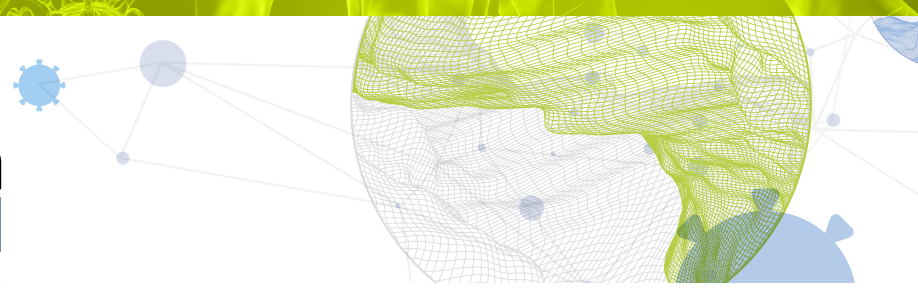




Global Innovation Index 2021



PHILIPPINES

51st Philippines ranks 51st 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 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 2021 is between ranks 47 and 55.

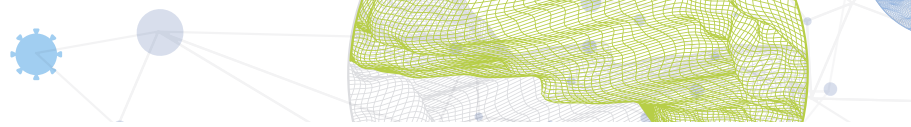
Rankings for Philippines (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	51	72	40
2020	50	70	41
2019	54	76	42

- Philippines performs better in innovation outputs than innovation inputs in 2021.
- This year Philippines ranks 72nd in innovation inputs, lower than last year but higher than 2019.
- As for innovation outputs, Philippines ranks 40th. This position is higher than both 2020 and 2019.

4th Philippines ranks 4th among the 34 lower middle-income group economies.

