



CYPRUS

27th Cyprus ranks 27th among the 132 economies featured in the GII 2022.

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 2022 is between ranks 25 and 28.

Rankings for Cyprus (2020–2022)

GIIYR	GII	Innovation inputs	Innovation outputs
2020	29	30	26
2021	28	31	21
2022	27	29	20

- Cyprus performs better in innovation outputs than innovation inputs in 2022.
- This year Cyprus ranks 29th in innovation inputs, higher than both 2021 and 2020.
- As for innovation outputs, Cyprus ranks 20th. This position is higher than both 2021 and 2020.

26th Cyprus ranks 26th among the 48 high-income group economies.

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

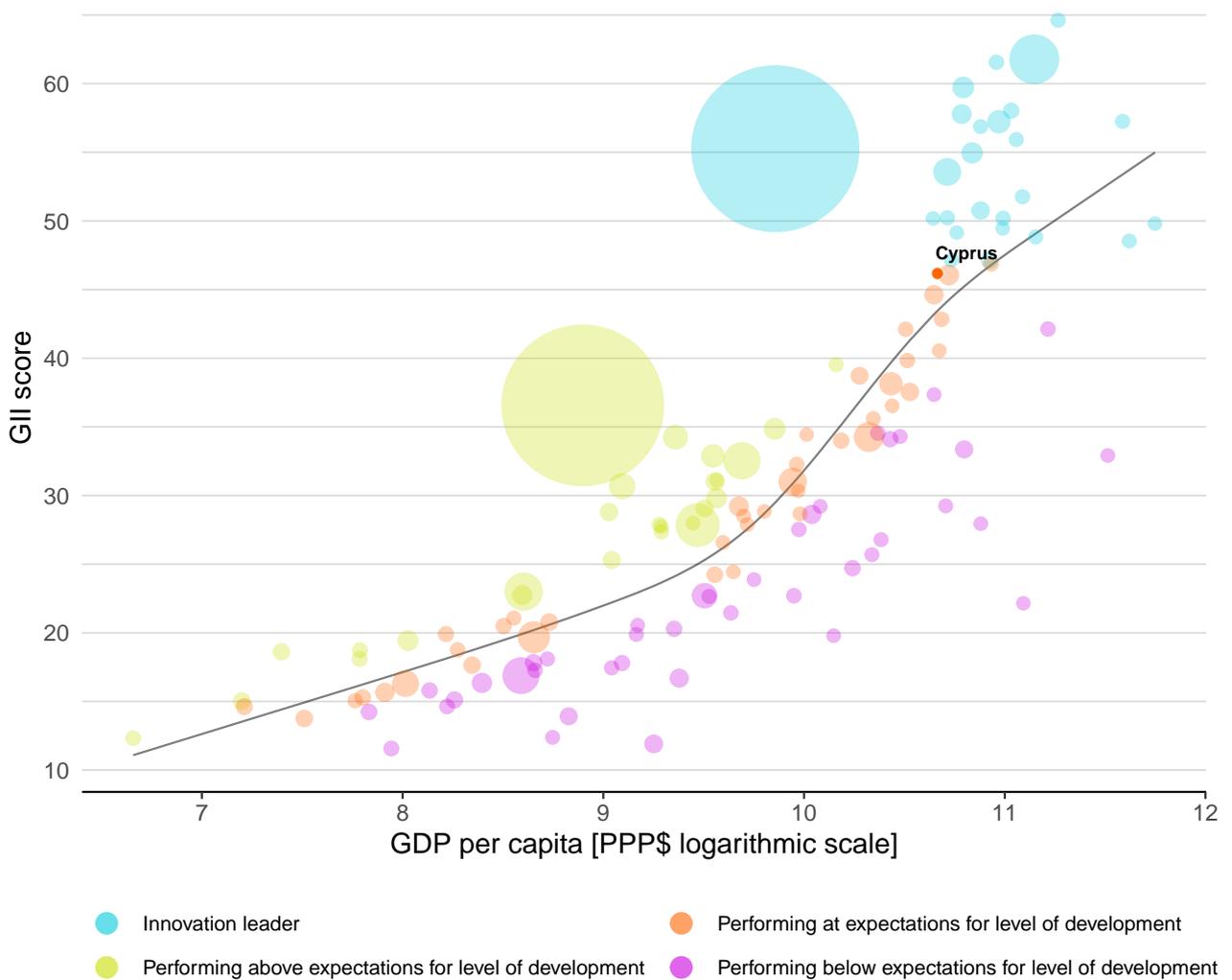


EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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



