



## PHILIPPINES

**59th** Philippines ranks 59th 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 Philippines 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 Philippines in the GII 2022 is between ranks 55 and 61.

### Rankings for Philippines (2020–2022)

GIIYR	GII	Innovation inputs	Innovation outputs
2020	50	70	41
2021	51	72	40
2022	59	76	51

- Philippines performs better in innovation outputs than innovation inputs in 2022.
- This year Philippines ranks 76th in innovation inputs, lower than both 2021 and 2020.
- As for innovation outputs, Philippines ranks 51st. This position is lower than both 2021 and 2020.

**5th** Philippines ranks 5th among the 36 lower-middle-income group economies.

**11th** Philippines ranks 11th among the 17 economies in South East Asia, East Asia, and Oceania.

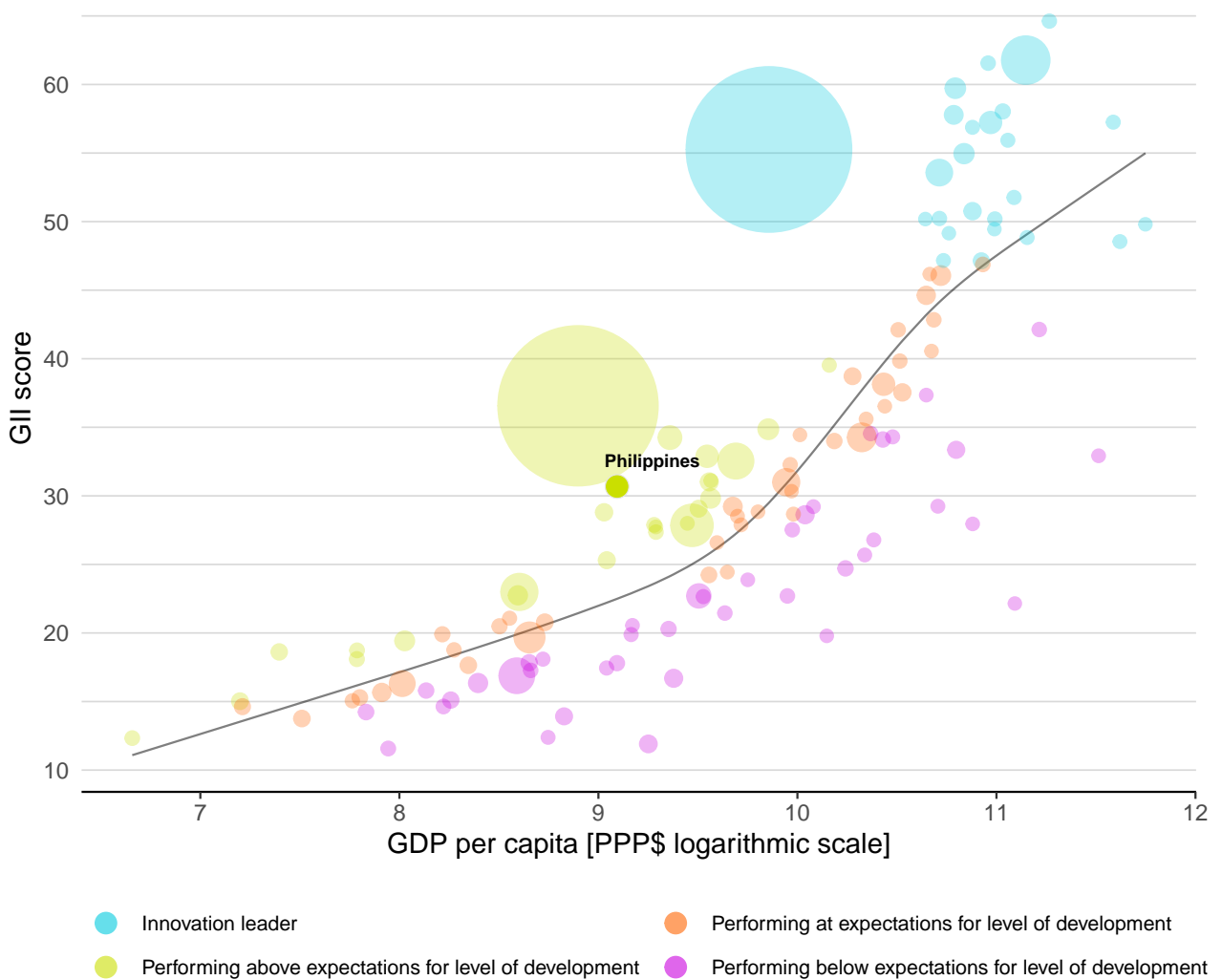


## EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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's performance is above expectations for its level of development.