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

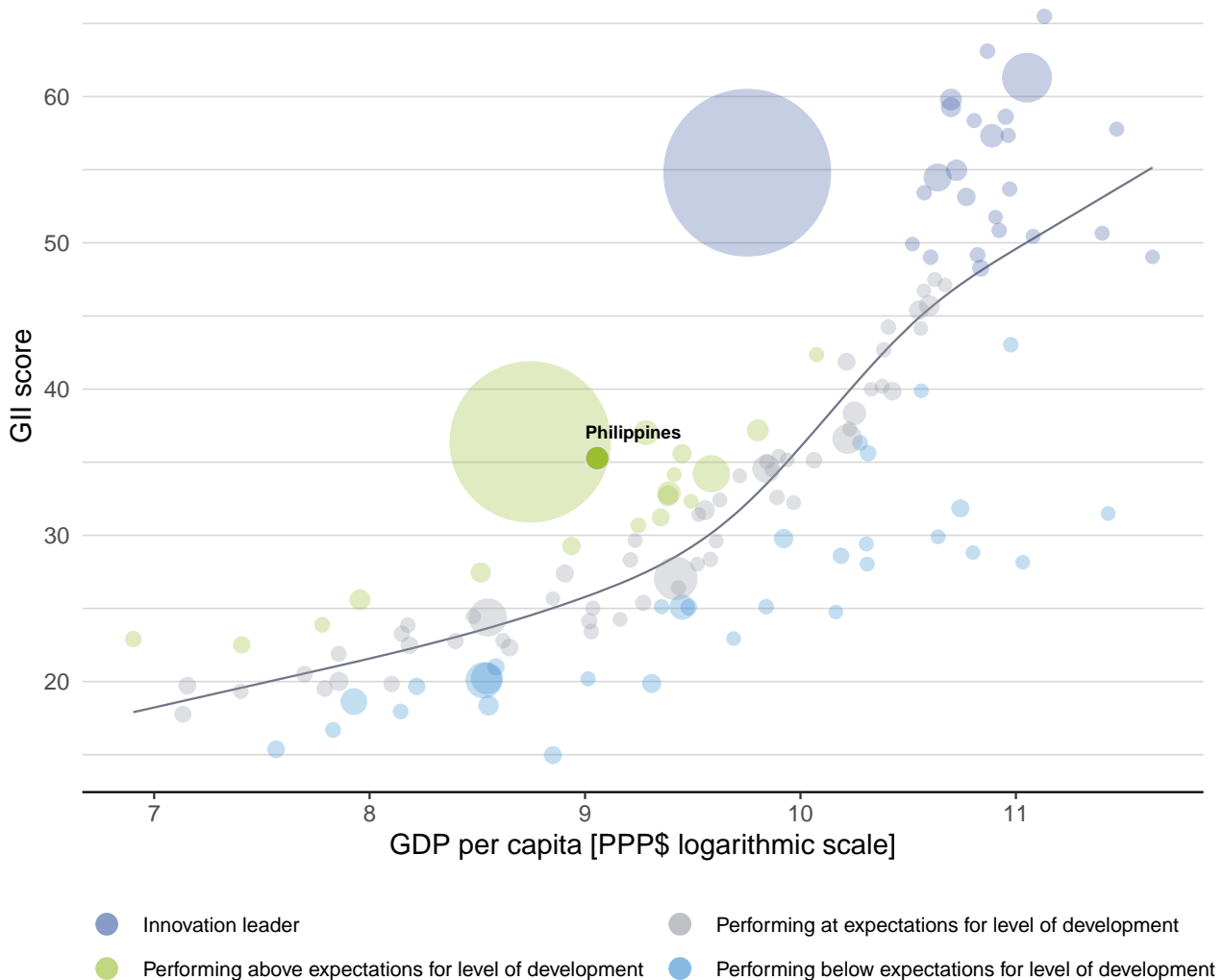


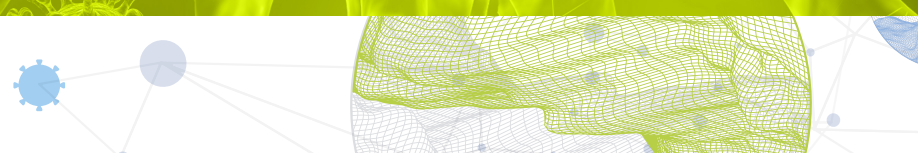
EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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



