



# Global Innovation Index 2021



## CYPRUS

**28th**

Cyprus ranks 28th among the 132 economies featured in the GII 2021.

The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

The following table shows the rankings of Cyprus over the past three years, noting that data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Cyprus in the GII 2021 is between ranks 25 and 28.

### Rankings for Cyprus (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	28	31	21
2020	29	30	26
2019	28	28	23

- Cyprus performs better in innovation outputs than innovation inputs in 2021.
- This year Cyprus ranks 31st in innovation inputs, lower than both 2020 and 2019.
- As for innovation outputs, Cyprus ranks 21st. This position is higher than both 2020 and 2019.

**27th**

Cyprus ranks 27th among the 51 high-income group economies.

**2nd**

Cyprus ranks 2nd among the 19 economies in Northern Africa and Western Asia.

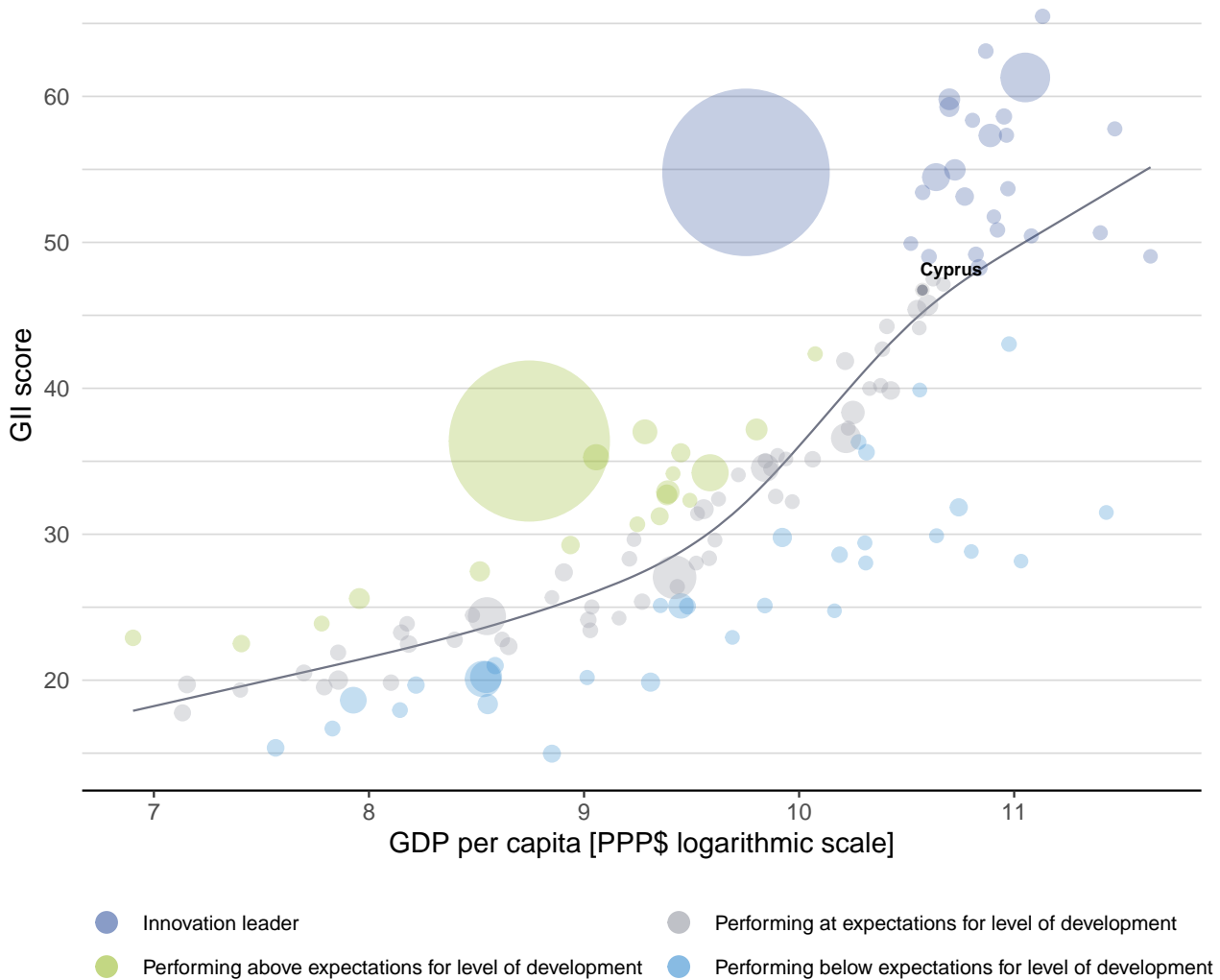


## EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.

Relative to GDP, Cyprus's performance is at expectations for its level of development.

