

Global Innovation Index 2023

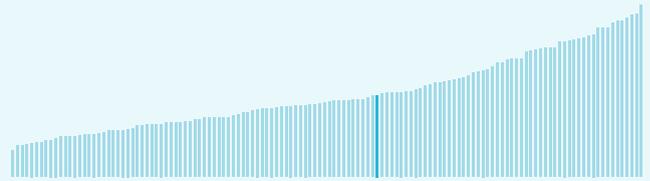


The Global Innovation Index (GII) **ranks world economies according to their innovation capabilities.**

Consisting of **roughly 80 indicators**, grouped into innovation inputs and outputs, the GII **aims to capture the multi-dimensional facets of innovation.**

Philippines ranking in the Global Innovation Index 2023

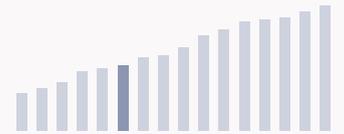
> Philippines ranks **56th** among the 132 economies featured in the GII 2023.



> Philippines ranks **4th** among the 37 lower-middle-income group economies.



> Philippines ranks **11th** among the 16 economies in South East Asia, East Asia, and Oceania.



> Philippines GII Ranking (2020-2023)

The table shows the rankings of Philippines over the past four years. 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 Philippines in the GII 2023 is between ranks 51 and 59.

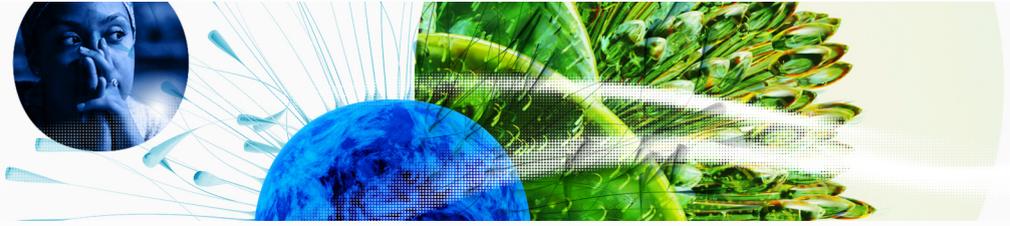
	GII Position	Innovation Inputs	Innovation Outputs
2020	50th	70th	41st
2021	51st	72nd	40th
2022	59th	76th	51st
2023	56th	69th	52nd

Philippines performs better in innovation outputs than innovation inputs in 2023.

This year Philippines ranks 69th in innovation inputs. This position is higher than last year.

Philippines ranks 52nd in innovation outputs. This position is lower than last year.

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→ Expected vs. observed innovation performance

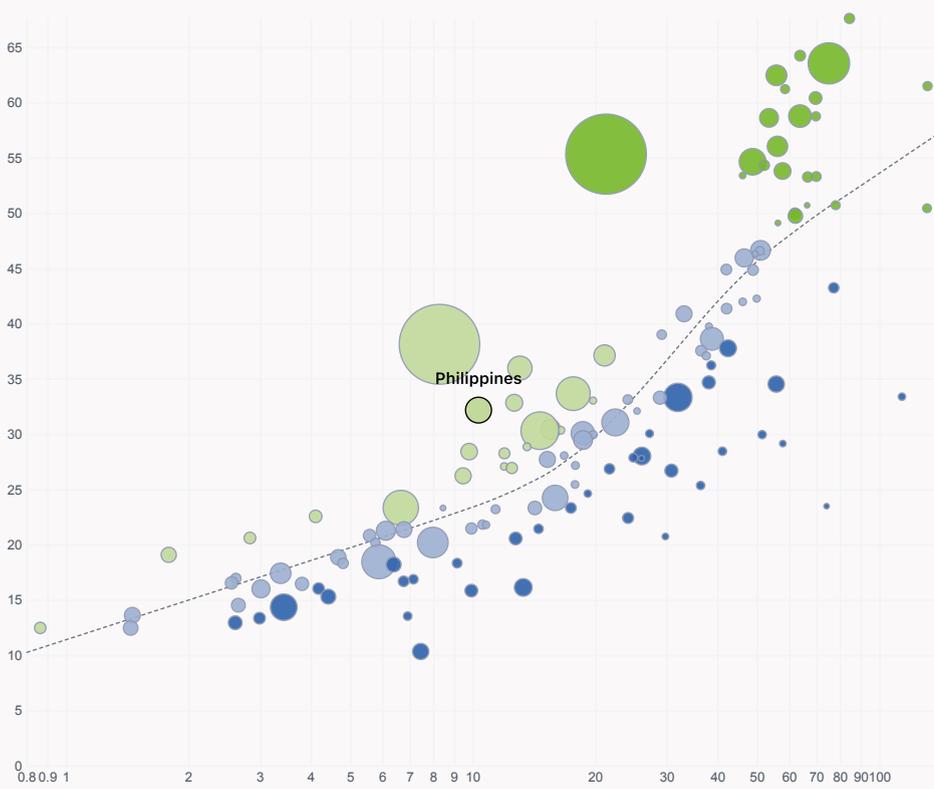
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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



> Relative to GDP, Philippines is performing above expectations for its level of development.

