

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
16	8	High	SEAO	7.4	484.0	64,215.7	14
				Score/Value	Rank		
INSTITUTIONS				91.1	7		
1.1	Political environment		93.4	4			
1.1.1	Political and operational stability*.....		94.7	4			
1.1.2	Government effectiveness*.....		92.7	5			
1.2	Regulatory environment		98.0	3 ●			
1.2.1	Regulatory quality*.....		100.0	1 ●◆			
1.2.2	Rule of law*.....		91.8	12			
1.2.3	Cost of redundancy dismissal, salary weeks.....		8.0	1 ●			
1.3	Business environment		81.9	28			
1.3.1	Ease of starting a business*.....		98.2	5 ◆			
1.3.2	Ease of resolving insolvency*.....		65.7	41 ◇			
HUMAN CAPITAL & RESEARCH				46.1	28 ◇		
2.1	Education		53.6	48			
2.1.1	Expenditure on education, % GDP.....		3.3	96 ○◇			
2.1.2	Government funding/pupil, secondary, % GDP/cap... ..		22.2	40			
2.1.3	School life expectancy, years.....		16.5	21			
2.1.4	PISA scales in reading, maths, & science.....		532.6	2 ●◆			
2.1.5	Pupil-teacher ratio, secondary.....		11.5	43			
2.2	Tertiary education		50.0	15			
2.2.1	Tertiary enrolment, % gross.....		73.8	23			
2.2.2	Graduates in science & engineering, %.....		n/a	n/a			
2.2.3	Tertiary inbound mobility, %.....		11.4	16			
2.3	Research & development (R&D)		34.7	33 ◇			
2.3.1	Researchers, FTE/mn pop.....		3,411.7	27 ◇			
2.3.2	Gross expenditure on R&D, % GDP.....		0.8	43 ◇			
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*.....		80.1	7			
INFRASTRUCTURE				67.9	4 ◆		
3.1	Information & communication technologies (ICTs)		87.3	[18]			
3.1.1	ICT access*.....		91.4	4 ◆			
3.1.2	ICT use*.....		83.2	8			
3.1.3	Government's online service*.....		n/a	n/a			
3.1.4	E-participation*.....		n/a	n/a			
3.2	General infrastructure		44.1	34			
3.2.1	Electricity output, kWh/mn pop.....		5,205.2	41			
3.2.2	Logistics performance*.....		86.8	12			
3.2.3	Gross capital formation, % GDP.....		22.2	74 ○			
3.3	Ecological sustainability		72.2	2 ●◆			
3.3.1	GDP/unit of energy use.....		27.0	1 ●◆			
3.3.2	Environmental performance*.....		n/a	n/a			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		2.2	44			
MARKET SOPHISTICATION				77.3	3 ●◆		
4.1	Credit		87.5	2 ●◆			
4.1.1	Ease of getting credit*.....		75.0	29			
4.1.2	Domestic credit to private sector, % GDP...Ⓞ.....		203.8	1 ●◆			
4.1.3	Microfinance gross loans, % GDP.....		n/a	n/a			
4.2	Investment		67.7	11 ◆			
4.2.1	Ease of protecting minority investors*.....		78.3	10 ◆			
4.2.2	Market capitalization, % GDP.....		1,099.6	1 ●◆			
4.2.3	Venture capital deals/bn PPP\$ GDP.....		0.1	26			
4.3	Trade, competition, & market scale		76.8	16			
4.3.1	Applied tariff rate, weighted avg., %.....		0.0	1 ●◆			
4.3.2	Intensity of local competition*.....		85.6	2 ●◆			
4.3.3	Domestic market scale, bn PPP\$.....		484.0	41			
BUSINESS SOPHISTICATION				51.1	20		
5.1	Knowledge workers		51.9	35		◇	
5.1.1	Knowledge-intensive employment, %...Ⓞ.....		39.0	29		◇	
5.1.2	Firms offering formal training, % firms.....		n/a	n/a			
5.1.3	GERD performed by business, % GDP.....		0.4	43		◇	
5.1.4	GERD financed by business, %.....		50.0	26			
5.1.5	Females employed w/advanced degrees, %...Ⓞ.....		15.9	41		◇	
5.2	Innovation linkages		44.7	21			
5.2.1	University/industry research collaboration*.....		66.4	15			
5.2.2	State of cluster development*.....		72.6	6 ◆			
5.2.3	GERD financed by abroad, %.....		4.4	65 ○			
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP.....		0.2	4 ◆			
5.2.5	Patent families 2+ offices/bn PPP\$ GDP.....		1.1	25		◇	
5.3	Knowledge absorption		56.6	8			
5.3.1	Intellectual property payments, % total trade.....		0.3	76 ○◇			
5.3.2	High-tech imports, % total trade.....		49.8	1 ●◆			
5.3.3	ICT services imports, % total trade.....		0.3	112 ○◇			
5.3.4	FDI net inflows, % GDP.....		45.3	1 ●◆			
5.3.5	Research talent, % in business enterprise.....		37.3	34		◇	
KNOWLEDGE & TECHNOLOGY OUTPUTS				32.9	33		◇
6.1	Knowledge creation		21.5	[39]			
6.1.1	Patents by origin/bn PPP\$ GDP.....		0.7	70		◇	
6.1.2	PCT patents by origin/bn PPP\$ GDP.....		n/a	n/a			
6.1.3	Utility models by origin/bn PPP\$ GDP.....		1.1	22			
6.1.4	Scientific & technical articles/bn PPP\$ GDP.....		n/a	n/a			
6.1.5	Citable documents H-index.....		35.5	25			
6.2	Knowledge impact		50.1	14			
6.2.1	Growth rate of PPP\$ GDP/worker, %.....		2.1	41			
6.2.2	New businesses/th pop. 15-64.....		27.3	1 ●◆			
6.2.3	Computer software spending, % GDP.....		0.4	27			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....		5.7	55			
6.2.5	High- & medium-high-tech manufactures, %.....		0.1	82 ○◇			
6.3	Knowledge diffusion		27.0	36			
6.3.1	Intellectual property receipts, % total trade.....		0.1	52		◇	
6.3.2	High-tech net exports, % total trade...Ⓞ.....		0.1	104 ○◇			
6.3.3	ICT services exports, % total trade.....		0.4	103 ○◇			
6.3.4	FDI net outflows, % GDP.....		26.2	1 ●◆			
CREATIVE OUTPUTS				55.9	3 ●◆		
7.1	Intangible assets		50.2	35			
7.1.1	Trademarks by origin/bn PPP\$ GDP.....		64.8	31			
7.1.2	Industrial designs by origin/bn PPP\$ GDP.....		2.7	44			
7.1.3	ICTs & business model creation*.....		74.6	19			
7.1.4	ICTs & organizational model creation*.....		67.6	23		◇	
7.2	Creative goods & services		70.5	1 ●◆			
7.2.1	Cultural & creative services exports, % total trade.....		0.1	76 ○◇			
7.2.2	National feature films/mn pop. 15-69...Ⓞ.....		10.4	17			
7.2.3	Entertainment & Media market/th pop. 15-69.....		50.9	16			
7.2.4	Printing & other media, % manufacturing.....		4.8	1 ●◆			
7.2.5	Creative goods exports, % total trade.....		9.9	1 ●◆			
7.3	Online creativity		52.8	10			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....		71.9	8			
7.3.2	Country-code TLDs/th pop. 15-69.....		12.3	36		◇	
7.3.3	Wikipedia edits/mn pop. 15-69.....		84.1	11			
7.3.4	Mobile app creation/bn PPP\$ GDP.....		70.2	5		◆	

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.