### The positive relationship between innovation and development



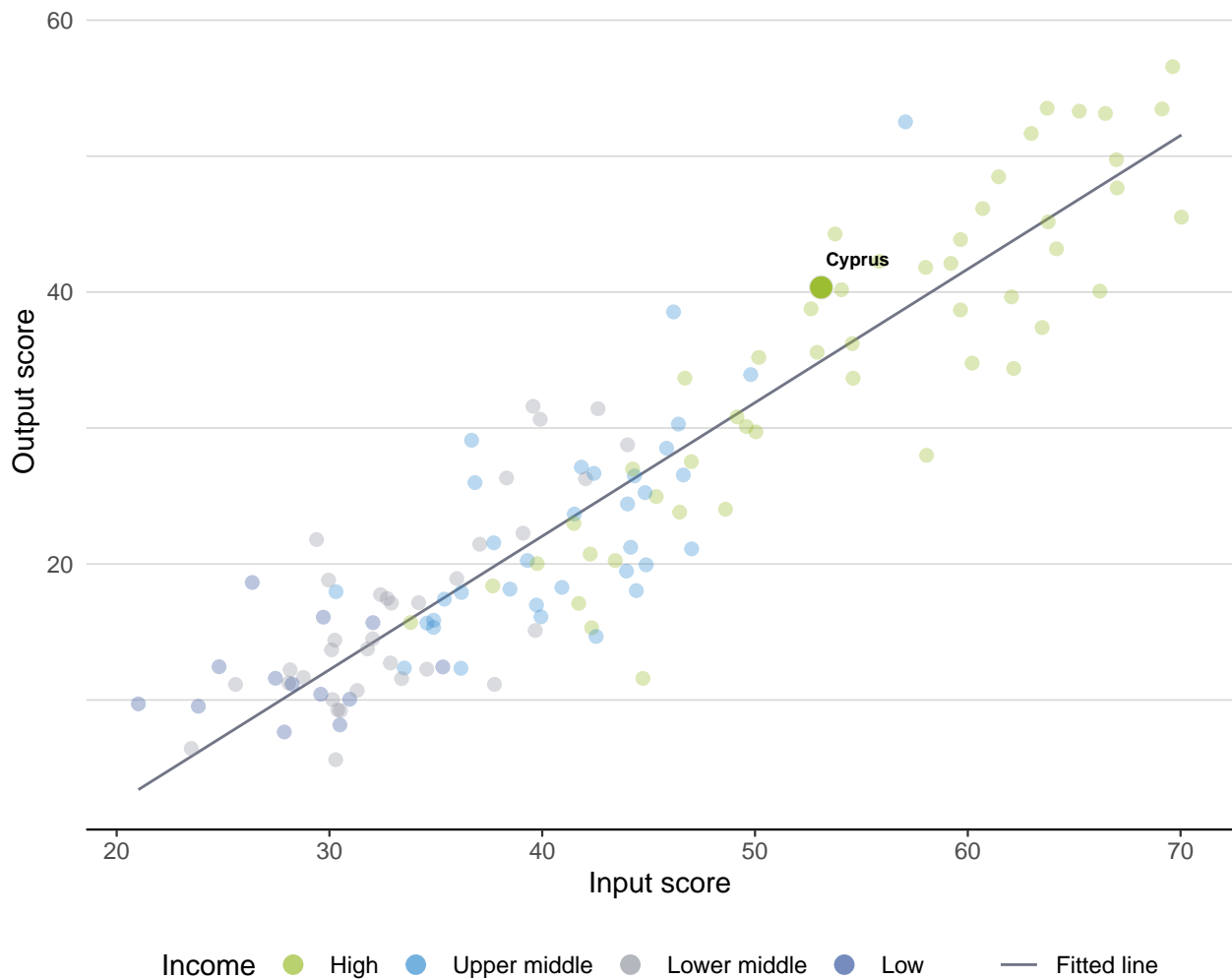


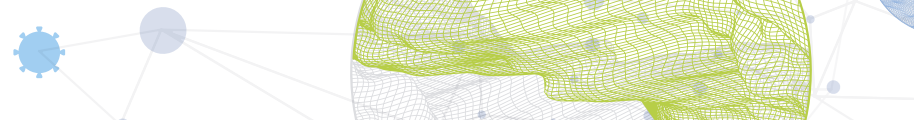
## EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

Cyprus produces more innovation outputs relative to its level of innovation investments.

### Innovation input to output performance





## BENCHMARKING AGAINST OTHER HIGH-INCOME GROUP ECONOMIES AND NORTHERN AFRICA AND WESTERN ASIA

### The seven GII pillar scores for Cyprus

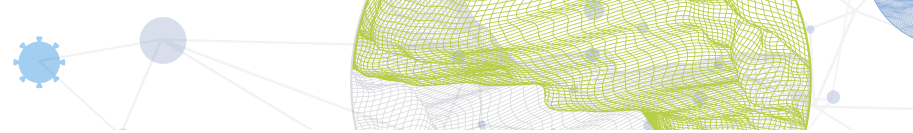


