

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank	
91	110	Lower middle	SSF	24.9	106.8	4,177.6	123	
				Score/Value	Rank			
INSTITUTIONS.....				57.5	84	BUSINESS SOPHISTICATION..... 26.1 [94]		
1.1	Political environment.....		40.1	105	5.1	Knowledge workers..... 28.8 [85]		
1.1.1	Political and operational stability*.....		63.2	86	5.1.1	Knowledge-intensive employment, %..... n/a n/a		
1.1.2	Government effectiveness*.....		28.6	116	5.1.2	Firms offering formal training, % firms..... 35.5 39 ●		
1.2	Regulatory environment.....		61.6	77	5.1.3	GERD performed by business, % GDP..... n/a n/a		
1.2.1	Regulatory quality*.....		32.2	96	5.1.4	GERD financed by business, %..... n/a n/a		
1.2.2	Rule of law*.....		29.7	99	5.1.5	Females employed w/advanced degrees, %..... 0.8 108		
1.2.3	Cost of redundancy dismissal, salary weeks.....		13.1	48 ●	5.2	Innovation linkages..... 17.4 [113]		
1.3	Business environment.....		70.9	63	5.2.1	University/industry research collaboration*..... 22.1 124 ○ ◇		
1.3.1	Ease of starting a business*.....		93.7	23 ● ◆	5.2.2	State of cluster development*..... 32.5 116 ◇		
1.3.2	Ease of resolving insolvency*.....		48.0	72	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..... 0.0 93 ○ ◇		
HUMAN CAPITAL & RESEARCH.....				13.6	113	5.3	Knowledge absorption..... 32.1 72	
2.1	Education.....		33.7	101	5.3.1	Intellectual property payments, % total trade..... 0.0 114 ○ ◇		
2.1.1	Expenditure on education, % GDP.....		4.4	65	5.3.2	High-tech imports, % total trade..... 5.6 96		
2.1.2	Government funding/pupil, secondary, % GDP/cap... ..		23.5	33 ●	5.3.3	ICT services imports, % total trade..... 1.9 29 ● ◆		
2.1.3	School life expectancy, years.....		9.6	108 ◇	5.3.4	FDI net inflows, % GDP..... 1.6 94		
2.1.4	PISA scales in reading, maths, & science.....		n/a	n/a	5.3.5	Research talent, % in business enterprise..... n/a n/a		
2.1.5	Pupil-teacher ratio, secondary.....		26.3	100	KNOWLEDGE & TECHNOLOGY OUTPUTS.... 19.7 74			
2.2	Tertiary education.....		7.2	116 ◇	6.1	Knowledge creation..... 3.3 115		
2.2.1	Tertiary enrolment, % gross.....		9.2	110 ◇	6.1.1	Patents by origin/bn PPP\$ GDP..... 0.2 97		
2.2.2	Graduates in science & engineering, %.....		n/a	n/a	6.1.2	PCT patents by origin/bn PPP\$ GDP..... 0.0 99 ○ ◇		
2.2.3	Tertiary inbound mobility, %.....		2.1	73	6.1.3	Utility models by origin/bn PPP\$ GDP..... n/a n/a		
2.3	Research & development (R&D).....		0.0	[120]	6.1.4	Scientific & technical articles/bn PPP\$ GDP..... 1.9 113		
2.3.1	Researchers, FTE/mn pop.....		n/a	n/a	6.1.5	Citable documents H-index..... 5.3 94		
2.3.2	Gross expenditure on R&D, % GDP.....		n/a	n/a	6.2	Knowledge impact..... 45.8 [26]		
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$.....		0.0	43 ○ ◇	6.2.1	Growth rate of PPP\$ GDP/worker, %..... 5.1 7 ● ◆		
2.3.4	QS university ranking, average score top 3*.....		0.0	78 ○ ◇	6.2.2	New businesses/th pop. 15-64..... n/a n/a		
					6.2.3	Computer software spending, % GDP..... 0.0 121 ○ ◇		
					6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP..... 2.1 86		
					6.2.5	High- & medium-high-tech manufactures, %..... n/a n/a		
INFRASTRUCTURE.....				28.1	117 ◇	6.3	Knowledge diffusion..... 10.1 102	
3.1	Information & communication technologies (ICTs).....		27.4	122 ○ ◇	6.3.1	Intellectual property receipts, % total trade..... 0.0 91		
3.1.1	ICT access*.....		37.0	107	6.3.2	High-tech net exports, % total trade..... 1.1 66		
3.1.2	ICT use*.....		32.9	98	6.3.3	ICT services exports, % total trade..... 1.2 76		
3.1.3	Government's online service*.....		22.2	124 ○ ◇	6.3.4	FDI net outflows, % GDP..... 0.1 103		
3.1.4	E-participation*.....		17.4	126 ○ ◇	CREATIVE OUTPUTS..... 17.6 105			
3.2	General infrastructure.....		31.7	78	7.1	Intangible assets..... 34.5 97		
3.2.1	Electricity output, kWh/mn pop.....		432.6	108	7.1.1	Trademarks by origin/bn PPP\$ GDP..... 9.5 106		
3.2.2	Logistics performance*.....		47.6	49 ● ◆	7.1.2	Industrial designs by origin/bn PPP\$ GDP..... 1.5 58		
3.2.3	Gross capital formation, % GDP.....		23.7	58	7.1.3	ICTs & business model creation*..... 63.7 53 ● ◆		
					7.1.4	ICTs & organizational model creation*..... 50.3 80		
3.3	Ecological sustainability.....		25.3	115	7.2	Creative goods & services..... 1.1 [124]		
3.3.1	GDP/unit of energy use.....		6.4	95	7.2.1	Cultural & creative services exports, % total trade..... 0.1 93		
3.3.2	Environmental performance*.....		45.3	108	7.2.2	National feature films/mn pop. 15-69..... n/a n/a		
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.3	96	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..... 0.1 103		
MARKET SOPHISTICATION.....				36.7	113 ◇	7.3	Online creativity..... 0.3 116	
4.1	Credit.....		31.2	87	7.3.1	Generic top-level domains (TLDs)/th pop. 15-69..... 0.5 109		
4.1.1	Ease of getting credit*.....		70.0	40 ●	7.3.2	Country-code TLDs/th pop. 15-69..... 0.2 108		
4.1.2	Domestic credit to private sector, % GDP.....		26.5	102	7.3.3	Wikipedia edits/mn pop. 15-69..... 0.5 108		
4.1.3	Microfinance gross loans, % GDP.....		0.8	27 ●	7.3.4	Mobile app creation/bn PPP\$ GDP..... n/a n/a		
4.2	Investment.....		28.2	123 ○				
4.2.1	Ease of protecting minority investors*.....		40.0	114 ○ ◇				
4.2.2	Market capitalization, % GDP.....		n/a	n/a				
4.2.3	Venture capital deals/bn PPP\$ GDP.....		0.0	43				
4.3	Trade, competition, & market scale.....		50.8	105				
4.3.1	Applied tariff rate, weighted avg., %.....		10.3	114 ◇				
4.3.2	Intensity of local competition*.....		70.2	57				
4.3.3	Domestic market scale, bn PPP\$.....		106.8	76				

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.