> Innovation overperformers relative to their economic development

↑ **GII Score**



- Innovation leader
- Performing above expectations for level of development
- Performing at expectations for level of development
- Performing below expectations for level of development

Size legend (Population)



→ GDP per capita, PPP logarithmic scale (thousands of \$)

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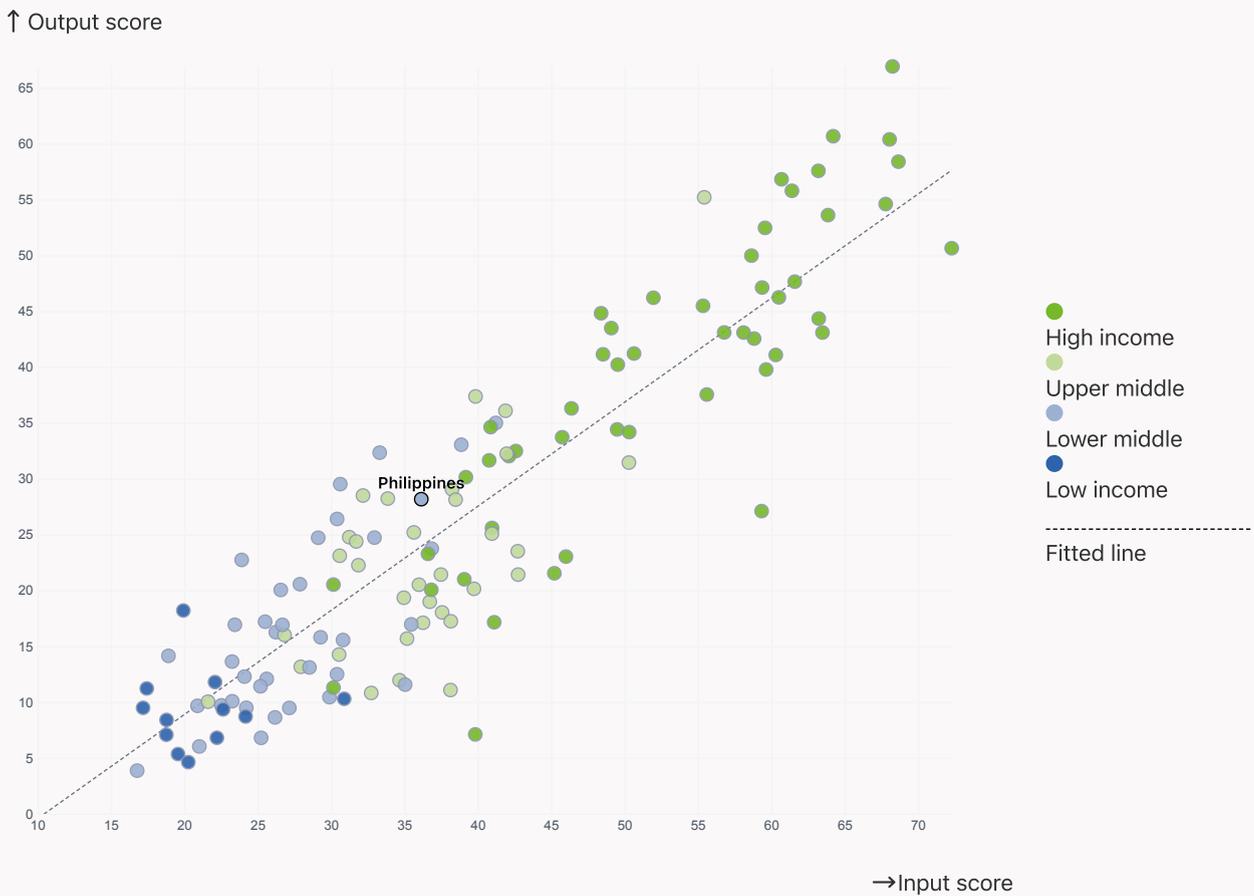
→ Effectively translating innovation investments into innovation outputs

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.

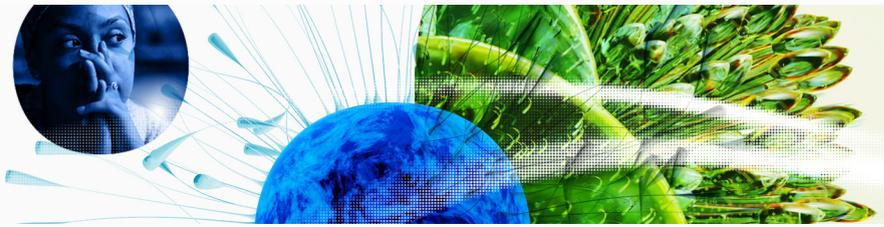


> Philippines produces more innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs



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→ Overview of Philippines's rankings in the seven areas of the GII in 2023

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Philippines are those that rank above the GII (shown in blue) and the weakest are those that rank below.



> Highest rankings



Philippines ranks highest in Business sophistication (38th), Knowledge and technology outputs (46th) and Market sophistication (55th).

> Lowest rankings



Philippines ranks lowest in Human capital and research (88th), Infrastructure (86th) and Institutions (79th).

The full WIPO Intellectual Property Statistics profile for Philippines can be found on [this link](#).

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→ Benchmark of Philippines against other country groupings for each of the seven areas of the GII Index

The charts show the relative position of Philippines (blue bar) against other country groupings (grey bars), for each of the seven areas of the GII Index.

> Lower-Middle-Income economies

Philippines performs above the lower-middle-income group average in all the pillars.



> South East Asia, East Asia, And Oceania

Philippines performs below the regional average in all the pillars.



Knowledge and technology outputs

Top 10 | Score: 58.96

SEAO | Score: 32.16

Philippines | Score: 29.93

Lower middle income | Score: 17.21

* South East Asia, East Asia, and Oceania

Creative outputs

Top 10 | 56.09

SEAO | 34.40

Philippines | 26.38

Lower middle income | 16.35

Business sophistication

Top 10 | 64.39

SEAO | 40.54

Philippines | 37.89

Lower middle income | 22.71

Market sophistication

Top 10 | 61.93

SEAO | 47.18

Philippines | 37.73

Lower middle income | 28.01

Human capital and research

Top 10 | 60.28

SEAO | 40.81

Philippines | 25.26

Lower middle income | 21.73

Infrastructure

Top 10 | 62.83

SEAO | 47.13

Philippines | 33.64

Lower middle income | 27.83

Institutions

Top 10 | 79.85

SEAO | 62.54

Philippines | 46.27

Lower middle income | 39.43

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→ Innovation strengths and weaknesses in Philippines

The table below gives an overview of the indicator strengths and weaknesses of Philippines in the GII 2023.



