

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank		
31	15	High	SEAO	24.8	1,318.6	52,373.5	20		
INSTITUTIONS 88.8 13				BUSINESS SOPHISTICATION 46.1 26					
1.1	Political environment		85.7	14	5.1	Knowledge workers		67.5	11
1.1.1	Political and operational stability*		89.5	15	5.1.1	Knowledge-intensive employment, %		46.0	14
1.1.2	Government effectiveness*		83.8	15	5.1.2	Firms offering formal training, % firms		n/a	n/a
1.2	Regulatory environment		93.1	12	5.1.3	GERD performed by business, % GDP		1.0	21
1.2.1	Regulatory quality*		93.7	5 ●	5.1.4	GERD financed by business, %		61.9	11
1.2.2	Rule of law*		90.9	13	5.1.5	Females employed w/advanced degrees, %		22.6	17
1.2.3	Cost of redundancy dismissal, salary weeks		12.0	38	5.2	Innovation linkages		34.6	39
1.3	Business environment		87.7	11	5.2.1	University/industry research collaboration†		53.1	35
1.3.1	Ease of starting a business*		96.5	7 ●	5.2.2	State of cluster development†		53.8	40
1.3.2	Ease of resolving insolvency*		78.9	19	5.2.3	GERD financed by abroad, %		1.6	84 ○
2.1	Education		61.0	19	5.2.4	JV-strategic alliance deals/bn PPP\$ GDP		0.2	7 ●
2.1.1	Expenditure on education, % GDP		5.3	32	5.2.5	Patent families 2+ offices/bn PPP\$ GDP		1.0	28
2.1.2	Government funding/pupil, secondary, % GDP/cap...		17.2	69 ○ ◇	5.3	Knowledge absorption		36.2	50
2.1.3	School life expectancy, years		22.1	1 ● ◆	5.3.1	Intellectual property payments, % total trade		1.3	24
2.1.4	PISA scales in reading, maths, & science		502.3	19	5.3.2	High-tech imports, % total trade		10.5	26
2.1.5	Pupil-teacher ratio, secondary		n/a	n/a	5.3.3	ICT services imports, % total trade		1.0	71 ○ ◇
2.2	Tertiary education		50.6	13	5.3.4	FDI net inflows, % GDP		3.3	50
2.2.1	Tertiary enrolment, % gross		113.8	2 ● ◆	5.3.5	Research talent, % in business enterprise		27.9	44
2.2.2	Graduates in science & engineering, %		17.6	76 ○ ◇	6.1	Knowledge creation		38.0	21
2.2.3	Tertiary inbound mobility, %		17.5	9	6.1.1	Patents by origin/bn PPP\$ GDP		2.0	43
2.3	Research & development (R&D)		61.4	14	6.1.2	PCT patents by origin/bn PPP\$ GDP		1.4	26
2.3.1	Researchers, FTE/mn pop.		4,539.5	16	6.1.3	Utility models by origin/bn PPP\$ GDP		0.8	29
2.3.2	Gross expenditure on R&D, % GDP		1.9	18	6.1.4	Scientific & technical articles/bn PPP\$ GDP		26.9	10 ●
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$		68.1	20	6.1.5	Citable documents H-index		65.2	10 ●
2.3.4	QS university ranking, average score top 3*		80.9	5 ●	6.2	Knowledge impact		44.1	30
3.1	Information & communication technologies (ICTs)		89.0	13	6.2.1	Growth rate of PPP\$ GDP/worker, %		0.4	77 ○
3.1.1	ICT access*		80.4	26	6.2.2	New businesses/th pop. 15-64		15.5	7 ● ◆
3.1.2	ICT use*		80.2	15	6.2.3	Computer software spending, % GDP		0.3	53
3.1.3	Government's online service*		97.2	7 ●	6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP		9.7	32
3.1.4	E-participation*		98.3	5 ●	6.2.5	High- & medium-high-tech manufactures, %		0.3	39
3.2	General infrastructure		49.1	20	6.3	Knowledge diffusion		12.6	88 ○ ◇
3.2.1	Electricity output, kWh/mn pop.		10,432.2	13	6.3.1	Intellectual property receipts, % total trade		0.3	29
3.2.2	Logistics performance*		79.0	18	6.3.2	High-tech net exports, % total trade		1.7	58
3.2.3	Gross capital formation, % GDP		24.3	50	6.3.3	ICT services exports, % total trade		1.0	83 ○
3.3	Ecological sustainability		44.5	45	6.3.4	FDI net outflows, % GDP		0.1	97 ○ ◇
3.3.1	GDP/unit of energy use		8.5	67 ○	7.1	Intangible assets		48.7	40
3.3.2	Environmental performance*		74.1	21	7.1.1	Trademarks by origin/bn PPP\$ GDP		64.3	33
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP		3.2	30	7.1.2	Industrial designs by origin/bn PPP\$ GDP		2.3	48
4.1	Credit		79.5	5 ● ◆	7.1.3	ICTs & business model creation†		70.7	30
4.1.1	Ease of getting credit*		90.0	7 ● ◆	7.1.4	ICTs & organizational model creation†		67.3	25
4.1.2	Domestic credit to private sector, % GDP		142.5	13	7.2	Creative goods & services		27.5	35
4.1.3	Microfinance gross loans, % GDP		n/a	n/a	7.2.1	Cultural & creative services exports, % total trade		0.4	56
4.2	Investment		46.4	51	7.2.2	National feature films/mn pop. 15-69		3.2	56 ○
4.2.1	Ease of protecting minority investors*		60.0	61 ○	7.2.3	Entertainment & Media market/th pop. 15-69		67.0	7
4.2.2	Market capitalization, % GDP		102.3	11	7.2.4	Printing & other media, % manufacturing		2.3	14
4.2.3	Venture capital deals/bn PPP\$ GDP		0.1	19	7.2.5	Creative goods exports, % total trade		0.6	54
4.3	Trade, competition, & market scale		78.9	10 ●	7.3	Online creativity		39.5	16
4.3.1	Applied tariff rate, weighted avg., %		0.9	9 ●	7.3.1	Generic top-level domains (TLDs)/th pop. 15-69		63.1	10 ●
4.3.2	Intensity of local competition†		79.2	11	7.3.2	Country-code TLDs/th pop. 15-69		50.9	14
4.3.3	Domestic market scale, bn PPP\$		1,318.6	20	7.3.3	Wikipedia edits/mn pop. 15-69		47.2	28
					7.3.4	Mobile app creation/bn PPP\$ GDP		12.1	37

NOTES: ● indicates a strength; ○ a weakness; ◆ a strength relative to the other top 25-ranked GII economies; ◇ a weakness relative to the other top 25-ranked GII economies; * 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.