### The positive relationship between innovation and development



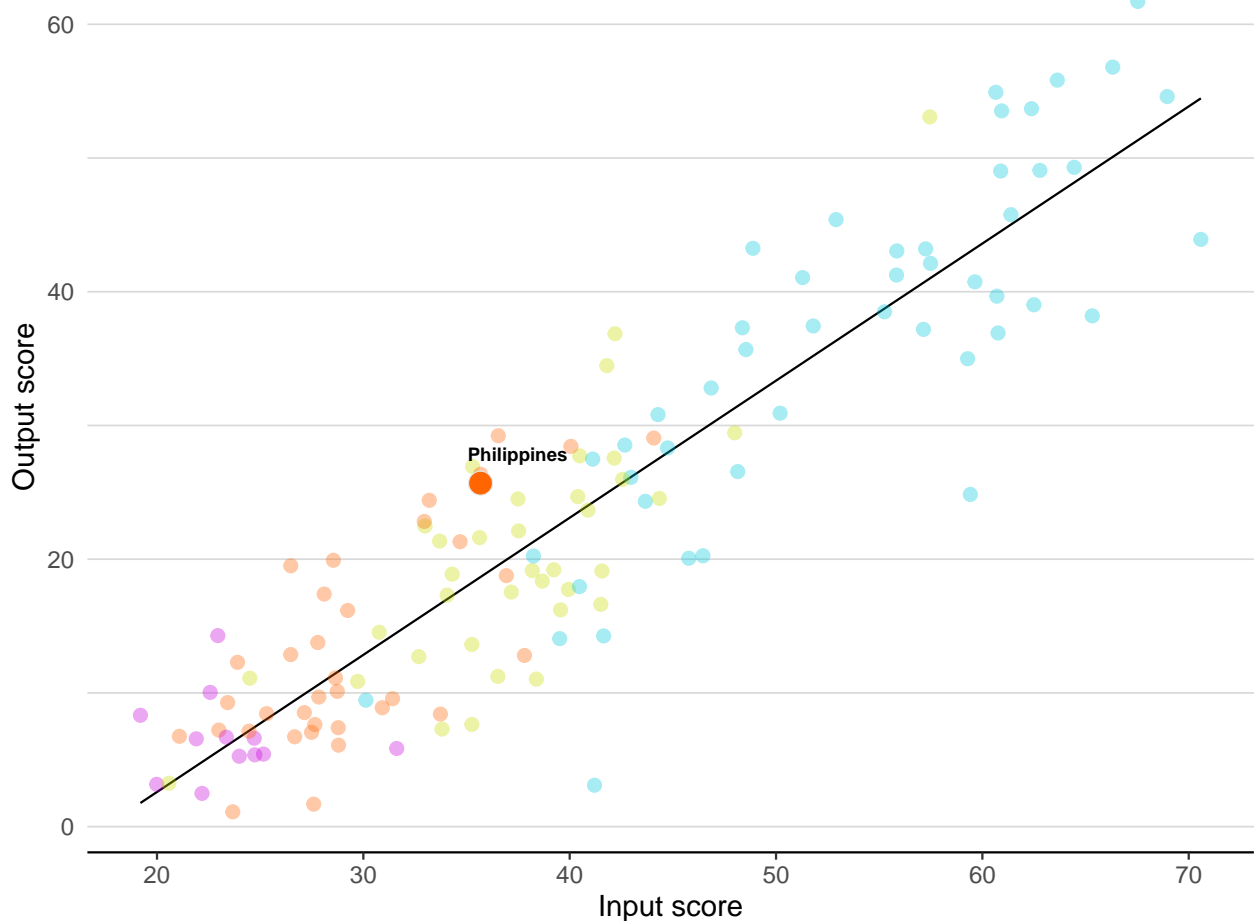


## EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Philippines 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 LOWER MIDDLE-INCOME GROUP ECONOMIES AND SOUTH EAST ASIA, EAST ASIA, AND OCEANIA

