
Innovation Efficiency Ratio	0.4	138 ○
Global Innovation Index 2013 (out of 142)	30.0	101

1 Institutions	46.2	122
1.1 Political environment	39.1	128
1.1.1 Political stability*	37.2	122
1.1.2 Government effectiveness*	15.9	127
1.1.3 Press freedom*	64.3	101
1.2 Regulatory environment	51.6	110
1.2.1 Regulatory quality*	22.5	131
1.2.2 Rule of law*	14.0	134
1.2.3 Cost of redundancy dismissal, salary weeks	15.5	72 ●
1.3 Business environment	47.7	126
1.3.1 Ease of starting a business*	82.7	74
1.3.2 Ease of resolving insolvency*	38.0	72 ●
1.3.3 Ease of paying taxes*	22.6	139 ○

2 Human capital & research	24.4	88
2.1 Education	41.6	79
2.1.1 Expenditure on education, % GDP	3.9	91
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	11.2	102
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	15.4	64
2.2 Tertiary education	30.1	79
2.2.1 Tertiary enrolment, % gross	22.5	87
2.2.2 Graduates in science & engineering, %	25.5	24 ●
2.2.3 Tertiary inbound mobility, %	1.6	70
2.3 Research & development (R&D)	1.4	113
2.3.1 Researchers, headcounts/mn pop.	200.3	85
2.3.2 Gross expenditure on R&D, % GDP	0.1	100
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	19.6	133
3.1 Information & communication technologies (ICTs)	12.1	136 ○
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	24.2	131
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	17.6	136 ○
3.2.1 Electricity output, kWh/cap	2,323.6	72
3.2.2 Logistics performance*	26.6	127
3.2.3 Gross capital formation, % GDP	16.6	118
3.3 Ecological sustainability	29.1	97
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.0	68
3.3.2 Environmental performance*	31.3	127
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a

4 Market sophistication	61.3	23 ●
4.1 Credit	46.8	40 ●
4.1.1 Ease of getting credit*	37.5	130
4.1.2 Domestic credit to private sector, % GDP	13.0	135 ○
4.1.3 Microfinance gross loans, % GDP	8.0	1 ●

4.2 Investment	66.7	10 ●
4.2.1 Ease of protecting investors*	66.7	21 ●
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	70.5	108
4.3.1 Applied tariff rate, weighted mean, %	5.9	93
4.3.2 Non-agricultural mkt access weighted tariff, %	3.6	125
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication	12.6	142 ○
5.1 Knowledge workers	17.3	130
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	21.2	90
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	5.5	128
5.2 Innovation linkages	4.8	141 ○
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	0.6	86
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	52 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	15.8	122
5.3.1 Royalty & license fees payments, % total trade	0.0	127 ○
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	1.2	49 ●
5.3.4 FDI net inflows, % GDP	0.2	132

6 Knowledge & technology outputs	24.3	88
6.1 Knowledge creation	21.9	46 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.2	93
6.1.2 PCT resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app./tr PPP\$ GDP	3.9	9 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	3.5	122
6.1.5 Citable documents H index	23.0	139 ○
6.2 Knowledge impact	31.2	99
6.2.1 Growth rate of PPP\$ GDP/worker, %	4.5	12 ●
6.2.2 New businesses/th pop. 15–64	0.3	83
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.2	140 ○
6.2.5 High- & medium-high-tech manufactures, %	2.4	94 ○
6.3 Knowledge diffusion	19.9	132
6.3.1 Royalty & license fees receipts, % total trade	0.0	83
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	2.1	39 ●
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	5.0	140 ○
7.1 Intangible assets	4.0	139 ○
7.1.1 Domestic res trademark app./bn PPP\$ GDP	15.6	89
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.0	74 ○
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	8.0	102
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	1.8	56
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	84
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	3.8	114
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.1	136 ○
7.3.2 Country-code TLDs/th pop. 15–69	10.7	101
7.3.3 Wikipedia edits/pop. 15–69	332.0	110
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Tanzania, United Republic of

Key indicators

Population (millions)	47.8
GDP (US\$ billions)	32.5
GDP per capita, PPP\$	1,715.5
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.6	123
Innovation Output Sub-Index	19.2	122
Innovation Input Sub-Index	32.0	120
Innovation Efficiency Ratio	0.6	113
Global Innovation Index 2013 (out of 142)	26.4	123

1	Institutions	57.2	85
1.1	Political environment	53.8	80
1.1.1	Political stability*	66.3	68
1.1.2	Government effectiveness*	22.4	114
1.1.3	Press freedom*	72.7	57 ●
1.2	Regulatory environment	65.9	73
1.2.1	Regulatory quality*	38.4	103
1.2.2	Rule of law*	30.5	97
1.2.3	Cost of redundancy dismissal, salary weeks	9.3	32 ●
1.3	Business environment	52.0	111
1.3.1	Ease of starting a business*	76.8	100
1.3.2	Ease of resolving insolvency*	22.7	116
1.3.3	Ease of paying taxes*	56.3	113
2	Human capital & research	12.7	132 ○
2.1	Education	30.8	115
2.1.1	Expenditure on education, % GDP	6.2	24 ●
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	16.2	77
2.1.3	School life expectancy, years	9.2	117 ○
2.1.4	PISA scales in reading, maths, & science	n/a	n/a
2.1.5	Pupil-teacher ratio, secondary	26.4	95
2.2	Tertiary education	3.2	135 ○
2.2.1	Tertiary enrolment, % gross	3.9	129 ○
2.2.2	Graduates in science & engineering, %	n/a	n/a
2.2.3	Tertiary inbound mobility, %	0.6	88
2.3	Research & development (R&D)	4.0	89
2.3.1	Researchers, headcounts/mn pop.	69.0	108
2.3.2	Gross expenditure on R&D, % GDP	0.5	58
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	25.4	115
3.1	Information & communication technologies (ICTs)	16.7	121
3.1.1	ICT access*	18.7	125 ○
3.1.2	ICT use*	4.9	116
3.1.3	Government's online service*	35.3	106
3.1.4	E-participation*	7.9	98
3.2	General infrastructure	39.6	45 ●
3.2.1	Electricity output, kWh/cap	114.7	119 ○
3.2.2	Logistics performance*	41.3	89
3.2.3	Gross capital formation, % GDP	36.7	10 ●
3.3	Ecological sustainability	19.8	134 ○
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.9	110
3.3.2	Environmental performance*	36.2	121
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	90
4	Market sophistication	36.6	136 ○
4.1	Credit	17.8	128
4.1.1	Ease of getting credit*	43.8	112
4.1.2	Domestic credit to private sector, % GDP	17.9	124
4.1.3	Microfinance gross loans, % GDP	0.4	51

4.2	Investment	21.7	133 ○
4.2.1	Ease of protecting investors*	50.0	81
4.2.2	Market capitalization, % GDP	6.4	98
4.2.3	Total value of stocks traded, % GDP	0.1	99
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	46
4.3	Trade & competition	70.3	110
4.3.1	Applied tariff rate, weighted mean, %	6.6	103
4.3.2	Non-agricultural mkt access weighted tariff, %	0.2	32 ●
4.3.3	Intensity of local competition†	53.0	121
5	Business sophistication	28.0	94
5.1	Knowledge workers	19.7	123
5.1.1	Knowledge-intensive employment, %	2.6	108 ○
5.1.2	Firms offering formal training, % firms	36.5	46 ●
5.1.3	GERD performed by business, % GDP	n/a	n/a
5.1.4	GERD performed by business, %	n/a	n/a
5.1.5	GMAT test takers/mn pop. 20–34	5.1	132 ○
5.2	Innovation linkages	46.7	22 ●
5.2.1	University/industry research collaboration†	41.8	72
5.2.2	State of cluster development†	42.0	87
5.2.3	GERD financed by abroad, %	42.0	10 ●
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3	Knowledge absorption	17.7	114
5.3.1	Royalty & license fees payments, % total trade	0.0	126 ○
5.3.2	High-tech imports less re-imports, %	6.6	75
5.3.3	Comm., computer & info. services imp., % total trade	0.3	113
5.3.4	FDI net inflows, % GDP	4.6	46 ●
6	Knowledge & technology outputs	17.5	119
6.1	Knowledge creation	8.2	90
6.1.1	Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.0	106 ○
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	9.0	83
6.1.5	Citable documents H index	93.0	69
6.2	Knowledge impact	39.4	68
6.2.1	Growth rate of PPP\$ GDP/worker, %	3.4	31 ●
6.2.2	New businesses/th pop. 15–64	n/a	n/a
6.2.3	Computer software spending, % GDP	n/a	n/a
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	0.7	127
6.2.5	High- & medium-high-tech manufactures, %	10.5	74
6.3	Knowledge diffusion	5.0	135 ○
6.3.1	Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2	High-tech exports less re-exports, %	0.9	70
6.3.3	Comm., computer & info. services exp., % total trade	0.4	104
6.3.4	FDI net outflows, % GDP	n/a	n/a
7	Creative outputs	20.9	122
7.1	Intangible assets	31.3	127
7.1.1	Domestic res trademark app/bn PPP\$ GDP	1.0	100 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	47.8	105
7.1.4	ICTs & organizational model creation†	45.7	94
7.2	Creative goods & services	19.8	60 ●
7.2.1	Cultural & creative services exports, % total trade	0.0	81
7.2.2	National feature films/mn pop. 15–69	n/a	n/a
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	0.0	12 ●
7.2.5	Creative goods exports, % total trade	0.1	102
7.3	Online creativity	1.2	123
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	0.2	130
7.3.2	Country-code TLDs/th pop. 15–69	3.4	116
7.3.3	Wikipedia edits/pop. 15–69	82.6	123
7.3.4	Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	2.1
GDP (US\$ billions)	10.2
GDP per capita, PPP\$	10,904.5
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.9	60
Innovation Output Sub-Index	30.4	66
Innovation Input Sub-Index	43.4	57
Innovation Efficiency Ratio	0.7	82
Global Innovation Index 2013 (out of 142)	38.2	51

1 Institutions	65.8	60
1.1 Political environment	53.1	81
1.1.1 Political stability*	54.8	91
1.1.2 Government effectiveness*	38.9	75
1.1.3 Press freedom*	65.7	95
1.2 Regulatory environment	69.4	57
1.2.1 Regulatory quality*	57.8	60
1.2.2 Rule of law*	39.8	74
1.2.3 Cost of redundancy dismissal, salary weeks	13.0	56
1.3 Business environment	74.7	29 ●
1.3.1 Ease of starting a business*	97.7	3 ●
1.3.2 Ease of resolving insolvency*	46.4	46
1.3.3 Ease of paying taxes*	80.1	33
2 Human capital & research	33.8	52
2.1 Education	65.2	3 ●
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	13.3	64
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	11.9	38
2.2 Tertiary education	31.9	72
2.2.1 Tertiary enrolment, % gross	40.8	62
2.2.2 Graduates in science & engineering, %	21.2	45
2.2.3 Tertiary inbound mobility, %	2.6	54
2.3 Research & development (R&D)	4.2	87
2.3.1 Researchers, headcounts/mn pop.	854.5	59
2.3.2 Gross expenditure on R&D, % GDP	0.2	85 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	36.3	72
3.1 Information & communication technologies (ICTs)	37.9	70
3.1.1 ICT access*	56.5	59
3.1.2 ICT use*	36.7	50
3.1.3 Government's online service*	45.1	85
3.1.4 E-participation*	13.2	84
3.2 General infrastructure	27.0	101
3.2.1 Electricity output, kWh/cap	3,337.9	59
3.2.2 Logistics performance*	37.7	97 ○
3.2.3 Gross capital formation, % GDP	n/a	n/a
3.3 Ecological sustainability	44.1	45
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.3	62
3.3.2 Environmental performance*	50.4	80
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	9.4	12 ●
4 Market sophistication	54.6	39
4.1 Credit	48.2	36
4.1.1 Ease of getting credit*	93.8	3 ●
4.1.2 Domestic credit to private sector, % GDP	47.5	72
4.1.3 Microfinance gross loans, % GDP	2.9	19 ●

4.2 Investment	35.9	64
4.2.1 Ease of protecting investors*	70.0	16 ●
4.2.2 Market capitalization, % GDP	5.8	100 ○
4.2.3 Total value of stocks traded, % GDP	0.3	84 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	79.7	31
4.3.1 Applied tariff rate, weighted mean, %	2.0	47
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	25 ●
4.3.3 Intensity of local competition†	63.3	82

5 Business sophistication	26.8	103
5.1 Knowledge workers	25.8	107 ○
5.1.1 Knowledge-intensive employment, %	29.6	47
5.1.2 Firms offering formal training, % firms	19.0	95 ○
5.1.3 GERD performed by business, % GDP	0.0	75 ○
5.1.4 GERD performed by business, %	11.5	73 ○
5.1.5 GMAT test takers/mn pop. 20–34	26.4	102 ○
5.2 Innovation linkages	30.8	73
5.2.1 University/industry research collaboration†	39.7	79
5.2.2 State of cluster development†	41.7	90
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	23.9	79
5.3.1 Royalty & license fees payments, % total trade	0.5	57
5.3.2 High-tech imports less re-imports, %	6.2	81
5.3.3 Comm., computer & info. services imp., % total trade	1.3	45
5.3.4 FDI net inflows, % GDP	3.4	62

