

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2018 rank
2	11	High	EUR	17.1	972.5	56,383.2	2
				Score/Value	Rank		
INSTITUTIONS				90.9	8		
1.1	Political environment		91.4	8	5.1	Knowledge workers	
1.1.1	Political and operational stability*.....		91.2	12	5.1.1	Knowledge-intensive employment, %.....	
1.1.2	Government effectiveness*.....		91.4	7	5.1.2	Firms offering formal training, % firms.....	
1.2	Regulatory environment		91.9	14	5.1.3	GERD performed by business, % GDP.....	
1.2.1	Regulatory quality*.....		96.9	4 ●	5.1.4	GERD financed by business, %.....	
1.2.2	Rule of law*.....		94.8	7	5.1.5	Females employed w/advanced degrees, %.....	
1.2.3	Cost of redundancy dismissal, salary weeks.....		15.8	65 ○	5.2	Innovation linkages	
1.3	Business environment		89.3	7	5.2.1	University/industry research collaboration*.....	
1.3.1	Ease of starting a business*.....		94.3	19	5.2.2	State of cluster development*.....	
1.3.2	Ease of resolving insolvency*.....		84.3	7	5.2.3	GERD financed by abroad, %.....	
				Score/Value	Rank		
BUSINESS SOPHISTICATION				63.7	6		
2.1	Education		60.1	23	5.3	Knowledge absorption	
2.1.1	Expenditure on education, % GDP.....		5.4	29	5.3.1	Intellectual property payments, % total trade.....	
2.1.2	Government funding/pupil, secondary, % GDP/cap... ..		22.9	36	5.3.2	High-tech imports, % total trade.....	
2.1.3	School life expectancy, years.....		18.0	11	5.3.3	ICT services imports, % total trade.....	
2.1.4	PISA scales in reading, maths, & science.....		507.9	12	5.3.4	FDI net inflows, % GDP.....	
2.1.5	Pupil-teacher ratio, secondary.....		14.4	64 ○	5.3.5	Research talent, % in business enterprise.....	
2.2	Tertiary education		32.8	59 ○	5.3	Knowledge absorption	
2.2.1	Tertiary enrolment, % gross.....		80.4	19	5.3.1	Intellectual property payments, % total trade.....	
2.2.2	Graduates in science & engineering, %.....		14.1	91 ○ ◇	5.3.2	High-tech imports, % total trade.....	
2.2.3	Tertiary inbound mobility, %.....		10.7	18	5.3.3	ICT services imports, % total trade.....	
2.3	Research & development (R&D)		64.4	12	5.3.4	FDI net inflows, % GDP.....	
2.3.1	Researchers, FTE/mn pop.....		5,007.1	13	5.3.5	Research talent, % in business enterprise.....	
2.3.2	Gross expenditure on R&D, % GDP.....		2.0	17			
2.3.3	Global R&D companies, avg. exp. top 3, mn US\$.....		85.4	9			
2.3.4	QS university ranking, average score top 3*.....		68.1	13			
				Score/Value	Rank		
HUMAN CAPITAL & RESEARCH				52.4	17		
				Score/Value	Rank		
INFRASTRUCTURE				61.8	14		
3.1	Information & communication technologies (ICTs)		91.1	4 ●	6.1	Knowledge creation	
3.1.1	ICT access*.....		87.5	8	6.1.1	Patents by origin/bn PPP\$ GDP.....	
3.1.2	ICT use*.....		84.8	7	6.1.2	PCT patents by origin/bn PPP\$ GDP.....	
3.1.3	Government's online service*.....		93.1	17	6.1.3	Utility models by origin/bn PPP\$ GDP.....	
3.1.4	E-participation*.....		98.9	4 ●	6.1.4	Scientific & technical articles/bn PPP\$ GDP.....	
3.2	General infrastructure		45.7	31	6.1.5	Citable documents H-index.....	
3.2.1	Electricity output, kWh/mn pop.....		6,805.9	31	6.2	Knowledge impact	
3.2.2	Logistics performance*.....		91.5	6	6.2.1	Growth rate of PPP\$ GDP/worker, %.....	
3.2.3	Gross capital formation, % GDP.....		21.3	85 ○	6.2.2	New businesses/th pop. 15-64.....	
3.3	Ecological sustainability		48.5	36	6.2.3	Computer software spending, % GDP.....	
3.3.1	GDP/unit of energy use.....		10.9	42	6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP.....	
3.3.2	Environmental performance*.....		75.5	18	6.2.5	High- & medium-high-tech manufactures, %.....	
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP..		3.0	33	6.3	Knowledge diffusion	
				Score/Value	Rank		
MARKET SOPHISTICATION				58.2	23		
4.1	Credit		49.3	32	7.1	Intangible assets	
4.1.1	Ease of getting credit*.....		45.0	94 ○ ◇	7.1.1	Trademarks by origin/bn PPP\$ GDP.....	
4.1.2	Domestic credit to private sector, % GDP.....		111.9	20	7.1.2	Industrial designs by origin/bn PPP\$ GDP.....	
4.1.3	Microfinance gross loans, % GDP.....		n/a	n/a	7.1.3	ICTs & business model creation*.....	
4.2	Investment		48.8	42	7.1.4	ICTs & organizational model creation*.....	
4.2.1	Ease of protecting minority investors*.....		58.3	68 ○	7.2	Creative goods & services	
4.2.2	Market capitalization, % GDP.....		111.0	9	7.2.1	Cultural & creative services exports, % total trade.....	
4.2.3	Venture capital deals/bn PPP\$ GDP.....		0.1	15	7.2.2	National feature films/mn pop. 15-69.....	
4.3	Trade, competition, & market scale		76.5	18	7.2.3	Entertainment & Media market/th pop. 15-69.....	
4.3.1	Applied tariff rate, weighted avg., %.....		1.8	23 ○	7.2.4	Printing & other media, % manufacturing.....	
4.3.2	Intensity of local competition*.....		80.5	5 ●	7.2.5	Creative goods exports, % total trade.....	
4.3.3	Domestic market scale, bn PPP\$.....		972.5	26	7.3	Online creativity	

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.