

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
37	63	Lower middle	SEAO	96.5	707.6	7,510.5	45
				Score/Value	Rank		
INSTITUTIONS				58.6	81		
1.1	Political environment		58.6	57	◆		
1.1.1	Political and operational stability*		82.5	32	◆		
1.1.2	Government effectiveness*		46.6	71	◆		
1.2	Regulatory environment		57.3	90	○		
1.2.1	Regulatory quality*		31.3	97	○		
1.2.2	Rule of law*		48.2	59	◆		
1.2.3	Cost of redundancy dismissal, salary weeks		24.6	101	○		
1.3	Business environment		59.9	106	○		
1.3.1	Ease of starting a business*		84.8	80	○		
1.3.2	Ease of resolving insolvency*		34.9	110	○		
HUMAN CAPITAL & RESEARCH				31.1	61		
2.1	Education		61.2	[18]	◆		
2.1.1	Expenditure on education, % GDP		5.7	24	○		
2.1.2	Government funding/pupil, secondary, % GDP/cap		n/a	n/a	○		
2.1.3	School life expectancy, years		n/a	n/a	○		
2.1.4	PISA scales in reading, maths, & science		502.0	20	◆		
2.1.5	Pupil-teacher ratio, secondary		n/a	n/a	○		
2.2	Tertiary education		24.7	81	○		
2.2.1	Tertiary enrolment, % gross		28.3	85	○		
2.2.2	Graduates in science & engineering, %		22.7	46	○		
2.2.3	Tertiary inbound mobility, %		0.2	104	○		
2.3	Research & development (R&D)		7.4	67	○		
2.3.1	Researchers, FTE/mn pop		700.8	58	○		
2.3.2	Gross expenditure on R&D, % GDP		0.5	61	○		
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*		9.9	64	○		
INFRASTRUCTURE				42.0	82		
3.1	Information & communication technologies (ICTs)		57.5	82	○		
3.1.1	ICT access*		48.8	90	○		
3.1.2	ICT use*		38.7	92	○		
3.1.3	Government's online service*		73.6	57	○		
3.1.4	E-participation*		69.1	70	○		
3.2	General infrastructure		39.3	45	○		
3.2.1	Electricity output, kWh/mn pop		1,778.1	81	○		
3.2.2	Logistics performance*		56.6	38	◆		
3.2.3	Gross capital formation, % GDP		27.5	32	○		
3.3	Ecological sustainability		29.2	100	○		
3.3.1	GDP/unit of energy use		6.7	92	○		
3.3.2	Environmental performance*		47.0	104	○		
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP		2.2	45	◆		
MARKET SOPHISTICATION				57.0	29	◆	
4.1	Credit		68.6	11	◆		
4.1.1	Ease of getting credit*		75.0	29	○		
4.1.2	Domestic credit to private sector, % GDP		130.7	16	◆		
4.1.3	Microfinance gross loans, % GDP		3.9	8	◆		
4.2	Investment		33.1	108	○		
4.2.1	Ease of protecting minority investors*		55.0	84	○		
4.2.2	Market capitalization, % GDP		36.9	41	○		
4.2.3	Venture capital deals/bn PPP\$ GDP		0.0	37	○		
4.3	Trade, competition, & market scale		69.3	35	◆		
4.3.1	Applied tariff rate, weighted avg., %		2.7	61	○		
4.3.2	Intensity of local competition*		63.2	90	○		
4.3.3	Domestic market scale, bn PPP\$		707.6	33	○		
BUSINESS SOPHISTICATION				30.0	69		
5.1	Knowledge workers		22.8	102	○		
5.1.1	Knowledge-intensive employment, %		1.1	117	○		
5.1.2	Firms offering formal training, % firms		22.2	70	○		
5.1.3	GERD performed by business, % GDP		0.4	42	◆		
5.1.4	GERD financed by business, %		64.1	8	◆		
5.1.5	Females employed w/advanced degrees, %		6.1	83	○		
5.2	Innovation linkages		20.0	86	○		
5.2.1	University/industry research collaboration*		38.6	75	○		
5.2.2	State of cluster development*		45.2	74	○		
5.2.3	GERD financed by abroad, %		4.5	64	○		
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP		0.0	49	○		
5.2.5	Patent families 2+ offices/bn PPP\$ GDP		0.0	84	○		
5.3	Knowledge absorption		47.1	23	◆		
5.3.1	Intellectual property payments, % total trade		n/a	n/a	○		
5.3.2	High-tech imports, % total trade		26.5	1	◆		
5.3.3	ICT services imports, % total trade		0.0	126	○		
5.3.4	FDI net inflows, % GDP		6.2	23	○		
5.3.5	Research talent, % in business enterprise		24.1	51	○		
KNOWLEDGE & TECHNOLOGY OUTPUTS				35.6	27	◆	
6.1	Knowledge creation		8.1	80	○		
6.1.1	Patents by origin/bn PPP\$ GDP		0.9	65	○		
6.1.2	PCT patents by origin/bn PPP\$ GDP		0.0	82	○		
6.1.3	Utility models by origin/bn PPP\$ GDP		0.4	35	○		
6.1.4	Scientific & technical articles/bn PPP\$ GDP		5.6	74	○		
6.1.5	Citable documents H-index		11.7	57	○		
6.2	Knowledge impact		56.5	5	◆		
6.2.1	Growth rate of PPP\$ GDP/worker, %		6.0	3	◆		
6.2.2	New businesses/th pop. 15-64		n/a	n/a	○		
6.2.3	Computer software spending, % GDP		0.3	38	○		
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP		8.3	37	◆		
6.2.5	High- & medium-high-tech manufactures, %		0.4	27	◆		
6.3	Knowledge diffusion		42.1	18	◆		
6.3.1	Intellectual property receipts, % total trade		n/a	n/a	○		
6.3.2	High-tech net exports, % total trade		32.9	1	◆		
6.3.3	ICT services exports, % total trade		0.1	125	○		
6.3.4	FDI net outflows, % GDP		0.4	71	○		
CREATIVE OUTPUTS				32.3	47	◆	
7.1	Intangible assets		43.7	53	○		
7.1.1	Trademarks by origin/bn PPP\$ GDP		85.3	24	○		
7.1.2	Industrial designs by origin/bn PPP\$ GDP		2.7	43	○		
7.1.3	ICTs & business model creation*		56.1	83	○		
7.1.4	ICTs & organizational model creation*		54.4	63	○		
7.2	Creative goods & services		28.8	32	◆		
7.2.1	Cultural & creative services exports, % total trade		n/a	n/a	○		
7.2.2	National feature films/mn pop. 15-69		1.2	78	○		
7.2.3	Entertainment & Media market/th pop. 15-69		1.3	56	○		
7.2.4	Printing & other media, % manufacturing		0.9	70	○		
7.2.5	Creative goods exports, % total trade		5.9	10	◆		
7.3	Online creativity		13.0	44	◆		
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69		2.4	74	◆		
7.3.2	Country-code TLDs/th pop. 15-69		1.8	69	○		
7.3.3	Wikipedia edits/mn pop. 15-69		7.1	70	○		
7.3.4	Mobile app creation/bn PPP\$ GDP		42.9	13	◆		

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.