6 Knowledge & technology outputs	28.2	64
6.1 Knowledge creation	9.6	84
6.1.1 Domestic resident patent app./tr PPP\$ GDP	1.7	54
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.1	76
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	12.8	66
6.1.5 Citable documents H index	62.0	94
6.2 Knowledge impact	42.5	55
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.4	81
6.2.2 New businesses/th pop. 15–64	3.6	29
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	22.3	19 ●
6.2.5 High- & medium-high-tech manufactures, %	13.8	68
6.3 Knowledge diffusion	32.7	63
6.3.1 Royalty & license fees receipts, % total trade	0.1	51
6.3.2 High-tech exports less re-exports, %	1.9	53
6.3.3 Comm., computer & info. services exp., % total trade	2.3	33
6.3.4 FDI net outflows, % GDP	1.9	37

7 Creative outputs	32.6	71
7.1 Intangible assets	45.9	62
7.1.1 Domestic res trademark app./bn PPP\$ GDP	96.9	17 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	2.3	13 ●
7.1.3 ICTs & business model creation†	54.2	78
7.1.4 ICTs & organizational model creation†	48.5	85
7.2 Creative goods & services	21.6	57
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	2.5	50
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	16 ●
7.2.5 Creative goods exports, % total trade	0.2	84
7.3 Online creativity	17.0	73
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	3.2	72
7.3.2 Country-code TLDs/th pop. 15–69	23.0	71
7.3.3 Wikipedia edits/pop. 15–69	14,509.2	34
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Thailand

Key indicators

Population (millions)	66.8
GDP (US\$ billions)	387.2
GDP per capita, PPP\$	9,874.5
Income group	Upper-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	39.3	48
Innovation Output Sub-Index	33.8	49
Innovation Input Sub-Index	44.7	52
Innovation Efficiency Ratio	0.8	62
Global Innovation Index 2013 (out of 142)	34.8	57

1	Institutions	54.4	94
1.1	Political environment	48.0	95
1.1.1	Political stability*	36.2	125 ○
1.1.2	Government effectiveness*	46.4	59
1.1.3	Press freedom*	61.4	110 ○
1.2	Regulatory environment	46.0	122 ○
1.2.1	Regulatory quality*	54.7	64
1.2.2	Rule of law*	41.6	69
1.2.3	Cost of redundancy dismissal, salary weeks	36.0	134 ○
1.3	Business environment	69.2	52
1.3.1	Ease of starting a business*	87.9	55
1.3.2	Ease of resolving insolvency*	44.7	50
1.3.3	Ease of paying taxes*	74.9	48

2	Human capital & research	41.1	36
2.1	Education	43.2	67
2.1.1	Expenditure on education, % GDP	5.8	35
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	25.9	34
2.1.3	School life expectancy, years	13.1	73
2.1.4	PISA scales in reading, maths, & science	437.3	44
2.1.5	Pupil-teacher ratio, secondary	19.9	80
2.2	Tertiary education	64.0	5 ●
2.2.1	Tertiary enrolment, % gross	51.4	51
2.2.2	Graduates in science & engineering, %	53.2	1 ●
2.2.3	Tertiary inbound mobility, %	0.8	85
2.3	Research & development (R&D)	16.1	51
2.3.1	Researchers, headcounts/mn pop.	581.0	68
2.3.2	Gross expenditure on R&D, % GDP	0.3	81
2.3.3	QS university ranking, average score top 3*	37.3	35

3	Infrastructure	36.5	71
3.1	Information & communication technologies (ICTs)	33.7	81
3.1.1	ICT access*	40.0	83
3.1.2	ICT use*	12.3	100
3.1.3	Government's online service*	51.0	65
3.1.4	E-participation*	31.6	48
3.2	General infrastructure	40.5	43
3.2.1	Electricity output, kWh/cap	2,243.8	74
3.2.2	Logistics performance*	62.3	37
3.2.3	Gross capital formation, % GDP	30.0	22
3.3	Ecological sustainability	35.2	70
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.5	90
3.3.2	Environmental performance*	52.8	71
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	4.7	26

4	Market sophistication	56.9	34
4.1	Credit	36.8	65
4.1.1	Ease of getting credit*	62.5	69
4.1.2	Domestic credit to private sector, % GDP	147.6	16 ●
4.1.3	Microfinance gross loans, % GDP	0.0	91 ○

4.2	Investment	55.3	21
4.2.1	Ease of protecting investors*	76.7	12 ●
4.2.2	Market capitalization, % GDP	104.8	15
4.2.3	Total value of stocks traded, % GDP	62.8	12 ●
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	68 ○
4.3	Trade & competition	78.6	35
4.3.1	Applied tariff rate, weighted mean, %	4.9	83
4.3.2	Non-agricultural mkt access weighted tariff, %	1.2	79
4.3.3	Intensity of local competition†	72.0	39

5	Business sophistication	34.9	55
5.1	Knowledge workers	47.0	48
5.1.1	Knowledge-intensive employment, %	10.9	97 ○
5.1.2	Firms offering formal training, % firms	75.3	2 ●
5.1.3	GERD performed by business, % GDP	0.1	55
5.1.4	GERD performed by business, %	41.2	45
5.1.5	GMAT test takers/mn pop. 20–34	118.5	44
5.2	Innovation linkages	26.5	94
5.2.1	University/industry research collaboration†	48.7	49
5.2.2	State of cluster development†	55.7	31
5.2.3	GERD financed by abroad, %	1.0	80 ○
5.2.4	JV-strategic alliance deals/tr PPP\$ GDP	0.0	41
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	86
5.3	Knowledge absorption	31.1	38
5.3.1	Royalty & license fees payments, % total trade	1.3	15 ●
5.3.2	High-tech imports less re-imports, %	14.5	13 ●
5.3.3	Comm., computer & info. services imp., % total trade	0.2	129 ○
5.3.4	FDI net inflows, % GDP	2.4	78

6	Knowledge & technology outputs	32.4	47
6.1	Knowledge creation	17.3	62
6.1.1	Domestic resident patent app/tr PPP\$ GDP	1.6	58
6.1.2	PCT resident patent app/tr PPP\$ GDP	0.1	72
6.1.3	Domestic res utility model app/tr PPP\$ GDP	2.2	14
6.1.4	Scientific & technical articles/bn PPP\$ GDP	9.2	82
6.1.5	Citable documents H index	167.0	38
6.2	Knowledge impact	46.3	43
6.2.1	Growth rate of PPP\$ GDP/worker, %	4.9	8 ●
6.2.2	New businesses/th pop. 15–64	0.9	66
6.2.3	Computer software spending, % GDP	0.3	32
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	13.5	35
6.2.5	High- & medium-high-tech manufactures, %	43.9	15
6.3	Knowledge diffusion	33.8	52
6.3.1	Royalty & license fees receipts, % total trade	0.1	56
6.3.2	High-tech exports less re-exports, %	13.6	13 ●
6.3.3	Comm., computer & info. services exp., % total trade	0.2	124 ○
6.3.4	FDI net outflows, % GDP	3.5	20

7	Creative outputs	35.2	60
7.1	Intangible assets	41.2	85
7.1.1	Domestic res trademark app/bn PPP\$ GDP	42.6	61
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3	ICTs & business model creation†	57.3	65
7.1.4	ICTs & organizational model creation†	49.7	83
7.2	Creative goods & services	35.5	27
7.2.1	Cultural & creative services exports, % total trade	n/a	n/a
7.2.2	National feature films/mn pop. 15–69	1.0	71
7.2.3	Global ent. & media output/th pop. 15–69	0.2	46 ○
7.2.4	Printing & publishing manufactures, %	0.0	65
7.2.5	Creative goods exports, % total trade	10.1	6 ●
7.3	Online creativity	22.8	63
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	6.7	54
7.3.2	Country-code TLDs/th pop. 15–69	11.0	99
7.3.3	Wikipedia edits/pop. 15–69	2,472.0	73
7.3.4	Video uploads on YouTube/pop. 15–69	69.5	43

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	6.6
GDP (US\$ billions)	4.4
GDP per capita, PPP\$	1,084.0
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	17.6	142 ○
Innovation Output Sub-Index	7.0	142 ○
Innovation Input Sub-Index	28.3	134
Innovation Efficiency Ratio	0.2	142 ○
Global Innovation Index 2013 (out of 142)	23.0	139

1 Institutions	47.9	115
1.1 Political environment	44.2	115
1.1.1 Political stability*	55.4	90
1.1.2 Government effectiveness*	5.5	140 ○
1.1.3 Press freedom*	71.6	69 ●
1.2 Regulatory environment	56.7	97
1.2.1 Regulatory quality*	26.5	125
1.2.2 Rule of law*	21.1	123
1.2.3 Cost of redundancy dismissal, salary weeks	13.1	59 ●
1.3 Business environment	43.0	131
1.3.1 Ease of starting a business*	51.5	139 ○
1.3.2 Ease of resolving insolvency*	29.2	98
1.3.3 Ease of paying taxes*	48.2	122
2 Human capital & research	14.5	125
2.1 Education	32.9	105
2.1.1 Expenditure on education, % GDP	4.5	73 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	15.7	81
2.1.3 School life expectancy, years	12.2	87
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	26.2	93
2.2 Tertiary education	8.4	127
2.2.1 Tertiary enrolment, % gross	10.3	108
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	1.4	73
2.3 Research & development (R&D)	2.1	105
2.3.1 Researchers, headcounts/mn pop.	90.1	104
2.3.2 Gross expenditure on R&D, % GDP	0.3	80
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	15.4	142 ○
3.1 Information & communication technologies (ICTs)	9.5	139 ○
3.1.1 ICT access*	n/a	n/a
3.1.2 ICT use*	n/a	n/a
3.1.3 Government's online service*	13.7	140 ○
3.1.4 E-participation*	5.3	111
3.2 General infrastructure	21.9	125
3.2.1 Electricity output, kWh/cap	22.6	123 ○
3.2.2 Logistics performance*	38.5	94
3.2.3 Gross capital formation, % GDP	20.5	86
3.3 Ecological sustainability	14.7	141 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.1	119 ○
3.3.2 Environmental performance*	27.9	134 ○
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	100
4 Market sophistication	42.7	110
4.1 Credit	41.5	53 ●
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	30.9	97
4.1.3 Microfinance gross loans, % GDP	5.7	8 ●

4.2 Investment	36.7	59 ●
4.2.1 Ease of protecting investors*	36.7	119
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	49.8	141 ○
4.3.1 Applied tariff rate, weighted mean, %	11.1	130
4.3.2 Non-agricultural mkt access weighted tariff, %	5.8	134 ○
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication **21.1** **129**

5.1 Knowledge workers	28.6	100
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	32.3	56 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	8.9	124
5.2 Innovation linkages	14.9	138 ○
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	11.7	38 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	19.7	103
5.3.1 Royalty & license fees payments, % total trade	0.1	103
5.3.2 High-tech imports less re-imports, %	4.9	102
5.3.3 Comm., computer & info. services imp., % total trade	1.6	30 ●
5.3.4 FDI net inflows, % GDP	1.5	102

6 Knowledge & technology outputs **13.4** **135**

6.1 Knowledge creation	4.8	114
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	114 ○
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	8.3	85 ●
6.1.5 Citable documents H index	31.0	132
6.2 Knowledge impact	2.5	139 ○
6.2.1 Growth rate of PPP\$ GDP/worker, %	n/a	n/a
6.2.2 New businesses/th pop. 15–64	0.1	88
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.9	102
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	32.8	62 ●
6.3.1 Royalty & license fees receipts, % total trade	0.0	108
6.3.2 High-tech exports less re-exports, %	0.1	117
6.3.3 Comm., computer & info. services exp., % total trade	3.8	13 ●
6.3.4 FDI net outflows, % GDP	2.4	29 ●

7 Creative outputs **0.6** **143** ○

7.1 Intangible assets	n/a	n/a
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	0.9	134 ○
7.2.1 Cultural & creative services exports, % total trade	0.0	90
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	108
7.3 Online creativity	0.3	136 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.8	108
7.3.2 Country-code TLDs/th pop. 15–69	0.0	143 ○
7.3.3 Wikipedia edits/pop. 15–69	36.8	133
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Trinidad and Tobago

Key indicators

Population (millions)	1.3
GDP (US\$ billions)	27.7
GDP per capita, PPP\$	20,437.7
Income group	High income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	31.6	90
Innovation Output Sub-Index	24.5	98
Innovation Input Sub-Index	38.6	86
Innovation Efficiency Ratio	0.6	103
Global Innovation Index 2013 (out of 142)	33.2	81

1 Institutions	62.1	64
1.1 Political environment	65.6	51
1.1.1 Political stability*	68.3	61
1.1.2 Government effectiveness*	51.6	52
1.1.3 Press freedom*	76.9	39 ●
1.2 Regulatory environment	61.4	84
1.2.1 Regulatory quality*	54.5	65
1.2.2 Rule of law*	41.2	70
1.2.3 Cost of redundancy dismissal, salary weeks	20.5	95
1.3 Business environment	59.4	87
1.3.1 Ease of starting a business*	81.1	83
1.3.2 Ease of resolving insolvency*	28.5	101
1.3.3 Ease of paying taxes*	68.6	77

