

**Key indicators**

Population (millions) .....	44.9
GDP (US\$ billions) .....	130.7
GDP per capita, PPP\$ .....	7,552.4
Income group .....	Lower-middle income
Region .....	Europe

	Score 0–100 or value (hard data)	Rank
<b>Global Innovation Index (out of 141)</b> .....	<b>36.5</b>	<b>64</b>
Innovation Output Sub-Index .....	33.9	47
Innovation Input Sub-Index.....	39.1	84
Innovation Efficiency Ratio.....	0.9	15 ●
Global Innovation Index 2014 (out of 143) .....	36.3	63
<b>1 Institutions.....</b>	<b>52.2</b>	<b>98</b>
1.1 Political environment.....	34.6	112
1.1.1 Political stability*.....	45.4	110
1.1.2 Government effectiveness*.....	23.8	109
1.2 Regulatory environment .....	59.2	89
1.2.1 Regulatory quality*.....	30.8	112
1.2.2 Rule of law*.....	25.7	114 ○
1.2.3 Cost of redundancy dismissal, salary weeks.....	13.0	53
1.3 Business environment.....	63.0	92
1.3.1 Ease of starting a business*.....	87.4	64
1.3.2 Ease of resolving insolvency*.....	31.2	121 ○
1.3.3 Ease of paying taxes*.....	70.3	85
<b>2 Human capital &amp; research.....</b>	<b>40.4</b>	<b>36</b>
2.1 Education.....	55.8	25 ●
2.1.1 Expenditure on education, % GDP.....	6.7	18 ●
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap.....	30.1	23
2.1.3 School life expectancy, years.....	15.1	40
2.1.4 PISA scales in reading, maths, & science.....	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary.....	9.3	20 ●
2.2 Tertiary education.....	45.0	31
2.2.1 Tertiary enrolment, % gross.....	79.0	13 ●
2.2.2 Graduates in science & engineering, %.....	25.6	20
2.2.3 Tertiary inbound mobility, %.....	2.3	63
2.3 Research & development (R&D).....	20.4	45
2.3.1 Researchers, FTE/mn pop.....	1163.3	46
2.3.2 Gross expenditure on R&D, % GDP.....	0.8	44
2.3.3 QS university ranking, average score top 3*.....	29.4	46
<b>3 Infrastructure.....</b>	<b>26.3</b>	<b>112</b>
3.1 Information & communication technologies (ICTs).....	38.2	89
3.1.1 ICT access*.....	61.6	63
3.1.2 ICT use*.....	21.1	89
3.1.3 Government's online service*.....	26.8	112 ○
3.1.4 E-participation*.....	43.1	76
3.2 General infrastructure.....	16.0	127 ○
3.2.1 Electricity output, kWh/cap.....	4351.0	48
3.2.2 Logistics performance*.....	41.6	59
3.2.3 Gross capital formation, % GDP.....	8.2	140 ○
3.3 Ecological sustainability.....	24.8	121 ○
3.3.1 GDP/unit of energy use, 2005 PPP\$/kg oil eq.....	2.8	116 ○
3.3.2 Environmental performance*.....	49.0	85
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP.....	0.5	82
<b>4 Market sophistication.....</b>	<b>43.9</b>	<b>89</b>
4.1 Credit.....	33.3	60
4.1.1 Ease of getting credit*.....	75.0	16 ●
4.1.2 Domestic credit to private sector, % GDP.....	74.0	42
4.1.3 Microfinance gross loans, % GDP.....	0.1	64