### The seven GII pillar scores for Philippines



#### Lower-middle-income group economies

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

#### South East Asia, East Asia, and Oceania

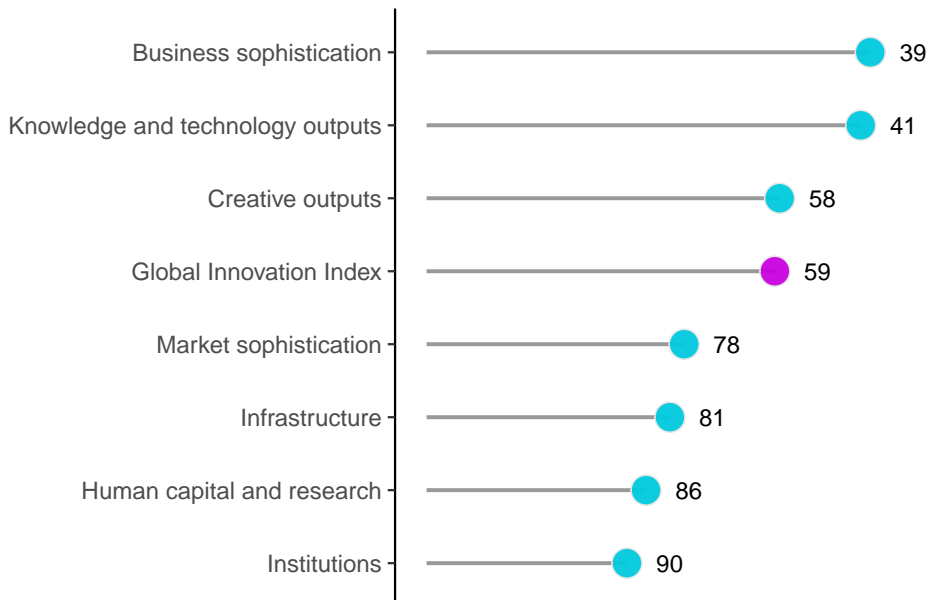
Philippines performs above the regional average in Knowledge and technology outputs.



## OVERVIEW OF RANKINGS IN THE SEVEN GII 2022 AREAS

Philippines performs best in Business sophistication and its weakest performance is in Institutions.

### The seven GII pillar ranks for Philippines



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

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

[https://www.wipo.int/ipstats/en/statistics/country\\_profile/profile.jsp?code=PH](https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=PH).



## INNOVATION STRENGTHS AND WEAKNESSES

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






### Strengths and weaknesses for Philippines

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
3.3.1	GDP/unit of energy use	24	1.2.3	Cost of redundancy dismissal	115
4.3.3	Domestic market scale, bn PPP\$	28	2.1.4	PISA scales in reading, maths and science	77
5.1.2	Firms offering formal training, %	9	2.1.5	Pupil-teacher ratio, secondary	104
5.3.2	High-tech imports, % total trade	3	2.3.3	Global corporate R&D investors, top 3, mn USD	38
6.1.3	Utility models by origin/bn PPP\$ GDP	15	3.3.2	Environmental performance	113
6.2.5	High-tech manufacturing, %	28	4.1.3	Loans from microfinance institutions, % GDP	56
6.3.2	Production and export complexity	28	5.2.3	GERD financed by abroad, % GDP	89
6.3.3	High-tech exports, % total trade	2	6.1.4	Scientific and technical articles/bn PPP\$ GDP	122
6.3.4	ICT services exports, % total trade	14	6.2.2	New businesses/th pop. 15–64	111
7.2.5	Creative goods exports, % total trade	10	7.2.2	National feature films/mn pop. 15–69	60

# Philippines

# 59

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
51	76	Lower middle	SEAO	111.0	983.1	8,900