2 Human capital & research	29.2	68
2.1 Education	47.4	55
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	12.3	85
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	37.6	56
2.2.1 Tertiary enrolment, % gross	12.0	104
2.2.2 Graduates in science & engineering, %	30.4	12 ●
2.2.3 Tertiary inbound mobility, %	5.8	31 ●
2.3 Research & development (R&D)	2.6	100
2.3.1 Researchers, headcounts/mn pop.	758.4	61
2.3.2 Gross expenditure on R&D, % GDP	0.0	112 ○
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	25.7	114
3.1 Information & communication technologies (ICTs)	35.3	76
3.1.1 ICT access*	56.7	58
3.1.2 ICT use*	28.3	61
3.1.3 Government's online service*	48.4	74
3.1.4 E-participation*	7.9	98
3.2 General infrastructure	17.9	135 ○
3.2.1 Electricity output, kWh/cap	6,568.1	31 ●
3.2.2 Logistics performance*	n/a	n/a
3.2.3 Gross capital formation, % GDP	14.0	134 ○
3.3 Ecological sustainability	23.8	124
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	1.4	123 ○
3.3.2 Environmental performance*	52.3	72
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.7	73

4 Market sophistication	48.4	69
4.1 Credit	30.3	92
4.1.1 Ease of getting credit*	81.3	27 ●
4.1.2 Domestic credit to private sector, % GDP	30.7	98
4.1.3 Microfinance gross loans, % GDP	0.1	73

4.2 Investment	42.7	46
4.2.1 Ease of protecting investors*	66.7	21 ●
4.2.2 Market capitalization, % GDP	63.2	30 ●
4.2.3 Total value of stocks traded, % GDP	0.5	80
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	72.1	95
4.3.1 Applied tariff rate, weighted mean, %	10.0	125
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	26 ●
4.3.3 Intensity of local competition†	62.3	85

5 Business sophistication	27.9	95
5.1 Knowledge workers	31.0	92
5.1.1 Knowledge-intensive employment, %	25.0	53
5.1.2 Firms offering formal training, % firms	31.5	60
5.1.3 GERD performed by business, % GDP	0.0	83 ○
5.1.4 GERD performed by business, %	2.2	80 ○
5.1.5 GMAT test takers/mn pop. 20–34	150.5	35 ●
5.2 Innovation linkages	35.1	58
5.2.1 University/industry research collaboration†	37.0	99
5.2.2 State of cluster development†	42.0	87
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	38
5.3 Knowledge absorption	17.6	115
5.3.1 Royalty & license fees payments, % total trade	0.3	65
5.3.2 High-tech imports less re-imports, %	4.9	100
5.3.3 Comm., computer & info. services imp., % total trade	0.9	66
5.3.4 FDI net inflows, % GDP	2.4	75

6 Knowledge & technology outputs	21.9	102
6.1 Knowledge creation	4.1	123
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.0	107 ○
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.0	98
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	6.1	98
6.1.5 Citable documents H index	61.0	96
6.2 Knowledge impact	40.7	62
6.2.1 Growth rate of PPP\$ GDP/worker, %	1.3	62
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.8	105
6.2.5 High- & medium-high-tech manufactures, %	24.1	43
6.3 Knowledge diffusion	20.8	128
6.3.1 Royalty & license fees receipts, % total trade	0.0	104 ○
6.3.2 High-tech exports less re-exports, %	0.0	118 ○
6.3.3 Comm., computer & info. services exp., % total trade	0.1	136 ○
6.3.4 FDI net outflows, % GDP	4.5	16 ●

7 Creative outputs	27.1	95
7.1 Intangible assets	45.6	65
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	45.2	115
7.1.4 ICTs & organizational model creation†	46.0	92
7.2 Creative goods & services	8.0	104
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	67
7.2.5 Creative goods exports, % total trade	0.1	103
7.3 Online creativity	9.3	95
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	6.7	56
7.3.2 Country-code TLDs/th pop. 15–69	17.0	84
7.3.3 Wikipedia edits/pop. 15–69	2,460.0	74
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	10.8
GDP (US\$ billions)	47.4
GDP per capita, PPP\$	9,931.7
Income group	Upper-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	32.9	78
Innovation Output Sub-Index	26.1	87
Innovation Input Sub-Index	39.7	77
Innovation Efficiency Ratio	0.7	98
Global Innovation Index 2013 (out of 142)	35.8	70

1	Institutions	61.8	65
1.1	Political environment	49.5	91
1.1.1	Political stability*	47.9	110
1.1.2	Government effectiveness*	40.5	68
1.1.3	Press freedom*	60.1	113
1.2	Regulatory environment	67.4	64
1.2.1	Regulatory quality*	43.4	89
1.2.2	Rule of law*	42.7	68
1.2.3	Cost of redundancy dismissal, salary weeks	12.1	51
1.3	Business environment	68.6	56
1.3.1	Ease of starting a business*	81.1	84
1.3.2	Ease of resolving insolvency*	55.0	35 ●
1.3.3	Ease of paying taxes*	69.7	70
2	Human capital & research	37.8	44
2.1	Education	46.5	59
2.1.1	Expenditure on education, % GDP	6.2	25 ●
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	24.4	45
2.1.3	School life expectancy, years	14.6	46
2.1.4	PISA scales in reading, maths, & science	396.6	56 ○
2.1.5	Pupil-teacher ratio, secondary	13.6	47
2.2	Tertiary education	48.7	25 ●
2.2.1	Tertiary enrolment, % gross	35.2	71
2.2.2	Graduates in science & engineering, %	42.4	3 ●
2.2.3	Tertiary inbound mobility, %	0.5	91
2.3	Research & development (R&D)	18.3	46
2.3.1	Researchers, headcounts/mn pop.	3,194.8	30 ●
2.3.2	Gross expenditure on R&D, % GDP	1.1	33 ●
2.3.3	QS university ranking, average score top 3*	0.0	70 ○
3	Infrastructure	37.0	68
3.1	Information & communication technologies (ICTs)	35.6	75
3.1.1	ICT access*	39.5	84
3.1.2	ICT use*	18.2	86
3.1.3	Government's online service*	47.7	76
3.1.4	E-participation*	36.8	42
3.2	General infrastructure	33.8	66
3.2.1	Electricity output, kWh/cap	1,511.7	83
3.2.2	Logistics performance*	61.9	39
3.2.3	Gross capital formation, % GDP	24.6	54
3.3	Ecological sustainability	41.7	51
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	9.3	20 ●
3.3.2	Environmental performance*	59.0	50
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.8	69
4	Market sophistication	39.9	127 ○
4.1	Credit	25.4	109
4.1.1	Ease of getting credit*	50.0	96
4.1.2	Domestic credit to private sector, % GDP	75.2	42 ●
4.1.3	Microfinance gross loans, % GDP	0.2	60

4.2	Investment	27.1	114
4.2.1	Ease of protecting investors*	60.0	42
4.2.2	Market capitalization, % GDP	19.5	73
4.2.3	Total value of stocks traded, % GDP	2.7	57
4.2.4	Venture capital deals/tr PPP\$ GDP	0.0	56
4.3	Trade & competition	67.3	120 ○
4.3.1	Applied tariff rate, weighted mean, %	16.0	139 ○
4.3.2	Non-agricultural mkt access weighted tariff, %	0.3	44
4.3.3	Intensity of local competition†	64.5	77

5	Business sophistication	22.1	126 ○
5.1	Knowledge workers	24.8	111
5.1.1	Knowledge-intensive employment, %	20.9	68
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	0.2	46
5.1.4	GERD performed by business, %	20.0	64
5.1.5	GMAT test takers/mn pop. 20–34	21.5	109
5.2	Innovation linkages	24.1	110
5.2.1	University/industry research collaboration†	34.2	109 ○
5.2.2	State of cluster development†	44.8	74
5.2.3	GERD financed by abroad, %	14.9	31
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.0	102 ○
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	79
5.3	Knowledge absorption	17.5	116 ○
5.3.1	Royalty & license fees payments, % total trade	0.1	111 ○
5.3.2	High-tech imports less re-imports, %	9.3	40
5.3.3	Comm., computer & info. services imp., % total trade	0.4	105
5.3.4	FDI net inflows, % GDP	0.9	116 ○

6	Knowledge & technology outputs	21.2	106
6.1	Knowledge creation	13.8	67
6.1.1	Domestic resident patent app./tr PPP\$ GDP	0.8	70
6.1.2	PCT resident patent app./tr PPP\$ GDP	0.1	87
6.1.3	Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	26.3	38 ●
6.1.5	Citable documents H index	85.0	74
6.2	Knowledge impact	29.4	107
6.2.1	Growth rate of PPP\$ GDP/worker, %	1.7	57
6.2.2	New businesses/th pop. 15–64	0.0	92 ○
6.2.3	Computer software spending, % GDP	0.3	33
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	4.9	65
6.2.5	High- & medium-high-tech manufactures, %	11.8	70
6.3	Knowledge diffusion	20.4	130 ○
6.3.1	Royalty & license fees receipts, % total trade	0.1	52
6.3.2	High-tech exports less re-exports, %	4.5	34 ●
6.3.3	Comm., computer & info. services exp., % total trade	1.6	55
6.3.4	FDI net outflows, % GDP	n/a	n/a

7	Creative outputs	31.1	74
7.1	Intangible assets	39.8	92
7.1.1	Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	0.0	69 ○
7.1.3	ICTs & business model creation†	50.7	92
7.1.4	ICTs & organizational model creation†	48.7	84
7.2	Creative goods & services	26.9	44
7.2.1	Cultural & creative services exports, % total trade	0.0	73
7.2.2	National feature films/mn pop. 15–69	1.4	59
7.2.3	Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4	Printing & publishing manufactures, %	n/a	n/a
7.2.5	Creative goods exports, % total trade	2.8	19 ●
7.3	Online creativity	17.8	69
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	2.7	80
7.3.2	Country-code TLDs/th pop. 15–69	7.2	108
7.3.3	Wikipedia edits/pop. 15–69	1,389.4	88
7.3.4	Video uploads on YouTube/pop. 15–69	58.9	52 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Turkey

Key indicators

Population (millions)	74.0
GDP (US\$ billions)	827.2
GDP per capita, PPP\$	15,352.6
Income group	Upper-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	38.2	54
Innovation Output Sub-Index	36.7	39
Innovation Input Sub-Index	39.7	78
Innovation Efficiency Ratio	0.9	11 ●
Global Innovation Index 2013 (out of 142)	36.0	68

1 Institutions	54.9	92
1.1 Political environment	47.2	98
1.1.1 Political stability*	36.5	124 ○
1.1.2 Government effectiveness*	51.6	51
1.1.3 Press freedom*	53.4	126 ○
1.2 Regulatory environment	54.9	104
1.2.1 Regulatory quality*	59.7	55
1.2.2 Rule of law*	47.4	58
1.2.3 Cost of redundancy dismissal, salary weeks	29.8	128 ○
1.3 Business environment	62.7	76
1.3.1 Ease of starting a business*	87.7	57
1.3.2 Ease of resolving insolvency*	23.6	112
1.3.3 Ease of paying taxes*	76.8	44

2 Human capital & research	33.3	54
2.1 Education	41.7	78
2.1.1 Expenditure on education, % GDP	2.9	113 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	14.4	50
2.1.4 PISA scales in reading, maths, & science	462.3	40
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	35.7	62
2.2.1 Tertiary enrolment, % gross	60.7	36
2.2.2 Graduates in science & engineering, %	22.3	38
2.2.3 Tertiary inbound mobility, %	0.8	86
2.3 Research & development (R&D)	22.5	42
2.3.1 Researchers, headcounts/mn pop.	1,881.4	42
2.3.2 Gross expenditure on R&D, % GDP	0.9	38
2.3.3 QS university ranking, average score top 3*	30.4	41

3 Infrastructure	35.6	75
3.1 Information & communication technologies (ICTs)	32.3	83
3.1.1 ICT access*	51.1	67
3.1.2 ICT use*	26.3	66
3.1.3 Government's online service*	46.4	79
3.1.4 E-participation*	5.3	111 ○
3.2 General infrastructure	34.5	63
3.2.1 Electricity output, kWh/cap	3,194.1	61
3.2.2 Logistics performance*	75.4	26 ●
3.2.3 Gross capital formation, % GDP	20.0	92
3.3 Ecological sustainability	40.1	56
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	8.8	26 ●
3.3.2 Environmental performance*	54.9	61
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.5	52

4 Market sophistication	49.1	63
4.1 Credit	24.3	111
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	54.4	59
4.1.3 Microfinance gross loans, % GDP	0.0	88 ○

4.2 Investment	38.7	55
4.2.1 Ease of protecting investors*	63.3	32
4.2.2 Market capitalization, % GDP	39.1	51
4.2.3 Total value of stocks traded, % GDP	44.2	18 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	62 ○
4.3 Trade & competition	84.2	8 ●
4.3.1 Applied tariff rate, weighted mean, %	2.7	56
4.3.2 Non-agricultural mkt access weighted tariff, %	1.3	83
4.3.3 Intensity of local competition†	79.8	13 ●

5 Business sophistication	25.4	110
5.1 Knowledge workers	34.4	85
5.1.1 Knowledge-intensive employment, %	20.2	72
5.1.2 Firms offering formal training, % firms	29.7	67
5.1.3 GERD performed by business, % GDP	0.4	38
5.1.4 GERD performed by business, %	43.2	43
5.1.5 GMAT test takers/mn pop. 20–34	71.1	61
5.2 Innovation linkages	25.1	102
5.2.1 University/industry research collaboration†	47.7	50
5.2.2 State of cluster development†	57.0	28 ●
5.2.3 GERD financed by abroad, %	0.7	85 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	78
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	67
5.3 Knowledge absorption	16.8	118 ○
5.3.1 Royalty & license fees payments, % total trade	0.3	67
5.3.2 High-tech imports less re-imports, %	8.4	52
5.3.3 Comm., computer & info. services imp., % total trade	0.2	131 ○
5.3.4 FDI net inflows, % GDP	1.6	97