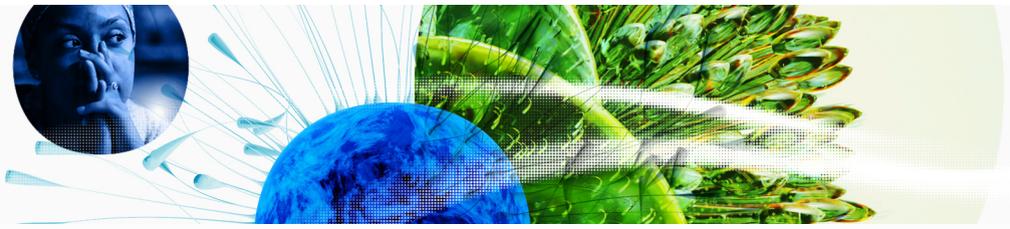
> Philippines's main innovation strengths are **High-tech imports, % total trade** (rank 1), **High-tech exports, % total trade** (rank 2) and **Firms offering formal training, %** (rank 8).

Strengths

Weaknesses

Rank	Code	Indicator name	Rank	Code	Indicator name
1	5.3.2	High-tech imports, % total trade	124	6.1.4	Scientific and technical articles/bn PPP\$ GDP
2	6.3.3	High-tech exports, % total trade	116	3.3.2	Environmental performance
8	5.1.2	Firms offering formal training, %	114	1.2.3	Cost of redundancy dismissal
9	6.1.3	Utility models by origin/bn PPP\$ GDP	109	2.1.5	Pupil-teacher ratio, secondary
10	7.2.4	Creative goods exports, % total trade	106	1.2.2	Rule of law
18	6.3.4	ICT services exports, % total trade	89	5.2.3	GERD financed by abroad, % GDP
26	3.3.1	GDP/unit of energy use	84	2.3.1	Researchers, FTE/mn pop.
26	6.2.4	High-tech manufacturing, %	78	2.1.4	PISA scales in reading, maths and science
29	4.3.3	Domestic market scale, bn PPP\$	53	4.1.3	Loans from microfinance institutions, % GDP
			40	2.3.3	Global corporate R&D investors, top 3, mn US\$

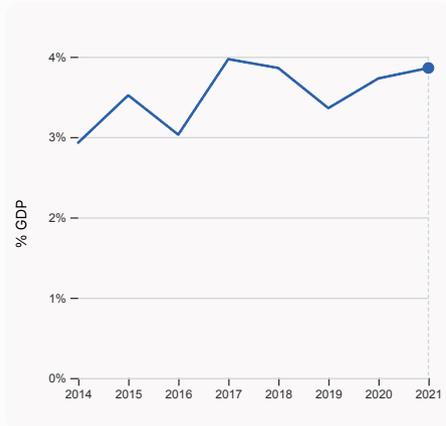
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→ Philippines's innovation system

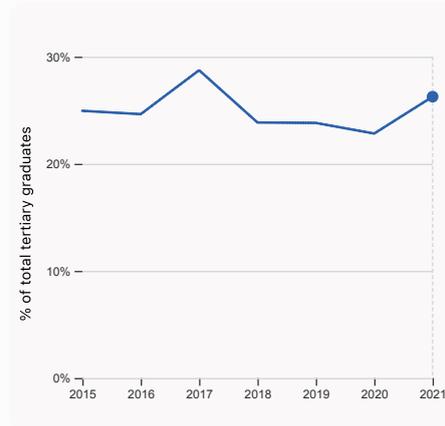
As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in Philippines



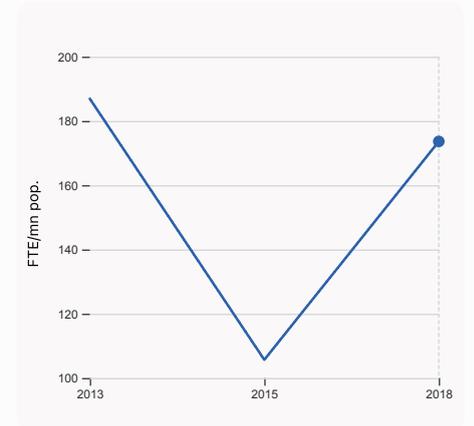
2.1.1 Expenditure on education, % GDP

was equal to 3.86% GDP in 2021, up by 0.13 percentage points from the year prior – and equivalent to an indicator rank of 79.



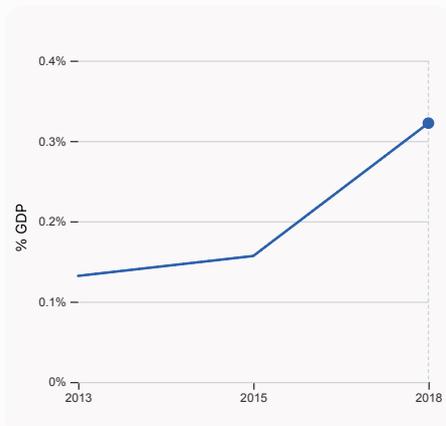
2.2.2 Graduates in science and engineering, %

was equal to 26.27% of total tertiary graduates in 2021, up by 3.44 percentage points from the year prior – and equivalent to an indicator rank of 37.



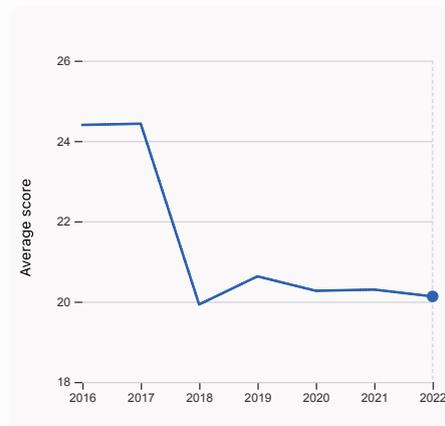
2.3.1 Researchers, FTE/mn pop.

was equal to 173.64 FTE/mn pop. in 2018, up by 64.31% from the year prior – and equivalent to an indicator rank of 84.