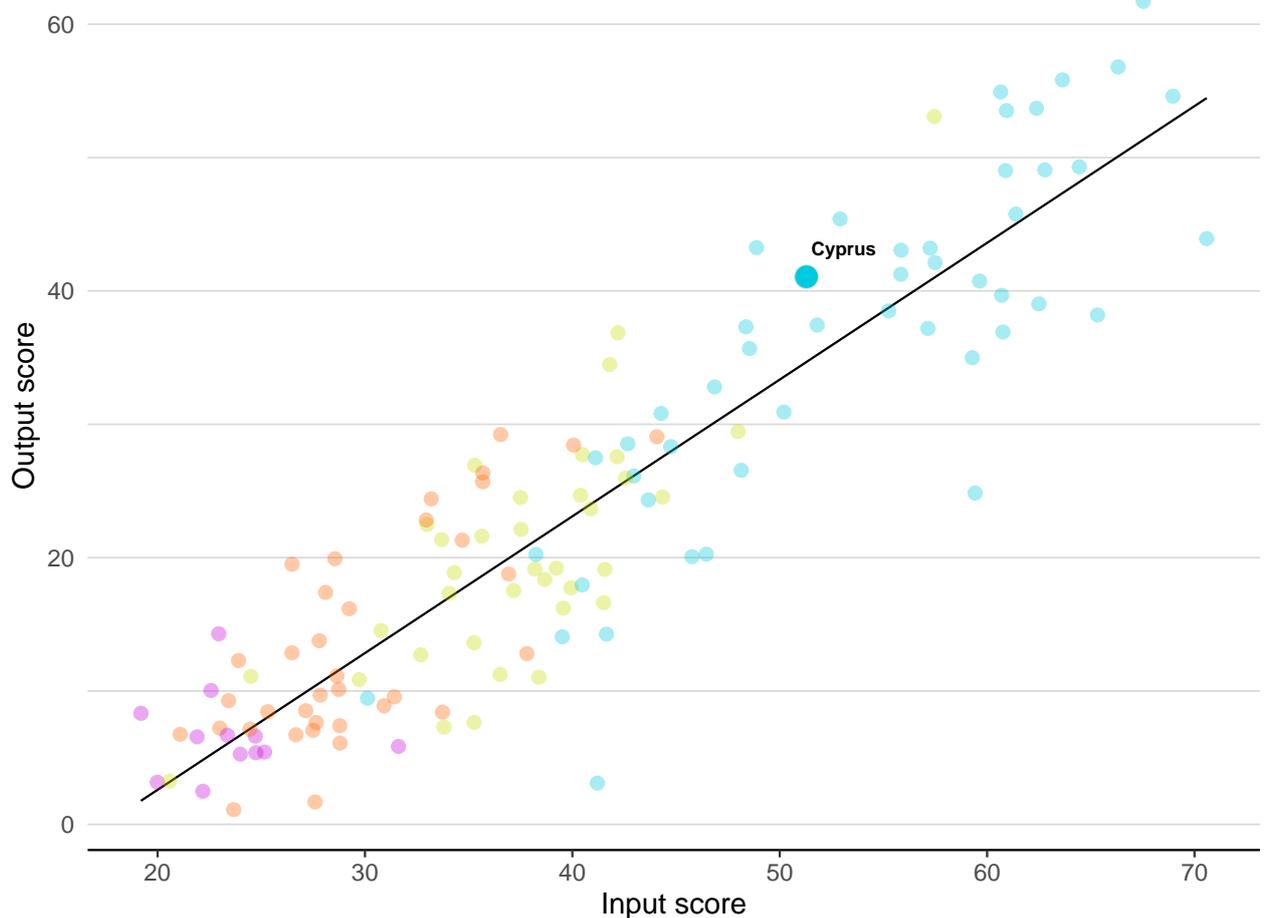


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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

