

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
127	125	Low	SSF	22.3	23.5	1,216.8	n/a
				Score/Value	Rank		
INSTITUTIONS				54.4	93		
1.1	Political environment		38.3	112			
1.1.1	Political and operational stability*.....		54.4	111			
1.1.2	Government effectiveness*.....		30.2	112			
1.2	Regulatory environment		58.5	86			
1.2.1	Regulatory quality*.....		23.7	109			
1.2.2	Rule of law*.....		28.5	103			
1.2.3	Cost of redundancy dismissal, salary weeks.....		14.0	55	●		
1.3	Business environment		66.6	76			
1.3.1	Ease of starting a business*.....		93.7	24	● ◆		
1.3.2	Ease of resolving insolvency*.....		39.4	100			
HUMAN CAPITAL & RESEARCH				9.9	126	◇	
2.1	Education		19.2	124	◇		
2.1.1	Expenditure on education, % GDP.....		3.5	93			
2.1.2	Government funding/pupil, secondary, % GDP/cap... ..		16.0	77			
2.1.3	School life expectancy, years.....		6.5	118	○ ◇		
2.1.4	PISA scales in reading, maths, & science.....		n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary.....		29.7	106			
2.2	Tertiary education		10.4	110			
2.2.1	Tertiary enrolment, % gross.....		4.0	120			
2.2.2	Graduates in science & engineering, %.....		13.2	94			
2.2.3	Tertiary inbound mobility, %.....		4.3	47	●		
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				25.5	124		
3.1	Information & communication technologies (ICTs)		18.7	[128]			
3.1.1	ICT access*.....		n/a	n/a			
3.1.2	ICT use*.....		n/a	n/a			
3.1.3	Government's online service*.....		16.0	127	○ ◇		
3.1.4	E-participation*.....		21.4	122	◇		
3.2	General infrastructure		35.6	62	●		
3.2.1	Electricity output, kWh/mn pop.....		25.4	121	○ ◇		
3.2.2	Logistics performance*.....		0.3	121	○ ◇		
3.2.3	Gross capital formation, % GDP.....		38.5	9	● ◆		
3.3	Ecological sustainability		22.3	122			
3.3.1	GDP/unit of energy use.....		6.3	96			
3.3.2	Environmental performance*.....		35.7	122	◇		
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		1.0	65	● ◆		
MARKET SOPHISTICATION				27.3	127	◇	
4.1	Credit		12.5	122			
4.1.1	Ease of getting credit*.....		30.0	115			
4.1.2	Domestic credit to private sector, % GDP.....		15.7	114			
4.1.3	Microfinance gross loans, % GDP.....		0.1	49			
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		29.4	127	◇		
4.3.1	Applied tariff rate, weighted avg., %.....		11.9	119			
4.3.2	Intensity of local competition*.....		n/a	n/a			
4.3.3	Domestic market scale, bn PPP\$.....		23.5	124			
BUSINESS SOPHISTICATION				22.8	[112]		
5.1	Knowledge workers		21.2	[105]			
5.1.1	Knowledge-intensive employment, %.....		n/a	n/a			
5.1.2	Firms offering formal training, % firms.....		27.5	57			
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, %.....		0.2	117	○ ◇		
5.2	Innovation linkages		0.0	[129]			
5.2.1	University/industry research collaboration*.....		n/a	n/a			
5.2.2	State of cluster development*.....		n/a	n/a			
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		47.1	24	● ◆		
5.3.1	Intellectual property payments, % total trade.....		0.0	110			
5.3.2	High-tech imports, % total trade.....		7.2	69	●		
5.3.3	ICT services imports, % total trade.....		3.5	5	● ◆		
5.3.4	FDI net inflows, % GDP.....		5.2	29	●		
5.3.5	Research talent, % in business enterprise.....		n/a	n/a			
KNOWLEDGE & TECHNOLOGY OUTPUTS				16.1	90		
6.1	Knowledge creation		3.2	116			
6.1.1	Patents by origin/bn PPP\$ GDP.....		0.3	84	◆		
6.1.2	PCT patents by origin/bn PPP\$ GDP.....		0.0	77	◆		
6.1.3	Utility models by origin/bn PPP\$ GDP.....		n/a	n/a			
6.1.4	Scientific & technical articles/bn PPP\$ GDP.....		3.3	97			
6.1.5	Citable documents H-index.....		2.6	114			
6.2	Knowledge impact		28.1	100			
6.2.1	Growth rate of PPP\$ GDP/worker, %.....		1.1	61	●		
6.2.2	New businesses/th pop. 15-64.....		0.0	106	○ ◇		
6.2.3	Computer software spending, % GDP.....		0.0	111			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....		1.6	92			
6.2.5	High- & medium-high-tech manufactures, %.....		n/a	n/a			
6.3	Knowledge diffusion		16.9	70	●		
6.3.1	Intellectual property receipts, % total trade.....		0.0	106			
6.3.2	High-tech net exports, % total trade.....		0.1	103			
6.3.3	ICT services exports, % total trade.....		4.3	14	● ◆		
6.3.4	FDI net outflows, % GDP.....		0.5	68	●		
CREATIVE OUTPUTS				0.4	[129]		
7.1	Intangible assets		0.0	[129]			
7.1.1	Trademarks by origin/bn PPP\$ GDP.....		2.8	121	○ ◇		
7.1.2	Industrial designs by origin/bn PPP\$ GDP.....		0.0	114			
7.1.3	ICTs & business model creation*.....		n/a	n/a			
7.1.4	ICTs & organizational model creation*.....		n/a	n/a			
7.2	Creative goods & services		1.3	[121]			
7.2.1	Cultural & creative services exports, % total trade.....		0.1	87			
7.2.2	National feature films/mn pop. 15-69.....		0.7	91			
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	113			
7.3	Online creativity		0.3	115			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....		1.0	96	◆		
7.3.2	Country-code TLDs/th pop. 15-69.....		0.0	127			
7.3.3	Wikipedia edits/mn pop. 15-69.....		0.0	127	○ ◇		
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.