

## Key indicators

Population (millions) .....	0.6
GDP (US\$ billions) .....	61.0
GDP per capita, PPP\$ .....	98,987.2
Income group .....	High income
Region .....	Europe

	Score 0–100 or value (hard data)	Rank
<b>Global Innovation Index (out of 127) .....</b>	<b>56.4</b>	<b>12</b>
Innovation Output Sub-Index .....	55.4	4 ●
Innovation Input Sub-Index .....	57.4	24
Innovation Efficiency Ratio .....	1.0	1 ●
Global Innovation Index 2016 (out of 128) .....	57.1	12

<b>1 Institutions .....</b>	<b>82.6</b>	<b>19</b>
1.1 Political environment .....	92.2	4 ●
1.1.1 Political stability & safety* .....	98.0	2 ●
1.1.2 Government effectiveness* .....	86.5	14
1.2 Regulatory environment .....	81.2	23
1.2.1 Regulatory quality* .....	84.9	13
1.2.2 Rule of law* .....	93.9	9
1.2.3 Cost of redundancy dismissal, salary weeks .....	21.7	92 ○
1.3 Business environment .....	74.3	54
1.3.1 Ease of starting a business* .....	88.7	55
1.3.2 Ease of resolving insolvency* .....	45.4	74
1.3.3 Ease of paying taxes* .....	88.9	15

<b>2 Human capital &amp; research .....</b>	<b>42.9</b>	<b>33</b>
2.1 Education .....	48.5	59
2.1.1 Expenditure on education, % GDP <sup>Ⓐ</sup> .....	4.1	76
2.1.2 Gov't expenditure/pupil, secondary, % GDP/cap .....	19.4	55
2.1.3 School life expectancy, years <sup>Ⓐ</sup> .....	13.9	64
2.1.4 PISA scales in reading, maths, & science .....	483.3	32
2.1.5 Pupil-teacher ratio, secondary <sup>Ⓐ</sup> .....	9.1	16
2.2 Tertiary education .....	43.9	36
2.2.1 Tertiary enrolment, % gross <sup>Ⓐ</sup> .....	19.4	92 ○
2.2.2 Graduates in science & engineering, % .....	16.3	77 ○
2.2.3 Tertiary inbound mobility, % <sup>Ⓐ</sup> .....	40.6	1 ●
2.3 Research & development (R&D) .....	36.2	31
2.3.1 Researchers, FTE/mn pop. .....	5,058.3	10
2.3.2 Gross expenditure on R&D, % GDP .....	1.3	27
2.3.3 Global R&D companies, avg. expend. top 3, mn \$US .....	53.9	26
2.3.4 QS university ranking, average score top 3* .....	0.0	75 ○

<b>3 Infrastructure .....</b>	<b>60.1</b>	<b>24</b>
3.1 Information & communication technologies (ICTs) .....	79.3	21
3.1.1 ICT access* .....	95.4	1 ●
3.1.2 ICT use* .....	80.5	10
3.1.3 Government's online service* .....	71.7	40
3.1.4 E-participation* .....	69.5	43
3.2 General infrastructure .....	44.2	41
3.2.1 Electricity output, kWh/cap .....	2,289.5	75
3.2.2 Logistics performance* .....	99.7	2 ●
3.2.3 Gross capital formation, % GDP .....	18.6	96 ○
3.3 Ecological sustainability .....	56.9	25
3.3.1 GDP/unit of energy use .....	13.3	17
3.3.2 Environmental performance* .....	86.6	20
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP .....	1.9	49

<b>4 Market sophistication .....</b>	<b>43.4</b>	<b>78</b>
4.1 Credit .....	26.4	94 ○
4.1.1 Ease of getting credit* .....	15.0	121 ○
4.1.2 Domestic credit to private sector, % GDP .....	95.4	31
4.1.3 Microfinance gross loans, % GDP .....	n/a	n/a

4.2 Investment .....	43.4	46
4.2.1 Ease of protecting minority investors* .....	45.0	98 ○
4.2.2 Market capitalization, % GDP .....	81.6	18
4.2.3 Venture capital deals/bn PPP\$ GDP .....	0.2	13
4.3 Trade, competition, & market scale .....	60.5	66
4.3.1 Applied tariff rate, weighted mean, % .....	1.6	23
4.3.2 Intensity of local competition <sup>†</sup> .....	71.9	41
4.3.3 Domestic market scale, bn PPP\$ .....	58.7	91 ○