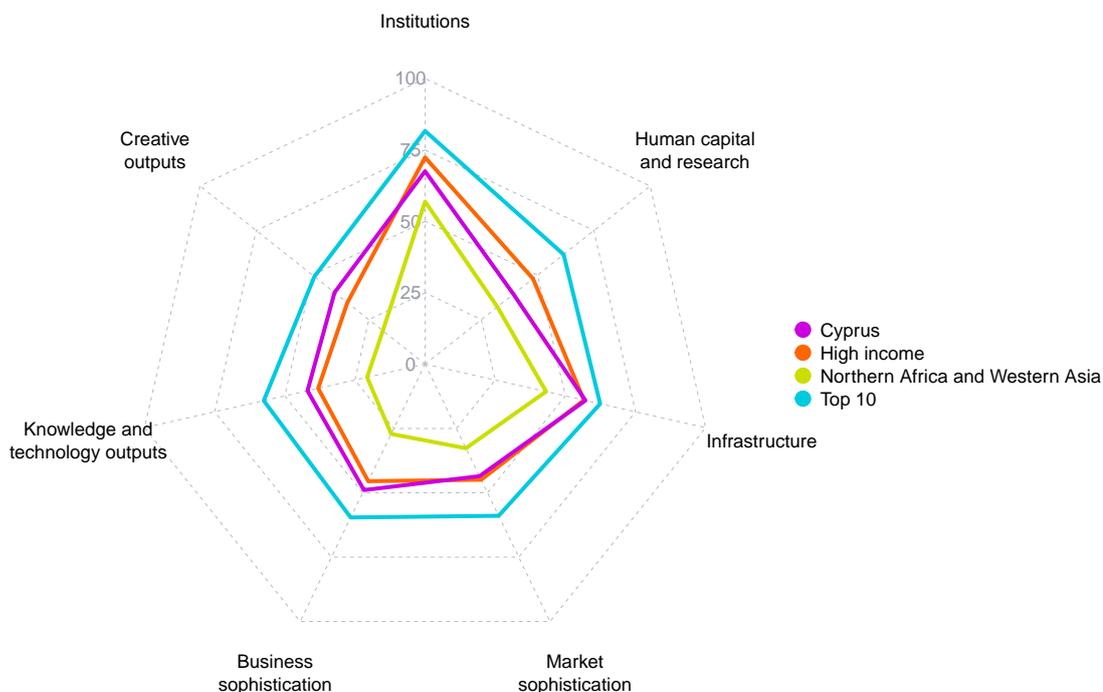


Income ● High income ● Upper middle ● Lower middle ● Low income — Fitted line



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 four pillars, namely: Infrastructure; Business sophistication; Knowledge and technology outputs; and, Creative outputs.

Northern Africa and Western Asia

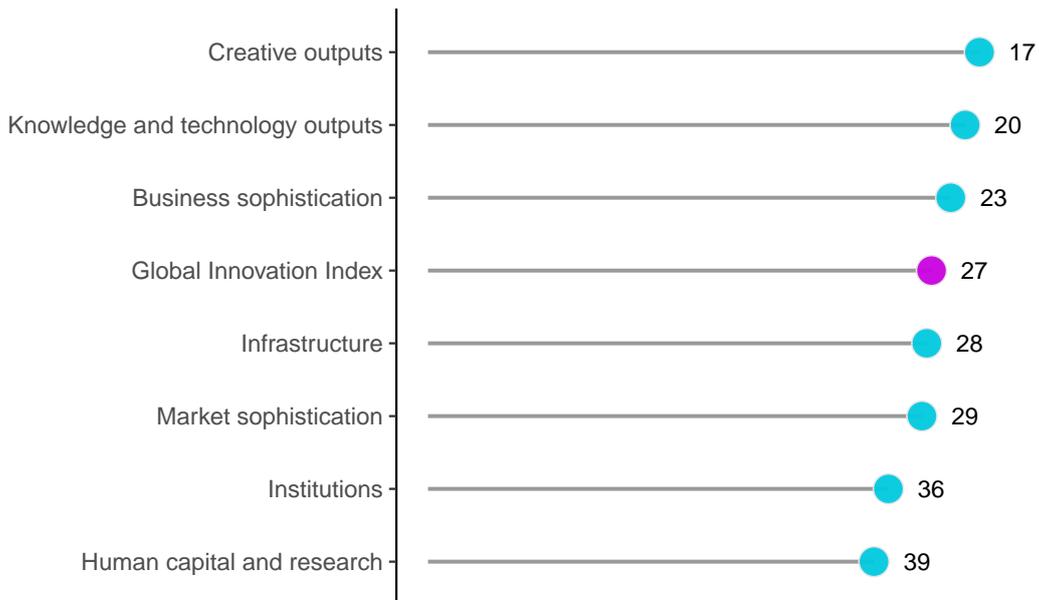
Cyprus performs above the regional average in all GII pillars.