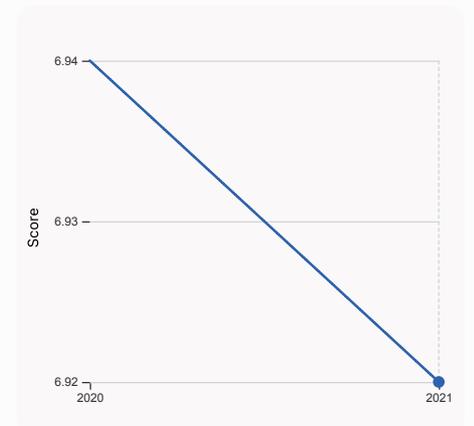
2.3.2 Gross expenditure on R&D, % GDP

was equal to 0.322% GDP in 2018, up by 0.17 percentage points from the year prior – and equivalent to an indicator rank of 73.



2.3.4 QS university ranking, top 3

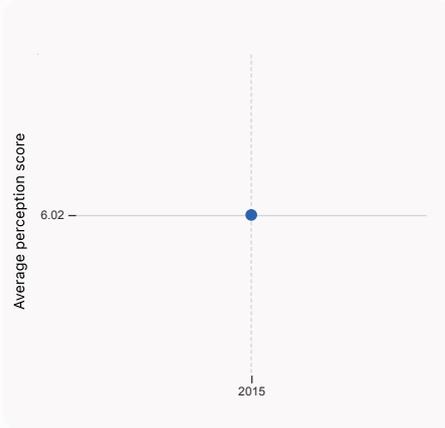
was equal to an average score of 20.13 for the top 3 universities in 2022, down by 0.84% from the year prior – and equivalent to an indicator rank of 51.



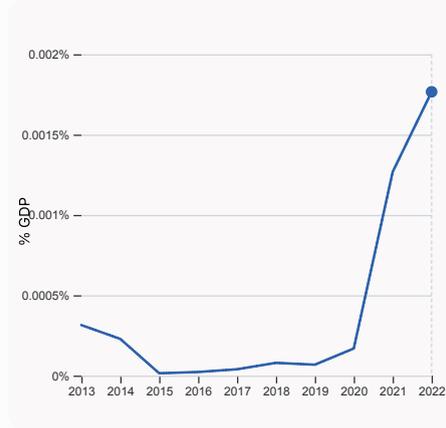
3.1.1 ICT access

was equal to a score of 6.92 in 2021, down by 0.29% from the year prior – and equivalent to an indicator rank of 103.

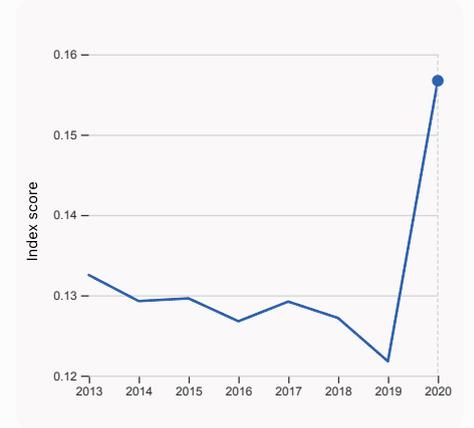
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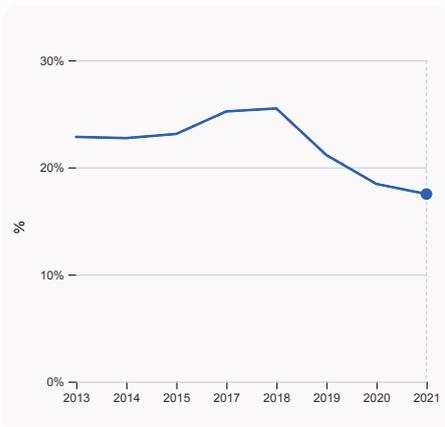
4.1.1 Finance for startups and scaleups was equal to an average perception score of 6.02 in 2015, equivalent to an indicator rank of 7.



4.2.4 VC received, value, % GDP was equal to 0.00177% GDP in 2022, up by 0.0005 percentage points from the year prior – and equivalent to an indicator rank of 47.



4.3.2 Domestic industry diversification was equal to an index score of 0.157 in 2020, up by 28.68% from the year prior – and equivalent to an indicator rank of 51.

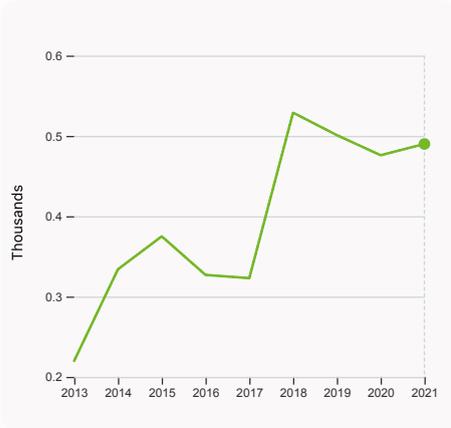


5.1.1 Knowledge-intensive employment, % was equal to 17.51% in 2021, down by 0.94 percentage points from the year prior – and equivalent to an indicator rank of 83.