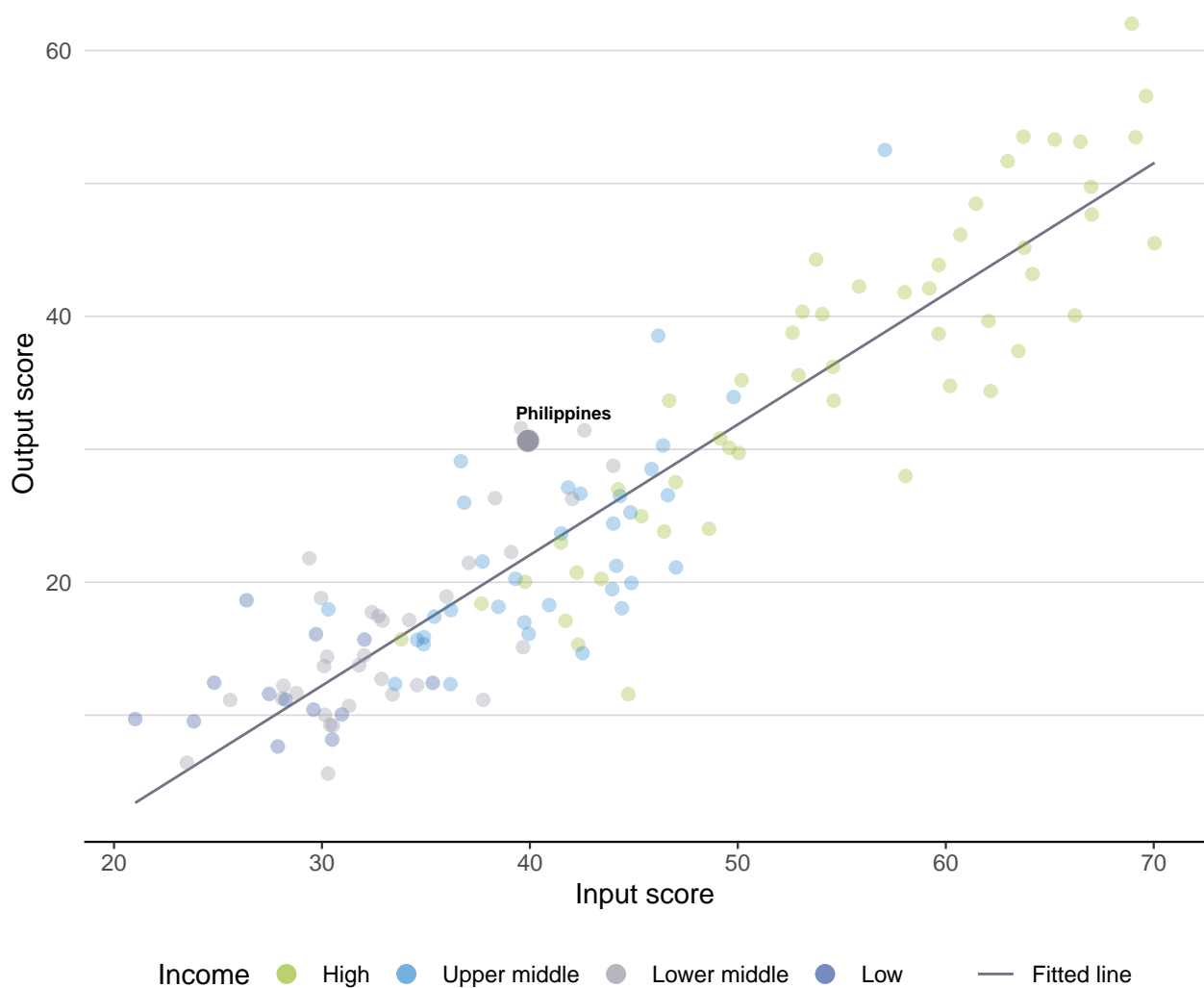


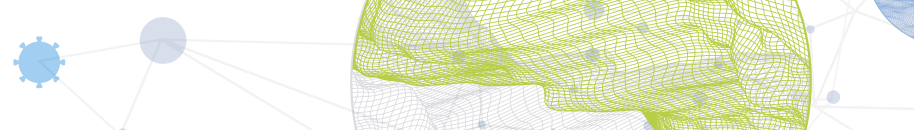
EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

