

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
94	95	Upper middle	LCN	6.9	95.0	13,395.3	89
				Score/Value	Rank		
INSTITUTIONS				49.4	113		
1.1	Political environment			39.0	108		
1.1.1	Political and operational stability*			63.2	86		
1.1.2	Government effectiveness*			26.8	117		
1.2	Regulatory environment			49.9	111		
1.2.1	Regulatory quality*			35.7	87		
1.2.2	Rule of law*			29.2	101		
1.2.3	Cost of redundancy dismissal, salary weeks			29.4	114		
1.3	Business environment			59.4	107		
1.3.1	Ease of starting a business*			77.5	113		
1.3.2	Ease of resolving insolvency*			41.3	91		
HUMAN CAPITAL & RESEARCH				22.0	89		
2.1	Education			37.7	89		
2.1.1	Expenditure on education, % GDP			4.5	61		
2.1.2	Government funding/pupil, secondary, % GDP/cap			15.5	80		
2.1.3	School life expectancy, years			12.3	88		
2.1.4	PISA scales in reading, maths, & science			n/a	n/a		
2.1.5	Pupil-teacher ratio, secondary			18.4	80		
2.2	Tertiary education			27.3	[75]		
2.2.1	Tertiary enrolment, % gross			35.1	76		
2.2.2	Graduates in science & engineering, %			n/a	n/a		
2.2.3	Tertiary inbound mobility, %			n/a	n/a		
2.3	Research & development (R&D)			1.1	105		
2.3.1	Researchers, FTE/mn pop.			122.1	84		
2.3.2	Gross expenditure on R&D, % GDP			0.2	95		
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				38.4	90		
3.1	Information & communication technologies (ICTs)			49.2	97		
3.1.1	ICT access*			43.5	100		
3.1.2	ICT use*			40.3	87		
3.1.3	Government's online service*			55.6	98		
3.1.4	E-participation*			57.3	95		
3.2	General infrastructure			31.6	80		
3.2.1	Electricity output, kWh/mn pop.			9,475.6	16		
3.2.2	Logistics performance*			33.6	73		
3.2.3	Gross capital formation, % GDP			19.4	97		
3.3	Ecological sustainability			34.4	81		
3.3.1	GDP/unit of energy use			9.9	54		
3.3.2	Environmental performance*			53.9	86		
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP			0.3	100		
MARKET SOPHISTICATION				43.2	91		
4.1	Credit			31.3	85		
4.1.1	Ease of getting credit*			40.0	104		
4.1.2	Domestic credit to private sector, % GDP			40.0	82		
4.1.3	Microfinance gross loans, % GDP			2.1	12		
4.2	Investment			41.7	[65]		
4.2.1	Ease of protecting minority investors*			41.7	108		
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			56.7	83		
4.3.1	Applied tariff rate, weighted avg., %			4.8	83		
4.3.2	Intensity of local competition*			65.6	78		
4.3.3	Domestic market scale, bn PPP\$			95.0	80		
BUSINESS SOPHISTICATION				26.6	87		
5.1	Knowledge workers			29.0	84		
5.1.1	Knowledge-intensive employment, %			17.7	83		
5.1.2	Firms offering formal training, % firms			46.4	26		
5.1.3	GERD performed by business, % GDP			0.0	92		
5.1.4	GERD financed by business, %			0.4	94		
5.1.5	Females employed w/advanced degrees, %			9.6	68		
5.2	Innovation linkages			18.5	98		
5.2.1	University/industry research collaboration†			26.4	121		
5.2.2	State of cluster development†			34.3	111		
5.2.3	GERD financed by abroad, %			13.0	33		
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP			0.0	91		
5.2.5	Patent families 2+ offices/bn PPP\$ GDP			0.0	93		
5.3	Knowledge absorption			32.3	69		
5.3.1	Intellectual property payments, % total trade			0.2	93		
5.3.2	High-tech imports, % total trade			16.7	11		
5.3.3	ICT services imports, % total trade			0.0	128		
5.3.4	FDI net inflows, % GDP			1.3	100		
5.3.5	Research talent, % in business enterprise			n/a	n/a		
KNOWLEDGE & TECHNOLOGY OUTPUTS				6.4	123		
6.1	Knowledge creation			2.2	[120]		
6.1.1	Patents by origin/bn PPP\$ GDP			0.3	86		
6.1.2	PCT patents by origin/bn PPP\$ GDP			n/a	n/a		
6.1.3	Utility models by origin/bn PPP\$ GDP			n/a	n/a		
6.1.4	Scientific & technical articles/bn PPP\$ GDP			0.6	124		
6.1.5	Citable documents H-index			3.1	112		
6.2	Knowledge impact			7.5	117		
6.2.1	Growth rate of PPP\$ GDP/worker, %			n/a	n/a		
6.2.2	New businesses/th pop. 15-64			0.1	97		
6.2.3	Computer software spending, % GDP			0.0	104		
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP			3.6	68		
6.2.5	High- & medium-high-tech manufactures, %			0.1	67		
6.3	Knowledge diffusion			9.4	105		
6.3.1	Intellectual property receipts, % total trade			n/a	n/a		
6.3.2	High-tech net exports, % total trade			0.5	80		
6.3.3	ICT services exports, % total trade			0.1	124		
6.3.4	FDI net outflows, % GDP			0.3	84		
CREATIVE OUTPUTS				30.1	52		
7.1	Intangible assets			55.0	21		
7.1.1	Trademarks by origin/bn PPP\$ GDP			220.4	3		
7.1.2	Industrial designs by origin/bn PPP\$ GDP			2.0	50		
7.1.3	ICTs & business model creation†			52.8	94		
7.1.4	ICTs & organizational model creation†			41.8	109		
7.2	Creative goods & services			9.1	89		
7.2.1	Cultural & creative services exports, % total trade			0.0	116		
7.2.2	National feature films/mn pop. 15-69			1.3	75		
7.2.3	Entertainment & Media market/th pop. 15-69			n/a	n/a		
7.2.4	Printing & other media, % manufacturing			1.3	37		
7.2.5	Creative goods exports, % total trade			0.0	114		
7.3	Online creativity			1.5	97		
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69			1.7	85		
7.3.2	Country-code TLDs/th pop. 15-69			1.3	74		
7.3.3	Wikipedia edits/mn pop. 15-69			4.2	86		
7.3.4	Mobile app creation/bn PPP\$ GDP			0.0	91		

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.