

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
84	104	Lower middle	SEAO	16.2	70.3	4,334.7	98
INSTITUTIONS 49.6 112				BUSINESS SOPHISTICATION 23.5 109			
1.1	Political environment	45.0	93	5.1	Knowledge workers	13.2	120
1.1.1	Political and operational stability*.....	73.7	50	5.1.1	Knowledge-intensive employment, %.....	5.3	107
1.1.2	Government effectiveness*.....	30.7	110	5.1.2	Firms offering formal training, % firms.....	22.2	70
1.2	Regulatory environment	53.1	104	5.1.3	GERD performed by business, % GDP.....	0.0	81
1.2.1	Regulatory quality*.....	28.5	104	5.1.4	GERD financed by business, %.....	19.4	67
1.2.2	Rule of law*.....	18.4	122	5.1.5	Females employed w/advanced degrees, %.....	1.1	107
1.2.3	Cost of redundancy dismissal, salary weeks.....	19.4	80	5.2	Innovation linkages	36.9	35
1.3	Business environment	50.6	125	5.2.1	University/industry research collaboration*.....	37.4	85
1.3.1	Ease of starting a business*.....	52.8	129	5.2.2	State of cluster development*.....	52.2	44
1.3.2	Ease of resolving insolvency*.....	48.4	71	5.2.3	GERD financed by abroad, %.....	34.9	9
				5.2.4	JV-strategic alliance deals/bn PPP\$ GDP.....	0.0	33
				5.2.5	Patent families 2+ offices/bn PPP\$ GDP.....	0.0	93
HUMAN CAPITAL & RESEARCH 11.2 120				KNOWLEDGE & TECHNOLOGY OUTPUTS 19.6 [75]			
2.1	Education	17.8	[126]	5.3	Knowledge absorption	20.4	122
2.1.1	Expenditure on education, % GDP.....	1.9	117	5.3.1	Intellectual property payments, % total trade.....	0.1	102
2.1.2	Government funding/pupil, secondary, % GDP/cap.....	n/a	n/a	5.3.2	High-tech imports, % total trade.....	2.7	125
2.1.3	School life expectancy, years.....	10.6	101	5.3.3	ICT services imports, % total trade.....	0.6	97
2.1.4	PISA scales in reading, maths, & science.....	n/a	n/a	5.3.4	FDI net inflows, % GDP.....	11.7	10
2.1.5	Pupil-teacher ratio, secondary.....	n/a	n/a	5.3.5	Research talent, % in business enterprise.....	4.3	72
2.2	Tertiary education	15.2	100	6.1	Knowledge creation	3.6	[114]
2.2.1	Tertiary enrolment, % gross.....	13.1	100	6.1.1	Patents by origin/bn PPP\$ GDP.....	0.0	121
2.2.2	Graduates in science & engineering, %.....	15.4	86	6.1.2	PCT patents by origin/bn PPP\$ GDP.....	n/a	n/a
2.2.3	Tertiary inbound mobility, %.....	n/a	n/a	6.1.3	Utility models by origin/bn PPP\$ GDP.....	n/a	n/a
2.3	Research & development (R&D)	0.6	113	6.1.4	Scientific & technical articles/bn PPP\$ GDP.....	2.3	109
2.3.1	Researchers, FTE/mn pop.....	30.4	100	6.1.5	Citable documents H-index.....	4.3	99
2.3.2	Gross expenditure on R&D, % GDP.....	0.1	102	6.2	Knowledge impact	46.0	[25]
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, %.....	4.9	9
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	115
				6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....	2.4	82
				6.2.5	High- & medium-high-tech manufactures, %.....	n/a	n/a
INFRASTRUCTURE 26.5 123				CREATIVE OUTPUTS 19.8 97			
3.1	Information & communication technologies (ICTs)	29.5	121	7.1	Intangible assets	37.1	83
3.1.1	ICT access*.....	41.6	102	7.1.1	Trademarks by origin/bn PPP\$ GDP.....	23.4	83
3.1.2	ICT use*.....	34.1	96	7.1.2	Industrial designs by origin/bn PPP\$ GDP.....	0.2	106
3.1.3	Government's online service*.....	25.0	123	7.1.3	ICTs & business model creation*.....	60.1	66
3.1.4	E-participation*.....	17.4	126	7.1.4	ICTs & organizational model creation*.....	60.6	41
3.2	General infrastructure	23.9	105	7.2	Creative goods & services	4.4	[105]
3.2.1	Electricity output, kWh/mn pop.....	354.9	111	7.2.1	Cultural & creative services exports, % total trade.....	0.0	112
3.2.2	Logistics performance*.....	24.1	93	7.2.2	National feature films/mn pop. 15-69.....	3.2	55
3.2.3	Gross capital formation, % GDP.....	22.0	76	7.2.3	Entertainment & Media market/th pop. 15-69.....	n/a	n/a
3.3	Ecological sustainability	26.0	112	7.2.4	Printing & other media, % manufacturing.....	n/a	n/a
3.3.1	GDP/unit of energy use.....	7.0	85	7.2.5	Creative goods exports, % total trade.....	0.3	76
3.3.2	Environmental performance*.....	43.2	115	7.3	Online creativity	0.6	107
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP.....	0.7	78	7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....	0.8	99
				7.3.2	Country-code TLDs/th pop. 15-69.....	0.0	121
				7.3.3	Wikipedia edits/mn pop. 15-69.....	1.8	100
				7.3.4	Mobile app creation/bn PPP\$ GDP.....	0.3	74
MARKET SOPHISTICATION 56.8 30							
4.1	Credit	73.6	8				
4.1.1	Ease of getting credit*.....	80.0	20				
4.1.2	Domestic credit to private sector, % GDP.....	86.7	32				
4.1.3	Microfinance gross loans, % GDP.....	7.5	1				
4.2	Investment	50.0	[39]				
4.2.1	Ease of protecting minority investors*.....	50.0	93				
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	46.7	114				
4.3.1	Applied tariff rate, weighted avg., %.....	9.8	111				
4.3.2	Intensity of local competition*.....	59.6	108				
4.3.3	Domestic market scale, bn PPP\$.....	70.3	91				

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.