

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
<b>44</b>	<b>73</b>	<b>Lower middle</b>	<b>SEAO</b>	<b>3.1</b>	<b>43.2</b>	<b>13,446.5</b>	<b>53</b>
				Score/Value	Rank		
<b>INSTITUTIONS.....</b>				<b>59.8</b>	<b>76</b>		
<b>1.1</b>	<b>Political environment.....</b>		<b>52.5</b>	<b>73</b>			
1.1.1	Political and operational stability*.....		77.2	44	◆		
1.1.2	Government effectiveness*.....		40.2	86			
<b>1.2</b>	<b>Regulatory environment.....</b>		<b>68.8</b>	<b>58</b>	◆		
1.2.1	Regulatory quality*.....		38.8	77			
1.2.2	Rule of law*.....		38.4	80			
1.2.3	Cost of redundancy dismissal, salary weeks.....		8.7	19	●◆		
<b>1.3</b>	<b>Business environment.....</b>		<b>58.1</b>	<b>108</b>			
1.3.1	Ease of starting a business*.....		86.9	70			
1.3.2	Ease of resolving insolvency*.....		29.4	122	○◇		
<b>HUMAN CAPITAL &amp; RESEARCH.....</b>				<b>24.6</b>	<b>84</b>		
<b>2.1</b>	<b>Education.....</b>		<b>41.9</b>	<b>79</b>			
2.1.1	Expenditure on education, % GDP.....		4.1	76			
2.1.2	Government funding/pupil, secondary, % GDP/cap.Ⓞ		15.4	81			
2.1.3	School life expectancy, years.Ⓞ		14.6	61	◆		
2.1.4	PISA scales in reading, maths, & science.....		n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary.Ⓞ		14.5	65			
<b>2.2</b>	<b>Tertiary education.....</b>		<b>31.1</b>	<b>63</b>			
2.2.1	Tertiary enrolment, % gross.....		64.8	36	◆		
2.2.2	Graduates in science & engineering, %.....		21.6	53			
2.2.3	Tertiary inbound mobility, %.....		1.0	87			
<b>2.3</b>	<b>Research &amp; development (R&amp;D).....</b>		<b>0.9</b>	<b>108</b>			
2.3.1	Researchers, FTE/mn pop.....		n/a	n/a			
2.3.2	Gross expenditure on R&D, % GDP.....		0.1	99			
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*.....		0.0	78	○◇		
<b>INFRASTRUCTURE.....</b>				<b>41.0</b>	<b>84</b>		
<b>3.1</b>	<b>Information &amp; communication technologies (ICTs).....</b>		<b>55.6</b>	<b>84</b>			
3.1.1	ICT access*.....		49.1	89			
3.1.2	ICT use*.....		40.0	88			
3.1.3	Government's online service*.....		59.7	91			
3.1.4	E-participation*.....		73.6	63			
<b>3.2</b>	<b>General infrastructure.....</b>		<b>36.8</b>	<b>57</b>			
3.2.1	Electricity output, kWh/mn pop.....		1,870.3	79			
3.2.2	Logistics performance*.....		14.5	114	○◇		
3.2.3	Gross capital formation, % GDP.....		34.8	12	●◆		
<b>3.3</b>	<b>Ecological sustainability.....</b>		<b>30.6</b>	<b>90</b>			
3.3.1	GDP/unit of energy use.....		6.8	89			
3.3.2	Environmental performance*.....		57.5	72			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.1	122	○		
<b>MARKET SOPHISTICATION.....</b>				<b>62.2</b>	<b>13</b>	●◆	
<b>4.1</b>	<b>Credit.....</b>		<b>68.0</b>	<b>14</b>	●◆		
4.1.1	Ease of getting credit*.....		80.0	20			
4.1.2	Domestic credit to private sector, % GDP.....		53.0	61			
4.1.3	Microfinance gross loans, % GDP.....		18.5	1	●◆		
<b>4.2</b>	<b>Investment.....</b>		<b>68.3</b>	<b>[9]</b>			
4.2.1	Ease of protecting minority investors*.....		68.3	30			
4.2.2	Market capitalization, % GDP.....		n/a	n/a			
4.2.3	Venture capital deals/bn PPP\$ GDP.....		n/a	n/a			
<b>4.3</b>	<b>Trade, competition, &amp; market scale.....</b>		<b>50.4</b>	<b>106</b>			
4.3.1	Applied tariff rate, weighted avg., %.....		5.5	91			
4.3.2	Intensity of local competition*.....		61.9	98			
4.3.3	Domestic market scale, bn PPP\$.....		43.2	101	◇		
<b>BUSINESS SOPHISTICATION.....</b>				<b>23.5</b>	<b>108</b>		