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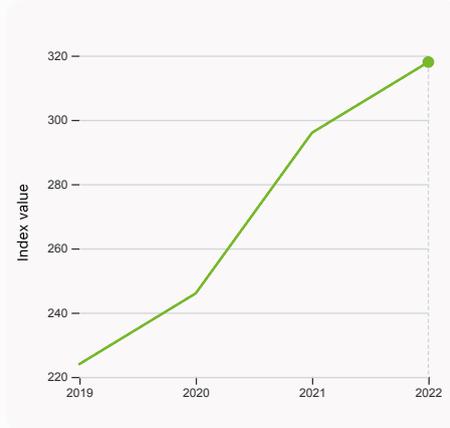


> Innovation outputs in Philippines



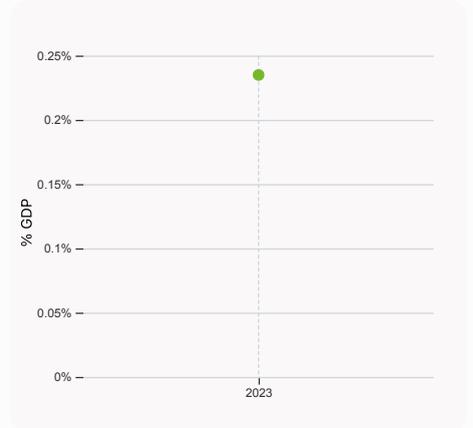
6.1.1 Patents by origin

was equal to 0.49 Thousands in 2021, up by 2.94% from the year prior – and equivalent to an indicator rank of 81.



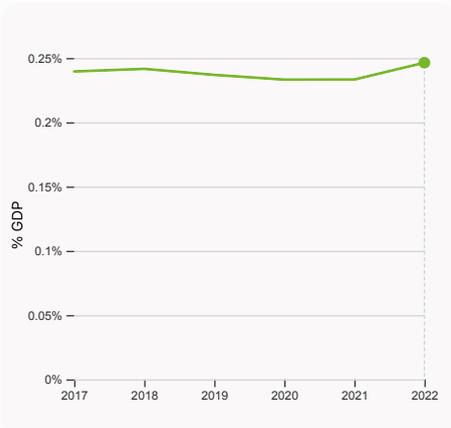
6.1.5 Citable documents H-index

was equal to an index value of 318 in 2022, up by 7.43% from the year prior – and equivalent to an indicator rank of 55.



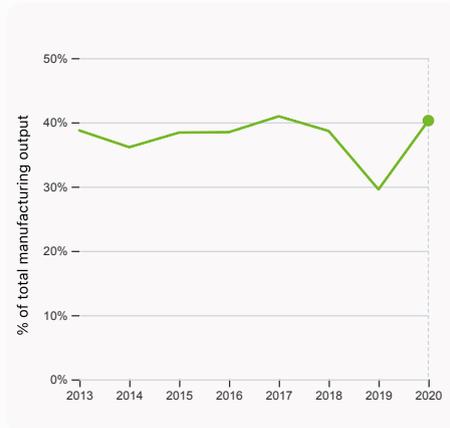
6.2.2 Unicorn valuation, % GDP

was equal to 0.235 % GDP in 2023 – and equivalent to an indicator rank of 44.



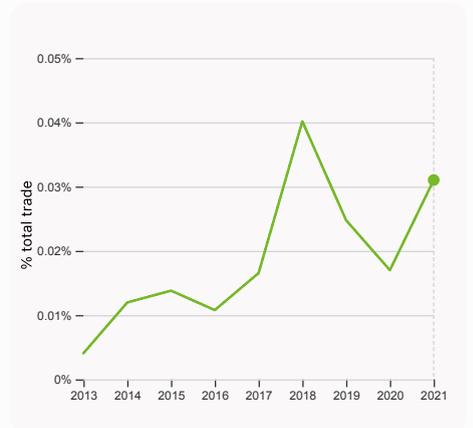
6.2.3 Software spending, % GDP

was equal to 0.246% GDP in 2022, up by 0.013 percentage points from the year prior – and equivalent to an indicator rank of 57.



6.2.4 High-tech manufacturing, %

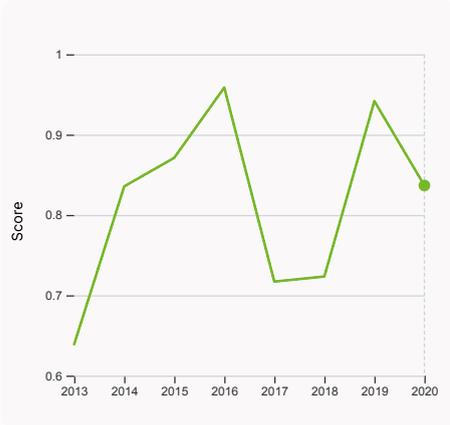
was equal to 40.27% of total manufacturing output in 2020, up by 10.71 percentage points from the year prior – and equivalent to an indicator rank of 26.



6.3.1 Intellectual property receipts, % total trade

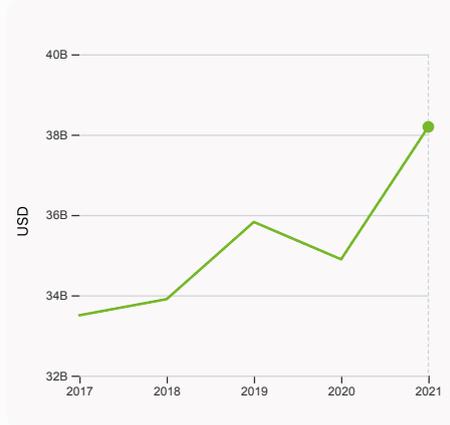
was equal to 0.031% total trade in 2021, up by 0.014 percentage points from the year prior – and equivalent to an indicator rank of 82.

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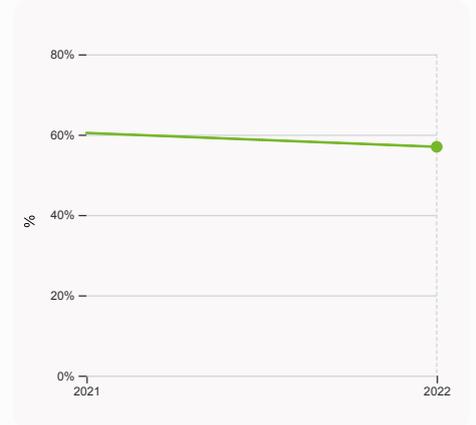
6.3.2 Production and export complexity

was equal to a score of 0.837 in 2020, down by 11.16% from the year prior – and equivalent to an indicator rank of 30.