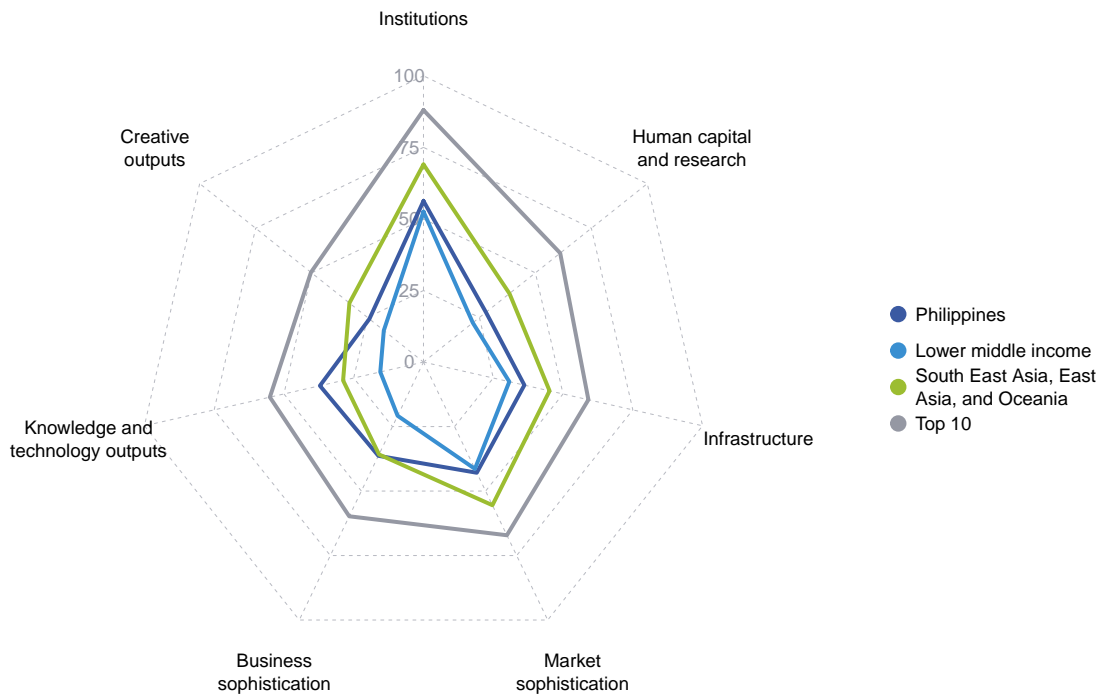
Innovation input to output performance





BENCHMARKING AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND SOUTH EAST ASIA, EAST ASIA, AND OCEANIA

The seven GII pillar scores for Philippines

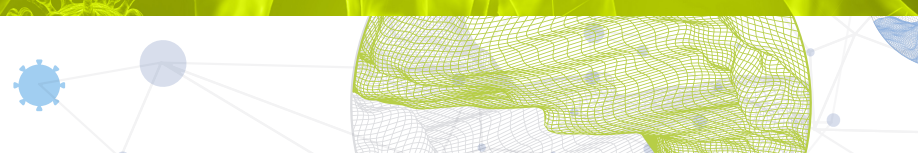


Lower middle-income group economies

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

South East Asia, East Asia, and Oceania

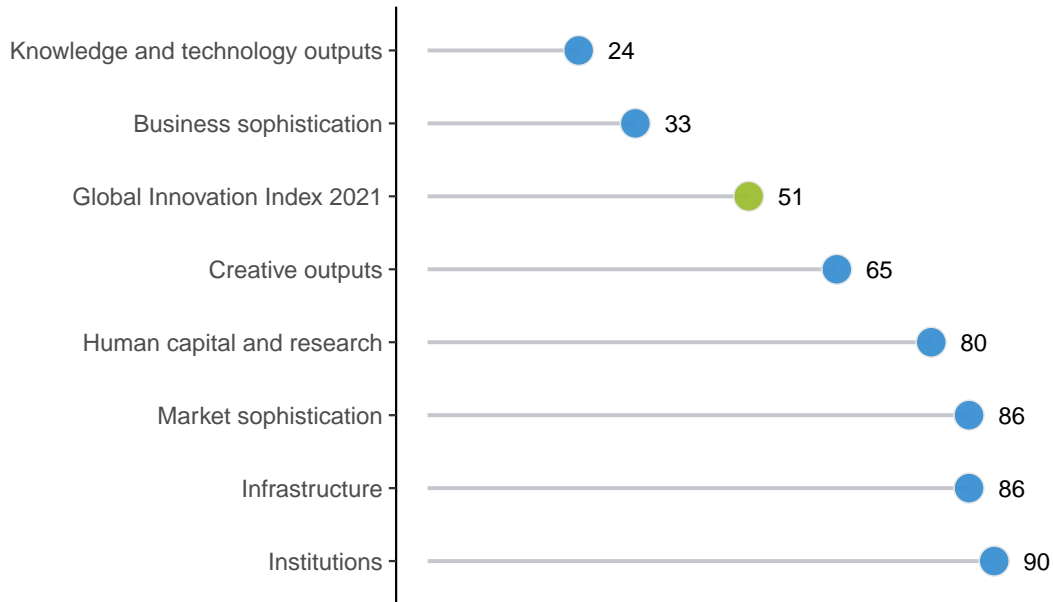
Philippines performs above the regional average in two pillars, namely: Business sophistication; and, Knowledge and technology outputs.



OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Philippines performs best in Knowledge and technology outputs and its weakest performance is in Institutions.

The seven GII pillar ranks for Philippines



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 Philippines in the GII 2021.