	Score/Value	Rank		Score/Value	Rank
 <b>Institutions</b>	48.7	90	 <b>Business sophistication</b>	36.9	39
<b>1.1 Political environment</b>	56.4	76	<b>5.1 Knowledge workers</b>	38.2	51
1.1.1 Political and operational stability*	61.8	87	5.1.1 Knowledge-intensive employment, %	18.5	80
1.1.2 Government effectiveness*	51.0	65	5.1.2 Firms offering formal training, %	59.8	9
<b>1.2 Regulatory environment</b>	50.1	107	5.1.3 GERD performed by business, % GDP	0.1	68
1.2.1 Regulatory quality*	45.7	72	5.1.4 GERD financed by business, %	38.0	47
1.2.2 Rule of law*	31.8	95	5.1.5 Females employed w/advanced degrees, %	13.1	58
1.2.3 Cost of redundancy dismissal	27.4	115	<b>5.2 Innovation linkages</b>	20.5	91
<b>1.3 Business environment</b>	39.4	[87]	5.2.1 University-industry R&D collaboration†	44.4	64
1.3.1 Policies for doing business†	39.4	96	5.2.2 State of cluster development and depth†	46.6	70
1.3.2 Entrepreneurship policies and culture*	n/a	n/a	5.2.3 GERD financed by abroad, % GDP	0.0	89
			5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.0	52
			5.2.5 Patent families/bn PPP\$ GDP	0.0	87
 <b>Human capital and research</b>	25.0	86	<b>5.3 Knowledge absorption</b>	51.9	13
<b>2.1 Education</b>	33.4	112	5.3.1 Intellectual property payments, % total trade	0.7	58
2.1.1 Expenditure on education, % GDP	3.9	83	5.3.2 High-tech imports, % total trade	30.6	3
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	5.3.3 ICT services imports, % total trade	1.7	50
2.1.3 School life expectancy, years	13.1	81	5.3.4 FDI net inflows, % GDP	2.3	66
2.1.4 PISA scales in reading, maths and science	349.7	77	5.3.5 Research talent, % in businesses	51.8	22
2.1.5 Pupil-teacher ratio, secondary	24.6	104			
<b>2.2 Tertiary education</b>	33.4	59	 <b>Knowledge and technology outputs</b>	30.8	41
2.2.1 Tertiary enrolment, % gross	35.5	79	<b>6.1 Knowledge creation</b>	11.4	69
2.2.2 Graduates in science and engineering, %	22.8	52	6.1.1 Patents by origin/bn PPP\$ GDP	0.5	75
2.2.3 Tertiary inbound mobility, %	n/a	n/a	6.1.2 PCT patents by origin/bn PPP\$ GDP	0.1	76
<b>2.3 Research and development (R&amp;D)</b>	8.0	63	6.1.3 Utility models by origin/bn PPP\$ GDP	1.5	15
2.3.1 Researchers, FTE/mn pop.	173.6	84	6.1.4 Scientific and technical articles/bn PPP\$ GDP	2.5	122
2.3.2 Gross expenditure on R&D, % GDP	0.3	75	6.1.5 Citable documents H-index	14.8	55
2.3.3 Global corporate R&D investors, top 3, mn USD	0.0	38	<b>6.2 Knowledge impact</b>	29.6	59
2.3.4 QS university ranking, top 3*	20.3	48	6.2.1 Labor productivity growth, %	2.2	32
			6.2.2 New businesses/th pop. 15-64	0.2	111
			6.2.3 Software spending, % GDP	0.2	61
			6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.5	60
			6.2.5 High-tech manufacturing, %	38.7	28
 <b>Infrastructure</b>	38.7	81	<b>6.3 Knowledge diffusion</b>	51.5	14
<b>3.1 Information and communication technologies (ICTs)</b>	66.2	85	6.3.1 Intellectual property receipts, % total trade	0.0	82
3.1.1 ICT access*	69.4	100	6.3.2 Production and export complexity	63.9	28
3.1.2 ICT use*	47.6	95	6.3.3 High-tech exports, % total trade	39.7	2
3.1.3 Government's online service*	72.9	60	6.3.4 ICT services exports, % total trade	6.3	14
3.1.4 E-participation*	75.0	57			
<b>3.2 General infrastructure</b>	23.1	88	 <b>Creative outputs</b>	20.5	58
3.2.1 Electricity output, GWh/mn pop.	980.8	97	<b>7.1 Intangible assets</b>	30.0	61
3.2.2 Logistics performance*	39.5	59	7.1.1 Intangible asset intensity, top 15, %	60.4	41
3.2.3 Gross capital formation, % GDP	19.8	93	7.1.2 Trademarks by origin/bn PPP\$ GDP	33.7	69
<b>3.3 Ecological sustainability</b>	26.8	59	7.1.3 Global brand value, top 5,000, % GDP	41.8	39
3.3.1 GDP/unit of energy use	15.4	24	7.1.4 Industrial designs by origin/bn PPP\$ GDP	0.7	75
3.3.2 Environmental performance*	28.9	113	<b>7.2 Creative goods and services</b>	20.3	56
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.3	64	7.2.1 Cultural and creative services exports, % total trade	0.1	83
			7.2.2 National feature films/mn pop. 15-69	1.0	60
			7.2.3 Entertainment and media market/th pop. 15-69	4.5	47
			7.2.4 Printing and other media, % manufacturing	0.7	71
			7.2.5 Creative goods exports, % total trade	6.3	10
 <b>Market sophistication</b>	29.2	78	<b>7.3 Online creativity</b>	1.9	87
<b>4.1 Credit</b>	9.3	115	7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	1.3	90
4.1.1 Finance for startups and scaleups*	n/a	n/a	7.3.2 Country-code TLDs/th pop. 15-69	0.4	101
4.1.2 Domestic credit to private sector, % GDP	52.1	68	7.3.3 GitHub commit pushes received/mn pop. 15-69	2.1	85
4.1.3 Loans from microfinance institutions, % GDP	0.0	56	7.3.4 Mobile app creation/bn PPP\$ GDP	3.7	62
<b>4.2 Investment</b>	10.6	55			
4.2.1 Market capitalization, % GDP	74.3	24			
4.2.2 Venture capital investors, deals/bn PPP\$ GDP	0.0	70			
4.2.3 Venture capital recipients, deals/bn PPP\$ GDP	0.0	75			
4.2.4 Venture capital received, value, % GDP	0.0	52			
<b>4.3 Trade, diversification, and market scale</b>	67.8	22			
4.3.1 Applied tariff rate, weighted avg., %	1.7	52			
4.3.2 Domestic industry diversification	92.2	39			
4.3.3 Domestic market scale, bn PPP\$	983.1	28			