OVERVIEW OF RANKINGS IN THE SEVEN GII 2022 AREAS

Cyprus performs best in Creative outputs and its weakest performance is in Human capital and research.

The seven GII pillar ranks for Cyprus



Note: The highest possible ranking in each pillar is 1.

The full WIPO Intellectual Property Statistics profile for Cyprus can be found at:

https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=CY.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the indicator strengths and weaknesses of Cyprus in the GII 2022.

Strengths and weaknesses for Cyprus

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.2.3	Cost of redundancy dismissal	1	1.3.2	Entrepreneurship policies and culture	49
2.1.2	Government funding/pupil, secondary, % GDP/cap	4	2.2.2	Graduates in science and engineering, %	99
2.1.5	Pupil-teacher ratio, secondary	7	2.3.3	Global corporate R&D investors, top 3, mn USD	38
2.2.3	Tertiary inbound mobility, %	4	2.3.4	QS university ranking, top 3	72
3.1.1	ICT access	4	4.1.1	Finance for startups and scaleups	53
4.2.2	Venture capital investors, deals/bn PPP\$ GDP	1	4.2.1	Market capitalization, % GDP	64
5.3.3	ICT services imports, % total trade	1	4.3.3	Domestic market scale, bn PPP\$	114
5.3.4	FDI net inflows, % GDP	1	5.3.2	High-tech imports, % total trade	124
6.1.4	Scientific and technical articles/bn PPP\$ GDP	4	6.2.1	Labor productivity growth, %	79
6.3.4	ICT services exports, % total trade	1	7.1.3	Global brand value, top 5,000, % GDP	77
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\$
20	29	High	NAWA	1.2	38.6	42,832

	Score/ Value	Rank
Institutions	67.5	36
1.1 Political environment	73.5	35
1.1.1 Political and operational stability*	78.2	35
1.1.2 Government effectiveness*	68.7	36
1.2 Regulatory environment	82.8	24
1.2.1 Regulatory quality*	70.0	33
1.2.2 Rule of law*	61.1	41
1.2.3 Cost of redundancy dismissal	8.0	1
1.3 Business environment	46.3	70
1.3.1 Policies for doing business†	59.9	39
1.3.2 Entrepreneurship policies and culture*	32.8	49

	Score/ Value	Rank
Human capital and research	39.3	39
2.1 Education	65.4	12
2.1.1 Expenditure on education, % GDP	5.7	23
2.1.2 Government funding/pupil, secondary, % GDP/cap	37.3	4
2.1.3 School life expectancy, years	15.6	43
2.1.4 PISA scales in reading, maths and science	438.0	45
2.1.5 Pupil-teacher ratio, secondary	7.7	7
2.2 Tertiary education	46.7	20
2.2.1 Tertiary enrolment, % gross	88.5	11
2.2.2 Graduates in science and engineering, %	13.1	99
2.2.3 Tertiary inbound mobility, %	26.1	4
2.3 Research and development (R&D)	5.7	67
2.3.1 Researchers, FTE/mn pop.	1,706.1	45
2.3.2 Gross expenditure on R&D, % GDP	0.8	47
2.3.3 Global corporate R&D investors, top 3, mn USD	0.0	38
2.3.4 QS university ranking, top 3*	0.0	72

	Score/ Value	Rank
Infrastructure	57.2	28
3.1 Information and communication technologies (ICTs)	89.7	15
3.1.1 ICT access*	98.1	4
3.1.2 ICT use*	78.3	26
3.1.3 Government's online service*	87.1	20
3.1.4 E-participation*	95.2	14
3.2 General infrastructure	35.9	46
3.2.1 Electricity output, GWh/mn pop.	5,545.5	34
3.2.2 Logistics performance*	51.2	44
3.2.3 Gross capital formation, % GDP	22.2	78
3.3 Ecological sustainability	45.9	21
3.3.1 GDP/unit of energy use	14.2	29
3.3.2 Environmental performance*	58.0	22
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	6.5	16