#### High-income group economies

Cyprus performs above the high-income group average in five pillars, namely: Institutions; Infrastructure; Business sophistication; Knowledge and technology outputs; and, Creative outputs.

#### Northern Africa and Western Asia

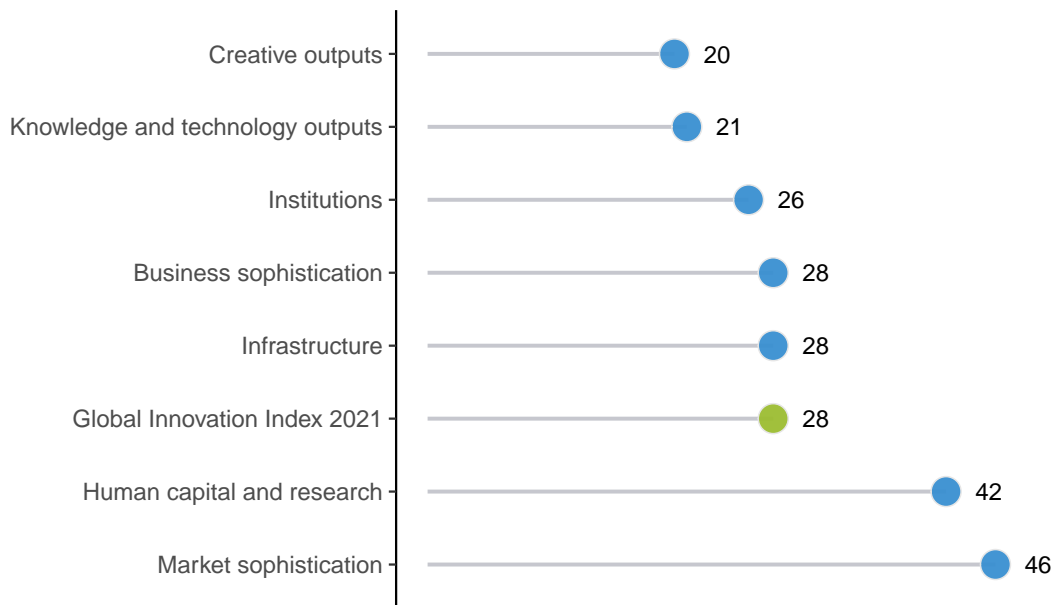
Cyprus performs above the regional average in all GII pillars.



## OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Cyprus performs best in Creative outputs and its weakest performance is in Market sophistication.

### The seven GII pillar ranks for Cyprus



Note: The highest possible ranking in each pillar is one.










## INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of Cyprus in the GII 2021.

### Strengths and weaknesses for Cyprus

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.2.3	Cost of redundancy dismissal	1	2.2.2	Graduates in science and engineering, %	98
2.1.2	Government funding/pupil, secondary, % GDP/cap	3	2.3.3	Global corporate R&D investors, top 3, mn US\$	41
2.2.3	Tertiary inbound mobility, %	5	2.3.4	QS university ranking, top 3	74
5.3.3	ICT services imports, % total trade	1	3.2.3	Gross capital formation, % GDP	109
5.3.4	FDI net inflows, % GDP	1	4.2.2	Market capitalization, % GDP	64
6.1.4	Scientific and technical articles/bn PPP\$ GDP	8	4.3.3	Domestic market scale, bn PPP\$	117
6.2.2	New businesses/th pop. 15–64	5	5.3.2	High-tech imports, % total trade	120
6.3.4	ICT services exports, % total trade	1	6.2.1	Labor productivity growth, %	95
7.1.3	Industrial designs by origin/bn PPP\$ GDP	7	7.1.2	Global brand value, top 5,000, % GDP	80
7.3	Online creativity	8	7.1.4	ICTs and organizational model creation	93
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	8			
7.3.4	Mobile app creation/bn PPP\$ GDP	1			

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$	GII 2020 rank
21	31	High	NAWA	1.2	34.6	39,079	29