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](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 Philippines.

### Missing data for Philippines

Code	Indicator name	Economy year	Model year	Source
1.3.2	Entrepreneurship policies and culture	n/a	2021	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2018	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	n/a	2019	UNESCO Institute for Statistics
4.1.1	Finance for startups and scaleups	n/a	2021	Global Entrepreneurship Monitor

### Outdated data for Philippines

Code	Indicator name	Economy year	Model year	Source
2.3.1	Researchers, FTE/mn pop.	2018	2020	UNESCO Institute for Statistics
2.3.2	Gross expenditure on R&D, % GDP	2018	2020	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2019	2020	International Energy Agency
4.3.2	Domestic industry diversification	2018	2019	United Nations Industrial Development Organization
5.1.1	Knowledge-intensive employment, %	2020	2021	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	2020	UNESCO Institute for Statistics
5.1.4	GERD financed by business, %	2015	2019	UNESCO Institute for Statistics
5.1.5	Females employed w/advanced degrees, %	2018	2021	International Labour Organization
5.2.3	GERD financed by abroad, % GDP	2015	2019	UNESCO Institute for Statistics
5.3.5	Research talent, % in businesses	2015	2020	UNESCO Institute for Statistics
6.2.5	High-tech manufacturing, %	2018	2019	United Nations Industrial Development Organization
7.2.4	Printing and other media, % manufacturing	2018	2019	United Nations Industrial Development Organization

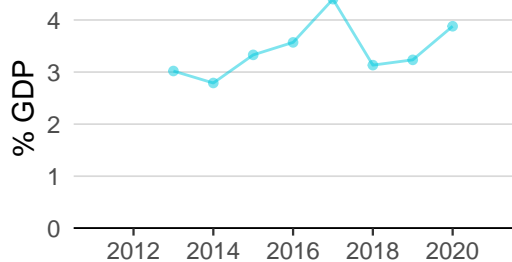




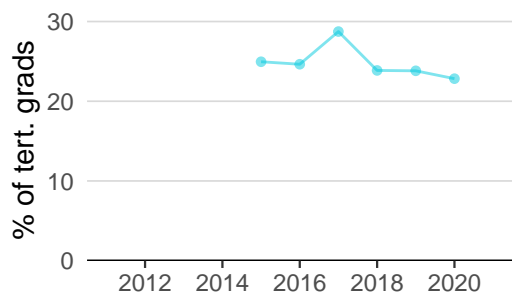
## PHILIPPINES'S INNOVATION SYSTEM

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

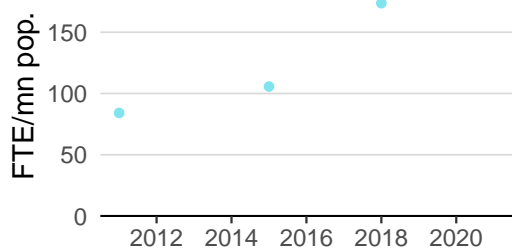
### Innovation inputs



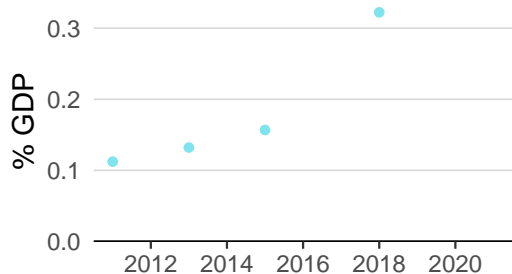
**2.1.1 Expenditure on education** was equal to 3.9% GDP in 2020—up by 20 percentage points from the year prior—and equivalent to an indicator rank of 83.