	Score/ Value	Rank
Market sophistication	43.5	29
4.1 Credit	36.5	36
4.1.1 Finance for startups and scaleups*	31.5	53
4.1.2 Domestic credit to private sector, % GDP	110.6	21
4.1.3 Loans from microfinance institutions, % GDP	n/a	n/a
4.2 Investment	38.2	19
4.2.1 Market capitalization, % GDP	16.2	64
4.2.2 Venture capital investors, deals/bn PPP\$ GDP	1.3	1
4.2.3 Venture capital recipients, deals/bn PPP\$ GDP	0.1	15
4.2.4 Venture capital received, value, % GDP	0.0	44
4.3 Trade, diversification, and market scale	56.0	70
4.3.1 Applied tariff rate, weighted avg., %	1.5	20
4.3.2 Domestic industry diversification	76.8	71
4.3.3 Domestic market scale, bn PPP\$	38.6	114

	Score/ Value	Rank
Business sophistication	48.9	23
5.1 Knowledge workers	48.9	33
5.1.1 Knowledge-intensive employment, %	38.0	36
5.1.2 Firms offering formal training, %	39.7	34
5.1.3 GERD performed by business, % GDP	0.4	46
5.1.4 GERD financed by business, %	36.4	52
5.1.5 Females employed w/advanced degrees, %	26.5	14
5.2 Innovation linkages	41.0	26
5.2.1 University-industry R&D collaboration†	44.2	65
5.2.2 State of cluster development and depth†	51.5	46
5.2.3 GERD financed by abroad, % GDP	0.2	26
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.2	10
5.2.5 Patent families/bn PPP\$ GDP	0.9	27
5.3 Knowledge absorption	56.9	6
5.3.1 Intellectual property payments, % total trade	1.3	29
5.3.2 High-tech imports, % total trade	3.9	124
5.3.3 ICT services imports, % total trade	14.1	1
5.3.4 FDI net inflows, % GDP	52.5	1
5.3.5 Research talent, % in businesses	36.3	37

	Score/ Value	Rank
Knowledge and technology outputs	41.9	20
6.1 Knowledge creation	34.5	28
6.1.1 Patents by origin/bn PPP\$ GDP	1.9	37
6.1.2 PCT patents by origin/bn PPP\$ GDP	1.4	22
6.1.3 Utility models by origin/bn PPP\$ GDP	n/a	n/a
6.1.4 Scientific and technical articles/bn PPP\$ GDP	58.2	4
6.1.5 Citable documents H-index	12.3	62
6.2 Knowledge impact	38.9	28
6.2.1 Labor productivity growth, %	0.4	79
6.2.2 New businesses/th pop. 15-64	13.3	8
6.2.3 Software spending, % GDP	0.2	73
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	21.1	13
6.2.5 High-tech manufacturing, %	15.9	72
6.3 Knowledge diffusion	52.3	13
6.3.1 Intellectual property receipts, % total trade	1.6	14
6.3.2 Production and export complexity	49.1	46
6.3.3 High-tech exports, % total trade	0.9	75
6.3.4 ICT services exports, % total trade	17.7	1

	Score/ Value	Rank
Creative outputs	40.2	17
7.1 Intangible assets	46.7	25
7.1.1 Intangible asset intensity, top 15, %	54.4	48
7.1.2 Trademarks by origin/bn PPP\$ GDP	102.9	11
7.1.3 Global brand value, top 5,000, % GDP	0.0	77
7.1.4 Industrial designs by origin/bn PPP\$ GDP	6.3	17
7.2 Creative goods and services	19.6	58
7.2.1 Cultural and creative services exports, % total trade	0.6	44
7.2.2 National feature films/mn pop. 15-69	3.4	35
7.2.3 Entertainment and media market/th pop. 15-69	n/a	n/a
7.2.4 Printing and other media, % manufacturing	1.8	17
7.2.5 Creative goods exports, % total trade	0.2	78
7.3 Online creativity	47.9	7
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	73.3	8
7.3.2 Country-code TLDs/th pop. 15-69	7.1	45
7.3.3 GitHub commit pushes received/mn pop. 15-69	11.2	41
7.3.4 Mobile app creation/bn PPP\$ GDP	100.0	1

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 https://www.wipo.int/global_innovation_index/en/2022. 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 indicators that are either missing or outdated for Cyprus.

