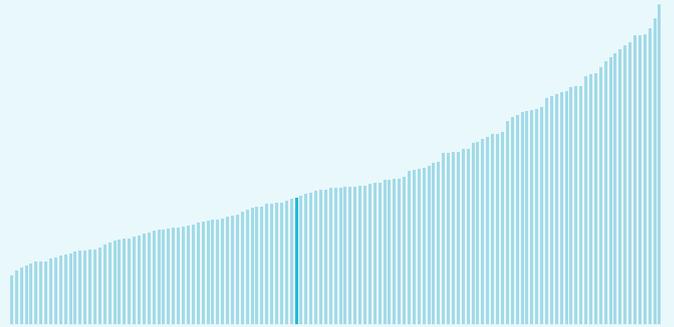


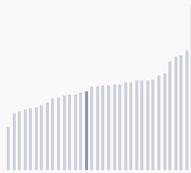
Peru ranking in the Global Innovation Index 2024

Peru ranks **75th** among the 133 economies featured in the GII 2024.

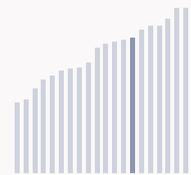
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



Peru ranks **20th** among the 34 upper-middle-income group economies.



Peru ranks **7th** among the 20 economies in Latin America and the Caribbean.



> Peru GII Ranking (2020-2024)

The table shows the rankings of Peru 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 Peru in the GII 2024 is between ranks 73 and 81.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	76th	55th	98th
2021	70th	52nd	82nd
2022	65th	52nd	81st
2023	76th	60th	84th
2024	75th	63rd	85th

Peru performs worse in innovation outputs than innovation inputs in 2024.

This year Peru ranks **63rd** in innovation inputs. This position is lower than last year.

Peru ranks **85th** in innovation outputs. This position is lower than last year.

Peru has no clusters in the top 100 S&T clusters of the Global Innovation Index.

Global Innovation Index 2024



> Global Innovation Tracker

The Global Innovation Tracker 2024 shows what is the current state of innovation in Peru, how rapidly is technology being embraced and what are the resulting societal impacts.



For Peru, 7 indicators have improved in the short-term and 4 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▲ 2.8% 2022 - 2023	▲ 21.3% 2021 - 2022	▲ 44.4% 2022 - 2023	▼ -44% 2022 - 2023	▼ -12.9% 2022 - 2023
▲ 14.1% 2013 - 2023	▲ 14.6% 2012 - 2022	n/a	n/a	▲ 7.6% 2013 - 2023

Technology adoption

Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
▲ 4.6% 2021 - 2022	▲ 4.3% 2021 - 2022	0% 2021 - 2022	▲ 5.8% 2021 - 2022	n/a
▲ 5.4% 2012 - 2022	▲ 6.7% 2012 - 2022		▲ 31.2% 2012 - 2022	n/a
57.7 per 100 inhabitants in 2022	9.3 per 100 inhabitants in 2022	5.3 per 100 inhabitants in 2022		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▼ -0.6% 2022 - 2023	▲ 1.4% 2021 - 2022	▲ 1.7°C 2023
▲ 0.9% 2013 - 2023	▼ -0.2% 2012 - 2022	n/a
29,638 USD in 2023	73.4 years in 2022	

Notes: Not all indicators of the Global Innovation Tracker are used to calculate the Global Innovation Index. Long-term annual growth refers to the compound annual growth rate (CAGR) over the indicated period. For each variable, a one-year growth rate is set for the short run, and ten-year CAGR is set for the long run; time windows might differ when gaps exist in data availability. The end period corresponds to the most recent available observation, which may differ among countries. Temperature change is an exception: it indicates the change in degrees Celsius with respect to the average temperature in the country from 1951–1980. Figures are rounded.



