

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2019 rank	
6	26	Upper middle	SEAO	1,433.8	27,308.9	17,027.5	14	
				Score/Value	Rank			
INSTITUTIONS				64.6	62			
BUSINESS SOPHISTICATION				52.9	15			
1.1	Political environment	64.9	47	◆	5.1	Knowledge workers	77.9	[1]
1.1.1	Political and operational stability*.....	73.2	49		5.1.1	Knowledge-intensive employment, %.....	n/a	n/a
1.1.2	Government effectiveness*.....	60.8	45	◆	5.1.2	Firms offering formal training, %.....	79.2	1 ◆◆
1.2	Regulatory environment	50.7	102	○	5.1.3	GERD performed by business, % GDP.....	1.7	12 ◆
1.2.1	Regulatory quality*.....	38.2	82		5.1.4	GERD financed by business, %.....	76.6	4 ◆◆
1.2.2	Rule of law*.....	41.4	72		5.1.5	Females employed w/advanced degrees, %.....	n/a	n/a
1.2.3	Cost of redundancy dismissal, salary weeks.....	27.4	109	○	5.2	Innovation linkages	24.5	48
1.3	Business environment	78.1	39		5.2.1	University/industry research collaboration†.....	56.5	29 ◆
1.3.1	Ease of starting a business*.....	94.1	25	◆	5.2.2	State of cluster development†.....	59.6	25 ◆
1.3.2	Ease of resolving insolvency*.....	62.1	46		5.2.3	GERD financed by abroad, % GDP.....	0.0	81 ○
					5.2.4	JV-strategic alliance deals/bn PPP\$ GDP.....	0.0	76
					5.2.5	Patent families 2+ offices/bn PPP\$ GDP.....	1.0	27 ◆
HUMAN CAPITAL & RESEARCH				49.4	21			
2.1	Education	64.5	[12]		5.3	Knowledge absorption	56.3	6
2.1.1	Expenditure on education, % GDP.....	n/a	n/a		5.3.1	Intellectual property payments, % total trade.....	1.2	28
2.1.2	Government funding/pupil, secondary, % GDP/cap.....	n/a	n/a		5.3.2	High-tech imports, % total trade.....	23.9	5 ◆
2.1.3	School life expectancy, years.....	12.4	87	○ ◆	5.3.3	ICT services imports, % total trade.....	0.9	78
2.1.4	PISA scales in reading, maths, & science.....	579.0	1	◆◆	5.3.4	FDI net inflows, % GDP.....	1.5	100 ○
2.1.5	Pupil-teacher ratio, secondary.....	13.3	62		5.3.5	Research talent, % in business enterprise.....	61.3	12 ◆
2.2	Tertiary education	25.0	83		KNOWLEDGE & TECHNOLOGY OUTPUTS			
2.2.1	Tertiary enrolment, % gross.....	50.6	58		6.1	Knowledge creation	70.4	4
2.2.2	Graduates in science & engineering, %.....	n/a	n/a		6.1.1	Patents by origin/bn PPP\$ GDP.....	55.1	1 ◆◆
2.2.3	Tertiary inbound mobility, %.....	0.4	101	○ ◆	6.1.2	PCT patents by origin/bn PPP\$ GDP.....	2.2	15 ◆
2.3	Research & development (R&D)	58.8	16	◆	6.1.3	Utility models by origin/bn PPP\$ GDP.....	81.6	1 ◆◆
2.3.1	Researchers, FTE/mn pop.....	1,307.1	48		6.1.4	Scientific & technical articles/bn PPP\$ GDP.....	13.8	39
2.3.2	Gross expenditure on R&D, % GDP.....	2.2	13	◆	6.1.5	Citable documents H-index.....	57.0	13 ◆
2.3.3	Global R&D companies, avg. exp. top 3, mn \$US.....	91.8	3	◆◆	6.2	Knowledge impact	50.4	6
2.3.4	QS university ranking, average score top 3*.....	83.8	3	◆◆	6.2.1	Growth rate of PPP\$ GDP/worker, %.....	6.6	2 ◆◆
					6.2.2	New businesses/th pop. 15-64.....	n/a	n/a
					6.2.3	Computer software spending, % GDP.....	0.0	23 ◆
					6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....	11.7	24
					6.2.5	High- and medium-high-tech manufacturing, %.....	46.4	13 ◆
INFRASTRUCTURE				52.1	36			
3.1	Information & communication technologies (ICTs)	75.8	45	◆	6.3	Knowledge diffusion	44.5	21
3.1.1	ICT access*.....	61.5	71		6.3.1	Intellectual property receipts, % total trade.....	0.2	44
3.1.2	ICT use*.....	65.1	53	◆	6.3.2	High-tech net exports, % total trade.....	28.0	5 ◆
3.1.3	Government's online service*.....	86.1	34	◆	6.3.3	ICT services exports, % total trade.....	1.8	61
3.1.4	E-participation*.....	90.5	29	◆	6.3.4	FDI net outflows, % GDP.....	1.3	48
3.2	General infrastructure	48.1	6	◆	CREATIVE OUTPUTS			
3.2.1	Electricity output, kWh/mn pop.....	4,762.1	45		7.1	Intangible assets	72.1	1
3.2.2	Logistics performance*.....	72.0	26	◆	7.1.1	Trademarks by origin/bn PPP\$ GDP.....	281.9	1 ◆◆
3.2.3	Gross capital formation, % GDP.....	43.4	6	◆	7.1.2	Global brand value, top 5,000, % GDP.....	118.3	17 ◆
3.3	Ecological sustainability	32.5	54		7.1.3	Industrial designs by origin/bn PPP\$ GDP.....	27.3	1 ◆◆
3.3.1	GDP/unit of energy use.....	6.8	94	○	7.1.4	ICTs & organizational model creation†.....	59.7	46 ◆
3.3.2	Environmental performance*.....	37.3	98	○ ◆	7.2	Creative goods and services	39.7	12
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP.....	5.4	19		7.2.1	Cultural & creative services exports, % total trade.....	0.5	46
					7.2.2	National feature films/mn pop. 15-69.....	0.8	93 ○
					7.2.3	Entertainment & Media market/th pop. 15-69.....	9.7	37 ◆
					7.2.4	Printing and other media, % manufacturing.....	0.8	72 ○
					7.2.5	Creative goods exports, % total trade.....	11.8	1 ◆◆
MARKET SOPHISTICATION				58.5	19			
4.1	Credit	53.1	25	◆	7.3	Online creativity	4.1	[113]
4.1.1	Ease of getting credit*.....	60.0	74		7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....	2.2	74
4.1.2	Domestic credit to private sector, % GDP.....	161.1	6	◆	7.3.2	Country-code TLDs/th pop. 15-69.....	6.1	47
4.1.3	Microfinance gross loans, % GDP.....	0.0	73	○	7.3.3	Wikipedia edits/mn pop. 15-69.....	n/a	n/a
4.2	Investment	37.1	66		7.3.4	Mobile app creation/bn PPP\$ GDP.....	n/a	n/a
4.2.1	Ease of protecting minority investors*.....	72.0	27					
4.2.2	Market capitalization, % GDP.....	61.3	24					
4.2.3	Venture capital deals/bn PPP\$ GDP.....	0.1	32					
4.3	Trade, competition, and market scale	85.3	3	◆◆				
4.3.1	Applied tariff rate, weighted avg., %.....	3.4	68					
4.3.2	Intensity of local competition†.....	74.4	32	◆				
4.3.3	Domestic market scale, bn PPP\$.....	27,308.9	1	◆◆				

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.