Missing data for Cyprus

Code	Indicator name	Economy year	Model year	Source
4.1.3	Loans from microfinance institutions, % GDP	n/a	2020	International Monetary Fund, Financial Access Survey (FAS)
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2020	World Intellectual Property Organization
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2021	PwC, GEMO

Outdated data for Cyprus

Code	Indicator name	Economy year	Model year	Source
2.1.1	Expenditure on education, % GDP	2017	2020	UNESCO Institute for Statistics
2.1.2	Government funding/pupil, secondary, % GDP/cap	2017	2018	UNESCO Institute for Statistics

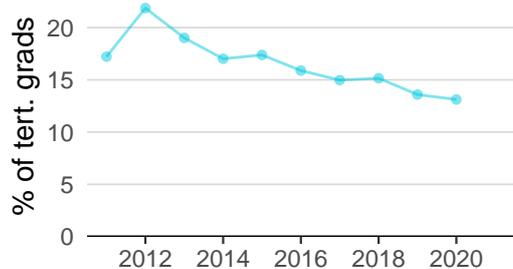
CYPRUS'S INNOVATION SYSTEM

As far as practicable, the plots below present unscaled indicator data.

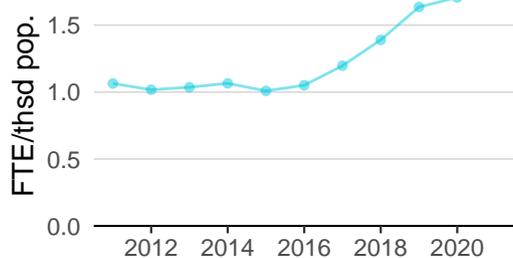
Innovation inputs



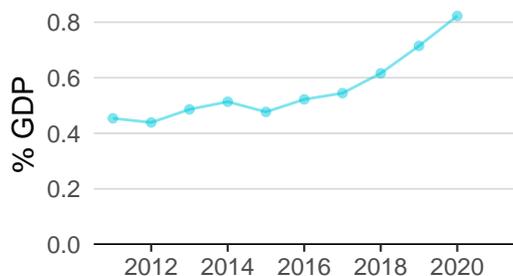
2.1.1 Expenditure on education was equal to 5.7% GDP in 2017—down by 7 percentage points from the year prior—and equivalent to an indicator rank of 23.



2.2.2 Graduates in science and engineering was equal to 13.1% of tert. grads in 2020—down by 4 percentage points from the year prior—and equivalent to an indicator rank of 99.



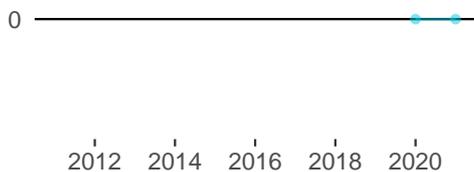
2.3.1 Researchers was equal to 1.7 FTE/thsd pop. in 2020—up by 4 percentage points from the year prior—and equivalent to an indicator rank of 45.



2.3.2 Gross expenditure on R&D was equal to 0.8% GDP in 2020—up by 15 percentage points from the year prior—and equivalent to an indicator rank of 47.



2.3.4 QS university ranking was equal to 0.0 in 2021—effectively unchanged from the year prior—and equivalent to an indicator rank of 72.



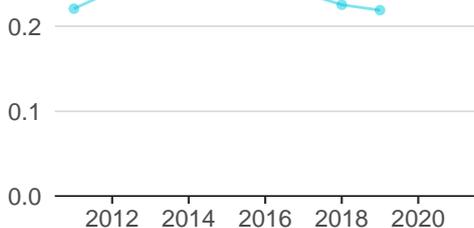
3.1.1 ICT access was equal to 9.8 in 2020 and equivalent to an indicator rank of 4.



