

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$	GII 2020 rank									
1	4	High	EUR	8.7	590.9	68,340	1									
				Score/ Value Rank				Score/ Value Rank								
	Institutions			87.3	13			Business sophistication	62.6	4	◆					
1.1 Political environment				92.4	3	◆	5.1 Knowledge workers				71.4	5				
1.1.1 Political and operational stability*				89.3	6		5.1.1 Knowledge-intensive employment, %				51.0	6				
1.1.2 Government effectiveness*				94.0	2	◆	5.1.2 Firms offering formal training, %				n/a	n/a				
1.2 Regulatory environment				93.9	7		5.1.3 GERD performed by business, % GDP				⌚	2.3	6			
1.2.1 Regulatory quality*				87.0	12		5.1.4 GERD financed by business, %				⌚	68.6	6	◆		
1.2.2 Rule of law*				97.0	3	●	5.1.5 Females employed w/advanced degrees, %				20.0	31				
1.2.3 Cost of redundancy dismissal				10.1	31		5.2 Innovation linkages				63.9	4				
1.3 Business environment				75.5	47	◇	5.2.1 University-industry R&D collaboration†				77.1	2	◆			
1.3.1 Ease of starting a business*				88.4	66	○	5.2.2 State of cluster development and depth†				70.6	4	◆			
1.3.2 Ease of resolving insolvency*				62.6	44	◇	5.2.3 GERD financed by abroad, % GDP				⌚	0.2	26			
							5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP				0.2	12				
							5.2.5 Patent families/bn PPP\$ GDP				8.5	1	◆			
				Human capital and research			60.7	6	5.3 Knowledge absorption				52.4	11		
2.1 Education				61.3	24		5.3.1 Intellectual property payments, % total trade				3.1	6	◆			
2.1.1 Expenditure on education, % GDP				5.1	34		5.3.2 High-tech imports, % total trade				6.2	93	○			
2.1.2 Government funding/pupil, secondary, % GDP/cap				24.7	17		5.3.3 ICT services imports, % total trade				3.7	4	◆			
2.1.3 School life expectancy, years				16.4	27		5.3.4 FDI net inflows, % GDP				1.9	81	○			
2.1.4 PISA scales in reading, maths and science				498.2	21		5.3.5 Research talent, % in businesses				⌚	49.7	25			
2.1.5 Pupil-teacher ratio, secondary				⌚	9.7	25										
2.2 Tertiary education				45.1	21						Knowledge and technology outputs			63.9	1	◆
2.2.1 Tertiary enrolment, % gross				61.4	49		6.1 Knowledge creation				86.6	1	◆			
2.2.2 Graduates in science and engineering, %				25.2	38		6.1.1 Patents by origin/bn PPP\$ GDP				15.6	1	◆			
2.2.3 Tertiary inbound mobility, %				17.7	9		6.1.2 PCT patents by origin/bn PPP\$ GDP				8.3	1	◆			
2.3 Research and development (R&D)				75.8	3	◆	6.1.3 Utility models by origin/bn PPP\$ GDP				n/a	n/a				
2.3.1 Researchers, FTE/mn pop.				⌚	5,450.5	11	6.1.4 Scientific and technical articles/bn PPP\$ GDP				56.6	3	◆			
2.3.2 Gross expenditure on R&D, % GDP				⌚	3.2	6	6.1.5 Citable documents H-index				66.1	10				
2.3.3 Global corporate R&D investors, top 3, mn US\$				90.0	6		6.2 Knowledge impact				55.4	2	◆			
2.3.4 QS university ranking, top 3*				83.9	4		6.2.1 Labor productivity growth, %				-0.1	67	○			
							6.2.2 New businesses/th pop. 15–64				4.5	33				
							6.2.3 Software spending, % GDP				0.7	2	◆			
							6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP				12.7	23				
							6.2.5 High-tech manufacturing, %				68.5	2	◆			
				Infrastructure			62.7	2	◆	6.3 Knowledge diffusion				49.7	12	
3.1 Information and communication technologies (ICTs)				87.8	15		6.3.1 Intellectual property receipts, % total trade				5.9	1	◆			
3.1.1 ICT access*				87.2	15		6.3.2 Production and export complexity				94.0	2	◆			
3.1.2 ICT use*				90.4	1	◆	6.3.3 High-tech exports, % total trade				7.2	25				
3.1.3 Government's online service*				82.9	36		6.3.4 ICT services exports, % total trade				2.6	43				
3.1.4 E-participation*				90.5	18											
3.2 General infrastructure				42.1	24						Creative outputs			60.2	2	◆
3.2.1 Electricity output, GWh/mn pop.				8,222.5	20		7.1 Intangible assets				63.4	5	◆			
3.2.2 Logistics performance*				86.1	13		7.1.1 Trademarks by origin/bn PPP\$ GDP				66.2	29				
3.2.3 Gross capital formation, % GDP				22.0	67	○	7.1.2 Global brand value, top 5,000, % GDP				236.0	2	◆			
3.3 Ecological sustainability				58.1	2	◆	7.1.3 Industrial designs by origin/bn PPP\$ GDP				5.4	23				
3.3.1 GDP/unit of energy use				23.4	6	◆	7.1.4 ICTs and organizational model creation†				77.4	9				
3.3.2 Environmental performance*				81.5	3	●	7.2 Creative goods and services				47.5	3	◆			
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP				3.7	24		7.2.1 Cultural and creative services exports, % total trade				0.6	39				
							7.2.2 National feature films/mn pop. 15–69				19.4	6	◆			
							7.2.3 Entertainment and media market/th pop. 15–69				97.4	2	◆			
							7.2.4 Printing and other media, % manufacturing				⌚	1.1	41	○		
							7.2.5 Creative goods exports, % total trade				3.7	13				
				Market sophistication			71.5	6	7.3 Online creativity				66.3	4		
4.1 Credit				69.2	7		7.3.1 Generic top-level domains (TLDs)/th pop. 15–69				59.2	11				
4.1.1 Ease of getting credit*				65.0	61	○	7.3.2 Country-code TLDs/th pop. 15–69				100.0	1	◆			
4.1.2 Domestic credit to private sector, % GDP				⌚	174.6	4	◆	7.3.3 Wikipedia edits/mn pop. 15–69				76.6	16			
4.1.3 Microfinance gross loans, % GDP				n/a	n/a		7.3.4 Mobile app creation/bn PPP\$ GDP				25.8	22				
4.2 Investment				70.6	10											
4.2.1 Ease of protecting minority investors*				50.0	92	○	◇									
4.2.2 Market capitalization, % GDP				237.8	3	◆										
4.2.3 Venture capital investors, deals/bn PPP\$ GDP				0.4	7	◆										
4.2.4 Venture capital recipients, deals/bn PPP\$ GDP				0.1	8											
4.3 Trade, diversification, and market scale				74.6	46											
4.3.1 Applied tariff rate, weighted avg., %				6.1	95	○	◇									
4.3.2 Domestic industry diversification				90.5	49	○										
4.3.3 Domestic market scale, bn PPP\$				590.9	34											

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 appendices 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.