

Output rank	Input rank	Income	Region	Efficiency ratio	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2017 rank
15	1 ●	High	SEAO	63 ○	5.7	513.7	93,905.5	7

	Score/Value	Rank
Institutions	94.7	1 ●◆
1.1 Political environment.....	100.0	1 ●◆
1.1.1 Political stability & safety*.....	100.0	1 ●◆
1.1.2 Government effectiveness*.....	100.0	1 ●◆
1.2 Regulatory environment.....	98.6	1 ●
1.2.1 Regulatory quality*.....	100.0	1 ●◆
1.2.2 Rule of law*.....	94.2	9
1.2.3 Cost of redundancy dismissal, salary weeks.....	8.0	1 ●
1.3 Business environment.....	85.4	19
1.3.1 Ease of starting a business*.....	96.5	6
1.3.2 Ease of resolving insolvency*.....	74.3	25
Human capital & research	73.3	1 ●◆
2.1 Education.....	54.3	42
2.1.1 Expenditure on education, % GDP [Ⓞ]	2.9	103 ○◇
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.....	551.6	1 ●◆
2.1.5 Pupil-teacher ratio, secondary [Ⓞ]	14.9	69 ○◇
2.2 Tertiary education.....	96.6	[1]
2.2.1 Tertiary enrolment, % gross.....	n/a	n/a
2.2.2 Graduates in science & engineering, %.....	n/a	n/a
2.2.3 Tertiary inbound mobility, % [Ⓞ]	19.2	5 ◆
2.3 Research & development (R&D).....	68.9	10
2.3.1 Researchers, FTE/mn pop. [Ⓞ]	6,729.7	5 ◆
2.3.2 Gross expenditure on R&D, % GDP [Ⓞ]	2.2	13
2.3.3 Global R&D companies, top 3, mn US\$.....	72.7	15
2.3.4 QS university ranking, average score top 3*.....	70.2	13
Infrastructure	65.8	5 ◆
3.1 Information & communication technologies (ICTs).....	87.3	8
3.1.1 ICT access*.....	86.1	12
3.1.2 ICT use*.....	74.5	22
3.1.3 Government's online service*.....	97.1	3 ●◆
3.1.4 E-participation*.....	91.5	8
3.2 General infrastructure.....	57.4	11
3.2.1 Electricity output, kWh/cap.....	9,100.2	17
3.2.2 Logistics performance*.....	96.2	5
3.2.3 Gross capital formation, % GDP.....	25.5	36
3.3 Ecological sustainability.....	52.7	18
3.3.1 GDP/unit of energy use.....	16.9	9 ◆
3.3.2 Environmental performance*.....	64.2	45 ○◇
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP.....	2.6	40
Market sophistication	72.4	4 ◆
4.1 Credit.....	66.2	13
4.1.1 Ease of getting credit*.....	75.0	26
4.1.2 Domestic credit to private sector, % GDP.....	132.9	15
4.1.3 Microfinance gross loans, % GDP.....	n/a	n/a
4.2 Investment.....	75.3	2 ●◆
4.2.1 Ease of protecting minority investors*.....	80.0	4 ◆
4.2.2 Market capitalization, % GDP.....	225.2	1 ●◆
4.2.3 Venture capital deals/bn PPP\$ GDP.....	0.1	14
4.3 Trade, competition, & market scale.....	75.6	17
4.3.1 Applied tariff rate, weighted mean, %.....	0.0	1 ●◆
4.3.2 Intensity of local competition*.....	78.6	15
4.3.3 Domestic market scale, bn PPP\$.....	513.7	38

	Score/Value	Rank
Business sophistication	65.1	2 ●◆
5.1 Knowledge workers.....	73.4	4
5.1.1 Knowledge-intensive employment, % [Ⓞ]	54.3	2 ●◆
5.1.2 Firms offering formal training, % firms.....	n/a	n/a
5.1.3 GERD performed by business, % GDP [Ⓞ]	1.3	15
5.1.4 GERD financed by business, % [Ⓞ]	54.1	16
5.1.5 Females employed w/advanced degrees, % [Ⓞ]	23.7	15
5.2 Innovation linkages.....	49.4	15
5.2.1 University/industry research collaboration*.....	71.3	8
5.2.2 State of cluster development*.....	69.6	9
5.2.3 GERD financed by abroad, % [Ⓞ]	6.8	53 ○
5.2.4 JV-strategic alliance deals/bn PPP\$ GDP.....	0.2	3 ●◆
5.2.5 Patent families 2+ offices/bn PPP\$ GDP.....	2.2	18
5.3 Knowledge absorption.....	72.4	2 ●◆
5.3.1 Intellectual property payments, % total trade.....	4.1	1 ●◆
5.3.2 High-tech net imports, % total trade.....	21.5	5 ◆
5.3.3 ICT services imports, % total trade.....	1.8	31
5.3.4 FDI net inflows, % GDP.....	22.8	1 ●◆
5.3.5 Research talent, % in business enterprise [Ⓞ]	50.5	22
Knowledge & technology outputs	51.3	11
6.1 Knowledge creation.....	31.9	30 ○
6.1.1 Patents by origin/bn PPP\$ GDP.....	3.3	32 ○
6.1.2 PCT patents by origin/bn PPP\$ GDP.....	1.7	20
6.1.3 Utility models by origin/bn PPP\$ GDP.....	n/a	n/a
6.1.4 Scientific & technical articles/bn PPP\$ GDP.....	18.9	27
6.1.5 Citable documents H index.....	35.6	24
6.2 Knowledge impact.....	52.6	13
6.2.1 Growth rate of PPP\$ GDP/worker, %.....	1.0	58 ○
6.2.2 New businesses/th pop. 15-64.....	8.6	16
6.2.3 Computer software spending, % GDP.....	0.3	35
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP.....	9.6	31
6.2.5 High- & medium-high-tech manufactures, %.....	0.7	1 ●◆
6.3 Knowledge diffusion.....	69.2	4 ◆
6.3.1 Intellectual property receipts, % total trade.....	1.1	17
6.3.2 High-tech net exports, % total trade.....	28.6	1 ●◆
6.3.3 ICT services exports, % total trade.....	1.4	69 ○
6.3.4 FDI net outflows, % GDP.....	11.9	1 ●◆
Creative outputs	39.6	35 ○
7.1 Intangible assets.....	48.1	44 ○
7.1.1 Trademarks by origin/bn PPP\$ GDP.....	19.7	88 ○◇
7.1.2 Industrial designs by origin/bn PPP\$ GDP.....	1.3	62 ○
7.1.3 ICTs & business model creation*.....	80.7	8
7.1.4 ICTs & organizational model creation*.....	75.9	11
7.2 Creative goods & services.....	39.4	19
7.2.1 Cultural & creative services exports, % total trade.....	n/a	n/a
7.2.2 National feature films/mn pop. 15-69.....	4.8	38 ○
7.2.3 Entertainment & Media market/th pop. 15-69.....	44.7	20
7.2.4 Printing & other media, % manufacturing.....	0.8	70 ○
7.2.5 Creative goods exports, % total trade.....	5.0	10 ◆
7.3 Online creativity.....	22.9	32 ○
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69.....	25.3	23
7.3.2 Country-code TLDs/th pop. 15-69.....	11.4	37 ○
7.3.3 Wikipedia edits/mn pop. 15-69.....	23.8	45 ○
7.3.4 Mobile app creation/bn PPP\$ GDP.....	39.0	17

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; * an index; † a survey question. Ⓞ indicates that the country'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; see page 215 of this appendix for details.