	Score/Value	Rank		Score/Value	Rank
 <b>Institutions</b>	80.4	26	 <b>Business sophistication</b>	42.6	28
<b>1.1 Political environment</b>	74.7	33	<b>5.1 Knowledge workers</b>	42.2	40
1.1.1 Political and operational stability*	78.6	34	5.1.1 Knowledge-intensive employment, %	35.5	38
1.1.2 Government effectiveness*	72.7	34	5.1.2 Firms offering formal training, %	39.7	30
<b>1.2 Regulatory environment</b>	84.2	22	5.1.3 GERD performed by business, % GDP	0.3	50
1.2.1 Regulatory quality*	70.0	32	5.1.4 GERD financed by business, %	34.8	55
1.2.2 Rule of law*	66.7	35	5.1.5 Females employed w/advanced degrees, %	25.5	13
1.2.3 Cost of redundancy dismissal	8.0	1 ◆◆	<b>5.2 Innovation linkages</b>	39.9	25
<b>1.3 Business environment</b>	82.3	26	5.2.1 University-industry R&D collaboration†	43.9	59
1.3.1 Ease of starting a business*	92.0	45	5.2.2 State of cluster development and depth†	49.1	54
1.3.2 Ease of resolving insolvency*	72.5	29	5.2.3 GERD financed by abroad, % GDP	0.2	28
			5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.2	14
			5.2.5 Patent families/bn PPP\$ GDP	2.0	19
 <b>Human capital and research</b>	38.7	42	<b>5.3 Knowledge absorption</b>	45.6	20
<b>2.1 Education</b>	65.9	14	5.3.1 Intellectual property payments, % total trade	1.5	26
2.1.1 Expenditure on education, % GDP	5.8	18	5.3.2 High-tech imports, % total trade	3.6	120 ○◆
2.1.2 Government funding/pupil, secondary, % GDP/cap	37.4	3 ◆◆	5.3.3 ICT services imports, % total trade	11.1	1 ◆◆
2.1.3 School life expectancy, years	15.4	47	5.3.4 FDI net inflows, % GDP	44.2	1 ◆◆
2.1.4 PISA scales in reading, maths and science	438.0	45 ◆	5.3.5 Research talent, % in businesses	33.5	39
2.1.5 Pupil-teacher ratio, secondary	8.1	10 ◆			
<b>2.2 Tertiary education</b>	42.8	34	 <b>Knowledge and technology outputs</b>	39.4	21
2.2.1 Tertiary enrolment, % gross	81.3	19	<b>6.1 Knowledge creation</b>	32.2	30
2.2.2 Graduates in science and engineering, %	15.1	98 ○◆	6.1.1 Patents by origin/bn PPP\$ GDP	1.4	53
2.2.3 Tertiary inbound mobility, %	23.9	5 ◆◆	6.1.2 PCT patents by origin/bn PPP\$ GDP	1.2	26
<b>2.3 Research and development (R&amp;D)</b>	7.4	66 ◆	6.1.3 Utility models by origin/bn PPP\$ GDP	n/a	n/a
2.3.1 Researchers, FTE/mn pop.	1,432.8	47 ◆	6.1.4 Scientific and technical articles/bn PPP\$ GDP	51.1	8 ◆◆
2.3.2 Gross expenditure on R&D, % GDP	0.6	55	6.1.5 Citable documents H-index	12.4	62
2.3.3 Global corporate R&D investors, top 3, mn US\$	0.0	41 ○◆	<b>6.2 Knowledge impact</b>	38.6	27
2.3.4 QS university ranking, top 3*	0.0	74 ○◆	6.2.1 Labor productivity growth, %	-1.6	95 ○
			6.2.2 New businesses/th pop. 15-64	17.6	5 ◆◆
			6.2.3 Software spending, % GDP	0.2	75
			6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	21.4	9 ◆
			6.2.5 High-tech manufacturing, %	19.2	64
 <b>Infrastructure</b>	53.9	28	<b>6.3 Knowledge diffusion</b>	47.3	17
<b>3.1 Information and communication technologies (ICTs)</b>	88.3	14	6.3.1 Intellectual property receipts, % total trade	0.9	22
3.1.1 ICT access*	87.9	11	6.3.2 Production and export complexity	48.1	50
3.1.2 ICT use*	83.0	14	6.3.3 High-tech exports, % total trade	0.9	72
3.1.3 Government's online service*	87.1	20	6.3.4 ICT services exports, % total trade	16.3	1 ◆◆
3.1.4 E-participation*	95.2	14			
<b>3.2 General infrastructure</b>	26.3	75 ◆	 <b>Creative outputs</b>	41.3	20
3.2.1 Electricity output, GWh/mn pop.	5,842.0	36	<b>7.1 Intangible assets</b>	45.4	27
3.2.2 Logistics performance*	51.3	44	7.1.1 Trademarks by origin/bn PPP\$ GDP	89.6	13 ◆
3.2.3 Gross capital formation, % GDP	16.2	109 ○◆	7.1.2 Global brand value, top 5,000, % GDP	0.0	80 ○◆
<b>3.3 Ecological sustainability</b>	47.0	21	7.1.3 Industrial designs by origin/bn PPP\$ GDP	15.3	7 ◆◆
3.3.1 GDP/unit of energy use	13.9	32	7.1.4 ICTs and organizational model creation†	47.3	93 ○◆
3.3.2 Environmental performance*	64.8	31	<b>7.2 Creative goods and services</b>	14.4	65
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	6.2	16	7.2.1 Cultural and creative services exports, % total trade	0.2	68
			7.2.2 National feature films/mn pop. 15-69	6.9	32
			7.2.3 Entertainment and media market/th pop. 15-69	n/a	n/a
			7.2.4 Printing and other media, % manufacturing	1.9	16
			7.2.5 Creative goods exports, % total trade	0.2	75
 <b>Market sophistication</b>	50.0	46	<b>7.3 Online creativity</b>	60.1	8 ◆◆
<b>4.1 Credit</b>	53.2	22	7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	72.3	8 ◆◆
4.1.1 Ease of getting credit*	60.0	74	7.3.2 Country-code TLDs/th pop. 15-69	5.8	51
4.1.2 Domestic credit to private sector, % GDP	112.3	20	7.3.3 Wikipedia edits/mn pop. 15-69	60.8	50
4.1.3 Microfinance gross loans, % GDP	n/a	n/a	7.3.4 Mobile app creation/bn PPP\$ GDP	100.0	1 ◆◆
<b>4.2 Investment</b>	33.0	56			
4.2.1 Ease of protecting minority investors*	76.0	21			
4.2.2 Market capitalization, % GDP	14.2	64 ○			
4.2.3 Venture capital investors, deals/bn PPP\$ GDP	0.1	36			
4.2.4 Venture capital recipients, deals/bn PPP\$ GDP	0.1	14			
<b>4.3 Trade, diversification, and market scale</b>	63.8	79			
4.3.1 Applied tariff rate, weighted avg., %	1.8	25			
4.3.2 Domestic industry diversification	80.3	76			
4.3.3 Domestic market scale, bn PPP\$	34.6	117 ○◆			

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 IV 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.