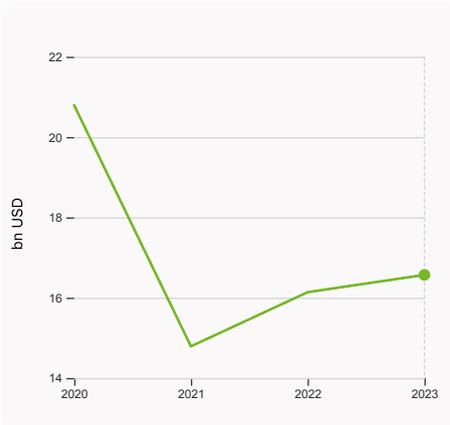
6.3.3 High-tech exports

was equal to 38,194,373,145 USD in 2021, up by 9.45% from the year prior – and equivalent to an indicator rank of 2.



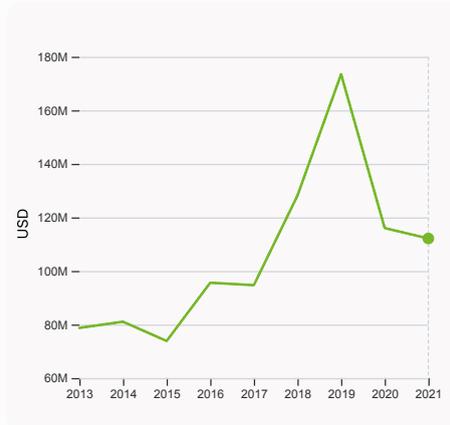
7.1.1 Intangible asset intensity, top 15, %

was equal to 56.97% in 2022, down by 3.45 percentage points from the year prior – and equivalent to an indicator rank of 41.



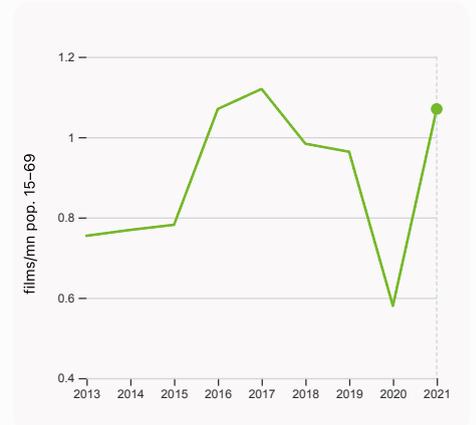
7.1.3 Global brand value, top 5,000

was equal to 16.569 bn USD in 2023, up by 2.67% from the year prior – and equivalent to an indicator rank of 38.



7.2.1 Cultural and creative services exports

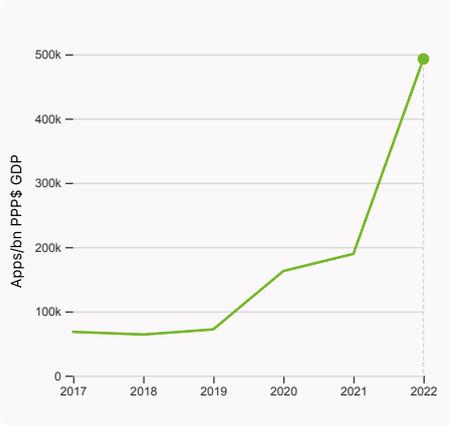
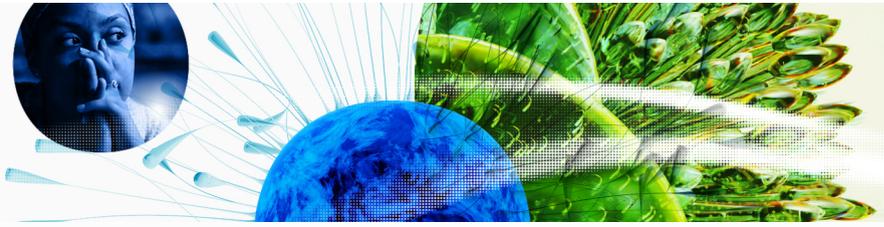
was equal to 112,144,000 USD in 2021, down by 3.34% from the year prior – and equivalent to an indicator rank of 85.



7.2.2 National feature films/mn pop. 15-69

was equal to 1.07 films/mn pop. 15-69 in 2021, up by 84.48% from the year prior – and equivalent to an indicator rank of 59.

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7.3.4 Mobile app creation/bn PPP\$ GDP

was equal to 492,782.11 Apps/bn PPP\$ GDP in 2022, up by 160.087% from the year prior – and equivalent to an indicator rank of 55.



→ Philippines's innovation top performers

> 2.3.4 QS university ranking of Philippines's top universities

Rank	University	Score
412	UNIVERSITY OF THE PHILIPPINES	27.70
651-700	ATENEO DE MANILA UNIVERSITY	18.20
801-1000	DE LA SALLE UNIVERSITY	14.50

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2023>).

Note: QS Quacquarelli Symonds Ltd annually assesses over 1,200 universities across the globe and scores them between [0,100]. Ranks can represent a single value "x", a tie "x=" or a range "x-y".

> 6.2.2 Top Unicorn Companies in Philippines

Rank	Unicorn Company	Industry	City	Valuation, bn USD
1	REVOLUTION PRECRAFTED	Other	Manila	1

Source: CBInsights, Tracker – The Complete List of Unicorn Companies: <https://www.cbinsights.com/research-unicorn-companies>

> 7.1.1 Top 15 intangible-asset intensive companies in Philippines

Rank	Firm	Intensity, %
1	SM INVESTMENTS CORP	33.12
2	SM PRIME HOLDINGS INC	49.32
3	INTERNATIONAL CONTAINER TERMINAL SERVICES INC	71.19

Source: Brand Finance (<https://brandirectory.com/reports/gif-2022>).