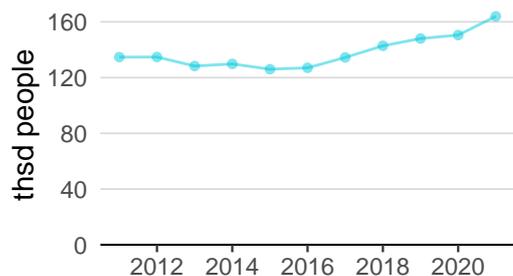
4.2.4 Venture capital received was equal to 0.0 bn USD in 2021—down by 5 percentage points from the year prior—and equivalent to an indicator rank of 44.



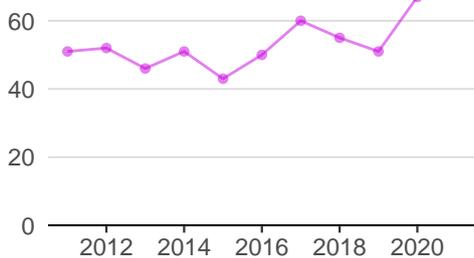
4.3.2 Domestic industry diversification was equal to 0.2 in 2019—down by 3 percentage points from the year prior—and equivalent to an indicator rank of 71.



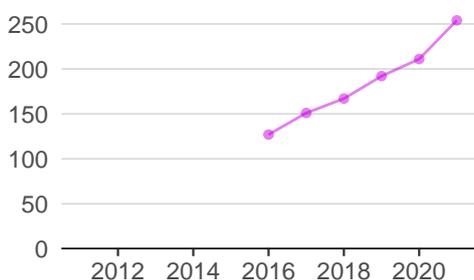
5.1.1 Knowledge-intensive employment was equal to 163.9 thsd people in 2021—up by 9 percentage points from the year prior—and equivalent to an indicator rank of 36.



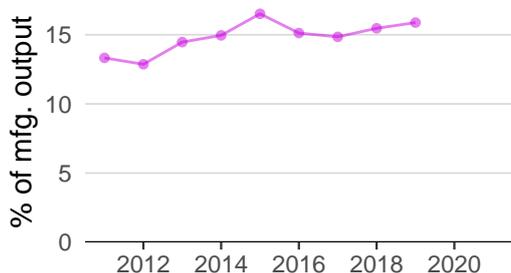
Innovation outputs



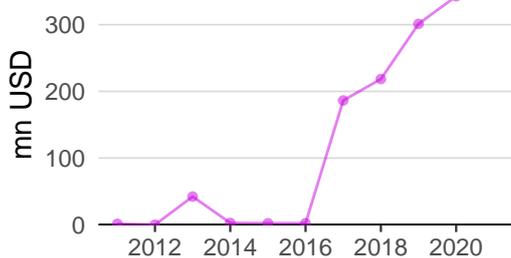
6.1.1 Patents by origin was equal to 67.0 in 2020—up by 31 percentage points from the year prior—and equivalent to an indicator rank of 37.



6.1.5 Citable documents H-index was equal to 254.0 in 2021—up by 20 percentage points from the year prior—and equivalent to an indicator rank of 62.



6.2.5 High-tech manufacturing was equal to 15.9% of mfg. output in 2019—up by 3 percentage points from the year prior—and equivalent to an indicator rank of 72.



6.3.1 Intellectual property receipts was equal to 342.7 mn USD in 2020—up by 14 percentage points from the year prior—and equivalent to an indicator rank of 14.



6.3.2 Production and export complexity was equal to 0.3 in 2019—up by 92 percentage points from the year prior—and equivalent to an indicator rank of 46.



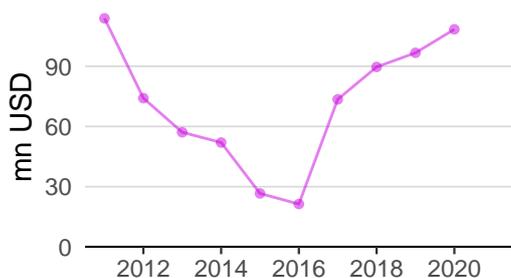
6.3.3 High-tech exports was equal to 154.4 mn USD in 2020—down by 3 percentage points from the year prior—and equivalent to an indicator rank of 75.



7.1.1 Intangible asset intensity was equal to 54.4% of total value in 2021 and equivalent to an indicator rank of 48.



7.1.3 Global brand value was equal to 0.0 mn USD in 2021—effectively unchanged from the year prior—and equivalent to an indicator rank of 77.