6 Knowledge & technology outputs	32.3	48
6.1 Knowledge creation	30.2	32
6.1.1 Domestic resident patent app/tr PPP\$ GDP	4.0	30
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.5	39
6.1.3 Domestic res utility model app/tr PPP\$ GDP	3.4	11 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	20.8	44
6.1.5 Citable documents H index	210.0	36
6.2 Knowledge impact	40.5	64
6.2.1 Growth rate of PPP\$ GDP/worker, %	1.0	68
6.2.2 New businesses/th pop. 15–64	0.8	68
6.2.3 Computer software spending, % GDP	0.7	9 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	7.0	55
6.2.5 High- & medium-high-tech manufactures, %	27.2	40
6.3 Knowledge diffusion	26.2	99
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	1.0	67
6.3.3 Comm., computer & info. services exp., % total trade	0.2	122 ○
6.3.4 FDI net outflows, % GDP	0.5	63

7 Creative outputs	41.2	40
7.1 Intangible assets	55.2	18 ●
7.1.1 Domestic res trademark app/bn PPP\$ GDP	174.7	4 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	1.1	29
7.1.3 ICTs & business model creation†	60.5	51
7.1.4 ICTs & organizational model creation†	55.5	59
7.2 Creative goods & services	24.9	50
7.2.1 Cultural & creative services exports, % total trade	0.6	20 ●
7.2.2 National feature films/mn pop. 15–69	1.4	60
7.2.3 Global ent. & media output/th pop. 15–69	0.2	43
7.2.4 Printing & publishing manufactures, %	0.0	66
7.2.5 Creative goods exports, % total trade	2.5	21 ●
7.3 Online creativity	29.4	51
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	13.8	40
7.3.2 Country-code TLDs/th pop. 15–69	27.4	65
7.3.3 Wikipedia edits/pop. 15–69	3,514.9	63
7.3.4 Video uploads on YouTube/pop. 15–69	70.3	42

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	36.3
GDP (US\$ billions)	23.1
GDP per capita, PPP\$	1,483.9
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	31.1	91
Innovation Output Sub-Index	26.0	90
Innovation Input Sub-Index	36.3	98
Innovation Efficiency Ratio	0.7	77
Global Innovation Index 2013 (out of 142)	31.2	89

1 Institutions	56.7	86
1.1 Political environment	46.0	103
1.1.1 Political stability*	43.9	116
1.1.2 Government effectiveness*	25.7	107
1.1.3 Press freedom*	68.3	83
1.2 Regulatory environment	69.1	60
1.2.1 Regulatory quality*	42.4	91
1.2.2 Rule of law*	36.5	79
1.2.3 Cost of redundancy dismissal, salary weeks	8.7	25 ●
1.3 Business environment	55.2	100
1.3.1 Ease of starting a business*	58.7	133 ○
1.3.2 Ease of resolving insolvency*	38.1	70
1.3.3 Ease of paying taxes*	68.8	76

2 Human capital & research	17.3	114
2.1 Education	31.9	109
2.1.1 Expenditure on education, % GDP	3.3	104
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	20.7	57
2.1.3 School life expectancy, years	10.8	107
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	18.5	77
2.2 Tertiary education	15.5	110
2.2.1 Tertiary enrolment, % gross	9.1	114
2.2.2 Graduates in science & engineering, %	9.5	100 ○
2.2.3 Tertiary inbound mobility, %	5.2	33 ●
2.3 Research & development (R&D)	4.4	86
2.3.1 Researchers, headcounts/mn pop.	83.1	106
2.3.2 Gross expenditure on R&D, % GDP	0.6	55
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	28.1	102
3.1 Information & communication technologies (ICTs)	16.1	123
3.1.1 ICT access*	19.5	124 ○
3.1.2 ICT use*	7.5	110
3.1.3 Government's online service*	29.4	125
3.1.4 E-participation*	7.9	98
3.2 General infrastructure	41.7	39 ●
3.2.1 Electricity output, kWh/cap	n/a	n/a
3.2.2 Logistics performance*	48.0	72
3.2.3 Gross capital formation, % GDP	27.2	33 ●
3.3 Ecological sustainability	26.5	110
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	n/a	n/a
3.3.2 Environmental performance*	39.2	113
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	116 ○

4 Market sophistication	43.7	102
4.1 Credit	30.4	90
4.1.1 Ease of getting credit*	75.0	40 ●
4.1.2 Domestic credit to private sector, % GDP	16.3	127
4.1.3 Microfinance gross loans, % GDP	1.0	37

4.2 Investment	23.7	125
4.2.1 Ease of protecting investors*	46.7	97
4.2.2 Market capitalization, % GDP	36.7	53
4.2.3 Total value of stocks traded, % GDP	0.1	103 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	48
4.3 Trade & competition	76.9	55 ●
4.3.1 Applied tariff rate, weighted mean, %	7.3	107
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	23 ●
4.3.3 Intensity of local competition†	67.0	64

5 Business sophistication	35.8	48 ●
5.1 Knowledge workers	22.1	118
5.1.1 Knowledge-intensive employment, %	4.4	106 ○
5.1.2 Firms offering formal training, % firms	35.0	51
5.1.3 GERD performed by business, % GDP	0.2	48
5.1.4 GERD performed by business, %	34.8	51
5.1.5 GMAT test takers/mn pop. 20–34	10.3	121
5.2 Innovation linkages	54.4	7 ●
5.2.1 University/industry research collaboration†	45.5	56
5.2.2 State of cluster development†	39.8	101
5.2.3 GERD financed by abroad, %	57.3	3 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	n/a	n/a
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	31.1	39 ●
5.3.1 Royalty & license fees payments, % total trade	0.2	84
5.3.2 High-tech imports less re-imports, %	8.5	49 ●
5.3.3 Comm., computer & info. services imp., % total trade	1.1	54
5.3.4 FDI net inflows, % GDP	8.7	18 ●

6 Knowledge & technology outputs	24.3	87
6.1 Knowledge creation	8.5	89
6.1.1 Domestic resident patent app./tr PPP\$ GDP	0.2	95
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	94
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	13.6	63
6.1.5 Citable documents H index	99.0	65
6.2 Knowledge impact	31.3	97
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.3	86
6.2.2 New businesses/th pop. 15–64	1.2	53
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.3	136 ○
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.2	58
6.3.1 Royalty & license fees receipts, % total trade	0.3	29 ●
6.3.2 High-tech exports less re-exports, %	2.9	44 ●
6.3.3 Comm., computer & info. services exp., % total trade	1.3	73
6.3.4 FDI net outflows, % GDP	0.0	108

7 Creative outputs	27.6	90
7.1 Intangible assets	50.0	41 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	51.7	87
7.1.4 ICTs & organizational model creation†	48.3	88
7.2 Creative goods & services	5.8	110
7.2.1 Cultural & creative services exports, % total trade	0.1	49
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	87
7.3 Online creativity	4.6	113
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.4	125
7.3.2 Country-code TLDs/th pop. 15–69	2.1	122
7.3.3 Wikipedia edits/pop. 15–69	70.3	128 ○
7.3.4 Video uploads on YouTube/pop. 15–69	15.7	63 ○

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Ukraine

Key indicators

Population (millions)	45.6
GDP (US\$ billions)	177.8
GDP per capita, PPP\$	7,423.1
Income group	Lower-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	36.3	63
Innovation Output Sub-Index	34.4	46
Innovation Input Sub-Index	38.2	88
Innovation Efficiency Ratio	0.9	14 ●
Global Innovation Index 2013 (out of 142)	35.8	71

1 Institutions	52.9	103
1.1 Political environment	50.6	86
1.1.1 Political stability*	63.3	77
1.1.2 Government effectiveness*	25.3	109
1.1.3 Press freedom*	63.2	103
1.2 Regulatory environment	59.3	90
1.2.1 Regulatory quality*	32.8	115
1.2.2 Rule of law*	24.5	112
1.2.3 Cost of redundancy dismissal, salary weeks	13.0	56
1.3 Business environment	48.8	122 ○
1.3.1 Ease of starting a business*	86.4	62
1.3.2 Ease of resolving insolvency*	8.7	136 ○
1.3.3 Ease of paying taxes*	51.3	119 ○

2 Human capital & research	36.6	45
2.1 Education	46.6	58
2.1.1 Expenditure on education, % GDP	6.2	26 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	27.5	29 ●
2.1.3 School life expectancy, years	15.1	42
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	45.1	34 ●
2.2.1 Tertiary enrolment, % gross	79.7	11
2.2.2 Graduates in science & engineering, %	25.6	23 ●
2.2.3 Tertiary inbound mobility, %	1.8	64
2.3 Research & development (R&D)	18.0	48
2.3.1 Researchers, headcounts/mn pop.	1,536.5	46
2.3.2 Gross expenditure on R&D, % GDP	0.7	47
2.3.3 QS university ranking, average score top 3*	22.9	48

3 Infrastructure	27.1	107
3.1 Information & communication technologies (ICTs)	32.1	84
3.1.1 ICT access*	52.7	64
3.1.2 ICT use*	17.6	87
3.1.3 Government's online service*	42.5	90
3.1.4 E-participation*	15.8	79
3.2 General infrastructure	25.2	110
3.2.1 Electricity output, kWh/cap	4,264.9	49
3.2.2 Logistics performance*	49.2	66
3.2.3 Gross capital formation, % GDP	16.2	121 ○
3.3 Ecological sustainability	23.9	122 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.3	117 ○
3.3.2 Environmental performance*	49.0	86
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.5	83

4 Market sophistication	45.1	90
4.1 Credit	36.1	67
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	62.0	52
4.1.3 Microfinance gross loans, % GDP	0.1	67

4.2 Investment	23.5	127 ○
4.2.1 Ease of protecting investors*	43.3	105
4.2.2 Market capitalization, % GDP	11.7	85
4.2.3 Total value of stocks traded, % GDP	0.7	75
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	75.8	65
4.3.1 Applied tariff rate, weighted mean, %	1.9	46
4.3.2 Non-agricultural mkt access weighted tariff, %	0.8	65
4.3.3 Intensity of local competition†	59.0	101

5 Business sophistication	29.1	87
5.1 Knowledge workers	40.3	65
5.1.1 Knowledge-intensive employment, %	33.8	37
5.1.2 Firms offering formal training, % firms	24.6	81
5.1.3 GERD performed by business, % GDP	0.4	35
5.1.4 GERD performed by business, %	55.7	29
5.1.5 GMAT test takers/mn pop. 20–34	41.0	80
5.2 Innovation linkages	24.7	105
5.2.1 University/industry research collaboration†	40.7	75
5.2.2 State of cluster development†	31.2	126 ○
5.2.3 GERD financed by abroad, %	25.8	17 ●
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	103 ○
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	93 ○
5.3 Knowledge absorption	22.2	90
5.3.1 Royalty & license fees payments, % total trade	0.8	38
5.3.2 High-tech imports less re-imports, %	6.7	72
5.3.3 Comm., computer & info. services imp., % total trade	0.5	89
5.3.4 FDI net inflows, % GDP	4.4	47

6 Knowledge & technology outputs	38.2	32 ●
6.1 Knowledge creation	48.8	15 ●
6.1.1 Domestic resident patent app/tr PPP\$ GDP	7.5	15 ●
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.4	45
6.1.3 Domestic res utility model app/tr PPP\$ GDP	30.2	1 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	13.9	62
6.1.5 Citable documents H index	142.0	43
6.2 Knowledge impact	34.6	85
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.8	21 ●
6.2.2 New businesses/th pop. 15–64	0.9	62
6.2.3 Computer software spending, % GDP	0.3	43
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	3.3	82
6.2.5 High- & medium-high-tech manufactures, %	21.7	50
6.3 Knowledge diffusion	31.1	71
6.3.1 Royalty & license fees receipts, % total trade	0.1	47
6.3.2 High-tech exports less re-exports, %	2.8	46
6.3.3 Comm., computer & info. services exp., % total trade	1.6	56
6.3.4 FDI net outflows, % GDP	0.7	55

7 Creative outputs	30.6	77
7.1 Intangible assets	35.8	112
7.1.1 Domestic res trademark app/bn PPP\$ GDP	91.7	20 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.9	31
7.1.3 ICTs & business model creation†	42.7	120 ○
7.1.4 ICTs & organizational model creation†	39.0	122 ○
7.2 Creative goods & services	14.4	82
7.2.1 Cultural & creative services exports, % total trade	0.0	74
7.2.2 National feature films/mn pop. 15–69	0.1	99 ○
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	43
7.2.5 Creative goods exports, % total trade	0.7	51
7.3 Online creativity	36.3	42
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	5.1	59
7.3.2 Country-code TLDs/th pop. 15–69	41.3	45
7.3.3 Wikipedia edits/pop. 15–69	10,862.7	43
7.3.4 Video uploads on YouTube/pop. 15–69	80.5	28

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	9.2
GDP (US\$ billions)	396.2
GDP per capita, PPP\$	30,122.1
Income group	High income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	43.2	36
Innovation Output Sub-Index	30.3	68
Innovation Input Sub-Index	56.2	25
Innovation Efficiency Ratio	0.5	127 ○
Global Innovation Index 2013 (out of 142)	41.9	38

