

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
119	93	Low	CSA	29.6	86.1	2,904.9	108
				Score/Value	Rank		
<b>INSTITUTIONS</b>				49.8	110		
1.1	<b>Political environment</b>		35.5	120			
1.1.1	Political and operational stability*		56.1	105			
1.1.2	Government effectiveness*		25.2	119			
1.2	<b>Regulatory environment</b>		48.2	114			
1.2.1	Regulatory quality*		22.7	111			
1.2.2	Rule of law*		28.5	104			
1.2.3	Cost of redundancy dismissal, salary weeks		27.2	105	◇		
1.3	<b>Business environment</b>		65.8	79			
1.3.1	Ease of starting a business*		84.4	82			
1.3.2	Ease of resolving insolvency*		47.2	75	◆		
<b>HUMAN CAPITAL &amp; RESEARCH</b>				12.9	115		
2.1	<b>Education</b>		32.3	104			
2.1.1	Expenditure on education, % GDP		5.1	45	●		
2.1.2	Government funding/pupil, secondary, % GDP/cap...		11.0	91			
2.1.3	School life expectancy, years		12.2	90	◆		
2.1.4	PISA scales in reading, maths, & science		n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary		28.8	105			
2.2	<b>Tertiary education</b>		4.4	121	○		
2.2.1	Tertiary enrolment, % gross		11.8	103			
2.2.2	Graduates in science & engineering, %		n/a	n/a			
2.2.3	Tertiary inbound mobility, %		0.0	111	○ ◇		
2.3	<b>Research &amp; development (R&amp;D)</b>		2.1	92			
2.3.1	Researchers, FTE/mn pop.		n/a	n/a			
2.3.2	Gross expenditure on R&D, % GDP		0.3	77			
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>				42.2	80	◆	
3.1	<b>Information &amp; communication technologies (ICTs)</b>		53.6	89	◆		
3.1.1	ICT access*		42.0	101	◆		
3.1.2	ICT use*		25.5	100	◆		
3.1.3	Government's online service*		68.8	72	◆		
3.1.4	E-participation*		78.1	55	● ◆		
3.2	<b>General infrastructure</b>		55.4	9	● ◆		
3.2.1	Electricity output, kWh/mn pop.		146.4	116	○		
3.2.2	Logistics performance*		21.0	105			
3.2.3	Gross capital formation, % GDP		51.8	1	● ◆		
3.3	<b>Ecological sustainability</b>		17.6	129	○ ◇		
3.3.1	GDP/unit of energy use		5.1	107			
3.3.2	Environmental performance*		31.4	124	○ ◇		
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		0.3	107			
<b>MARKET SOPHISTICATION</b>				45.9	72	◆	
4.1	<b>Credit</b>		34.3	70			
4.1.1	Ease of getting credit*		50.0	87			
4.1.2	Domestic credit to private sector, % GDP		79.8	36	● ◆		
4.1.3	Microfinance gross loans, % GDP		0.9	20	●		
4.2	<b>Investment</b>		58.3	[22]			
4.2.1	Ease of protecting minority investors*		58.3	68	◆		
4.2.2	Market capitalization, % GDP		n/a	n/a			
4.2.3	Venture capital deals/bn PPP\$ GDP		n/a	n/a			
4.3	<b>Trade, competition, &amp; market scale</b>		45.0	118			
4.3.1	Applied tariff rate, weighted avg., %		12.4	124	○		
4.3.2	Intensity of local competition*		63.1	91			
4.3.3	Domestic market scale, bn PPP\$		86.1	85			
<b>BUSINESS SOPHISTICATION</b>				32.8	54	◆	
5.1	<b>Knowledge workers</b>		37.6	[60]			
5.1.1	Knowledge-intensive employment, %		n/a	n/a			
5.1.2	Firms offering formal training, % firms		31.9	49	●		
5.1.3	GERD performed by business, % GDP		n/a	n/a			
5.1.4	GERD financed by business, %		n/a	n/a			
5.1.5	Females employed w/advanced degrees, %		n/a	n/a			
5.2	<b>Innovation linkages</b>		29.6	[49]			
5.2.1	University/industry research collaboration*		30.1	105			
5.2.2	State of cluster development*		38.0	96			
5.2.3	GERD financed by abroad, %		n/a	n/a			
5.2.4	JV-strategic alliance deals/bn PPP\$ GDP		0.0	54	●		
5.2.5	Patent families 2+ offices/bn PPP\$ GDP		n/a	n/a			
5.3	<b>Knowledge absorption</b>		31.1	[80]			
5.3.1	Intellectual property payments, % total trade		n/a	n/a			
5.3.2	High-tech imports, % total trade		11.5	21	●		
5.3.3	ICT services imports, % total trade		0.2	121	○ ◇		
5.3.4	FDI net inflows, % GDP		0.5	119			
5.3.5	Research talent, % in business enterprise		n/a	n/a			
<b>KNOWLEDGE &amp; TECHNOLOGY OUTPUTS</b>				10.4	[118]		
6.1	<b>Knowledge creation</b>		7.3	[81]			
6.1.1	Patents by origin/bn PPP\$ GDP		0.3	89			
6.1.2	PCT patents by origin/bn PPP\$ GDP		n/a	n/a			
6.1.3	Utility models by origin/bn PPP\$ GDP		n/a	n/a			
6.1.4	Scientific & technical articles/bn PPP\$ GDP		5.7	73			
6.1.5	Citable documents H-index		6.3	87			
6.2	<b>Knowledge impact</b>		3.7	125	○ ◇		
6.2.1	Growth rate of PPP\$ GDP/worker, %		n/a	n/a			
6.2.2	New businesses/th pop. 15-64		1.0	72			
6.2.3	Computer software spending, % GDP		0.0	119	○		
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP		0.9	109			
6.2.5	High- & medium-high-tech manufactures, %		0.1	90			
6.3	<b>Knowledge diffusion</b>		20.3	[49]			
6.3.1	Intellectual property receipts, % total trade		n/a	n/a			
6.3.2	High-tech net exports, % total trade		0.1	111			
6.3.3	ICT services exports, % total trade		4.2	17	● ◆		
6.3.4	FDI net outflows, % GDP		n/a	n/a			
<b>CREATIVE OUTPUTS</b>				15.5	112		
7.1	<b>Intangible assets</b>		28.3	110			
7.1.1	Trademarks by origin/bn PPP\$ GDP		50.6	47	● ◆		
7.1.2	Industrial designs by origin/bn PPP\$ GDP		0.2	104			
7.1.3	ICTs & business model creation*		40.4	120	○		
7.1.4	ICTs & organizational model creation*		37.9	117	○		
7.2	<b>Creative goods &amp; services</b>		4.0	[106]			
7.2.1	Cultural & creative services exports, % total trade		n/a	n/a			
7.2.2	National feature films/mn pop. 15-69		n/a	n/a			
7.2.3	Entertainment & Media market/th pop. 15-69		n/a	n/a			
7.2.4	Printing & other media, % manufacturing		0.4	95	◇		
7.2.5	Creative goods exports, % total trade		0.2	80	◆		
7.3	<b>Online creativity</b>		1.7	89	◆		
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69		0.5	110			
7.3.2	Country-code TLDs/th pop. 15-69		0.9	82			
7.3.3	Wikipedia edits/mn pop. 15-69		6.1	73	◆		
7.3.4	Mobile app creation/bn PPP\$ GDP		1.2	65	◆		

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.