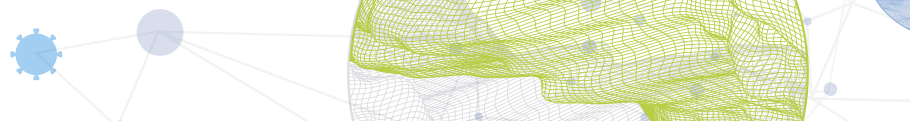
Strengths and weaknesses for Philippines

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
2.2.2	Graduates in science and engineering, %	19	1.2.3	Cost of redundancy dismissal	114
3.3.1	GDP/unit of energy use	21	1.3.1	Ease of starting a business	125
4.3	Trade, diversification, and market scale	21	2.1.4	PISA scales in reading, maths and science	78
4.3.1	Applied tariff rate, weighted avg., %	22	2.3.3	Global corporate R&D investors, top 3, mn US\$	41
4.3.3	Domestic market scale, bn PPP\$	27	4.1	Credit	119
5.1.2	Firms offering formal training, %	8	4.1.1	Ease of getting credit	113
5.3	Knowledge absorption	10	4.2.3	Venture capital investors, deals/bn PPP\$ GDP	77
5.3.2	High-tech imports, % total trade	1	5.2.3	GERD financed by abroad, % GDP	92
6.1.3	Utility models by origin/bn PPP\$ GDP	8	6.1.4	Scientific and technical articles/bn PPP\$ GDP	124
6.3	Knowledge diffusion	5	6.2.2	New businesses/th pop. 15–64	109
6.3.3	High-tech exports, % total trade	1	7.2.4	Printing and other media, % manufacturing	87
6.3.4	ICT services exports, % total trade	13			
7.2.5	Creative goods exports, % total trade	10			

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$	GII 2020 rank
40	72	Lower middle	SEAO	109.6	933.9	8,574	50

