

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
78	87	Lower middle	SEAO	266.8	3,495.9	13,229.5	85
				Score/Value	Rank		
INSTITUTIONS				53.2	99		
1.1	Political environment		53.9	68	◆		
1.1.1	Political and operational stability*.....		66.7	74			
1.1.2	Government effectiveness*.....		47.5	68	◆		
1.2	Regulatory environment		31.1	128	○ ◇		
1.2.1	Regulatory quality*.....		39.1	75			
1.2.2	Rule of law*.....		37.2	82			
1.2.3	Cost of redundancy dismissal, salary weeks.....		57.8	125	○ ◇		
1.3	Business environment		74.6	49	◆		
1.3.1	Ease of starting a business*.....		81.2	102			
1.3.2	Ease of resolving insolvency*.....		67.9	33	● ◆		
HUMAN CAPITAL & RESEARCH				21.3	90		
2.1	Education		33.9	99			
2.1.1	Expenditure on education, % GDP.....		3.6	92			
2.1.2	Government funding/pupil, secondary, % GDP/cap... ..		10.5	94	○		
2.1.3	School life expectancy, years.....		13.4	78			
2.1.4	PISA scales in reading, maths, & science.....		395.5	63			
2.1.5	Pupil-teacher ratio, secondary.....		15.3	69			
2.2	Tertiary education		21.5	89			
2.2.1	Tertiary enrolment, % gross.....		36.3	74			
2.2.2	Graduates in science & engineering, %.....		19.4	68			
2.2.3	Tertiary inbound mobility, %.....		0.1	110	○		
2.3	Research & development (R&D)		8.4	63			
2.3.1	Researchers, FTE/mn pop.Ⓞ.....		89.2	86			
2.3.2	Gross expenditure on R&D, % GDP.Ⓞ.....		0.1	109	○ ◇		
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*.....		31.3	36	● ◆		
INFRASTRUCTURE				44.2	75	◆	
3.1	Information & communication technologies (ICTs)		53.7	88			
3.1.1	ICT access*.....		51.4	85			
3.1.2	ICT use*.....		44.8	77	◆		
3.1.3	Government's online service*.....		56.9	92			
3.1.4	E-participation*.....		61.8	88			
3.2	General infrastructure		43.5	35	● ◆		
3.2.1	Electricity output, kWh/mn pop.....		952.1	94			
3.2.2	Logistics performance*.....		50.8	45	◆		
3.2.3	Gross capital formation, % GDP.....		33.4	15	●		
3.3	Ecological sustainability		35.4	76			
3.3.1	GDP/unit of energy use.....		11.9	30	●		
3.3.2	Environmental performance*.....		46.9	105			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.7	75			
MARKET SOPHISTICATION				48.8	64		
4.1	Credit		29.0	96			
4.1.1	Ease of getting credit*.....		70.0	40			
4.1.2	Domestic credit to private sector, % GDP.....		38.7	85			
4.1.3	Microfinance gross loans, % GDP.....		0.0	61			
4.2	Investment		36.8	90			
4.2.1	Ease of protecting minority investors*.....		63.3	48			
4.2.2	Market capitalization, % GDP.....		46.0	32			
4.2.3	Venture capital deals/bn PPP\$ GDP.....		0.0	60			
4.3	Trade, competition, & market scale		80.6	7	● ◆		
4.3.1	Applied tariff rate, weighted avg., %.....		2.1	54	◆		
4.3.2	Intensity of local competition*.....		73.2	37	◆		
4.3.3	Domestic market scale, bn PPP\$.....		3,495.9	7	● ◆		
BUSINESS SOPHISTICATION				25.7	95		
5.1	Knowledge workers		10.9	122	○ ◇		
5.1.1	Knowledge-intensive employment, %.....		10.9	97			
5.1.2	Firms offering formal training, % firms.....		7.7	90	○ ◇		
5.1.3	GERD performed by business, % GDP.Ⓞ.....		0.0	78			
5.1.4	GERD financed by business, %.....		n/a	n/a			
5.1.5	Females employed w/advanced degrees, %.....		6.0	85			
5.2	Innovation linkages		29.4	50			
5.2.1	University/industry research collaboration*.....		53.8	34	● ◆		
5.2.2	State of cluster development*.....		60.0	27	● ◆		
5.2.3	GERD financed by abroad, %.....		n/a	n/a			
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP.....		0.0	92			
5.2.5	Patent families 2+ offices/bn PPP\$ GDP.....		0.0	91			
5.3	Knowledge absorption		36.7	48			
5.3.1	Intellectual property payments, % total trade.....		1.0	35	◆		
5.3.2	High-tech imports, % total trade.....		8.5	49			
5.3.3	ICT services imports, % total trade.....		1.3	54			
5.3.4	FDI net inflows, % GDP.....		1.6	90			
5.3.5	Research talent, % in business enterprise...Ⓞ.....		35.5	37	◆		
KNOWLEDGE & TECHNOLOGY OUTPUTS				17.6	82		
6.1	Knowledge creation		4.6	101			
6.1.1	Patents by origin/bn PPP\$ GDP.....		0.7	72			
6.1.2	PCT patents by origin/bn PPP\$ GDP.....		0.0	97	○		
6.1.3	Utility models by origin/bn PPP\$ GDP.....		0.1	54			
6.1.4	Scientific & technical articles/bn PPP\$ GDP.....		0.6	125	○		
6.1.5	Citable documents H-index.....		12.7	55			
6.2	Knowledge impact		36.7	64			
6.2.1	Growth rate of PPP\$ GDP/worker, %.....		2.3	37			
6.2.2	New businesses/th pop. 15-64.....		0.3	91			
6.2.3	Computer software spending, % GDP.....		0.3	33	● ◆		
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....		2.2	85			
6.2.5	High- & medium-high-tech manufactures, %...Ⓞ.....		0.3	37	◆		
6.3	Knowledge diffusion		11.5	96			
6.3.1	Intellectual property receipts, % total trade.....		0.0	76			
6.3.2	High-tech net exports, % total trade.....		3.1	43			
6.3.3	ICT services exports, % total trade.....		0.5	101			
6.3.4	FDI net outflows, % GDP.....		0.0	112	○		
CREATIVE OUTPUTS				24.0	76		
7.1	Intangible assets		40.0	68			
7.1.1	Trademarks by origin/bn PPP\$ GDP.....		16.0	93			
7.1.2	Industrial designs by origin/bn PPP\$ GDP.....		0.7	80			
7.1.3	ICTs & business model creation*.....		67.1	40	◆		
7.1.4	ICTs & organizational model creation*.....		65.4	27	● ◆		
7.2	Creative goods & services		13.9	73			
7.2.1	Cultural & creative services exports, % total trade.....		0.0	99			
7.2.2	National feature films/mn pop. 15-69.Ⓞ.....		0.5	96	○		
7.2.3	Entertainment & Media market/th pop. 15-69.....		2.2	52	◆		
7.2.4	Printing & other media, % manufacturing.Ⓞ.....		0.8	77			
7.2.5	Creative goods exports, % total trade.....		2.9	19	● ◆		
7.3	Online creativity		2.0	83			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....		1.5	88			
7.3.2	Country-code TLDs/th pop. 15-69.....		0.4	97			
7.3.3	Wikipedia edits/mn pop. 15-69.....		2.0	99			
7.3.4	Mobile app creation/bn PPP\$ GDP.....		4.8	49			

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.