

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				Score/Value Rank			
INSTITUTIONS..... 51.3 105				BUSINESS SOPHISTICATION..... 29.5 [72]			
1.1	Political environment.....		40.7	102	5.1	Knowledge workers..... 17.8 [112]	
1.1.1	Political and operational stability*		61.4	91	5.1.1	Knowledge-intensive employment, %..... 3.8 110	
1.1.2	Government effectiveness*		30.3	111	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	
1.2	Regulatory environment.....		58.0	89	5.2	Innovation linkages..... 33.0 [43]	
1.2.1	Regulatory quality*		21.9	114	5.2.1	University/industry research collaboration†..... 28.7 110	
1.2.2	Rule of law*		36.6	84	5.2.2	State of cluster development†..... 35.2 105	
1.2.3	Cost of redundancy dismissal, salary weeks.....		16.7	68	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	
1.3	Business environment.....		55.2	116	5.3	Knowledge absorption..... 37.7 44 ● ♦	
1.3.1	Ease of starting a business*		77.2	114	5.3.1	Intellectual property payments, % total trade..... 0.2 87	
1.3.2	Ease of resolving insolvency*		33.3	113	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	
HUMAN CAPITAL & RESEARCH..... 10.8 122				KNOWLEDGE & TECHNOLOGY OUTPUTS.... 15.0 99			
2.1	Education.....		30.1	107	6.1	Knowledge creation..... 8.3 78	
2.1.1	Expenditure on education, % GDP.....		4.0	78	6.1.1	Patents by origin/bn PPP\$ GDP..... 0.1 105	
2.1.2	Government funding/pupil, secondary, % GDP/cap.....		25.2	24 ●	6.1.2	PCT patents by origin/bn PPP\$ GDP..... 0.0 99 ○ ◇	
2.1.3	School life expectancy, years.....		10.4	104	6.1.3	Utility models by origin/bn PPP\$ GDP..... n/a n/a	
2.1.4	PISA scales in reading, maths, & science.....		n/a	n/a	6.1.4	Scientific & technical articles/bn PPP\$ GDP..... 9.7 51 ● ♦	
2.1.5	Pupil-teacher ratio, secondary.....		37.9	112 ○ ◇	6.1.5	Citable documents H-index..... 7.0 83 ● ♦	
2.2	Tertiary education.....		2.0	125 ○ ◇	6.2	Knowledge impact..... 22.1 110	
2.2.1	Tertiary enrolment, % gross.....		0.8	123 ○ ◇	6.2.1	Growth rate of PPP\$ GDP/worker, %..... -0.4 98	
2.2.2	Graduates in science & engineering, %.....		n/a	n/a	6.2.2	New businesses/th pop. 15-64..... 0.1 102	
2.2.3	Tertiary inbound mobility, %.....		1.1	85	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	
2.3	Research & development (R&D).....		0.1	116	6.3	Knowledge diffusion..... 14.8 77	
2.3.1	Researchers, FTE/mn pop.....		48.3	90	6.3.1	Intellectual property receipts, % total trade..... n/a n/a	
2.3.2	Gross expenditure on R&D, % GDP.....		n/a	n/a	6.3.2	High-tech net exports, % total trade..... 0.5 81 ● ♦	
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$.....		0.0	43 ○ ◇	6.3.3	ICT services exports, % total trade..... 2.1 52 ●	
2.3.4	QS university ranking, average score top 3*.....		0.0	78 ○ ◇	6.3.4	FDI net outflows, % GDP..... -0.1 117	
INFRASTRUCTURE..... 23.5 125				CREATIVE OUTPUTS..... 15.5 114			
3.1	Information & communication technologies (ICTs).....		20.4	127 ○ ◇	7.1	Intangible assets..... 25.9 119	
3.1.1	ICT access*.....		22.6	123 ○ ◇	7.1.1	Trademarks by origin/bn PPP\$ GDP..... 23.6 82	
3.1.2	ICT use*.....		13.1	120	7.1.2	Industrial designs by origin/bn PPP\$ GDP..... n/a n/a	
3.1.3	Government's online service*.....		25.7	122	7.1.3	ICTs & business model creation†..... 40.0 121	
3.1.4	E-participation*.....		20.2	123 ◇	7.1.4	ICTs & organizational model creation†..... 28.7 124 ○ ◇	
3.2	General infrastructure.....		16.7	122	7.2	Creative goods & services..... 10.0 [85]	
3.2.1	Electricity output, kWh/mn pop.....		n/a	n/a	7.2.1	Cultural & creative services exports, % total trade..... 0.1 81	
3.2.2	Logistics performance*.....		24.4	92	7.2.2	National feature films/mn pop. 15-69..... n/a n/a	
3.2.3	Gross capital formation, % GDP.....		11.8	123 ○ ◇	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	
3.3	Ecological sustainability.....		33.2	83	7.3	Online creativity..... 0.1 121	
3.3.1	GDP/unit of energy use.....		n/a	n/a	7.3.1	Generic top-level domains (TLDs)/th pop. 15-69..... 0.2 118	
3.3.2	Environmental performance*.....		49.2	101 ♦	7.3.2	Country-code TLDs/th pop. 15-69..... 0.3 104	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.2	115	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	
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			

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.