	Score/Value	Rank		Score/Value	Rank
 Institutions	56.3	90	 Business sophistication	36.3	33
1.1 Political environment	55.4	74	5.1 Knowledge workers	38.1	47
1.1.1 Political and operational stability*	62.5	89	5.1.1 Knowledge-intensive employment, %	21.1	77
1.1.2 Government effectiveness*	51.8	69	5.1.2 Firms offering formal training, %	59.8	8
1.2 Regulatory environment	50.2	104	5.1.3 GERD performed by business, % GDP	0.1	70
1.2.1 Regulatory quality*	43.7	71	5.1.4 GERD financed by business, %	38.0	49
1.2.2 Rule of law*	34.1	94	5.1.5 Females employed w/advanced degrees, %	12.4	60
1.2.3 Cost of redundancy dismissal	27.4	114	5.2 Innovation linkages	17.1	94
1.3 Business environment	63.2	94	5.2.1 University-industry R&D collaboration†	43.7	61
1.3.1 Ease of starting a business*	71.3	125	5.2.2 State of cluster development and depth†	42.3	92
1.3.2 Ease of resolving insolvency*	55.1	60	5.2.3 GERD financed by abroad, % GDP	0.0	92
Human capital and research	27.9	80	5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.0	44
2.1 Education	37.9	[97]	5.2.5 Patent families/bn PPP\$ GDP	0.0	80
2.1.1 Expenditure on education, % GDP	n/a	n/a	5.3 Knowledge absorption	53.8	10
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	5.3.1 Intellectual property payments, % total trade	0.8	58
2.1.3 School life expectancy, years	13.1	80	5.3.2 High-tech imports, % total trade	26.8	1
2.1.4 PISA scales in reading, maths and science	349.7	78	5.3.3 ICT services imports, % total trade	1.2	63
2.1.5 Pupil-teacher ratio, secondary	25.2	105	5.3.4 FDI net inflows, % GDP	2.7	66
2.2 Tertiary education	39.8	41	5.3.5 Research talent, % in businesses	51.8	20
2.2.1 Tertiary enrolment, % gross	35.5	79	Knowledge and technology outputs	37.1	24
2.2.2 Graduates in science and engineering, %	28.7	19	6.1 Knowledge creation	19.1	55
2.2.3 Tertiary inbound mobility, %	n/a	n/a	6.1.1 Patents by origin/bn PPP\$ GDP	0.5	79
2.3 Research and development (R&D)	6.1	74	6.1.2 PCT patents by origin/bn PPP\$ GDP	0.0	80
2.3.1 Researchers, FTE/mn pop.	105.7	87	6.1.3 Utility models by origin/bn PPP\$ GDP	2.5	8
2.3.2 Gross expenditure on R&D, % GDP	0.2	95	6.1.4 Scientific and technical articles/bn PPP\$ GDP	2.1	124
2.3.3 Global corporate R&D investors, top 3, mn US\$	0.0	41	6.1.5 Citable documents H-index	14.8	55
2.3.4 QS university ranking, top 3*	20.3	53	6.2 Knowledge impact	33.6	47
Infrastructure	36.1	86	6.2.1 Labor productivity growth, %	1.6	31
3.1 Information and communication technologies (ICTs)	58.1	87	6.2.2 New businesses/th pop. 15–64	0.3	109
3.1.1 ICT access*	44.1	100	6.2.3 Software spending, % GDP	0.2	59
3.1.2 ICT use*	40.2	98	6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	4.2	63
3.1.3 Government's online service*	72.9	60	6.2.5 High-tech manufacturing, %	40.3	27
3.1.4 E-participation*	75.0	57	6.3 Knowledge diffusion	58.7	5
3.2 General infrastructure	21.5	101	6.3.1 Intellectual property receipts, % total trade	0.0	80
3.2.1 Electricity output, GWh/mn pop.	930.1	100	6.3.2 Production and export complexity	59.5	35
3.2.2 Logistics performance*	39.8	59	6.3.3 High-tech exports, % total trade	32.3	1
3.2.3 Gross capital formation, % GDP	19.1	95	6.3.4 ICT services exports, % total trade	5.4	13
3.3 Ecological sustainability	28.9	63	Creative outputs	24.2	65
3.3.1 GDP/unit of energy use	15.1	21	7.1 Intangible assets	29.9	71
3.3.2 Environmental performance*	38.4	92	7.1.1 Trademarks by origin/bn PPP\$ GDP	34.0	66
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.0	67	7.1.2 Global brand value, top 5,000, % GDP	40.3	39
Market sophistication	42.9	86	7.1.3 Industrial designs by origin/bn PPP\$ GDP	1.1	65
4.1 Credit	23.4	119	7.1.4 ICTs and organizational model creation†	61.7	39
4.1.1 Ease of getting credit*	40.0	113	7.2 Creative goods and services	27.0	33
4.1.2 Domestic credit to private sector, % GDP	48.0	74	7.2.1 Cultural and creative services exports, % total trade	0.2	74
4.1.3 Microfinance gross loans, % GDP	0.0	70	7.2.2 National feature films/mn pop. 15–69	0.8	89
4.2 Investment	22.7	102	7.2.3 Entertainment and media market/th pop. 15–69	4.0	49
4.2.1 Ease of protecting minority investors*	60.0	71	7.2.4 Printing and other media, % manufacturing	0.5	87
4.2.2 Market capitalization, % GDP	78.6	21	7.2.5 Creative goods exports, % total trade	6.3	10
4.2.3 Venture capital investors, deals/bn PPP\$ GDP	0.0	77	7.3 Online creativity	10.0	92
4.2.4 Venture capital recipients, deals/bn PPP\$ GDP	0.0	74	7.3.1 Generic top-level domains (TLDs)/th pop. 15–69	1.1	93
4.3 Trade, diversification, and market scale	82.6	21	7.3.2 Country-code TLDs/th pop. 15–69	0.4	100
4.3.1 Applied tariff rate, weighted avg., %	1.7	22	7.3.3 Wikipedia edits/mn pop. 15–69	37.5	89
4.3.2 Domestic industry diversification	93.4	39	7.3.4 Mobile app creation/bn PPP\$ GDP	2.8	67
4.3.3 Domestic market scale, bn PPP\$	933.9	27			

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

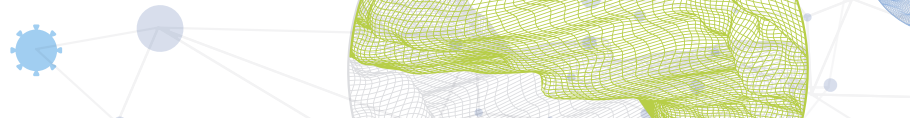
The following tables list data that are either missing or outdated for Philippines.