## DATA AVAILABILITY

The following tables list data that are either missing or outdated for Cyprus.

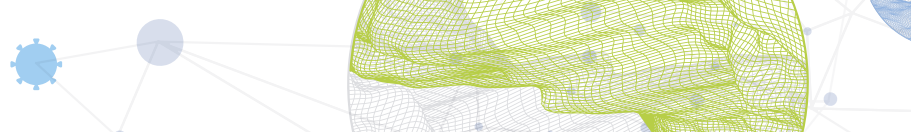
### Missing data for Cyprus

Code	Indicator name	Economy year	Model year	Source
4.1.3	Microfinance gross loans, % GDP	n/a	2018	Microfinance Information Exchange
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2019	World Intellectual Property Organization
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2020	PwC

### Outdated data for Cyprus

Code	Indicator name	Economy year	Model year	Source
2.1.5	Pupil-teacher ratio, secondary	2018	2019	UNESCO Institute for Statistics

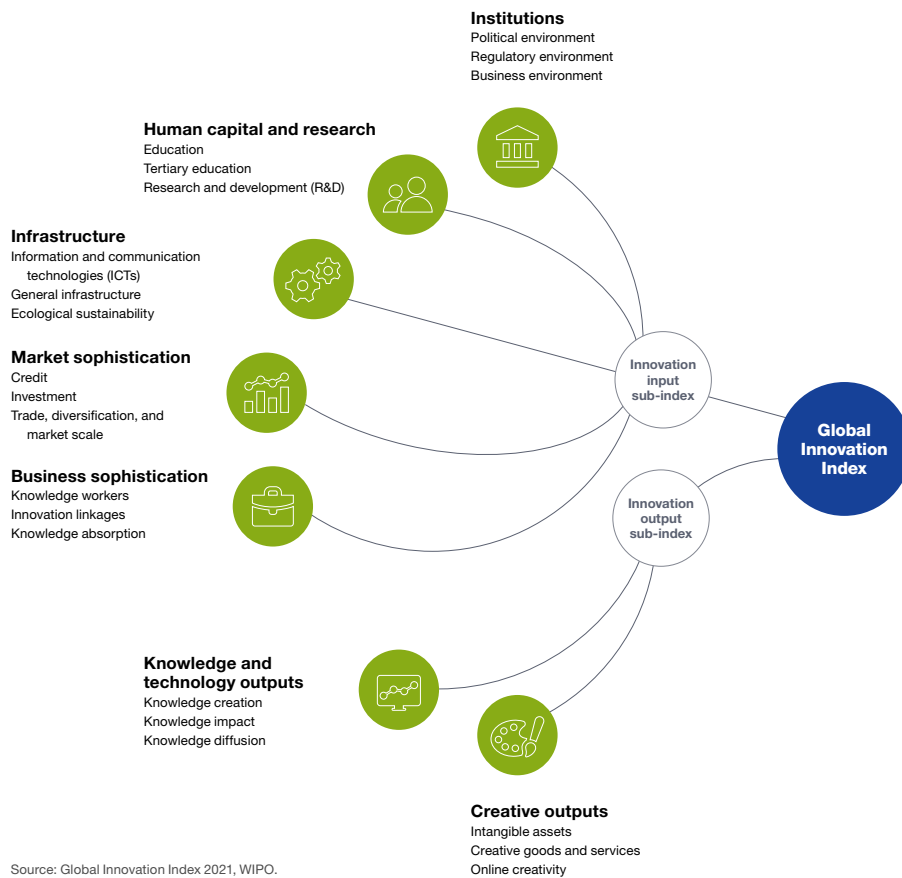




## ABOUT THE GLOBAL INNOVATION INDEX

The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.

Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a “tool for action” for economies that incorporate the GII into their innovation agendas.



The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research, infrastructure, credit, investment, linkages; the creation, absorption and diffusion of knowledge; and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.