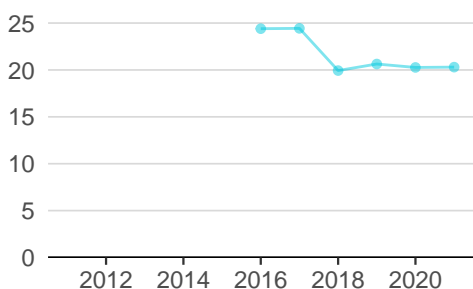
**2.2.2 Graduates in science and engineering** was equal to 22.8% of tert. grads in 2020—down by 4 percentage points from the year prior—and equivalent to an indicator rank of 52.



**2.3.1 Researchers** was equal to 173.6 FTE/mn pop. in 2018 and equivalent to an indicator rank of 84.



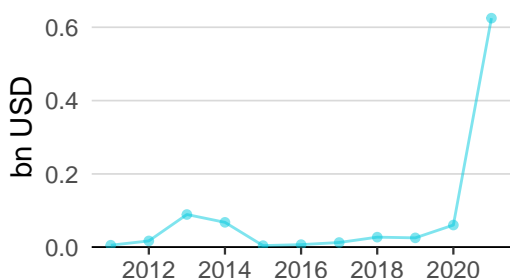
**2.3.2 Gross expenditure on R&D** was equal to 0.3% GDP in 2018 and equivalent to an indicator rank of 75.



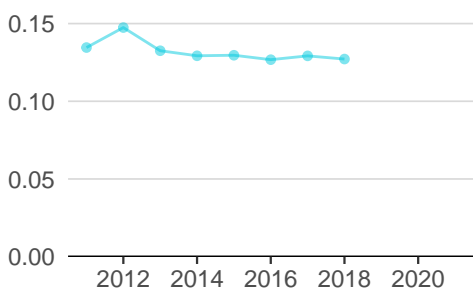
**2.3.4 QS university ranking** was equal to 20.3 in 2021—effectively unchanged from the year prior—and equivalent to an indicator rank of 48.



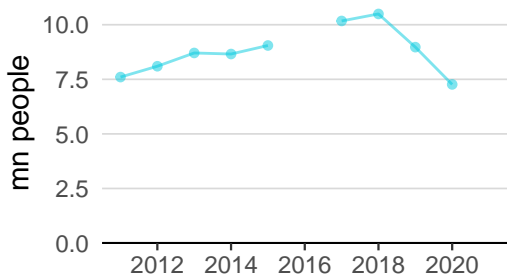
**3.1.1 ICT access** was equal to 6.9 in 2020 and equivalent to an indicator rank of 100.



**4.2.4 Venture capital received** was equal to 0.6 bn USD in 2021—up by 931 percentage points from the year prior—and equivalent to an indicator rank of 52.

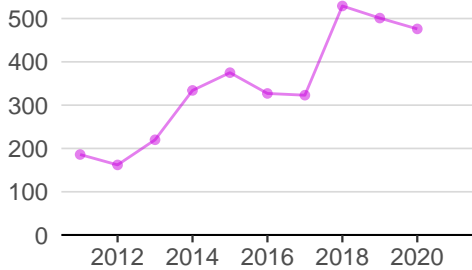


**4.3.2 Domestic industry diversification** was equal to 0.1 in 2018—down by 2 percentage points from the year prior—and equivalent to an indicator rank of 39.

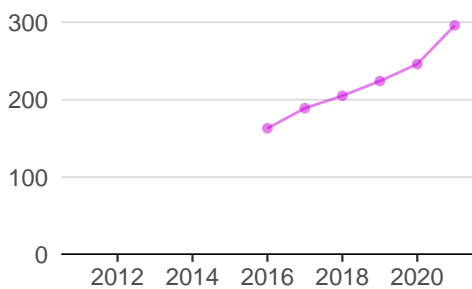


**5.1.1 Knowledge-intensive employment** was equal to 7.3 mn people in 2020—down by 19 percentage points from the year prior—and equivalent to an indicator rank of 80.