Missing data for Philippines

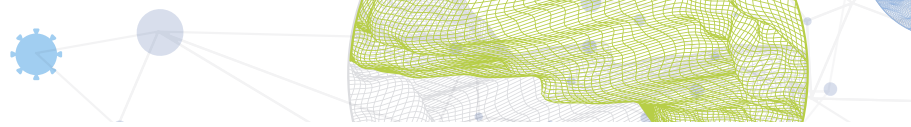
Code	Indicator name	Economy year	Model year	Source
2.1.1	Expenditure on education, % GDP	n/a	2017	UNESCO Institute for Statistics
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2017	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	n/a	2018	UNESCO Institute for Statistics

Outdated data for Philippines

Code	Indicator name	Economy year	Model year	Source
2.1.3	School life expectancy, years	2017	2018	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2017	2018	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.1	Researchers, FTE/mn pop.	2015	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2015	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.2	Firms offering formal training, %	2015	2019	World Bank
5.1.3	GERD performed by business, % GDP	2015	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.4	GERD financed by business, %	2015	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.5	Females employed w/advanced degrees, %	2016	2019	International Labour Organization



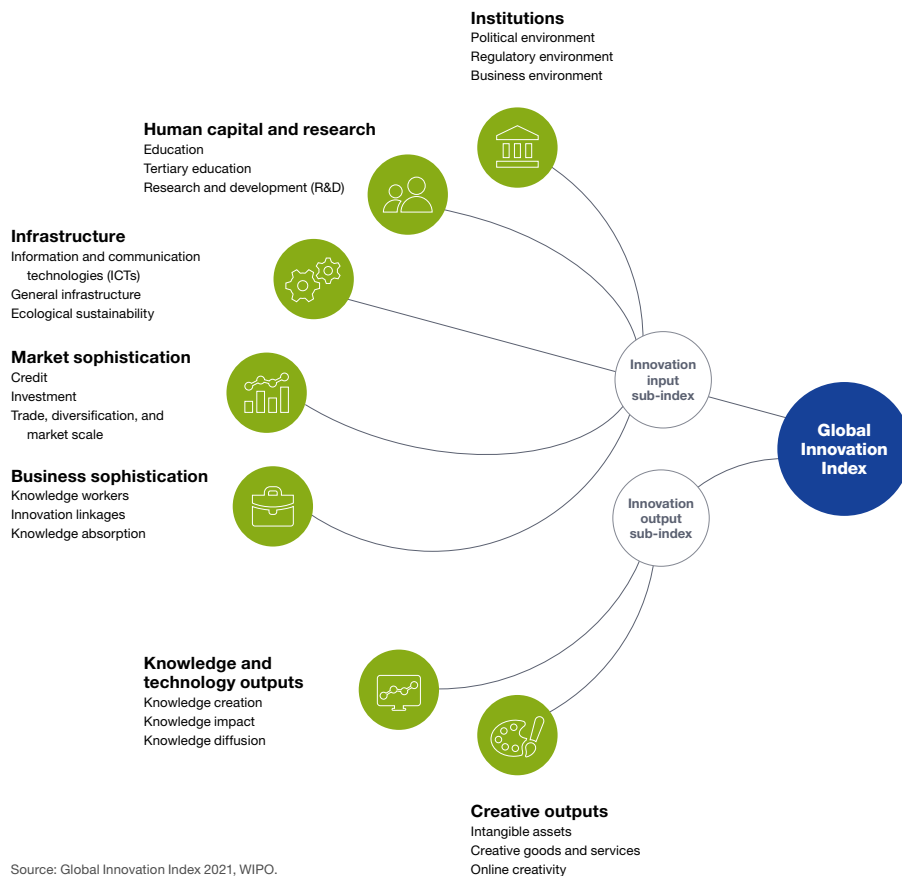
Code	Indicator name	Economy year	Model year	Source
5.2.3	GERD financed by abroad, % GDP	2015	2018	UNESCO Institute for Statistics
5.3.5	Research talent, % in businesses	2015	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
7.2.2	National feature films/mn pop. 15–69	2013	2017	UNESCO Institute for Statistics
7.2.4	Printing and other media, % manufacturing	2017	2018	United Nations Industrial Development Organization



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.