

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
112	119	Low	SSF	19.2	23.7	1,199.4	114
				Score/Value	Rank		
INSTITUTIONS				51.3	105		
1.1	Political environment	40.7	102				
1.1.1	Political and operational stability*.....	61.4	91				
1.1.2	Government effectiveness*.....	30.3	111				
1.2	Regulatory environment	58.0	89				
1.2.1	Regulatory quality*.....	21.9	114				
1.2.2	Rule of law*.....	36.6	84				
1.2.3	Cost of redundancy dismissal, salary weeks.....	16.7	68				
1.3	Business environment	55.2	116				
1.3.1	Ease of starting a business*.....	77.2	114				
1.3.2	Ease of resolving insolvency*.....	33.3	113				
HUMAN CAPITAL & RESEARCH				10.8	122		
2.1	Education	30.1	107				
2.1.1	Expenditure on education, % GDP.....	4.0	78				
2.1.2	Government funding/pupil, secondary, % GDP/cap... ..	25.2	24 ●				
2.1.3	School life expectancy, years.....	10.4	104				
2.1.4	PISA scales in reading, maths, & science.....	n/a	n/a				
2.1.5	Pupil-teacher ratio, secondary.....	37.9	112 ○ ◇				
2.2	Tertiary education	2.0	125 ○ ◇				
2.2.1	Tertiary enrolment, % gross.....	0.8	123 ○ ◇				
2.2.2	Graduates in science & engineering, %.....	n/a	n/a				
2.2.3	Tertiary inbound mobility, %.....	1.1	85				
2.3	Research & development (R&D)	0.1	116				
2.3.1	Researchers, FTE/mn pop.....	48.3	90				
2.3.2	Gross expenditure on R&D, % GDP.....	n/a	n/a				
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$.....	0.0	43 ○ ◇				
2.3.4	QS university ranking, average score top 3*.....	0.0	78 ○ ◇				
INFRASTRUCTURE				23.5	125		
3.1	Information & communication technologies (ICTs)	20.4	127 ○ ◇				
3.1.1	ICT access*.....	22.6	123 ○ ◇				
3.1.2	ICT use*.....	13.1	120				
3.1.3	Government's online service*.....	25.7	122				
3.1.4	E-participation*.....	20.2	123 ◇				
3.2	General infrastructure	16.7	122				
3.2.1	Electricity output, kWh/mn pop.....	n/a	n/a				
3.2.2	Logistics performance*.....	24.4	92				
3.2.3	Gross capital formation, % GDP.....	11.8	123 ○ ◇				
3.3	Ecological sustainability	33.2	83				
3.3.1	GDP/unit of energy use.....	n/a	n/a				
3.3.2	Environmental performance*.....	49.2	101 ◆				
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..	0.2	115				
MARKET SOPHISTICATION				38.8	107		
4.1	Credit	32.0	83				
4.1.1	Ease of getting credit*.....	90.0	7 ◆				
4.1.2	Domestic credit to private sector, % GDP.....	10.5	124 ○				
4.1.3	Microfinance gross loans, % GDP.....	0.2	41				
4.2	Investment	36.8	89				
4.2.1	Ease of protecting minority investors*.....	50.0	93				
4.2.2	Market capitalization, % GDP.....	n/a	n/a				
4.2.3	Venture capital deals/bn PPP\$ GDP.....	0.0	31 ●				
4.3	Trade, competition, & market scale	47.4	113				
4.3.1	Applied tariff rate, weighted avg., %.....	4.8	82 ◆				
4.3.2	Intensity of local competition*.....	61.1	105				
4.3.3	Domestic market scale, bn PPP\$.....	23.7	123				
BUSINESS SOPHISTICATION				29.5	[72]		
5.1	Knowledge workers	17.8	[112]				
5.1.1	Knowledge-intensive employment, %.....	3.8	110				
5.1.2	Firms offering formal training, % firms.....	32.9	45 ●				
5.1.3	GERD performed by business, % GDP.....	n/a	n/a				
5.1.4	GERD financed by business, %.....	n/a	n/a				
5.1.5	Females employed w/advanced degrees, %.....	0.6	111				
5.2	Innovation linkages	33.0	[43]				
5.2.1	University/industry research collaboration*.....	28.7	110				
5.2.2	State of cluster development*.....	35.2	105				
5.2.3	GERD financed by abroad, %.....	n/a	n/a				
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP.....	n/a	n/a				
5.2.5	Patent families 2+ offices/bn PPP\$ GDP.....	n/a	n/a				
5.3	Knowledge absorption	37.7	44 ● ◆				
5.3.1	Intellectual property payments, % total trade.....	0.2	87				
5.3.2	High-tech imports, % total trade.....	10.5	25 ●				
5.3.3	ICT services imports, % total trade.....	1.5	47 ●				
5.3.4	FDI net inflows, % GDP.....	6.2	24 ●				
5.3.5	Research talent, % in business enterprise.....	n/a	n/a				
KNOWLEDGE & TECHNOLOGY OUTPUTS				15.0	99		
6.1	Knowledge creation	8.3	78				
6.1.1	Patents by origin/bn PPP\$ GDP.....	0.1	105				
6.1.2	PCT patents by origin/bn PPP\$ GDP.....	0.0	99 ○ ◇				
6.1.3	Utility models by origin/bn PPP\$ GDP.....	n/a	n/a				
6.1.4	Scientific & technical articles/bn PPP\$ GDP.....	9.7	51 ● ◆				
6.1.5	Citable documents H-index.....	7.0	83 ◆				
6.2	Knowledge impact	22.1	110				
6.2.1	Growth rate of PPP\$ GDP/worker, %.....	-0.4	98				
6.2.2	New businesses/th pop. 15-64.....	0.1	102				
6.2.3	Computer software spending, % GDP.....	0.0	109				
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....	0.8	112				
6.2.5	High- & medium-high-tech manufactures, %.....	0.1	83				
6.3	Knowledge diffusion	14.8	77				
6.3.1	Intellectual property receipts, % total trade.....	n/a	n/a				
6.3.2	High-tech net exports, % total trade.....	0.5	81 ◆				
6.3.3	ICT services exports, % total trade.....	2.1	52 ●				
6.3.4	FDI net outflows, % GDP.....	-0.1	117				
CREATIVE OUTPUTS				15.5	114		
7.1	Intangible assets	25.9	119				
7.1.1	Trademarks by origin/bn PPP\$ GDP.....	23.6	82				
7.1.2	Industrial designs by origin/bn PPP\$ GDP.....	n/a	n/a				
7.1.3	ICTs & business model creation*.....	40.0	121				
7.1.4	ICTs & organizational model creation*.....	28.7	124 ○ ◇				
7.2	Creative goods & services	10.0	[85]				
7.2.1	Cultural & creative services exports, % total trade.....	0.1	81				
7.2.2	National feature films/mn pop. 15-69.....	n/a	n/a				
7.2.3	Entertainment & Media market/th pop. 15-69.....	n/a	n/a				
7.2.4	Printing & other media, % manufacturing.....	1.2	46 ●				
7.2.5	Creative goods exports, % total trade.....	0.1	104				
7.3	Online creativity	0.1	121				
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....	0.2	118				
7.3.2	Country-code TLDs/th pop. 15-69.....	0.3	104				
7.3.3	Wikipedia edits/mn pop. 15-69.....	0.0	124 ○				
7.3.4	Mobile app creation/bn PPP\$ GDP.....	n/a	n/a				

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question. ⊕ indicates that the economy'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.