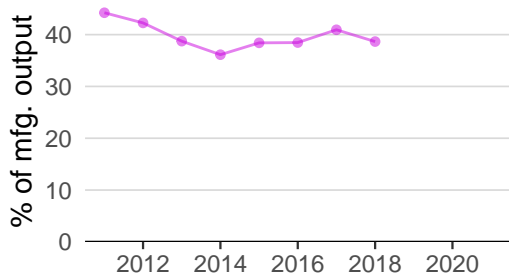
## Innovation outputs



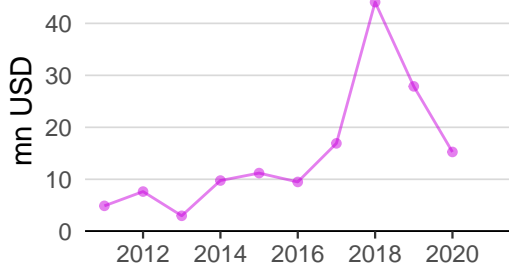
**6.1.1 Patents by origin** was equal to 476.0 in 2020—down by 5 percentage points from the year prior—and equivalent to an indicator rank of 75.



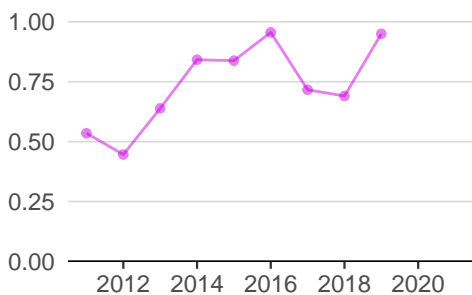
**6.1.5 Citable documents H-index** was equal to 296.0 in 2021—up by 20 percentage points from the year prior—and equivalent to an indicator rank of 55.



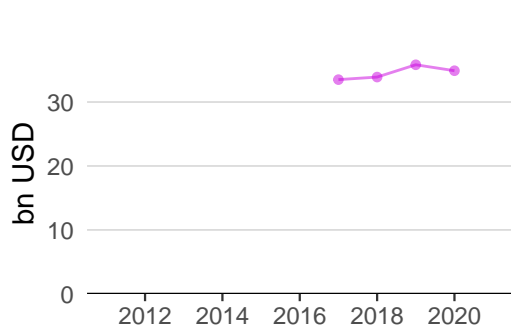
**6.2.5 High-tech manufacturing** was equal to 38.7% of mfg. output in 2018—down by 6 percentage points from the year prior—and equivalent to an indicator rank of 28.



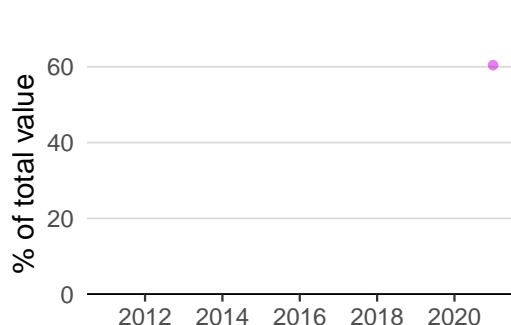
**6.3.1 Intellectual property receipts** was equal to 15.3 mn USD in 2020—down by 45 percentage points from the year prior—and equivalent to an indicator rank of 82.



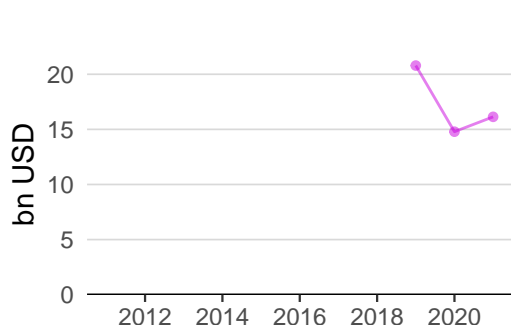
**6.3.2 Production and export complexity** was equal to 0.9 in 2019—up by 38 percentage points from the year prior—and equivalent to an indicator rank of 28.



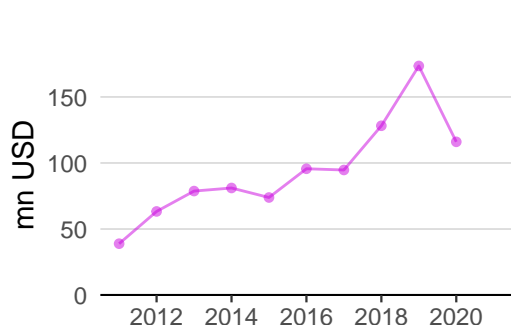
**6.3.3 High-tech exports** was equal to 34.9 bn USD in 2020—down by 3 percentage points from the year prior—and equivalent to an indicator rank of 2.