<b>5 Business sophistication .....</b>	<b>57.8</b>	<b>7</b>
5.1 Knowledge workers .....	59.9	23
5.1.1 Knowledge-intensive employment, % .....	56.8	1 ●
5.1.2 Firms offering formal training, % firms .....	n/a	n/a
5.1.3 GERD performed by business, % of GDP .....	0.7	29
5.1.4 GERD financed by business, % <sup>Ⓐ</sup> .....	16.5	66
5.1.5 Females employed w/advanced degrees, % total .....	20.6	21
5.2 Innovation linkages .....	64.4	3 ●
5.2.1 University/industry research collaboration <sup>†</sup> .....	60.8	20
5.2.2 State of cluster development <sup>†</sup> .....	69.7	10
5.2.3 GERD financed by abroad, % <sup>Ⓐ</sup> .....	32.3	15
5.2.4 JV-strategic alliance deals/bn PPP\$ GDP .....	0.1	8
5.2.5 Patent families 2+ offices/bn PPP\$ GDP .....	8.4	7
5.3 Knowledge absorption .....	49.0	16
5.3.1 Intellectual property payments, % total trade .....	2.6	6
5.3.2 High-tech imports less re-imports, % total trade .....	2.5	125 ○
5.3.3 ICT services imports, % total trade .....	2.8	9
5.3.4 FDI net inflows, % GDP .....	28.7	4 ●
5.3.5 Research talent, % in business enterprise .....	36.0	38

<b>6 Knowledge &amp; technology outputs .....</b>	<b>45.0</b>	<b>15</b>
6.1 Knowledge creation .....	45.9	15
6.1.1 Patents by origin/bn PPP\$ GDP .....	9.7	13
6.1.2 PCT patent applications/bn PPP\$ GDP .....	7.3	5
6.1.3 Utility models by origin/bn PPP\$ GDP .....	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP .....	18.7	40
6.1.5 Citable documents H index .....	7.9	75
6.2 Knowledge impact .....	34.2	50
6.2.1 Growth rate of PPP\$ GDP/worker, % .....	2.3	34
6.2.2 New businesses/th pop. 15–64 <sup>Ⓐ</sup> .....	6.1	20
6.2.3 Computer software spending, % GDP .....	0.2	73
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP .....	4.5	66
6.2.5 High- & medium-high-tech manufactures, % .....	0.2	62
6.3 Knowledge diffusion .....	54.9	9
6.3.1 Intellectual property receipts, % total trade .....	1.0	15
6.3.2 High-tech exports less re-exports, % total trade .....	0.7	72
6.3.3 ICT services exports, % total trade .....	3.9	20
6.3.4 FDI net outflows, % GDP .....	48.4	1 ●

<b>7 Creative outputs .....</b>	<b>65.8</b>	<b>1 ●</b>
7.1 Intangible assets .....	74.8	1 ●
7.1.1 Trademarks by origin/bn PPP\$ GDP .....	131.6	5 ●
7.1.2 Industrial designs by origin/bn PPP\$ GDP .....	13.8	7
7.1.3 ICTs & business model creation <sup>†</sup> .....	82.7	6
7.1.4 ICTs & organizational model creation <sup>†</sup> .....	74.2	14
7.2 Creative goods & services .....	39.9	10
7.2.1 Cultural & creative services exports, % of total trade <sup>Ⓐ</sup> .....	5.0	1 ●
7.2.2 National feature films/mn pop. 15–69 <sup>Ⓐ</sup> .....	42.4	1 ●
7.2.3 Global ent. & media market/th pop. 15–69 .....	n/a	n/a
7.2.4 Printing & publishing manufactures, % .....	1.2	54
7.2.5 Creative goods exports, % total trade .....	0.1	89 ○
7.3 Online creativity .....	74.0	3 ●
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69 .....	92.5	4 ●
7.3.2 Country-code TLDs/th pop. 15–69 .....	63.9	8
7.3.3 Wikipedia edits/mn pop. 15–69 <sup>Ⓐ</sup> .....	6.8	17
7.3.4 Video uploads on YouTube/pop. 15–69 .....	n/a	n/a

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, at <http://globalinnovationindex.org>.

Square brackets indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level; see page 181 of this appendix for details.