<b>5.1</b>	<b>Knowledge workers.....</b>		<b>42.4</b>	<b>49</b>	◆		
5.1.1	Knowledge-intensive employment, %.....		23.7	61			
5.1.2	Firms offering formal training, % firms.....		60.9	7	●◆		
5.1.3	GERD performed by business, % GDP.....		0.0	86	○		
5.1.4	GERD financed by business, %.....		4.6	82			
5.1.5	Females employed w/advanced degrees, %.....		18.5	27	◆		
<b>5.2</b>	<b>Innovation linkages.....</b>		<b>13.8</b>	<b>123</b>	○		
5.2.1	University/industry research collaboration*.....		26.6	119	○		
5.2.2	State of cluster development*.....		30.2	120	○◇		
5.2.3	GERD financed by abroad, %.....		2.1	76			
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP.....		n/a	n/a			
5.2.5	Patent families 2+ offices/bn PPP\$ GDP.....		0.1	65			
<b>5.3</b>	<b>Knowledge absorption.....</b>		<b>14.4</b>	<b>129</b>	○◇		
5.3.1	Intellectual property payments, % total trade.....		0.3	75			
5.3.2	High-tech imports, % total trade.....		4.3	114			
5.3.3	ICT services imports, % total trade.....		1.1	66			
5.3.4	FDI net inflows, % GDP.....		-7.8	128	○◇		
5.3.5	Research talent, % in business enterprise.....		n/a	n/a			
<b>KNOWLEDGE &amp; TECHNOLOGY OUTPUTS....</b>				<b>17.2</b>	<b>86</b>		
<b>6.1</b>	<b>Knowledge creation.....</b>		<b>34.0</b>	<b>26</b>	●◆		
6.1.1	Patents by origin/bn PPP\$ GDP.....		3.1	31	◆		
6.1.2	PCT patents by origin/bn PPP\$ GDP.....		0.0	75			
6.1.3	Utility models by origin/bn PPP\$ GDP.....		6.4	1	●◆		
6.1.4	Scientific & technical articles/bn PPP\$ GDP.....		4.4	87			
6.1.5	Citable documents H-index.....		3.7	106			
<b>6.2</b>	<b>Knowledge impact.....</b>		<b>10.6</b>	<b>115</b>	◇		
6.2.1	Growth rate of PPP\$ GDP/worker, %.....		n/a	n/a			
6.2.2	New businesses/th pop. 15-64.Ⓞ		6.3	23	●◆		
6.2.3	Computer software spending, % GDP.....		0.1	81			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....		0.8	114			
6.2.5	High- & medium-high-tech manufactures, %.....		0.1	92			
<b>6.3</b>	<b>Knowledge diffusion.....</b>		<b>7.2</b>	<b>120</b>	○		
6.3.1	Intellectual property receipts, % total trade.....		0.0	73			
6.3.2	High-tech net exports, % total trade.....		0.1	118			
6.3.3	ICT services exports, % total trade.....		0.4	106			
6.3.4	FDI net outflows, % GDP.....		0.2	86			
<b>CREATIVE OUTPUTS.....</b>				<b>43.5</b>	<b>18</b>	●◆	
<b>7.1</b>	<b>Intangible assets.....</b>		<b>68.5</b>	<b>2</b>	●◆		
7.1.1	Trademarks by origin/bn PPP\$ GDP.....		229.1	2	●◆		
7.1.2	Industrial designs by origin/bn PPP\$ GDP.....		17.9	4	●◆		
7.1.3	ICTs & business model creation*.....		51.3	101			
7.1.4	ICTs & organizational model creation*.....		42.8	101			
<b>7.2</b>	<b>Creative goods &amp; services.....</b>		<b>33.4</b>	<b>19</b>	●◆		
7.2.1	Cultural & creative services exports, % total trade.....		0.2	73			
7.2.2	National feature films/mn pop. 15-69.....		26.3	1	●◆		
7.2.3	Entertainment & Media market/th pop. 15-69.....		n/a	n/a			
7.2.4	Printing & other media, % manufacturing.....		2.4	11	●◆		
7.2.5	Creative goods exports, % total trade.....		0.0	125	○		
<b>7.3</b>	<b>Online creativity.....</b>		<b>3.4</b>	<b>75</b>			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69.....		0.6	101			
7.3.2	Country-code TLDs/th pop. 15-69.....		2.2	65	◆		
7.3.3	Wikipedia edits/mn pop. 15-69.Ⓞ		15.7	58			
7.3.4	Mobile app creation/bn PPP\$ GDP.....		0.1	83			

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.