4.2 Investment.....	21.4	136 ○
4.2.1 Ease of protecting investors*.....	48.3	96
4.2.2 Market capitalization, % GDP.....	11.7	86 ○
4.2.3 Total value of stocks traded, % GDP.....	0.7	75
4.2.4 Venture capital deals/tr PPP\$ GDP.....	0.0	51
4.3 Trade & competition.....	77.1	66
4.3.1 Applied tariff rate, weighted mean, %.....	2.1	46
4.3.2 Intensity of local competition†.....	61.3	97
<b>5 Business sophistication.....</b>	<b>32.4</b>	<b>78</b>
5.1 Knowledge workers.....	42.4	52
5.1.1 Knowledge-intensive employment, %.....	33.7	39
5.1.2 Firms offering formal training, % firms.....	22.5	84
5.1.3 GERD performed by business, % of GDP.....	0.4	36
5.1.4 GERD financed by business, %.....	29.0	51
5.1.5 Females employed w/advanced degrees, % total.....	28.1	4 ●
5.2 Innovation linkages.....	24.1	105
5.2.1 University/industry research collaboration†.....	41.7	72
5.2.2 State of cluster development†.....	33.3	122 ○
5.2.3 GERD financed by abroad, %.....	21.6	17 ●
5.2.4 JV-strategic alliance deals/tr PPP\$ GDP.....	0.0	80 ○
5.2.5 Patent families 3+ offices/bn PPP\$ GDP.....	0.0	88
5.3 Knowledge absorption.....	30.6	88
5.3.1 Royalty & license fees payments, % total trade.....	1.2	22 ●
5.3.2 High-tech imports less re-imports, % total trade.....	6.5	74
5.3.3 Comm., computer & info. services imp., % total trade.....	0.8	68
5.3.4 FDI net inflows, % GDP.....	2.1	78
<b>6 Knowledge &amp; technology outputs.....</b>	<b>36.4</b>	<b>34</b>
6.1 Knowledge creation.....	49.2	14 ●
6.1.1 Domestic resident patent app/bn PPP\$ GDP.....	7.3	12 ●
6.1.2 PCT resident patent app/bn PPP\$ GDP.....	0.4	44
6.1.3 Domestic res utility model app/bn PPP\$ GDP.....	25.4	1 ●
6.1.4 Scientific & technical articles/bn PPP\$ GDP.....	13.2	58
6.1.5 Citable documents H index.....	159.0	43
6.2 Knowledge impact.....	31.3	98
6.2.1 Growth rate of PPP\$ GDP/worker, %.....	1.2	66
6.2.2 New businesses/th pop. 15–64.....	0.9	70
6.2.3 Computer software spending, % GDP.....	0.3	47
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP.....	3.3	77
6.2.5 High- & medium-high-tech manufactures, %.....	24.9	46
6.3 Knowledge diffusion.....	28.6	65
6.3.1 Royalty & license fees receipts, % total trade.....	0.2	40
6.3.2 High-tech exports less re-exports, % total trade.....	2.4	47
6.3.3 Comm., computer & info. services exp., % total trade.....	2.2	36
6.3.4 FDI net outflows, % GDP.....	0.2	80
<b>7 Creative outputs.....</b>	<b>31.3</b>	<b>75</b>
7.1 Intangible assets.....	43.0	82
7.1.1 Domestic res trademark app/bn PPP\$ GDP.....	83.8	19 ●
7.1.2 Madrid trademark app. holders/bn PPP\$ GDP.....	1.2	26
7.1.3 ICTs & business model creation†.....	45.9	108 ○
7.1.4 ICTs & organizational model creation†.....	44.4	98
7.2 Creative goods & services.....	13.5	87
7.2.1 Cultural & creative services exports, % total trade.....	0.0	65
7.2.2 National feature films/mn pop. 15–69.....	0.4	99 ○
7.2.3 Global ent. & media output/th pop. 15–69.....	n/a	n/a
7.2.4 Printing & publishing output manufactures, %.....	1.5	48
7.2.5 Creative goods exports, % total trade.....	0.6	55
7.3 Online creativity.....	25.7	51
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69.....	5.1	60
7.3.2 Country-code TLDs/th pop. 15–69.....	8.1	46
7.3.3 Wikipedia edits/pop. 15–69.....	1472.1	66
7.3.4 Video uploads on YouTube/pop. 15–69.....	78.6	37

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

Ⓜ indicates that the country's data are older than the base year; see Appendix II for details, including the year of the data.