7.2.1 Cultural and creative services exports was equal to 108.4 mn USD in 2020—up by 12 percentage points from the year prior—and equivalent to an indicator rank of 44.



CYPRUS'S INNOVATION TOP PERFORMERS

2.3.3 Global corporate R&D investors

Firm	Industry	R&D	R&D Growth	R&D Intensity	Rank
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No observations

Source: European Commission's Joint Research Centre (<https://iri.jrc.ec.europa.eu/scoreboard/2021-eu-industrial-rd-investment-scoreboard>).

2.3.4 QS university ranking

University	Score	Rank
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No observations

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2022>).

7.1.1 Intangible asset intensity, top 15

Firm	Rank
TCS GROUP	1
GLOBAL PORTS INV	2
HANGJI GLOBAL	3

Source: Brand Finance (<https://brandirectory.com/reports/gif-2021>).

Note: Brand Finance only provides within economy ranks.

7.1.3 Global brand value, top 5,000

Brand	Industry	Rank
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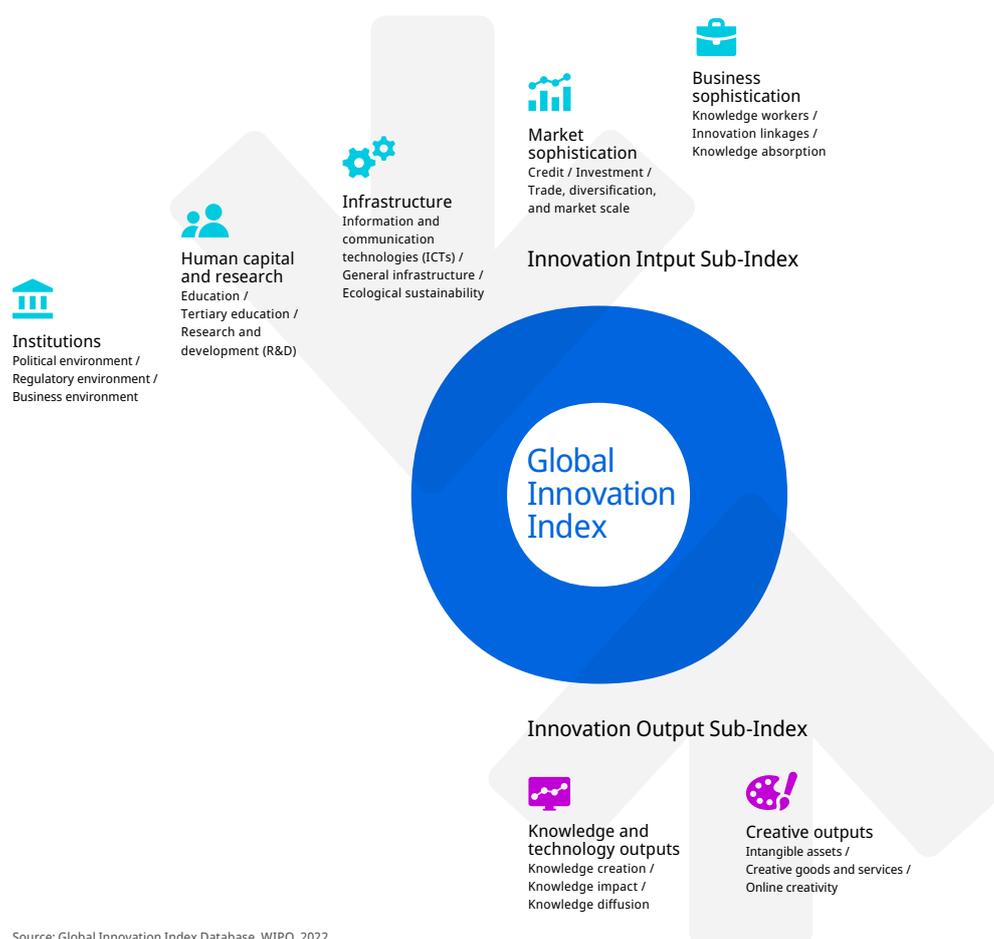
No observations

Source: Brand Finance (<https://brandirectory.com>).

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.