

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
				Score/Value	Rank		
124	127	Low	SSF	13.1	30.3	2,309.6	n/a
INSTITUTIONS				50.6	108		
1.1 Political environment				33.4	122		
1.1.1 Political and operational stability*		57.9	101				
1.1.2 Government effectiveness*		21.2	123				
1.2 Regulatory environment				56.8	93		
1.2.1 Regulatory quality*		19.5	119				
1.2.2 Rule of law*		13.9	125				
1.2.3 Cost of redundancy dismissal, salary weeks		10.1	30 ●				
1.3 Business environment				61.5	96		
1.3.1 Ease of starting a business*		83.9	86 ●				
1.3.2 Ease of resolving insolvency*		39.1	102				
HUMAN CAPITAL & RESEARCH				6.5	128 ○ ◇		
2.1 Education				13.8	128 ○ ◇		
2.1.1 Expenditure on education, % GDP		2.2	116	○			
2.1.2 Government funding/pupil, secondary, % GDP/cap.	○	8.7	100	○			
2.1.3 School life expectancy, years	○	9.1	109				
2.1.4 PISA scales in reading, maths, & science		n/a	n/a				
2.1.5 Pupil-teacher ratio, secondary	○	33.1	108				
2.2 Tertiary education				5.8	120		
2.2.1 Tertiary enrolment, % gross	○	11.3	105				
2.2.2 Graduates in science & engineering, %		n/a	n/a				
2.2.3 Tertiary inbound mobility, %	○	0.9	88				
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				27.0	121		
3.1 Information & communication technologies(ICTs)				27.1	123		
3.1.1 ICT access*		29.8	118				
3.1.2 ICT use*		12.0	121				
3.1.3 Government's online service*		31.3	118				
3.1.4 E-participation*		35.4	115				
3.2 General infrastructure				22.4	111		
3.2.1 Electricity output, kWh/mn pop		n/a	n/a				
3.2.2 Logistics performance*		6.4	119				
3.2.3 Gross capital formation, % GDP		19.8	94				
3.3 Ecological sustainability				31.4	88		
3.3.1 GDP/unit of energy use		n/a	n/a				
3.3.2 Environmental performance*		46.6	106				
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP..		0.1	119				
MARKET SOPHISTICATION				31.4	125		
4.1 Credit				11.8	123		
4.1.1 Ease of getting credit*		30.0	115				
4.1.2 Domestic credit to private sector, % GDP	○	9.6	125 ○				
4.1.3 Microfinance gross loans, % GDP	○	0.2	43 ●				
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				42.3	125		
4.3.1 Applied tariff rate, weighted avg., %		12.3	121				
4.3.2 Intensity of local competition*		75.9	21 ● ◆				
4.3.3 Domestic market scale, bn PPP\$		30.3	115				
BUSINESS SOPHISTICATION				23.3	[110]		
5.1 Knowledge workers				16.6	[114]		
5.1.1 Knowledge-intensive employment, %		n/a	n/a				
5.1.2 Firms offering formal training, % firms		16.0	83	◆			
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, %		n/a	n/a				
5.2 Innovation linkages				33.5	[42]		
5.2.1 University/industry research collaboration*		67.2	14 ● ◆				
5.2.2 State of cluster development		50.3	47 ● ◆				
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				19.8	124	◆	
5.3.1 Intellectual property payments, % total trade	○	0.0	115				
5.3.2 High-tech imports, % total trade	○	2.0	126 ○				
5.3.3 ICT services imports, % total trade		0.2	119	◆			
5.3.4 FDI net inflows, % GDP		8.2	18 ●				
5.3.5 Research talent, % in business enterprise		n/a	n/a				
KNOWLEDGE & TECHNOLOGY OUTPUTS				2.9	129 ○ ◇		
6.1 Knowledge creation				1.1	127 ○ ◇		
6.1.1 Patents by origin/bn PPP\$ GDP		0.0	122	◇			
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		11	121	◇			
6.1.5 Citable documents H-index		1.4	123	◇			
6.2 Knowledge impact				1.6	[128]		
6.2.1 Growth rate of PPP\$ GDP/worker, %		n/a	n/a				
6.2.2 New businesses/th pop. 15-64	○	0.1	98				
6.2.3 Computer software spending, % GDP		0.0	106				
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP		0.4	123				
6.2.5 High- & medium-high-tech manufactures, %		n/a	n/a				
6.3 Knowledge diffusion				5.9	128 ○		
6.3.1 Intellectual property receipts, % total trade	○	-0.1	109 ○ ◇				
6.3.2 High-tech net exports, % total trade	○	0.1	108				
6.3.3 ICT services exports, % total trade		0.0	127 ○				
6.3.4 FDI net outflows, % GDP		0.1	99				
CREATIVE OUTPUTS				19.6	98		
7.1 Intangible assets				38.6	77 ● ◆		
7.1.1 Trademarks by origin/bn PPP\$ GDP		8.4	108				
7.1.2 Industrial designs by origin/bn PPP\$ GDP		1.7	55 ●				
7.1.3 ICTs & business model creation*		68.2	35 ● ◆				
7.1.4 ICTs & organizational model creation*		60.0	45 ● ◆				
7.2 Creative goods & services				1.2	[123]		
7.2.1 Cultural & creative services exports, % total trade		0.1	90				
7.2.2 National feature films/mn pop. 15-69		0.8	85				
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	120				
7.3 Online creativity				0.0	128 ○		
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69		0.0	126				
7.3.2 Country-code TLDs/th pop. 15-69		0.0	128 ○				
7.3.3 Wikipedia edits/mn pop. 15-69	○	0.0	126 ○				
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.