

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GI I 2018 rank		
13	10	High	SEAO	51.2	2,139.7	41,350.6	12		
INSTITUTIONS 79.7 26 ◊				BUSINESS SOPHISTICATION 57.6 10					
1.1	Political environment		77.2	27	◊	5.1	Knowledge workers	75.3	5
1.1.1	Political and operational stability*		86.0	21	◊	5.1.1	Knowledge-intensive employment, %	39.1	28
1.1.2	Government effectiveness*		72.8	28	◊	5.1.2	Firms offering formal training, % firms	n/a	n/a
1.2	Regulatory environment		72.4	45	◊	5.1.3	GERD performed by business, % GDP	3.6	2
1.2.1	Regulatory quality*		71.6	29	◊	5.1.4	GERD financed by business, %	76.2	3
1.2.2	Rule of law*		77.2	23	◊	5.1.5	Females employed w/advanced degrees, %	16.2	39
1.2.3	Cost of redundancy dismissal, salary weeks		27.4	107	○ ◊	5.2	Innovation linkages	46.1	18
1.3	Business environment		89.4	6	◊	5.2.1	University/industry research collaboration†	56.5	26
1.3.1	Ease of starting a business*		95.8	11	◊	5.2.2	State of cluster development†	59.6	29
1.3.2	Ease of resolving insolvency*		83.0	10	◊	5.2.3	GERD financed by abroad, %	1.3	89
HUMAN CAPITAL & RESEARCH 66.5 1 ● ◆				KNOWLEDGE & TECHNOLOGY OUTPUTS50.2 13					
2.1	Education		60.8	21	◊	5.3	Knowledge absorption	51.5	18
2.1.1	Expenditure on education, % GDP		5.3	37	◊	5.3.1	Intellectual property payments, % total trade	1.6	19
2.1.2	Government funding/pupil, secondary, % GDP/cap		28.5	14	◆	5.3.2	High-tech imports, % total trade	15.2	13
2.1.3	School life expectancy, years		16.4	24	◊	5.3.3	ICT services imports, % total trade	0.5	105
2.1.4	PISA scales in reading, maths, & science		519.1	7	◊	5.3.4	FDI net inflows, % GDP	0.8	113
2.1.5	Pupil-teacher ratio, secondary		13.8	62	○	5.3.5	Research talent, % in business enterprise	81.3	2
2.2	Tertiary education		49.4	16	◊	6.1	Knowledge creation	63.1	8
2.2.1	Tertiary enrolment, % gross		93.8	4	◆	6.1.1	Patents by origin/bn PPP\$ GDP	78.2	1
2.2.2	Graduates in science & engineering, %		29.9	14	◆	6.1.2	PCT patents by origin/bn PPP\$ GDP	8.0	1
2.2.3	Tertiary inbound mobility, %		1.9	76	○ ◊	6.1.3	Utility models by origin/bn PPP\$ GDP	3.2	7
2.3	Research & development (R&D)		89.3	1	● ◆	6.1.4	Scientific & technical articles/bn PPP\$ GDP	20.4	24
2.3.1	Researchers, FTE/mn pop		7,514.4	3	● ◆	6.1.5	Citable documents H-index	43.3	18
2.3.2	Gross expenditure on R&D, % GDP		4.6	2	● ◆	6.2	Knowledge impact	43.8	31
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$		92.6	4	●	6.2.1	Growth rate of PPP\$ GDP/worker, %	2.1	42
2.3.4	QS university ranking, average score top 3*		74.1	9	◊	6.2.2	New businesses/th pop. 15-64	2.6	43
INFRASTRUCTURE 61.6 15				CREATIVE OUTPUTS 44.1 17					
3.1	Information & communication technologies (ICTs)		94.0	1	● ◆	6.2.3	Computer software spending, % GDP	0.2	62
3.1.1	ICT access*		90.0	7	◊	6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	6.2	49
3.1.2	ICT use*		88.1	4	● ◆	6.2.5	High- & medium-high-tech manufactures, %	0.6	7
3.1.3	Government's online service*		97.9	4	● ◆	6.3	Knowledge diffusion	43.8	16
3.1.4	E-participation*		100.0	1	●	6.3.1	Intellectual property receipts, % total trade	1.1	18
3.2	General infrastructure		55.4	7	◊	6.3.2	High-tech net exports, % total trade	26.4	1
3.2.1	Electricity output, kWh/mn pop		10,910.4	11	◊	6.3.3	ICT services exports, % total trade	0.7	90
3.2.2	Logistics performance*		72.4	25	◊	6.3.4	FDI net outflows, % GDP	2.0	29
3.2.3	Gross capital formation, % GDP		31.2	18	◆	7.1	Intangible assets	65.8	3
3.3	Ecological sustainability		35.4	77	○ ◊	7.1.1	Trademarks by origin/bn PPP\$ GDP	89.1	23
3.3.1	GDP/unit of energy use		6.3	98	○	7.1.2	Industrial designs by origin/bn PPP\$ GDP	29.7	1
3.3.2	Environmental performance*		62.3	53	◊	7.1.3	ICTs & business model creation†	79.7	10
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP		2.6	38	◊	7.1.4	ICTs & organizational model creation†	64.0	32
MARKET SOPHISTICATION 64.3 11				CREATIVE GOODS & SERVICES 25.7 42					
4.1	Credit		67.6	15	◊	7.2	Creative goods & services	25.7	42
4.1.1	Ease of getting credit*		65.0	54	◊	7.2.1	Cultural & creative services exports, % total trade	0.4	54
4.1.2	Domestic credit to private sector, % GDP		144.8	11	◊	7.2.2	National feature films/mn pop. 15-69	8.7	22
4.1.3	Microfinance gross loans, % GDP		n/a	n/a	◊	7.2.3	Entertainment & Media market/th pop. 15-69	47.8	19
4.2	Investment		48.7	43	◊	7.2.4	Printing & other media, % manufacturing	0.3	98
4.2.1	Ease of protecting minority investors*		73.3	21	◊	7.2.5	Creative goods exports, % total trade	3.6	16
4.2.2	Market capitalization, % GDP		97.8	13	◊	7.3	Online creativity	19.0	37
4.2.3	Venture capital deals/bn PPP\$ GDP		0.0	39	◊	7.3.1	Generic top-level domains (TLDs)/th pop. 15-69	8.1	43
4.3	Trade, competition, & market scale		76.7	17	◊	7.3.2	Country-code TLDs/th pop. 15-69	9.6	41
4.3.1	Applied tariff rate, weighted avg., %		5.1	88	○ ◊	7.3.3	Wikipedia edits/mn pop. 15-69	17.7	51
4.3.2	Intensity of local competition†		83.9	4	◆	7.3.4	Mobile app creation/bn PPP\$ GDP	46.6	12
4.3.3	Domestic market scale, bn PPP\$		2,139.7	14	◊				

NOTES: ● indicates a strength; ○ a weakness; ◆ a strength relative to the other top 25-ranked GI I economies; ◊ a weakness relative to the other top 25-ranked GI I 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.