

Key indicators

Population (millions)	1,326.8
GDP (US\$ billions)	2,251.0
GDP per capita, PPP\$	6,161.6
Income group	Lower-middle income
Region	Central and Southern Asia

	Score 0–100 or value (hard data)	Rank
Global Innovation Index (out of 127)	35.5	60
Innovation Output Sub-Index	28.1	58
Innovation Input Sub-Index	42.8	66
Innovation Efficiency Ratio	0.7	53
Global Innovation Index 2016 (out of 128)	33.6	66

1	Institutions	51.4	92
1.1	Political environment	43.1	87
1.1.1	Political stability & safety*	41.5	106
1.1.2	Government effectiveness*	44.7	66
1.2	Regulatory environment	59.8	73
1.2.1	Regulatory quality*	32.1	93
1.2.2	Rule of law*	37.8	61
1.2.3	Cost of redundancy dismissal, salary weeks	15.8	64
1.3	Business environment	51.2	121 ○
1.3.1	Ease of starting a business*	74.3	114 ○
1.3.2	Ease of resolving insolvency*	32.8	111 ○
1.3.3	Ease of paying taxes*	46.6	118 ○
2	Human capital & research	32.3	64
2.1	Education	26.7	114 ○
2.1.1	Expenditure on education, % GDP	3.8	84
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	16.8	67
2.1.3	School life expectancy, years	11.9	89
2.1.4	PISA scales in reading, maths, & science [Ⓐ]	336.0	71 ○
2.1.5	Pupil-teacher ratio, secondary [Ⓐ]	31.8	104 ○
2.2	Tertiary education	34.3	68
2.2.1	Tertiary enrolment, % gross [Ⓐ]	25.5	88
2.2.2	Graduates in science & engineering, %	29.1	10 ●
2.2.3	Tertiary inbound mobility, % [Ⓐ]	0.1	102 ○
2.3	Research & development (R&D)	35.9	32
2.3.1	Researchers, FTE/mn pop. [Ⓐ]	156.6	81
2.3.2	Gross expenditure on R&D, % GDP [Ⓐ]	0.8	43
2.3.3	Global R&D companies, avg. expend. top 3, mn \$US	74.0	14 ●
2.3.4	QS university ranking, average score top 3*	49.0	21 ●
3	Infrastructure	44.1	73
3.1	Information & communication technologies (ICTs)	49.2	80
3.1.1	ICT access*	33.2	106
3.1.2	ICT use*	12.5	109
3.1.3	Government's online service*	74.6	33
3.1.4	E-participation*	76.3	27
3.2	General infrastructure	48.5	32
3.2.1	Electricity output, kWh/cap	993.9	94
3.2.2	Logistics performance*	62.7	34
3.2.3	Gross capital formation, % GDP	31.7	12 ●
3.3	Ecological sustainability	34.6	103
3.3.1	GDP/unit of energy use	8.4	65
3.3.2	Environmental performance*	53.6	108 ○
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.8	69
4	Market sophistication	51.9	39
4.1	Credit	31.7	74
4.1.1	Ease of getting credit*	65.0	40
4.1.2	Domestic credit to private sector, % GDP	52.6	67
4.1.3	Microfinance gross loans, % GDP	0.6	34

4.2	Investment	46.9	36
4.2.1	Ease of protecting minority investors*	73.3	13 ●
4.2.2	Market capitalization, % GDP	72.4	22
4.2.3	Venture capital deals/bn PPP\$ GDP	0.0	40
4.3	Trade, competition, & market scale	77.0	16 ●
4.3.1	Applied tariff rate, weighted mean, % [Ⓐ]	6.3	100
4.3.2	Intensity of local competition [†]	62.5	91
4.3.3	Domestic market scale, bn PPP\$	8,720.5	3 ●
5	Business sophistication	34.6	55
5.1	Knowledge workers	31.3	[83]
5.1.1	Knowledge-intensive employment, %	n/a	n/a
5.1.2	Firms offering formal training, % firms	35.9	36
5.1.3	GERD performed by business, % of GDP [Ⓐ]	0.3	46
5.1.4	GERD financed by business, %	n/a	n/a
5.1.5	Females employed w/advanced degrees, % total	n/a	n/a
5.2	Innovation linkages	37.8	37
5.2.1	University/industry research collaboration [†]	58.9	23
5.2.2	State of cluster development [†]	58.7	26
5.2.3	GERD financed by abroad, %	n/a	n/a
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP	0.0	49
5.2.5	Patent families 2+ offices/bn PPP\$ GDP	0.3	43
5.3	Knowledge absorption	34.7	55
5.3.1	Intellectual property payments, % total trade	1.1	29
5.3.2	High-tech imports less re-imports, % total trade	9.2	52
5.3.3	ICT services imports, % total trade	0.8	78
5.3.4	FDI net inflows, % GDP	1.8	87
5.3.5	Research talent, % in business enterprise [Ⓐ]	38.7	33
6	Knowledge & technology outputs	30.3	38
6.1	Knowledge creation	14.2	55
6.1.1	Patents by origin/bn PPP\$ GDP	1.6	53
6.1.2	PCT patent applications/bn PPP\$ GDP	0.2	54
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	n/a
6.1.4	Scientific & technical articles/bn PPP\$ GDP	6.9	79
6.1.5	Citable documents H index	37.1	21 ●
6.2	Knowledge impact	40.5	30
6.2.1	Growth rate of PPP\$ GDP/worker, %	5.2	5 ●
6.2.2	New businesses/th pop. 15–64	0.1	100 ○
6.2.3	Computer software spending, % GDP	0.2	66
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	4.5	65
6.2.5	High- & medium-high-tech manufactures, %	0.3	40
6.3	Knowledge diffusion	36.2	26
6.3.1	Intellectual property receipts, % total trade	0.1	53
6.3.2	High-tech exports less re-exports, % total trade	3.2	45
6.3.3	ICT services exports, % total trade	12.6	1 ●
6.3.4	FDI net outflows, % GDP	0.3	76
7	Creative outputs	25.9	85
7.1	Intangible assets	39.0	78
7.1.1	Trademarks by origin/bn PPP\$ GDP	31.3	71
7.1.2	Industrial designs by origin/bn PPP\$ GDP	0.9	66
7.1.3	ICTs & business model creation [†]	56.6	80
7.1.4	ICTs & organizational model creation [†]	61.9	35
7.2	Creative goods & services	17.5	67
7.2.1	Cultural & creative services exports, % of total trade	0.1	52
7.2.2	National feature films/mn pop. 15–69	2.1	59
7.2.3	Global ent. & media market/th pop. 15–69	0.3	61 ○
7.2.4	Printing & publishing manufactures, %	0.6	85
7.2.5	Creative goods exports, % total trade	2.6	18 ●
7.3	Online creativity	8.1	103
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.0	98
7.3.2	Country-code TLDs/th pop. 15–69	0.7	85
7.3.3	Wikipedia edits/mn pop. 15–69	2.9	100
7.3.4	Video uploads on YouTube/pop. 15–69	2.5	68 ○

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.