**7.1.1 Intangible asset intensity** was equal to 60.4% of total value in 2021 and equivalent to an indicator rank of 41.



**7.1.3 Global brand value** was equal to 16.1 bn USD in 2021—up by 9 percentage points from the year prior—and equivalent to an indicator rank of 39.



**7.2.1 Cultural and creative services exports** was equal to 116.0 mn USD in 2020—down by 33 percentage points from the year prior—and equivalent to an indicator rank of 83.

## PHILIPPINES'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
UNIVERSITY OF THE PHILIPPINES	28.1	399
ATENEO DE MANILA UNIVERSITY	19.0	601-650
DE LA SALLE UNIVERSITY	13.8	801-1000

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

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".

### 7.1.1 Intangible asset intensity, top 15

Firm	Rank
SM INVESTMENTS	1
SM PRIME	2
SAN MIGUEL FOOD AND BEVERAGE	3

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

Note: Brand Finance only provides within economy ranks.

### 7.1.3 Global brand value, top 5,000

Brand	Industry	Rank
PLDT	Telecoms	1
GLOBE TELECOM	Telecoms	2
BDO	Banking	3

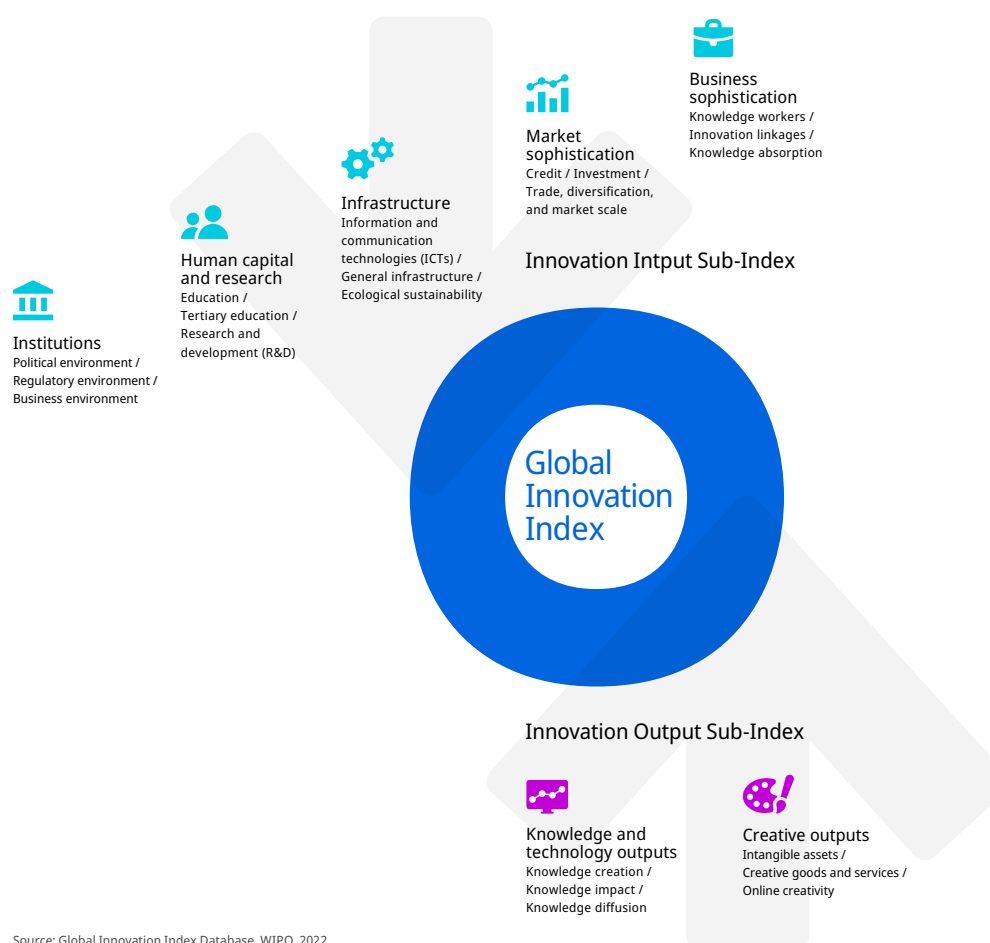
Source: Brand Finance (<https://brandirectory.com>).

Note: Rank corresponds to within economy ranks.

## 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.