

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
125	114	Low	SSF	11.5	27.5	2,426.5	n/a
				Score/Value	Rank		
INSTITUTIONS				56.6	87		
1.1	Political environment		42.3	98			
1.1.1	Political and operational stability*		64.9	79			
1.1.2	Government effectiveness*		30.9	109			
1.2	Regulatory environment		62.0	74 ●			
1.2.1	Regulatory quality*		29.3	102			
1.2.2	Rule of law*		29.8	98			
1.2.3	Cost of redundancy dismissal, salary weeks...		11.6	37 ●			
1.3	Business environment		65.6	80			
1.3.1	Ease of starting a business*		90.6	52 ●			
1.3.2	Ease of resolving insolvency*		40.7	97			
HUMAN CAPITAL & RESEARCH				21.1	92 ◆		
2.1	Education		36.8	96			
2.1.1	Expenditure on education, % GDP		4.0	79			
2.1.2	Government funding/pupil, secondary, % GDP/cap...		10.8	93			
2.1.3	School life expectancy, years		12.6	85 ◆			
2.1.4	PISA scales in reading, maths, & science		n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary		11.0	38 ● ◆			
2.2	Tertiary education		26.4	78 ◆			
2.2.1	Tertiary enrolment, % gross		12.9	101			
2.2.2	Graduates in science & engineering, %		20.7	59 ●			
2.2.3	Tertiary inbound mobility, %		8.3	24 ● ◆			
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				27.7	118		
3.1	Information & communication technologies (ICTs)		31.1	118			
3.1.1	ICT access*		31.4	115			
3.1.2	ICT use*		8.9	124 ○ ◆			
3.1.3	Government's online service*		47.2	108			
3.1.4	E-participation*		37.1	114			
3.2	General infrastructure		32.5	72 ●			
3.2.1	Electricity output, kWh/mn pop		32.7	119 ○			
3.2.2	Logistics performance*		32.1	75 ● ◆			
3.2.3	Gross capital formation, % GDP		28.4	25 ●			
3.3	Ecological sustainability		19.5	125			
3.3.1	GDP/unit of energy use		4.8	110			
3.3.2	Environmental performance*		38.2	120			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.1	126 ○			
MARKET SOPHISTICATION				32.1	124		
4.1	Credit		25.7	106			
4.1.1	Ease of getting credit*		30.0	115			
4.1.2	Domestic credit to private sector, % GDP		22.7	108			
4.1.3	Microfinance gross loans, % GDP		2.2	11 ●			
4.2	Investment		40.0	[72]			
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		n/a	n/a			
4.3	Trade, competition, & market scale		30.7	126 ○ ◆			
4.3.1	Applied tariff rate, weighted avg., %		17.8	128 ○ ◆			
4.3.2	Intensity of local competition*		63.2	89			
4.3.3	Domestic market scale, bn PPP\$		27.5	117			
BUSINESS SOPHISTICATION				19.9	[121]		
5.1	Knowledge workers		15.2	[118]			
5.1.1	Knowledge-intensive employment, %		n/a	n/a			
5.1.2	Firms offering formal training, % firms		20.0	75			
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, %		0.8	109			
5.2	Innovation linkages		19.5	[90]			
5.2.1	University/industry research collaboration†		30.8	104			
5.2.2	State of cluster development†		33.4	114			
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 ○ ◆			
5.3	Knowledge absorption		24.9	104			
5.3.1	Intellectual property payments, % total trade		0.0	118 ○			
5.3.2	High-tech imports, % total trade		3.6	121			
5.3.3	ICT services imports, % total trade		1.1	63 ●			
5.3.4	FDI net inflows, % GDP		1.8	87			
5.3.5	Research talent, % in business enterprise		n/a	n/a			
KNOWLEDGE & TECHNOLOGY OUTPUTS				5.6	126 ○ ◆		
6.1	Knowledge creation		6.2	89			
6.1.1	Patents by origin/bn PPP\$ GDP		0.1	108			
6.1.2	PCT patents by origin/bn PPP\$ GDP		0.0	99 ○ ◆			
6.1.3	Utility models by origin/bn PPP\$ GDP		n/a	n/a			
6.1.4	Scientific & technical articles/bn PPP\$ GDP		8.6	55 ● ◆			
6.1.5	Citable documents H-index		3.5	109			
6.2	Knowledge impact		3.9	[124]			
6.2.1	Growth rate of PPP\$ GDP/worker, %		n/a	n/a			
6.2.2	New businesses/th pop. 15-64		n/a	n/a			
6.2.3	Computer software spending, % GDP		0.1	100			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP		1.6	95			
6.2.5	High- & medium-high-tech manufactures, %		n/a	n/a			
6.3	Knowledge diffusion		6.6	125			
6.3.1	Intellectual property receipts, % total trade		0.0	107			
6.3.2	High-tech net exports, % total trade		0.1	105			
6.3.3	ICT services exports, % total trade		0.1	120			
6.3.4	FDI net outflows, % GDP		0.3	82			
CREATIVE OUTPUTS				13.1	124		
7.1	Intangible assets		26.0	118			
7.1.1	Trademarks by origin/bn PPP\$ GDP		7.0	109			
7.1.2	Industrial designs by origin/bn PPP\$ GDP		0.2	107			
7.1.3	ICTs & business model creation†		49.9	105			
7.1.4	ICTs & organizational model creation†		39.2	114			
7.2	Creative goods & services		0.1	[128]			
7.2.1	Cultural & creative services exports, % total trade		0.0	111			
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		0.0	128 ○ ◆			
7.3	Online creativity		0.4	111			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69		0.6	103 ◆			
7.3.2	Country-code TLDs/th pop. 15-69		0.0	125			
7.3.3	Wikipedia edits/mn pop. 15-69		0.9	106			
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.