1 Institutions	76.6	30
1.1 Political environment	75.0	34
1.1.1 Political stability*	87.2	29
1.1.2 Government effectiveness*	71.3	28
1.1.3 Press freedom*	66.5	93
1.2 Regulatory environment	82.0	27
1.2.1 Regulatory quality*	66.4	43
1.2.2 Rule of law*	61.8	42
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	72.9	36
1.3.1 Ease of starting a business*	88.7	47
1.3.2 Ease of resolving insolvency*	31.1	90
1.3.3 Ease of paying taxes*	98.9	1 ●
2 Human capital & research	62.1	4 ●
2.1 Education	66.3	2 ●
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	468.7	38
2.1.5 Pupil-teacher ratio, secondary	14.3	51
2.2 Tertiary education	100.0	1 ●
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	39.8	1 ●
2.3 Research & development (R&D)	19.9	44
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	0.5	59
2.3.3 QS university ranking, average score top 3*	28.8	42
3 Infrastructure	55.9	18
3.1 Information & communication technologies (ICTs)	71.2	18
3.1.1 ICT access*	73.1	24
3.1.2 ICT use*	51.8	29
3.1.3 Government's online service*	86.3	9 ●
3.1.4 E-participation*	73.7	11 ●
3.2 General infrastructure	53.7	12 ●
3.2.1 Electricity output, kWh/cap	12,564.9	9 ●
3.2.2 Logistics performance*	86.1	17
3.2.3 Gross capital formation, % GDP	24.9	50
3.3 Ecological sustainability	42.7	50
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	50	83 ○
3.3.2 Environmental performance*	72.9	25
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	3.4	30
4 Market sophistication	46.2	85
4.1 Credit	37.3	63
4.1.1 Ease of getting credit*	56.3	81
4.1.2 Domestic credit to private sector, % GDP	59.1	55
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	25.2	121 ○
4.2.1 Ease of protecting investors*	50.0	81 ○
4.2.2 Market capitalization, % GDP	19.8	72 ○
4.2.3 Total value of stocks traded, % GDP	4.4	51
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	31
4.3 Trade & competition	76.2	58
4.3.1 Applied tariff rate, weighted mean, %	3.7	65
4.3.2 Non-agricultural mkt access weighted tariff, %	3.7	126 ○
4.3.3 Intensity of local competition†	78.5	15 ●

5 Business sophistication	40.3	34
5.1 Knowledge workers	37.6	78
5.1.1 Knowledge-intensive employment, %	36.1	30
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	0.1	54
5.1.4 GERD performed by business, %	28.6	56
5.1.5 GMAT test takers/mn pop. 20–34	25.4	105 ○
5.2 Innovation linkages	63.8	2 ●
5.2.1 University/industry research collaboration†	63.2	22
5.2.2 State of cluster development†	74.2	2 ●
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.3	1 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	63
5.3 Knowledge absorption	19.5	104 ○
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	5.5	93 ○
5.3.3 Comm., computer & info. services imp., % total trade	n/a	n/a
5.3.4 FDI net inflows, % GDP	2.2	85

6 Knowledge & technology outputs	14.3	132 ○
6.1 Knowledge creation	7.7	92
6.1.1 Domestic resident patent app./tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.2	65
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.1	108 ○
6.1.5 Citable documents H index	87.0	71
6.2 Knowledge impact	34.9	82
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.9	70
6.2.2 New businesses/th pop. 15–64	1.4	50
6.2.3 Computer software spending, % GDP	0.3	59 ○
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	12.6	39
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	0.3	141 ○
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	0.1	108 ○
6.3.3 Comm., computer & info. services exp., % total trade	n/a	n/a
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	46.2	21
7.1 Intangible assets	74.2	1 ●
7.1.1 Domestic res trademark app./bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	76.5	4 ●
7.1.4 ICTs & organizational model creation†	71.8	8 ●
7.2 Creative goods & services	4.9	111 ○
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	0.4	32
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.1	98 ○
7.3 Online creativity	31.7	46
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	13.9	39
7.3.2 Country-code TLDs/th pop. 15–69	35.2	50
7.3.3 Wikipedia edits/pop. 15–69	3,798.4	62
7.3.4 Video uploads on YouTube/pop. 15–69	71.3	39

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

United Kingdom

Key indicators

Population (millions)	63.2
GDP (US\$ billions)	2,535.8
GDP per capita, PPP\$	37,306.6
Income group	High income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	62.4	2 ●
Innovation Output Sub-Index	56.5	4 ●
Innovation Input Sub-Index	68.2	3 ●
Innovation Efficiency Ratio	0.8	29
Global Innovation Index 2013 (out of 142)	61.2	3

1	Institutions	88.6	13
1.1	Political environment	80.2	25
1.1.1	Political stability*	75.7	50 ○
1.1.2	Government effectiveness*	81.6	17
1.1.3	Press freedom*	83.1	27
1.2	Regulatory environment	95.7	9
1.2.1	Regulatory quality*	91.7	12
1.2.2	Rule of law*	92.9	14
1.2.3	Cost of redundancy dismissal, salary weeks	8.5	24
1.3	Business environment	90.0	10
1.3.1	Ease of starting a business*	88.5	49 ○
1.3.2	Ease of resolving insolvency*	93.8	7
1.3.3	Ease of paying taxes*	87.6	13

2	Human capital & research	60.3	10
2.1	Education	57.2	16
2.1.1	Expenditure on education, % GDP	6.2	23
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	33.6	12
2.1.3	School life expectancy, years	16.2	22
2.1.4	PISA scales in reading, maths, & science	502.5	17
2.1.5	Pupil-teacher ratio, secondary	14.3	50 ○
2.2	Tertiary education	56.2	12
2.2.1	Tertiary enrolment, % gross	61.2	33
2.2.2	Graduates in science & engineering, %	22.3	37 ○
2.2.3	Tertiary inbound mobility, %	16.8	9
2.3	Research & development (R&D)	67.5	11
2.3.1	Researchers, headcounts/mn pop.	6,872.2	11
2.3.2	Gross expenditure on R&D, % GDP	1.7	21
2.3.3	QS university ranking, average score top 3*	98.9	1 ●

3	Infrastructure	60.6	6 ●
3.1	Information & communication technologies (ICTs)	86.5	4 ●
3.1.1	ICT access*	84.6	6
3.1.2	ICT use*	71.9	12
3.1.3	Government's online service*	97.4	4 ●
3.1.4	E-participation*	92.1	5 ●
3.2	General infrastructure	35.1	60 ○
3.2.1	Electricity output, kWh/cap	5,697.9	36
3.2.2	Logistics performance*	90.9	10
3.2.3	Gross capital formation, % GDP	14.0	132 ○
3.3	Ecological sustainability	60.1	7
3.3.1	GDP/unit of energy use, 2005 PPP\$/kg oil eq	10.8	12
3.3.2	Environmental performance*	77.4	12
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	6.9	19

4	Market sophistication	81.4	2 ●
4.1	Credit	79.2	3 ●
4.1.1	Ease of getting credit*	100.0	1 ●
4.1.2	Domestic credit to private sector, % GDP	178.7	9
4.1.3	Microfinance gross loans, % GDP	n/a	n/a

4.2	Investment	82.8	2 ●
4.2.1	Ease of protecting investors*	80.0	10
4.2.2	Market capitalization, % GDP	124.0	7
4.2.3	Total value of stocks traded, % GDP	102.2	1 ●
4.2.4	Venture capital deals/tr PPP\$ GDP	0.4	7
4.3	Trade & competition	82.3	16
4.3.1	Applied tariff rate, weighted mean, %	1.1	10
4.3.2	Non-agricultural mkt access weighted tariff, %	3.3	97 ○
4.3.3	Intensity of local competition†	84.0	2 ●

5	Business sophistication	50.2	14
5.1	Knowledge workers	65.0	20
5.1.1	Knowledge-intensive employment, %	47.2	5
5.1.2	Firms offering formal training, % firms	n/a	n/a
5.1.3	GERD performed by business, % GDP	1.1	21
5.1.4	GERD performed by business, %	63.4	19
5.1.5	GMAT test takers/mn pop. 20–34	124.5	42
5.2	Innovation linkages	50.7	13
5.2.1	University/industry research collaboration†	76.3	5 ●
5.2.2	State of cluster development†	67.7	12
5.2.3	GERD financed by abroad, %	19.7	20
5.2.4	JV–strategic alliance deals/tr PPP\$ GDP	0.1	24
5.2.5	Patent families filed in 3+ offices/bn PPP\$ GDP	1.0	19
5.3	Knowledge absorption	34.8	29
5.3.1	Royalty & license fees payments, % total trade	1.0	27
5.3.2	High-tech imports less re-imports, %	10.9	25
5.3.3	Comm., computer & info. services imp., % total trade	1.8	16
5.3.4	FDI net inflows, % GDP	2.3	80 ○

6	Knowledge & technology outputs	56.4	5 ●
6.1	Knowledge creation	59.7	7
6.1.1	Domestic resident patent app/tr PPP\$ GDP	6.6	18
6.1.2	PCT resident patent app/tr PPP\$ GDP	2.1	21
6.1.3	Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	43.0	15
6.1.5	Citable documents H index	851.0	1 ●
6.2	Knowledge impact	57.8	8
6.2.1	Growth rate of PPP\$ GDP/worker, %	–0.7	102 ○
6.2.2	New businesses/th pop. 15–64	11.0	10
6.2.3	Computer software spending, % GDP	0.7	6
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	19.3	22
6.2.5	High- & medium-high-tech manufactures, %	38.0	23
6.3	Knowledge diffusion	51.7	9
6.3.1	Royalty & license fees receipts, % total trade	1.4	14
6.3.2	High-tech exports less re-exports, %	9.3	22
6.3.3	Comm., computer & info. services exp., % total trade	3.3	18
6.3.4	FDI net outflows, % GDP	2.9	25

7	Creative outputs	56.6	7
7.1	Intangible assets	50.5	40
7.1.1	Domestic res trademark app/bn PPP\$ GDP	48.7	56 ○
7.1.2	Madrid trademark app. holders/bn PPP\$ GDP	1.0	30 ○
7.1.3	ICTs & business model creation†	75.8	6
7.1.4	ICTs & organizational model creation†	73.2	6
7.2	Creative goods & services	52.4	5 ●
7.2.1	Cultural & creative services exports, % total trade	1.4	1 ●
7.2.2	National feature films/mn pop. 15–69	6.8	17
7.2.3	Global ent. & media output/th pop. 15–69	1.9	8
7.2.4	Printing & publishing manufactures, %	0.0	28
7.2.5	Creative goods exports, % total trade	2.9	18
7.3	Online creativity	73.1	4 ●
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	76.0	12
7.3.2	Country-code TLDs/th pop. 15–69	73.9	6 ●
7.3.3	Wikipedia edits/pop. 15–69	27,536.2	11
7.3.4	Video uploads on YouTube/pop. 15–69	95.6	4

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	313.9
GDP (US\$ billions)	16,799.7
GDP per capita, PPP\$	53,101.0
Income group	High income
Region	Northern America

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	60.1	6
Innovation Output Sub-Index	52.3	7
Innovation Input Sub-Index	67.9	4 ●
Innovation Efficiency Ratio	0.8	57
Global Innovation Index 2013 (out of 142)	60.3	5

1 Institutions **86.2** **17**

1.1 Political environment	81.4	21
1.1.1 Political stability*	81.2	38
1.1.2 Government effectiveness*	81.2	18
1.1.3 Press freedom*	81.8	29
1.2 Regulatory environment	93.2	13
1.2.1 Regulatory quality*	82.4	20
1.2.2 Rule of law*	90.5	17
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment	84.0	15
1.3.1 Ease of starting a business*	89.9	39
1.3.2 Ease of resolving insolvency*	86.3	16
1.3.3 Ease of paying taxes*	75.8	46

2 Human capital & research **58.3** **11**

2.1 Education	52.6	38
2.1.1 Expenditure on education, % GDP	5.4	45
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	24.3	46
2.1.3 School life expectancy, years	16.5	13
2.1.4 PISA scales in reading, maths, & science	492.1	25
2.1.5 Pupil-teacher ratio, secondary	14.7	57
2.2 Tertiary education	41.1	41
2.2.1 Tertiary enrolment, % gross	95.3	3 ●
2.2.2 Graduates in science & engineering, %	15.5	84 ○
2.2.3 Tertiary inbound mobility, %	3.4	49
2.3 Research & development (R&D)	81.3	2 ●
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	2.8	11
2.3.3 QS university ranking, average score top 3*	98.7	2 ●

3 Infrastructure **57.5** **14**

3.1 Information & communication technologies (ICTs)	83.0	5
3.1.1 ICT access*	72.4	28
3.1.2 ICT use*	67.6	13
3.1.3 Government's online service*	100.0	1 ●
3.1.4 E-participation*	92.1	5
3.2 General infrastructure	50.7	16
3.2.1 Electricity output, kWh/cap	13,589.2	7
3.2.2 Logistics performance*	92.1	8
3.2.3 Gross capital formation, % GDP	19.4	96 ○
3.3 Ecological sustainability	38.9	58
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	6.3	59
3.3.2 Environmental performance*	67.5	33
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.4	94 ○

4 Market sophistication **83.8** **1 ●**

4.1 Credit	78.4	4 ●
4.1.1 Ease of getting credit*	93.8	3
4.1.2 Domestic credit to private sector, % GDP	192.4	5
4.1.3 Microfinance gross loans, % GDP	n/a	n/a

4.2 Investment	87.3	1 ●
4.2.1 Ease of protecting investors*	83.3	6
4.2.2 Market capitalization, % GDP	119.0	9
4.2.3 Total value of stocks traded, % GDP	136.3	1 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	0.7	1 ●
4.3 Trade & competition	85.6	4 ●
4.3.1 Applied tariff rate, weighted mean, %	1.6	42
4.3.2 Non-agricultural mkt access weighted tariff, %	1.2	80 ○
4.3.3 Intensity of local competition†	80.3	11

