

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
107	96	Low	SSF	44.3	96.7	2,497.6	103
				Score/Value	Rank		
INSTITUTIONS				55.2	91		
1.1	Political environment	41.5	99				
1.1.1	Political and operational stability*	59.6	98				
1.1.2	Government effectiveness*	32.4	100				
1.2	Regulatory environment	68.1	61 ● ◆				
1.2.1	Regulatory quality*	36.0	85				
1.2.2	Rule of law*	38.5	79				
1.2.3	Cost of redundancy dismissal, salary weeks	8.7	21				
1.3	Business environment	56.1	114				
1.3.1	Ease of starting a business*	72.3	118				
1.3.2	Ease of resolving insolvency*	39.9	98				
HUMAN CAPITAL & RESEARCH				13.4	114		
2.1	Education	18.1	[125]				
2.1.1	Expenditure on education, % GDP	2.6	113				
2.1.2	Government funding/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	21.2	91				
2.2.1	Tertiary enrolment, % gross	4.6	119				
2.2.2	Graduates in science & engineering, %	n/a	n/a				
2.2.3	Tertiary inbound mobility, %	10.7	19				
2.3	Research & development (R&D)	0.9	106				
2.3.1	Researchers, FTE/mn pop.	26.5	101				
2.3.2	Gross expenditure on R&D, % GDP	0.2	92				
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				36.6	96		
3.1	Information & communication technologies (ICTs)	40.5	105				
3.1.1	ICT access*	26.9	120				
3.1.2	ICT use*	15.9	113				
3.1.3	Government's online service*	56.9	92				
3.1.4	E-participation*	62.4	84				
3.2	General infrastructure	38.9	48 ●				
3.2.1	Electricity output, kWh/mn pop.	n/a	n/a				
3.2.2	Logistics performance*	23.9	96				
3.2.3	Gross capital formation, % GDP	27.2	33				
3.3	Ecological sustainability	30.2	93				
3.3.1	GDP/unit of energy use	n/a	n/a				
3.3.2	Environmental performance*	44.3	111				
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	0.3	101				
MARKET SOPHISTICATION				45.8	74		
4.1	Credit	32.6	80				
4.1.1	Ease of getting credit*	60.0	66				
4.1.2	Domestic credit to private sector, % GDP	15.0	116				
4.1.3	Microfinance gross loans, % GDP	1.9	13				
4.2	Investment	50.0	[39]				
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	n/a	n/a				
4.3	Trade, competition, & market scale	55.0	89 ◆				
4.3.1	Applied tariff rate, weighted avg., %	7.3	99				
4.3.2	Intensity of local competition*	72.4	44				
4.3.3	Domestic market scale, bn PPP\$	96.7	78				
BUSINESS SOPHISTICATION				27.3	82		
5.1	Knowledge workers	19.0	109				
5.1.1	Knowledge-intensive employment, %	10.1	100				
5.1.2	Firms offering formal training, % firms	34.7	41				
5.1.3	GERD performed by business, % GDP	0.0	83				
5.1.4	GERD financed by business, %	3.4	84				
5.1.5	Females employed w/advanced degrees, %	4.6	91				
5.2	Innovation linkages	41.7	25 ● ◆				
5.2.1	University/industry research collaboration*	42.6	57				
5.2.2	State of cluster development*	43.1	80				
5.2.3	GERD financed by abroad, %	52.4	1				
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP	0.0	83				
5.2.5	Patent families 2+ offices/bn PPP\$ GDP	0.0	93				
5.3	Knowledge absorption	21.2	119 ○ ◆				
5.3.1	Intellectual property payments, % total trade	0.3	79				
5.3.2	High-tech imports, % total trade	6.4	87				
5.3.3	ICT services imports, % total trade	0.6	98				
5.3.4	FDI net inflows, % GDP	2.7	61				
5.3.5	Research talent, % in business enterprise	4.0	74				
KNOWLEDGE & TECHNOLOGY OUTPUTS				13.6	108		
6.1	Knowledge creation	6.8	83				
6.1.1	Patents by origin/bn PPP\$ GDP	0.2	99				
6.1.2	PCT patents by origin/bn PPP\$ GDP	0.0	95				
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	n/a				
6.1.4	Scientific & technical articles/bn PPP\$ GDP	5.1	80				
6.1.5	Citable documents H-index	9.5	72				
6.2	Knowledge impact	26.6	103				
6.2.1	Growth rate of PPP\$ GDP/worker, %	0.4	76				
6.2.2	New businesses/th pop. 15-64	0.7	79				
6.2.3	Computer software spending, % GDP	0.0	123				
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	1.1	105				
6.2.5	High- & medium-high-tech manufactures, %	n/a	n/a				
6.3	Knowledge diffusion	7.5	115				
6.3.1	Intellectual property receipts, % total trade	0.0	67				
6.3.2	High-tech net exports, % total trade	0.1	102				
6.3.3	ICT services exports, % total trade	0.6	93				
6.3.4	FDI net outflows, % GDP	0.0	114				
CREATIVE OUTPUTS				17.5	106		
7.1	Intangible assets	32.6	101				
7.1.1	Trademarks by origin/bn PPP\$ GDP	15.2	95				
7.1.2	Industrial designs by origin/bn PPP\$ GDP	n/a	n/a				
7.1.3	ICTs & business model creation*	49.8	106				
7.1.4	ICTs & organizational model creation*	42.7	103				
7.2	Creative goods & services	4.5	[104]				
7.2.1	Cultural & creative services exports, % total trade	0.1	83				
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	n/a	n/a				
7.2.5	Creative goods exports, % total trade	0.5	62				
7.3	Online creativity	0.2	119 ○				
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69	0.2	115				
7.3.2	Country-code TLDs/th pop. 15-69	0.1	119				
7.3.3	Wikipedia edits/mn pop. 15-69	0.6	107				
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.