Note: Brand Finance only provides within economy ranks.

> 7.1.3 Top 5,000 companies in Philippines with highest global brand value

Rank	Brand	Industry	Brand Value, mn USD
1	PLDT	Telecoms	2,565.6
2	BDO	Banking	2,158.4
3	GLOBE TELECOM	Telecoms	2,028.0

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

Note: Rank corresponds to within economy ranks.

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GII 2023 rank

56

Philippines

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
52	69	Lower middle	SEAO	115.6	1,154.9	10,343.6

Score / Value Rank

Score / Value Rank

Institutions 46.3 79

1.1 Institutional environment	39.8	77
1.1.1 Operational stability for businesses*	41.0	93
1.1.2 Government effectiveness*	38.7	62
1.2 Regulatory environment	47.0	108
1.2.1 Regulatory quality*	44.1	69
1.2.2 Rule of law*	20.9	106
1.2.3 Cost of redundancy dismissal	27.4	114
1.3 Business environment	52.0	51
1.3.1 Policies for doing business*	41.9	81
1.3.2 Entrepreneurship policies and culture*	62.0	22

Human capital and research 25.3 88

2.1 Education	33.2	115
2.1.1 Expenditure on education, % GDP	3.9	79
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	13.1	82
2.1.4 PISA scales in reading, maths and science	349.7	78
2.1.5 Pupil-teacher ratio, secondary	24.6	109
2.2 Tertiary education	35.7	45
2.2.1 Tertiary enrolment, % gross	35.5	82
2.2.2 Graduates in science and engineering, %	26.3	37
2.2.3 Tertiary inbound mobility, %	n/a	n/a
2.3 Research and development (R&D)	6.9	70
2.3.1 Researchers, FTE/mn pop.	173.6	84
2.3.2 Gross expenditure on R&D, % GDP	0.3	73
2.3.3 Global corporate R&D investors, top 3, mn US\$	0.0	40
2.3.4 QS university ranking, top 3*	20.4	51

Infrastructure 33.6 86

3.1 Information and communication technologies (ICTs)	53.6	94
3.1.1 ICT access*	53.5	103
3.1.2 ICT use*	54.1	100
3.1.3 Government's online service*	59.1	76
3.1.4 E-participation*	47.7	79
3.2 General infrastructure	26.9	64
3.2.1 Electricity output, GWh/mn pop.	928.6	99
3.2.2 Logistics performance*	54.5	42
3.2.3 Gross capital formation, % GDP	25.0	55
3.3 Ecological sustainability	20.4	80
3.3.1 GDP/unit of energy use	14.8	26
3.3.2 Environmental performance*	16.9	116
3.3.3 ISO 14001 environment/bn PPP\$ GDP	1.0	64

Market sophistication 37.7 55

4.1 Credit	33.3	58
4.1.1 Finance for startups and scaleups*	81.2	7
4.1.2 Domestic credit to private sector, % GDP	52.0	71
4.1.3 Loans from microfinance institutions, % GDP	0.0	53
4.2 Investment	12.1	51
4.2.1 Market capitalization, % GDP	74.3	23
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP	0.0	61
4.2.3 VC recipients, deals/bn PPP\$ GDP	0.0	74
4.2.4 VC received, value, % GDP	0.0	47
4.3 Trade, diversification, and market scale	67.8	23
4.3.1 Applied tariff rate, weighted avg., %	1.7	52
4.3.2 Domestic industry diversification	89.3	51
4.3.3 Domestic market scale, bn PPP\$	1,154.9	29

Business sophistication 37.9 38

5.1 Knowledge workers	38.1	51
5.1.1 Knowledge-intensive employment, %	17.5	83
5.1.2 Firms offering formal training, %	59.8	8
5.1.3 GERD performed by business, % GDP	0.1	68
5.1.4 GERD financed by business, %	38.0	48
5.1.5 Females employed w/advanced degrees, %	12.3	62
5.2 Innovation linkages	19.2	79
5.2.1 University-industry R&D collaboration*	46.8	57
5.2.2 State of cluster development*	41.2	67
5.2.3 GERD financed by abroad, % GDP	0.0	89
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.0	61
5.2.5 Patent families/bn PPP\$ GDP	0.0	84
5.3 Knowledge absorption	56.4	8
5.3.1 Intellectual property payments, % total trade	0.6	60
5.3.2 High-tech imports, % total trade	31.3	1
5.3.3 ICT services imports, % total trade	2.0	38
5.3.4 FDI net inflows, % GDP	2.4	62
5.3.5 Research talent, % in businesses	51.8	23

Knowledge and technology outputs 29.9 46

6.1 Knowledge creation	14.3	67
6.1.1 Patents by origin/bn PPP\$ GDP	0.5	81
6.1.2 PCT patents by origin/bn PPP\$ GDP	0.0	82
6.1.3 Utility models by origin/bn PPP\$ GDP	1.7	9
6.1.4 Scientific and technical articles/bn PPP\$ GDP	n/a	n/a
6.1.5 Citable documents H-index	15.3	55
6.2 Knowledge impact	31.6	50
6.2.1 Labor productivity growth, %	0.5	80
6.2.2 Unicorn valuation, % GDP	0.2	44
6.2.3 Software spending, % GDP	0.2	57
6.2.4 High-tech manufacturing, %	40.3	26
6.3 Knowledge diffusion	43.9	25
6.3.1 Intellectual property receipts, % total trade	0.0	82
6.3.2 Production and export complexity	70.1	30
6.3.3 High-tech exports, % total trade	35.6	2
6.3.4 ICT services exports, % total trade	5.9	18
6.3.5 ISO 9001 quality/bn PPP\$ GDP	3.7	67