5 Business sophistication **53.7** **10**

5.1 Knowledge workers	73.5	7
5.1.1 Knowledge-intensive employment, %	36.3	28
5.1.2 Firms offering formal training, % firms	n/a	n/a
5.1.3 GERD performed by business, % GDP	1.9	11
5.1.4 GERD performed by business, %	69.8	8
5.1.5 GMAT test takers/mn pop. 20–34	1,376.3	1 ●
5.2 Innovation linkages	46.4	25
5.2.1 University/industry research collaboration†	79.0	3 ●
5.2.2 State of cluster development†	70.5	5
5.2.3 GERD financed by abroad, %	3.8	68 ○
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	37
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	1.6	11
5.3 Knowledge absorption	41.3	12
5.3.1 Royalty & license fees payments, % total trade	1.7	11
5.3.2 High-tech imports less re-imports, %	15.9	11
5.3.3 Comm., computer & info. services imp., % total trade	1.4	43
5.3.4 FDI net inflows, % GDP	1.3	107 ○

6 Knowledge & technology outputs **58.1** **4 ●**

6.1 Knowledge creation	68.5	3 ●
6.1.1 Domestic resident patent app./tr PPP\$ GDP	16.5	1 ●
6.1.2 PCT resident patent app./tr PPP\$ GDP	3.2	16
6.1.3 Domestic res utility model app./tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	20.5	45
6.1.5 Citable documents H index	1,380.0	1 ●
6.2 Knowledge impact	56.7	11
6.2.1 Growth rate of PPP\$ GDP/worker, %	0.5	77 ○
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	1.0	1 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.6	110 ○
6.2.5 High- & medium-high-tech manufactures, %	43.3	17
6.3 Knowledge diffusion	49.0	15
6.3.1 Royalty & license fees receipts, % total trade	5.1	1 ●
6.3.2 High-tech exports less re-exports, %	6.9	26
6.3.3 Comm., computer & info. services exp., % total trade	1.2	77
6.3.4 FDI net outflows, % GDP	2.6	26

7 Creative outputs **46.5** **20**

7.1 Intangible assets	44.0	72
7.1.1 Domestic res trademark app./bn PPP\$ GDP	20.3	84 ○
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.3	47 ○
7.1.3 ICTs & business model creation†	71.3	15
7.1.4 ICTs & organizational model creation†	72.0	7
7.2 Creative goods & services	34.4	30
7.2.1 Cultural & creative services exports, % total trade	0.4	24
7.2.2 National feature films/mn pop. 15–69	3.7	36
7.2.3 Global ent. & media output/th pop. 15–69	2.2	4
7.2.4 Printing & publishing manufactures, %	0.0	38
7.2.5 Creative goods exports, % total trade	1.7	33
7.3 Online creativity	63.3	15
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	100.0	1 ●
7.3.2 Country-code TLDs/th pop. 15–69	29.8	61
7.3.3 Wikipedia edits/pop. 15–69	13,812.2	37
7.3.4 Video uploads on YouTube/pop. 15–69	100.0	1 ●

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Uruguay

Key indicators

Population (millions)	3.4
GDP (US\$ billions)	56.3
GDP per capita, PPP\$	16,722.7
Income group	High income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	34.8	72
Innovation Output Sub-Index	29.3	72
Innovation Input Sub-Index	40.3	73
Innovation Efficiency Ratio	0.7	75
Global Innovation Index 2013 (out of 142)	38.1	52

1 Institutions 68.7 47

1.1 Political environment	73.3	39 ●
1.1.1 Political stability*	83.1	36 ●
1.1.2 Government effectiveness*	52.7	48
1.1.3 Press freedom*	84.1	25 ●
1.2 Regulatory environment	67.3	65
1.2.1 Regulatory quality*	59.1	56
1.2.2 Rule of law*	61.3	43
1.2.3 Cost of redundancy dismissal, salary weeks	20.8	97
1.3 Business environment	65.5	68
1.3.1 Ease of starting a business*	88.8	44
1.3.2 Ease of resolving insolvency*	47.7	45
1.3.3 Ease of paying taxes*	59.8	103

2 Human capital & research 29.4 67

2.1 Education	42.0	73
2.1.1 Expenditure on education, % GDP	4.5	76
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	10.7	94 ○
2.1.3 School life expectancy, years	15.5	35 ●
2.1.4 PISA scales in reading, maths, & science	412.2	52 ○
2.1.5 Pupil-teacher ratio, secondary	11.3	31 ●
2.2 Tertiary education	38.4	52
2.2.1 Tertiary enrolment, % gross	63.2	30 ●
2.2.2 Graduates in science & engineering, %	15.6	82 ○
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	7.9	75
2.3.1 Researchers, headcounts/mn pop.	734.6	63
2.3.2 Gross expenditure on R&D, % GDP	0.4	65
2.3.3 QS university ranking, average score top 3*	7.2	63

3 Infrastructure 38.6 62

3.1 Information & communication technologies (ICTs)	43.9	52
3.1.1 ICT access*	63.8	46
3.1.2 ICT use*	38.4	46
3.1.3 Government's online service*	54.9	52
3.1.4 E-participation*	18.4	73
3.2 General infrastructure	28.7	92
3.2.1 Electricity output, kWh/cap	3,069.4	63
3.2.2 Logistics performance*	54.4	56
3.2.3 Gross capital formation, % GDP	19.7	93
3.3 Ecological sustainability	43.1	49
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	10.1	14 ●
3.3.2 Environmental performance*	53.6	64
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.2	46

4 Market sophistication 40.0 125 ○

4.1 Credit	23.1	117 ○
4.1.1 Ease of getting credit*	62.5	69
4.1.2 Domestic credit to private sector, % GDP	24.1	110
4.1.3 Microfinance gross loans, % GDP	0.0	83 ○

4.2 Investment	23.9	124 ○
4.2.1 Ease of protecting investors*	50.0	81
4.2.2 Market capitalization, % GDP	0.4	108 ○
4.2.3 Total value of stocks traded, % GDP	0.0	108 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	0.1	26

4.3 Trade & competition	73.0	91
4.3.1 Applied tariff rate, weighted mean, %	3.8	66
4.3.2 Non-agricultural mkt access weighted tariff, %	1.0	75
4.3.3 Intensity of local competition†	57.7	108 ○

5 Business sophistication 24.7 116 ○

5.1 Knowledge workers	30.5	94
5.1.1 Knowledge-intensive employment, %	23.1	62
5.1.2 Firms offering formal training, % firms	32.3	56
5.1.3 GERD performed by business, % GDP	0.1	68
5.1.4 GERD performed by business, %	14.3	70 ○
5.1.5 GMAT test takers/mn pop. 20–34	66.2	65

5.2 Innovation linkages 22.6 119 ○

5.2.1 University/industry research collaboration†	43.3	64
5.2.2 State of cluster development†	41.0	94
5.2.3 GERD financed by abroad, %	6.5	56
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	84
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	51

5.3 Knowledge absorption 21.0 95

5.3.1 Royalty & license fees payments, % total trade	0.2	80
5.3.2 High-tech imports less re-imports, %	8.1	55
5.3.3 Comm., computer & info. services imp., % total trade	0.4	108
5.3.4 FDI net inflows, % GDP	4.7	44

6 Knowledge & technology outputs 24.1 90

6.1 Knowledge creation	10.2	77
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.4	83
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.7	37
6.1.4 Scientific & technical articles/bn PPP\$ GDP	12.7	67
6.1.5 Citable documents H index	104.0	63

6.2 Knowledge impact 36.4 76

6.2.1 Growth rate of PPP\$ GDP/worker, %	2.7	39
6.2.2 New businesses/th pop. 15–64	3.0	31
6.2.3 Computer software spending, % GDP	0.3	56
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	13.8	34 ●
6.2.5 High- & medium-high-tech manufactures, %	11.7	71

6.3 Knowledge diffusion 25.7 105

6.3.1 Royalty & license fees receipts, % total trade	0.0	105 ○
6.3.2 High-tech exports less re-exports, %	1.4	61
6.3.3 Comm., computer & info. services exp., % total trade	1.5	60
6.3.4 FDI net outflows, % GDP	0.4	70

7 Creative outputs 34.4 62

7.1 Intangible assets	49.2	46
7.1.1 Domestic res trademark app/bn PPP\$ GDP	77.3	29 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	59.3	58
7.1.4 ICTs & organizational model creation†	58.2	46

7.2 Creative goods & services 9.8 95

7.2.1 Cultural & creative services exports, % total trade	0.0	84 ○
7.2.2 National feature films/mn pop. 15–69	3.5	41
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	68
7.2.5 Creative goods exports, % total trade	0.1	90

7.3 Online creativity 29.6 49

7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	8.4	52
7.3.2 Country-code TLDs/th pop. 15–69	46.1	39 ●
7.3.3 Wikipedia edits/pop. 15–69	20,274.9	26 ●
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	29.8
GDP (US\$ billions)	56.5
GDP per capita, PPP\$	3,761.6
Income group	Lower-middle income
Region	Central and Southern Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.2	128
Innovation Output Sub-Index	19.1	123
Innovation Input Sub-Index	31.3	124
Innovation Efficiency Ratio	0.6	108
Global Innovation Index 2013 (out of 142)	23.9	133

1 Institutions	46.1	124
1.1 Political environment	36.1	134
1.1.1 Political stability*	52.9	97
1.1.2 Government effectiveness*	15.8	129
1.1.3 Press freedom*	39.6	136 ○
1.2 Regulatory environment	45.2	123
1.2.1 Regulatory quality*	6.7	141 ○
1.2.2 Rule of law*	11.5	138 ○
1.2.3 Cost of redundancy dismissal, salary weeks	17.3	81
1.3 Business environment	56.9	93
1.3.1 Ease of starting a business*	92.5	22 ●
1.3.2 Ease of resolving insolvency*	42.2	55 ●
1.3.3 Ease of paying taxes*	36.1	134 ○
2 Human capital & research	27.1	77
2.1 Education	55.7	22 ●
2.1.1 Expenditure on education, % GDP	n/a	n/a
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	11.5	95
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	13.3	44 ●
2.2 Tertiary education	20.5	101
2.2.1 Tertiary enrolment, % gross	8.9	115
2.2.2 Graduates in science & engineering, %	21.1	46 ●
2.2.3 Tertiary inbound mobility, %	0.1	104
2.3 Research & development (R&D)	5.1	85
2.3.1 Researchers, headcounts/mn pop.	1,097.3	56
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	29.2	96
3.1 Information & communication technologies (ICTs)	29.2	94
3.1.1 ICT access*	23.8	116
3.1.2 ICT use*	19.5	83
3.1.3 Government's online service*	49.7	68
3.1.4 E-participation*	23.7	60
3.2 General infrastructure	33.6	68
3.2.1 Electricity output, kWh/cap	1,786.0	80
3.2.2 Logistics performance*	33.7	113
3.2.3 Gross capital formation, % GDP	30.8	20 ●
3.3 Ecological sustainability	24.9	117
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	1.8	122 ○
3.3.2 Environmental performance*	43.2	102
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	n/a	n/a
4 Market sophistication	41.1	118
4.1 Credit	27.3	103
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	n/a	n/a
4.1.3 Microfinance gross loans, % GDP	0.9	40 ●

4.2 Investment	16.8	140 ○
4.2.1 Ease of protecting investors*	40.0	113
4.2.2 Market capitalization, % GDP	4.2	103 ○
4.2.3 Total value of stocks traded, % GDP	0.2	92
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	57
4.3 Trade & competition	79.4	32 ●
4.3.1 Applied tariff rate, weighted mean, %	6.9	105
4.3.2 Non-agricultural mkt access weighted tariff, %	1.6	88
4.3.3 Intensity of local competition†	n/a	n/a

5 Business sophistication	12.7	140 ○
5.1 Knowledge workers	9.1	141 ○
5.1.1 Knowledge-intensive employment, %	n/a	n/a
5.1.2 Firms offering formal training, % firms	9.6	102 ○
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	10.8	120
5.2 Innovation linkages	3.6	142 ○
5.2.1 University/industry research collaboration†	n/a	n/a
5.2.2 State of cluster development†	n/a	n/a
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	85
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	85
5.3 Knowledge absorption	25.5	70
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	n/a	n/a
5.3.4 FDI net inflows, % GDP	3.1	64

6 Knowledge & technology outputs	26.6	73
6.1 Knowledge creation	11.2	74
6.1.1 Domestic resident patent app./tr PPP\$ GDP	2.5	45 ●
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	111 ○
6.1.3 Domestic res utility model app./tr PPP\$ GDP	1.7	20 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP	2.8	127
6.1.5 Citable documents H index	53.0	106
6.2 Knowledge impact	41.9	58 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	5.4	6 ●
6.2.2 New businesses/th pop. 15–64	0.6	72
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.8	103
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	n/a	n/a
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	n/a	n/a
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	11.7	139 ○
7.1 Intangible assets	16.1	138 ○
7.1.1 Domestic res trademark app./bn PPP\$ GDP	62.0	41 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.0	70
7.1.3 ICTs & business model creation†	n/a	n/a
7.1.4 ICTs & organizational model creation†	n/a	n/a
7.2 Creative goods & services	n/a	n/a
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	2.9	118
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.1	138 ○
7.3.2 Country-code TLDs/th pop. 15–69	8.4	107
7.3.3 Wikipedia edits/pop. 15–69	146.7	118
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Venezuela, Bolivarian Republic of

