

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
105	116	Lower middle	SSF	195.9	1,169.1	6,027.2	118
				Score/Value	Rank		
INSTITUTIONS				49.3	114		
1.1	Political environment		30.7	126	○ ◇		
1.1.1	Political and operational stability*		45.6	125	○ ◇		
1.1.2	Government effectiveness*		23.3	122	◇		
1.2	Regulatory environment		60.4	81			
1.2.1	Regulatory quality*		18.2	121	◇		
1.2.2	Rule of law*		23.5	117			
1.2.3	Cost of redundancy dismissal, salary weeks		8.0	1	● ◆		
1.3	Business environment		56.7	113			
1.3.1	Ease of starting a business*		83.0	92			
1.3.2	Ease of resolving insolvency*		30.4	119	◇		
HUMAN CAPITAL & RESEARCH				11.3	119	◇	
2.1	Education		26.4	[114]			
2.1.1	Expenditure on education, % GDP		n/a	n/a			
2.1.2	Government funding/pupil, secondary, % GDP/cap		n/a	n/a			
2.1.3	School life expectancy, years		8.7	113	○ ◇		
2.1.4	PISA scales in reading, maths, & science		n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary		23.2	94			
2.2	Tertiary education		7.5	[114]			
2.2.1	Tertiary enrolment, % gross		10.2	107	◇		
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)		0.0	[120]			
2.3.1	Researchers, FTE/mn pop		n/a	n/a			
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				26.6	122	◇	
3.1	Information & communication technologies (ICTs)		36.7	111	◇		
3.1.1	ICT access*		29.9	117	◇		
3.1.2	ICT use*		15.9	114	◇		
3.1.3	Government's online service*		52.8	103			
3.1.4	E-participation*		48.3	105			
3.2	General infrastructure		14.1	126	○ ◇		
3.2.1	Electricity output, kWh/mn pop		166.1	115	◇		
3.2.2	Logistics performance*		21.9	102			
3.2.3	Gross capital formation, % GDP		13.6	120	○ ◇		
3.3	Ecological sustainability		29.1	103			
3.3.1	GDP/unit of energy use		6.6	93			
3.3.2	Environmental performance*		54.8	84			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP		0.1	125	○ ◇		
MARKET SOPHISTICATION				43.4	88		
4.1	Credit		34.2	72			
4.1.1	Ease of getting credit*		85.0	11	●		
4.1.2	Domestic credit to private sector, % GDP		14.2	119	◇		
4.1.3	Microfinance gross loans, % GDP		0.8	26	●		
4.2	Investment		34.8	101			
4.2.1	Ease of protecting minority investors*		66.7	35	●		
4.2.2	Market capitalization, % GDP		9.1	70			
4.2.3	Venture capital deals/bn PPP\$ GDP		0.0	47			
4.3	Trade, competition, & market scale		61.2	63	●		
4.3.1	Applied tariff rate, weighted avg., %		11.3	118	◇		
4.3.2	Intensity of local competition*		68.7	66	●		
4.3.3	Domestic market scale, bn PPP\$		1,169.1	23	● ◆		
BUSINESS SOPHISTICATION				26.7	85		
5.1	Knowledge workers		37.2	[64]			
5.1.1	Knowledge-intensive employment, %		28.4	49	● ◆		
5.1.2	Firms offering formal training, % firms		30.7	50			
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, %		5.0	90			
5.2	Innovation linkages		18.4	100			
5.2.1	University/industry research collaboration*		23.7	123	○ ◇		
5.2.2	State of cluster development*		41.5	88			
5.2.3	GERD financed by abroad, %		n/a	n/a			
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP		0.0	89			
5.2.5	Patent families 2+ offices/bn PPP\$ GDP		0.0	92			
5.3	Knowledge absorption		24.6	105			
5.3.1	Intellectual property payments, % total trade		0.5	64	●		
5.3.2	High-tech imports, % total trade		4.0	117			
5.3.3	ICT services imports, % total trade		0.9	81			
5.3.4	FDI net inflows, % GDP		0.9	106			
5.3.5	Research talent, % in business enterprise		n/a	n/a			
KNOWLEDGE & TECHNOLOGY OUTPUTS				14.0	106		
6.1	Knowledge creation		5.0	99			
6.1.1	Patents by origin/bn PPP\$ GDP		0.1	119			
6.1.2	PCT patents by origin/bn PPP\$ GDP		0.0	98			
6.1.3	Utility models by origin/bn PPP\$ GDP		n/a	n/a			
6.1.4	Scientific & technical articles/bn PPP\$ GDP		1.8	115			
6.1.5	Citable documents H-index		10.3	65	●		
6.2	Knowledge impact		26.9	102			
6.2.1	Growth rate of PPP\$ GDP/worker, %		-0.1	91	◇		
6.2.2	New businesses/th pop. 15-64		0.8	78			
6.2.3	Computer software spending, % GDP		0.1	83			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP		0.2	126	○ ◇		
6.2.5	High- & medium-high-tech manufactures, %		n/a	n/a			
6.3	Knowledge diffusion		10.1	101			
6.3.1	Intellectual property receipts, % total trade		n/a	n/a			
6.3.2	High-tech net exports, % total trade		0.0	122	○		
6.3.3	ICT services exports, % total trade		0.6	99			
6.3.4	FDI net outflows, % GDP		0.3	79			
CREATIVE OUTPUTS				18.8	101		
7.1	Intangible assets		32.0	102			
7.1.1	Trademarks by origin/bn PPP\$ GDP		19.8	89			
7.1.2	Industrial designs by origin/bn PPP\$ GDP		0.8	72			
7.1.3	ICTs & business model creation*		55.1	85			
7.1.4	ICTs & organizational model creation*		47.5	88			
7.2	Creative goods & services		10.8	[81]			
7.2.1	Cultural & creative services exports, % total trade		n/a	n/a			
7.2.2	National feature films/mn pop. 15-69		11.2	12	● ◆		
7.2.3	Entertainment & Media market/th pop. 15-69		0.6	59			
7.2.4	Printing & other media, % manufacturing		n/a	n/a			
7.2.5	Creative goods exports, % total trade		0.0	126	○		
7.3	Online creativity		0.3	117			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69		0.5	107			
7.3.2	Country-code TLDs/th pop. 15-69		0.3	102			
7.3.3	Wikipedia edits/mn pop. 15-69		0.3	112			
7.3.4	Mobile app creation/bn PPP\$ GDP		0.1	81			

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.