Creative outputs 26.4 60

7.1 Intangible assets	33.3	60
7.1.1 Intangible asset intensity, top 15, %	57.0	41
7.1.2 Trademarks by origin/bn PPP\$ GDP	34.5	68
7.1.3 Global brand value, top 5,000	3.9	38
7.1.4 Industrial designs by origin/bn PPP\$ GDP	0.7	78
7.2 Creative goods and services	20.3	49
7.2.1 Cultural and creative services exports, % total trade	0.1	85
7.2.2 National feature films/mn pop. 15-69	1.1	59
7.2.3 Entertainment and media market/th pop. 15-69	4.2	44
7.2.4 Creative goods exports, % total trade	5.8	10
7.3 Online creativity	18.7	74
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	1.2	93
7.3.2 Country-code TLDs/th pop. 15-69	0.4	101
7.3.3 GitHub commits/mn pop. 15-69	3.1	88
7.3.4 Mobile app creation/bn PPP\$ GDP	70.2	55

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/gii-ranking>. 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 Philippines.



> Philippines has missing data for two indicators and outdated data for twelve indicators.

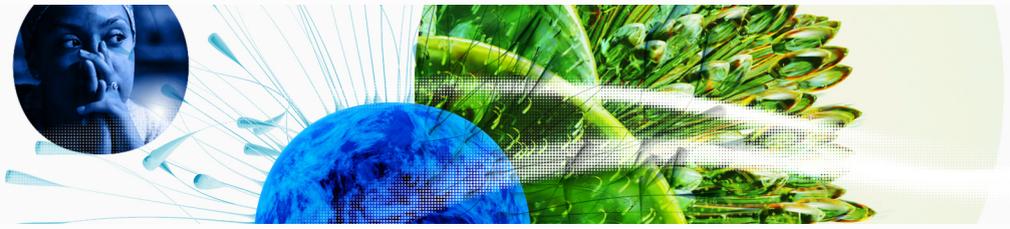
> Missing data for Philippines

Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2019	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	n/a	2020	UNESCO Institute for Statistics

> Outdated data for Philippines

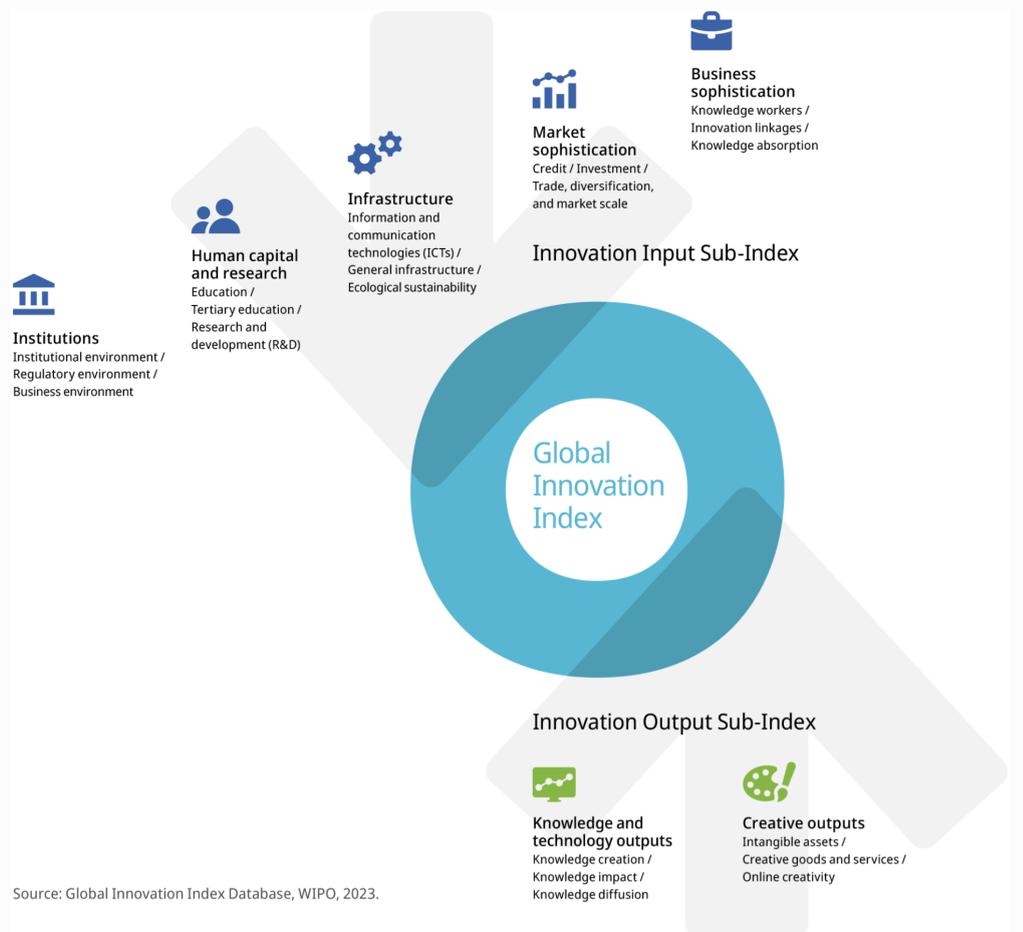
Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture	2015	2022	Global Entrepreneurship Monitor
2.3.1	Researchers, FTE/mn pop.	2018	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2018	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2020	2021	International Energy Agency
4.1.1	Finance for startups and scaleups	2015	2022	Global Entrepreneurship Monitor
5.1.1	Knowledge-intensive employment, %	2021	2022	International Labour Organization
5.1.2	Firms offering formal training, %	2015	2019	World Bank Enterprise Surveys
5.1.3	GERD performed by business, % GDP	2015	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	2015	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	Females employed w/advanced degrees, %	2018	2022	International Labour Organization
5.2.3	GERD financed by abroad, % GDP	2015	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	2015	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT

Global Innovation Index 2023



→ 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.