Key indicators

Population (millions)	30.0
GDP (US\$ billions)	374.0
GDP per capita, PPP\$	13,604.7
Income group	Upper-middle income
Region	Latin America and the Caribbean

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.7	122
Innovation Output Sub-Index	25.0	94
Innovation Input Sub-Index	26.3	137
Innovation Efficiency Ratio	0.9	7 ●
Global Innovation Index 2013 (out of 142)	27.3	114

1 Institutions	21.1	143 ○
1.1 Political environment	39.2	127
1.1.1 Political stability*	41.4	118
1.1.2 Government effectiveness*	10.5	136
1.1.3 Press freedom*	65.6	96
1.2 Regulatory environment	2.2	142 ○
1.2.1 Regulatory quality*	8.7	140 ○
1.2.2 Rule of law*	0.0	143 ○
1.2.3 Cost of redundancy dismissal, salary weeks	82.3	139 ○
1.3 Business environment	21.9	143 ○
1.3.1 Ease of starting a business*	45.7	141 ○
1.3.2 Ease of resolving insolvency*	6.9	139 ○
1.3.3 Ease of paying taxes*	13.1	141 ○

2 Human capital & research	31.2	60
2.1 Education	40.5	83
2.1.1 Expenditure on education, % GDP	6.9	14 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	16.6	74
2.1.3 School life expectancy, years	14.2	53 ●
2.1.4 PISA scales in reading, maths, & science	413.4	50
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	39.7	47 ●
2.2.1 Tertiary enrolment, % gross	77.9	12 ●
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	0.1	110 ○
2.3 Research & development (R&D)	13.5	60
2.3.1 Researchers, headcounts/mn pop.	342.4	78
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	23.9	47 ●

3 Infrastructure	26.0	112
3.1 Information & communication technologies (ICTs)	34.0	79
3.1.1 ICT access*	41.3	79
3.1.2 ICT use*	20.0	81
3.1.3 Government's online service*	48.4	74
3.1.4 E-participation*	26.3	56 ●
3.2 General infrastructure	29.7	89
3.2.1 Electricity output, kWh/cap	4,168.7	52
3.2.2 Logistics performance*	34.9	107
3.2.3 Gross capital formation, % GDP	24.0	63
3.3 Ecological sustainability	14.3	142 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.7	87
3.3.2 Environmental performance*	n/a	n/a
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.2	107

4 Market sophistication	29.6	143 ○
4.1 Credit	17.1	131
4.1.1 Ease of getting credit*	43.8	112
4.1.2 Domestic credit to private sector, % GDP	25.3	108
4.1.3 Microfinance gross loans, % GDP	0.0	78

4.2 Investment	12.6	143 ○
4.2.1 Ease of protecting investors*	23.3	142 ○
4.2.2 Market capitalization, % GDP	6.6	97
4.2.3 Total value of stocks traded, % GDP	0.0	107 ○
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	59.0	132
4.3.1 Applied tariff rate, weighted mean, %	8.6	119
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	31 ●
4.3.3 Intensity of local competition†	34.0	135 ○

5 Business sophistication	23.7	121
5.1 Knowledge workers	38.2	76
5.1.1 Knowledge-intensive employment, %	18.6	78
5.1.2 Firms offering formal training, % firms	39.0	43 ●
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	48.2	77
5.2 Innovation linkages	19.9	129
5.2.1 University/industry research collaboration†	39.7	79
5.2.2 State of cluster development†	27.7	132
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.0	100
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	91
5.3 Knowledge absorption	13.1	131
5.3.1 Royalty & license fees payments, % total trade	0.5	56
5.3.2 High-tech imports less re-imports, %	n/a	n/a
5.3.3 Comm., computer & info. services imp., % total trade	0.5	91
5.3.4 FDI net inflows, % GDP	0.6	124

6 Knowledge & technology outputs	26.6	74
6.1 Knowledge creation	6.5	98
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.1	104
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	2.3	129
6.1.5 Citable documents H index	130.0	50 ●
6.2 Knowledge impact	39.6	67
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.7	22 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.2	69
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.6	113
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	33.5	55 ●
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	n/a	n/a
6.3.3 Comm., computer & info. services exp., % total trade	0.2	125
6.3.4 FDI net outflows, % GDP	0.4	69

7 Creative outputs	23.4	108
7.1 Intangible assets	32.3	124
7.1.1 Domestic res trademark app/bn PPP\$ GDP	29.9	73
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	42.0	122
7.1.4 ICTs & organizational model creation†	43.3	107
7.2 Creative goods & services	3.9	115
7.2.1 Cultural & creative services exports, % total trade	0.0	89
7.2.2 National feature films/mn pop. 15–69	0.8	78
7.2.3 Global ent. & media output/th pop. 15–69	0.2	42
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	n/a	n/a
7.3 Online creativity	25.2	60
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.3	85
7.3.2 Country-code TLDs/th pop. 15–69	34.5	51 ●
7.3.3 Wikipedia edits/pop. 15–69	2,381.6	75
7.3.4 Video uploads on YouTube/pop. 15–69	59.9	51

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	88.8
GDP (US\$ billions)	170.6
GDP per capita, PPP\$	4,011.5
Income group	Lower-middle income
Region	South East Asia and Oceania

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	34.9	71
Innovation Output Sub-Index	34.0	47
Innovation Input Sub-Index	35.8	100
Innovation Efficiency Ratio	1.0	5 ●
Global Innovation Index 2013 (out of 142)	32.0	76

1 Institutions	46.6	121
1.1 Political environment	44.4	113
1.1.1 Political stability*	71.8	56
1.1.2 Government effectiveness*	33.1	86
1.1.3 Press freedom*	28.2	140 ○
1.2 Regulatory environment	49.2	118
1.2.1 Regulatory quality*	31.0	117
1.2.2 Rule of law*	32.5	91
1.2.3 Cost of redundancy dismissal, salary weeks	24.6	111
1.3 Business environment	46.2	129 ○
1.3.1 Ease of starting a business*	75.7	104
1.3.2 Ease of resolving insolvency*	17.2	127
1.3.3 Ease of paying taxes*	45.7	125

2 Human capital & research	24.2	89
2.1 Education	45.1	62
2.1.1 Expenditure on education, % GDP	6.3	21 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	27.5	83
2.2.1 Tertiary enrolment, % gross	24.6	84
2.2.2 Graduates in science & engineering, %	24.0	31
2.2.3 Tertiary inbound mobility, %	0.2	102 ○
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	28.6	99
3.1 Information & communication technologies (ICTs)	28.9	95
3.1.1 ICT access*	40.4	81
3.1.2 ICT use*	22.2	78
3.1.3 Government's online service*	42.5	90
3.1.4 E-participation*	10.5	94
3.2 General infrastructure	31.1	79
3.2.1 Electricity output, kWh/cap	1,129.1	91
3.2.2 Logistics performance*	55.2	53
3.2.3 Gross capital formation, % GDP	24.0	62
3.3 Ecological sustainability	25.9	112
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	4.3	94
3.3.2 Environmental performance*	38.2	114
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	2.3	41

4 Market sophistication	45.0	92
4.1 Credit	52.0	31 ●
4.1.1 Ease of getting credit*	75.0	40
4.1.2 Domestic credit to private sector, % GDP	104.3	28 ●
4.1.3 Microfinance gross loans, % GDP	3.8	14 ●

4.2 Investment	16.5	141 ○
4.2.1 Ease of protecting investors*	33.3	125 ○
4.2.2 Market capitalization, % GDP	23.2	64
4.2.3 Total value of stocks traded, % GDP	2.4	60
4.2.4 Venture capital deals/tr PPP\$ GDP	0.0	71 ○
4.3 Trade & competition	66.6	122
4.3.1 Applied tariff rate, weighted mean, %	5.7	90
4.3.2 Non-agricultural mkt access weighted tariff, %	5.1	132 ○
4.3.3 Intensity of local competition†	70.2	48

5 Business sophistication	34.4	59
5.1 Knowledge workers	32.9	89
5.1.1 Knowledge-intensive employment, %	7.4	100 ○
5.1.2 Firms offering formal training, % firms	43.6	38
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	51.6	74

5.2 Innovation linkages	29.5	80
5.2.1 University/industry research collaboration†	39.0	83
5.2.2 State of cluster development†	48.0	64
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	58
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	97
5.3 Knowledge absorption	40.7	14 ●
5.3.1 Royalty & license fees payments, % total trade	n/a	n/a
5.3.2 High-tech imports less re-imports, %	18.9	7 ●
5.3.3 Comm., computer & info. services imp., % total trade	0.0	137 ○
5.3.4 FDI net inflows, % GDP	6.0	32 ●

6 Knowledge & technology outputs	32.2	49
6.1 Knowledge creation	7.3	94
6.1.1 Domestic resident patent app./tr PPP\$ GDP	1.1	64
6.1.2 PCT resident patent app./tr PPP\$ GDP	0.0	96
6.1.3 Domestic res utility model app./tr PPP\$ GDP	0.6	38
6.1.4 Scientific & technical articles/bn PPP\$ GDP	5.8	102
6.1.5 Citable documents H index	107.0	59

6.2 Knowledge impact	48.4	33 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.5	27 ●
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.3	42
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	18.3	23 ●
6.2.5 High- & medium-high-tech manufactures, %	26.2	41
6.3 Knowledge diffusion	40.9	30 ●
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	17.8	6 ●
6.3.3 Comm., computer & info. services exp., % total trade	0.1	131 ○
6.3.4 FDI net outflows, % GDP	0.8	52

7 Creative outputs	35.8	58
7.1 Intangible assets	46.4	57
7.1.1 Domestic res trademark app./bn PPP\$ GDP	104.4	14 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	0.2	54
7.1.3 ICTs & business model creation†	64.0	38
7.1.4 ICTs & organizational model creation†	56.0	57

7.2 Creative goods & services	26.1	46
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	1.2	67
7.2.3 Global ent. & media output/th pop. 15–69	0.0	57 ○
7.2.4 Printing & publishing manufactures, %	0.0	61
7.2.5 Creative goods exports, % total trade	4.1	15 ●

7.3 Online creativity	24.4	61
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	2.1	88
7.3.2 Country-code TLDs/th pop. 15–69	27.6	63
7.3.3 Wikipedia edits/pop. 15–69	1,142.9	93
7.3.4 Video uploads on YouTube/pop. 15–69	65.8	47

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Yemen

Key indicators

Population (millions)	23.9
GDP (US\$ billions)	39.2
GDP per capita, PPP\$	2,316.3
Income group	Lower-middle income
Region	Northern Africa and Western Asia

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	19.5	141 ○
Innovation Output Sub-Index	14.7	139
Innovation Input Sub-Index	24.4	141 ○
Innovation Efficiency Ratio	0.6	111
Global Innovation Index 2013 (out of 142)	19.3	142

1 Institutions	36.6	138
1.1 Political environment	14.6	142 ○
1.1.1 Political stability*	6.1	142 ○
1.1.2 Government effectiveness*	6.8	139
1.1.3 Press freedom*	30.8	138
1.2 Regulatory environment	41.1	128
1.2.1 Regulatory quality*	30.6	118
1.2.2 Rule of law*	11.6	137
1.2.3 Cost of redundancy dismissal, salary weeks	27.4	120
1.3 Business environment	54.1	103
1.3.1 Ease of starting a business*	74.5	105
1.3.2 Ease of resolving insolvency*	25.8	110
1.3.3 Ease of paying taxes*	62.0	97

2 Human capital & research	15.5	120
2.1 Education	30.9	114
2.1.1 Expenditure on education, % GDP	5.2	54 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	11.2	93
2.1.3 School life expectancy, years	9.2	118
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	16.1	65 ●
2.2 Tertiary education	15.6	109
2.2.1 Tertiary enrolment, % gross	10.3	109
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	4.3	37 ●
2.3 Research & development (R&D)	0.0	131 ○
2.3.1 Researchers, headcounts/mn pop.	n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○

3 Infrastructure	16.3	140
3.1 Information & communication technologies (ICTs)	11.2	137
3.1.1 ICT access*	20.9	120
3.1.2 ICT use*	6.2	113
3.1.3 Government's online service*	17.7	137
3.1.4 E-participation*	0.0	129 ○
3.2 General infrastructure	13.0	140
3.2.1 Electricity output, kWh/cap	250.2	112
3.2.2 Logistics performance*	50.8	62 ●
3.2.3 Gross capital formation, % GDP	8.9	142 ○
3.3 Ecological sustainability	24.9	118
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	7.1	48 ●
3.3.2 Environmental performance*	30.2	129
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.0	128 ○

4 Market sophistication	40.7	120
4.1 Credit	8.4	143 ○
4.1.1 Ease of getting credit*	25.0	134 ○
4.1.2 Domestic credit to private sector, % GDP	4.6	142 ○
4.1.3 Microfinance gross loans, % GDP	0.0	86

4.2 Investment	40.0	51 ●
4.2.1 Ease of protecting investors*	40.0	113
4.2.2 Market capitalization, % GDP	n/a	n/a
4.2.3 Total value of stocks traded, % GDP	n/a	n/a
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	73.8	86 ●
4.3.1 Applied tariff rate, weighted mean, %	3.8	68 ●
4.3.2 Non-agricultural mkt access weighted tariff, %	0.3	42 ●
4.3.3 Intensity of local competition†	56.0	111

5 Business sophistication	12.7	141 ○
5.1 Knowledge workers	14.2	137
5.1.1 Knowledge-intensive employment, %	17.0	82
5.1.2 Firms offering formal training, % firms	7.3	104
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	4.6	133
5.2 Innovation linkages	20.4	125
5.2.1 University/industry research collaboration†	18.7	134 ○
5.2.2 State of cluster development†	30.3	128
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	97
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	3.4	142 ○
5.3.1 Royalty & license fees payments, % total trade	0.0	113
5.3.2 High-tech imports less re-imports, %	2.5	124
5.3.3 Comm., computer & info. services imp., % total trade	0.3	119
5.3.4 FDI net inflows, % GDP	–2.2	141 ○

6 Knowledge & technology outputs	13.7	133
6.1 Knowledge creation	3.6	129
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.6	75
6.1.2 PCT resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	2.8	126
6.1.5 Citable documents H index	37.0	127
6.2 Knowledge impact	18.5	119
6.2.1 Growth rate of PPP\$ GDP/worker, %	–5.3	114
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	0.4	133
6.2.5 High- & medium-high-tech manufactures, %	2.9	91
6.3 Knowledge diffusion	19.1	133
6.3.1 Royalty & license fees receipts, % total trade	0.4	26 ●
6.3.2 High-tech exports less re-exports, %	0.0	122
6.3.3 Comm., computer & info. services exp., % total trade	1.0	81 ●
6.3.4 FDI net outflows, % GDP	n/a	n/a

7 Creative outputs	15.7	133
7.1 Intangible assets	25.5	134
7.1.1 Domestic res trademark app/bn PPP\$ GDP	39.2	65 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	29.5	136 ○
7.1.4 ICTs & organizational model creation†	31.8	132
7.2 Creative goods & services	2.1	124
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	0.0	86
7.2.5 Creative goods exports, % total trade	0.0	126 ○
7.3 Online creativity	9.5	93
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.6	116
7.3.2 Country-code TLDs/th pop. 15–69	0.9	130
7.3.3 Wikipedia edits/pop. 15–69	317.7	111
7.3.4 Video uploads on YouTube/pop. 15–69	36.2	59

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Key indicators

Population (millions)	14.1
GDP (US\$ billions)	22.4
GDP per capita, PPP\$	1,754.0
Income group	Lower-middle income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	25.8	121
Innovation Output Sub-Index	22.8	105
Innovation Input Sub-Index	28.7	131
Innovation Efficiency Ratio	0.8	44 ●
Global Innovation Index 2013 (out of 142)	26.8	118
1 Institutions	50.7	107
1.1 Political environment	60.1	62
1.1.1 Political stability*	80.7	41 ●
1.1.2 Government effectiveness*	27.5	98
1.1.3 Press freedom*	72.1	59
1.2 Regulatory environment	25.5	138 ○
1.2.1 Regulatory quality*	37.6	105
1.2.2 Rule of law*	35.3	85
1.2.3 Cost of redundancy dismissal, salary weeks	50.6	138 ○
1.3 Business environment	66.6	64
1.3.1 Ease of starting a business*	88.3	51 ●
1.3.2 Ease of resolving insolvency*	39.3	65
1.3.3 Ease of paying taxes*	72.1	57
2 Human capital & research	3.6	143 ○
2.1 Education	4.6	142 ○
2.1.1 Expenditure on education, % GDP	1.3	131 ○
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	n/a	n/a
2.2.1 Tertiary enrolment, % gross	n/a	n/a
2.2.2 Graduates in science & engineering, %	n/a	n/a
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research & development (R&D)	2.6	99
2.3.1 Researchers, headcounts/mn pop.	49.1	113 ○
2.3.2 Gross expenditure on R&D, % GDP	0.3	73
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	20.4	130
3.1 Information & communication technologies (ICTs)	15.0	129
3.1.1 ICT access*	21.2	119
3.1.2 ICT use*	4.8	117
3.1.3 Government's online service*	31.4	117
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	25.3	109
3.2.1 Electricity output, kWh/cap	849.7	94
3.2.2 Logistics performance*	26.6	127 ○
3.2.3 Gross capital formation, % GDP	25.7	44 ●
3.3 Ecological sustainability	21.0	128
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	2.3	118 ○
3.3.2 Environmental performance*	41.7	104
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	0.5	82
4 Market sophistication	47.0	80
4.1 Credit	30.4	91
4.1.1 Ease of getting credit*	87.5	13 ●
4.1.2 Domestic credit to private sector, % GDP	14.8	133 ○
4.1.3 Microfinance gross loans, % GDP	0.0	80

4.2 Investment	29.0	102
4.2.1 Ease of protecting investors*	53.3	66
4.2.2 Market capitalization, % GDP	14.5	81
4.2.3 Total value of stocks traded, % GDP	0.9	68
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	81.6	22 ●
4.3.1 Applied tariff rate, weighted mean, %	2.7	55
4.3.2 Non-agricultural mkt access weighted tariff, %	0.5	51 ●
4.3.3 Intensity of local competition†	70.5	46 ●
5 Business sophistication	22.0	127
5.1 Knowledge workers	15.4	134 ○
5.1.1 Knowledge-intensive employment, %	7.3	103 ○
5.1.2 Firms offering formal training, % firms	31.1	61
5.1.3 GERD performed by business, % GDP	0.0	80
5.1.4 GERD performed by business, %	2.0	81 ○
5.1.5 GMAT test takers/mn pop. 20–34	8.4	125
5.2 Innovation linkages	29.8	78
5.2.1 University/industry research collaboration†	42.5	68
5.2.2 State of cluster development†	51.5	45 ●
5.2.3 GERD financed by abroad, %	1.6	75
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.1	28 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	n/a	n/a
5.3 Knowledge absorption	20.7	98
5.3.1 Royalty & license fees payments, % total trade	0.1	110
5.3.2 High-tech imports less re-imports, %	4.3	109
5.3.3 Comm., computer & info. services imp., % total trade	0.2	125
5.3.4 FDI net inflows, % GDP	10.3	13 ●
6 Knowledge & technology outputs	24.3	86
6.1 Knowledge creation	6.0	104
6.1.1 Domestic resident patent app/tr PPP\$ GDP	0.3	85
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.1	92
6.1.3 Domestic res utility model app/tr PPP\$ GDP	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP	9.3	80
6.1.5 Citable documents H index	68.0	90
6.2 Knowledge impact	38.7	69
6.2.1 Growth rate of PPP\$ GDP/worker, %	3.3	32 ●
6.2.2 New businesses/th pop. 15–64	1.4	51
6.2.3 Computer software spending, % GDP	n/a	n/a
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	1.6	111
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	28.2	87
6.3.1 Royalty & license fees receipts, % total trade	n/a	n/a
6.3.2 High-tech exports less re-exports, %	2.7	47
6.3.3 Comm., computer & info. services exp., % total trade	0.3	116
6.3.4 FDI net outflows, % GDP	0.9	50
7 Creative outputs	21.2	118
7.1 Intangible assets	39.1	96
7.1.1 Domestic res trademark app/bn PPP\$ GDP	26.7	79
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	56.0	68
7.1.4 ICTs & organizational model creation†	51.0	74
7.2 Creative goods & services	6.6	107
7.2.1 Cultural & creative services exports, % total trade	0.2	38 ●
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.0	106
7.3 Online creativity	0.1	140 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.2	131
7.3.2 Country-code TLDs/th pop. 15–69	0.1	140 ○
7.3.3 Wikipedia edits/pop. 15–69	74.3	126
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.

Zimbabwe

Key indicators

Population (millions)	13.7
GDP (US\$ billions)	13.0
GDP per capita, PPP\$	787.7
Income group	Low income
Region	Sub-Saharan Africa

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 143)	24.3	130
Innovation Output Sub-Index	21.5	111
Innovation Input Sub-Index	27.2	136
Innovation Efficiency Ratio	0.8	48 ●
Global Innovation Index 2013 (out of 142)	24.0	132
1 Institutions	26.7	142 ○
1.1 Political environment	39.0	129
1.1.1 Political stability*	46.4	111
1.1.2 Government effectiveness*	8.6	137 ○
1.1.3 Press freedom*	61.9	108
1.2 Regulatory environment	0.7	143 ○
1.2.1 Regulatory quality*	1.1	142 ○
1.2.2 Rule of law*	1.9	142 ○
1.2.3 Cost of redundancy dismissal, salary weeks	82.3	139 ○
1.3 Business environment	40.4	134
1.3.1 Ease of starting a business*	49.2	140 ○
1.3.2 Ease of resolving insolvency*	13.8	133
1.3.3 Ease of paying taxes*	58.1	106
2 Human capital & research	12.4	133
2.1 Education	14.1	138 ○
2.1.1 Expenditure on education, % GDP	2.5	120
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
2.1.4 PISA scales in reading, maths, & science	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	n/a	n/a
2.2 Tertiary education	22.2	95
2.2.1 Tertiary enrolment, % gross	5.9	123
2.2.2 Graduates in science & engineering, %	23.3	33 ●
2.2.3 Tertiary inbound mobility, %	0.4	97
2.3 Research & development (R&D)	0.9	121
2.3.1 Researchers, headcounts/mn pop.	199.6	86
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a
2.3.3 QS university ranking, average score top 3*	0.0	70 ○
3 Infrastructure	22.8	121
3.1 Information & communication technologies (ICTs)	18.5	115
3.1.1 ICT access*	25.4	110
3.1.2 ICT use*	15.9	93
3.1.3 Government's online service*	30.1	120
3.1.4 E-participation*	2.6	116
3.2 General infrastructure	28.1	96
3.2.1 Electricity output, kWh/cap	700.0	101
3.2.2 Logistics performance*	37.3	101
3.2.3 Gross capital formation, % GDP	25.9	43 ●
3.3 Ecological sustainability	21.7	126
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq	0.4	124 ○
3.3.2 Environmental performance*	49.5	85
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.4	54 ●
4 Market sophistication	46.4	83
4.1 Credit	21.9	122
4.1.1 Ease of getting credit*	50.0	96
4.1.2 Domestic credit to private sector, % GDP	44.5	76
4.1.3 Microfinance gross loans, % GDP	0.2	58

4.2 Investment	41.3	48 ●
4.2.1 Ease of protecting investors*	43.3	105
4.2.2 Market capitalization, % GDP	109.3	12 ●
4.2.3 Total value of stocks traded, % GDP	14.9	31 ●
4.2.4 Venture capital deals/tr PPP\$ GDP	n/a	n/a
4.3 Trade & competition	75.8	66
4.3.1 Applied tariff rate, weighted mean, %	n/a	n/a
4.3.2 Non-agricultural mkt access weighted tariff, %	0.1	27 ●
4.3.3 Intensity of local competition†	64.2	78
5 Business sophistication	27.7	97
5.1 Knowledge workers	25.2	109
5.1.1 Knowledge-intensive employment, %	6.6	105
5.1.2 Firms offering formal training, % firms	33.0	54
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD performed by business, %	n/a	n/a
5.1.5 GMAT test takers/mn pop. 20–34	33.3	91
5.2 Innovation linkages	40.0	42 ●
5.2.1 University/industry research collaboration†	34.7	108
5.2.2 State of cluster development†	32.7	122
5.2.3 GERD financed by abroad, %	n/a	n/a
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP	0.2	1 ●
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.0	106 ○
5.3 Knowledge absorption	17.9	112
5.3.1 Royalty & license fees payments, % total trade	0.3	73
5.3.2 High-tech imports less re-imports, %	7.1	63
5.3.3 Comm., computer & info. services imp., % total trade	0.2	126
5.3.4 FDI net inflows, % GDP	4.0	54 ●
6 Knowledge & technology outputs	17.4	122
6.1 Knowledge creation	14.5	65
6.1.1 Domestic resident patent app/tr PPP\$ GDP	n/a	n/a
6.1.2 PCT resident patent app/tr PPP\$ GDP	0.3	53
6.1.3 Domestic res utility model app/tr PPP\$ GDP	0.2	48
6.1.4 Scientific & technical articles/bn PPP\$ GDP	35.5	24 ●
6.1.5 Citable documents H index	72.0	87
6.2 Knowledge impact	35.8	78
6.2.1 Growth rate of PPP\$ GDP/worker, %	–2.0	111 ○
6.2.2 New businesses/th pop. 15–64	n/a	n/a
6.2.3 Computer software spending, % GDP	0.5	20 ●
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	2.2	95
6.2.5 High- & medium-high-tech manufactures, %	n/a	n/a
6.3 Knowledge diffusion	2.0	138 ○
6.3.1 Royalty & license fees receipts, % total trade	0.0	87
6.3.2 High-tech exports less re-exports, %	0.4	87
6.3.3 Comm., computer & info. services exp., % total trade	0.0	138 ○
6.3.4 FDI net outflows, % GDP	n/a	n/a
7 Creative outputs	25.5	101
7.1 Intangible assets	46.3	59
7.1.1 Domestic res trademark app/bn PPP\$ GDP	n/a	n/a
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP	n/a	n/a
7.1.3 ICTs & business model creation†	49.2	96
7.1.4 ICTs & organizational model creation†	43.3	107
7.2 Creative goods & services	8.6	101
7.2.1 Cultural & creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	n/a	n/a
7.2.3 Global ent. & media output/th pop. 15–69	n/a	n/a
7.2.4 Printing & publishing manufactures, %	n/a	n/a
7.2.5 Creative goods exports, % total trade	0.3	74
7.3 Online creativity	0.8	128
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	0.5	118
7.3.2 Country-code TLDs/th pop. 15–69	1.8	126
7.3.3 Wikipedia edits/pop. 15–69	92.3	121
7.3.4 Video uploads on YouTube/pop. 15–69	n/a	n/a

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.