Expected vs. observed innovation performance

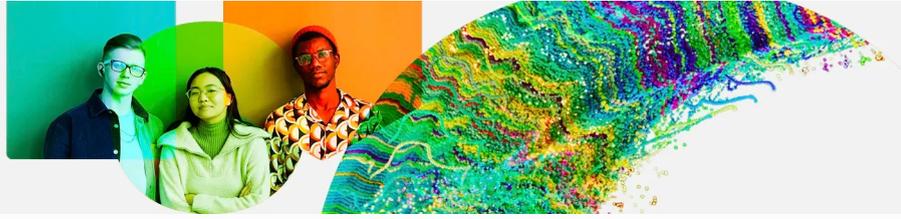
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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



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

> Innovation overperformers relative to their economic development





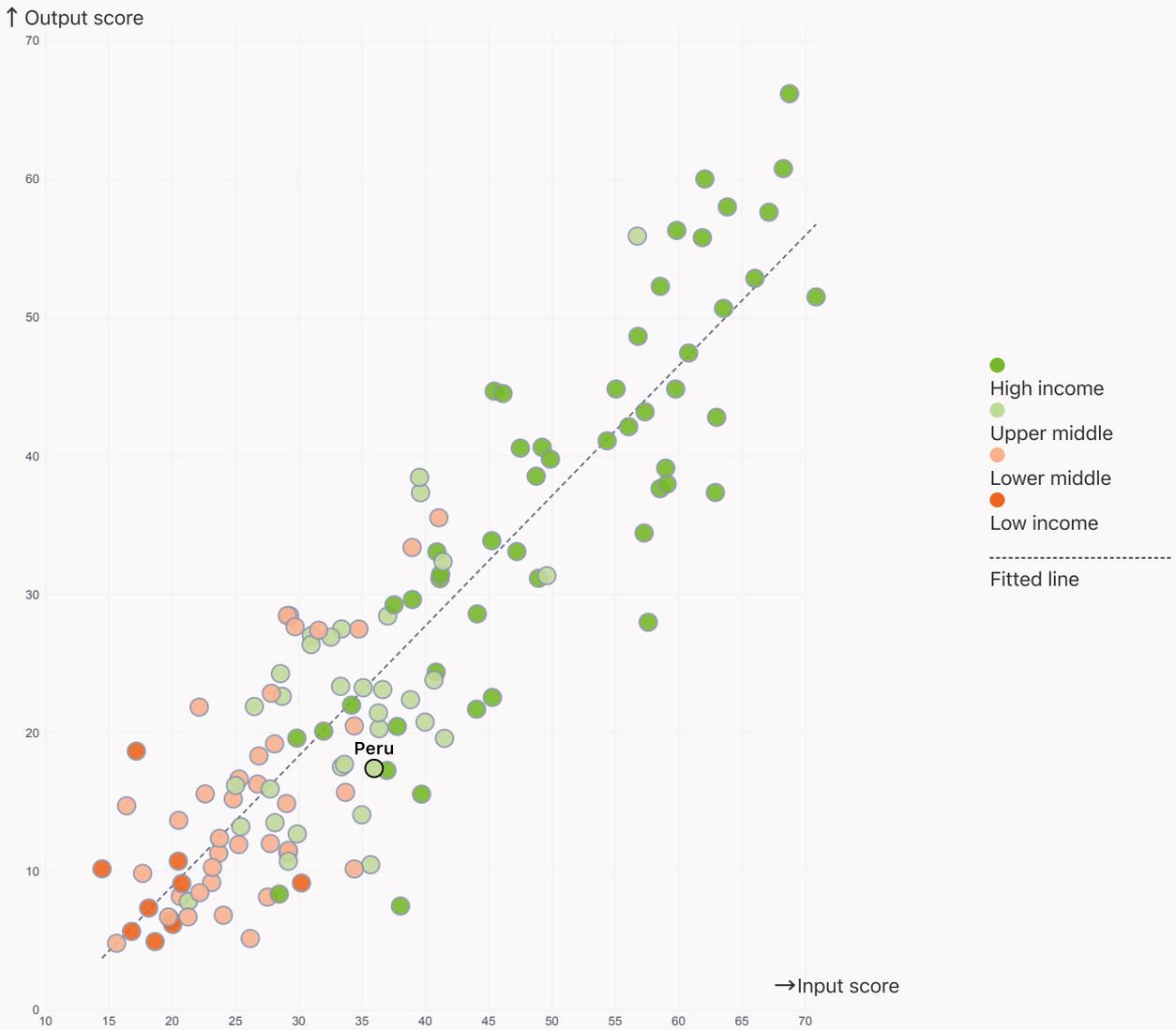
Effectively translating innovation investments into innovation outputs

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.



Peru produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

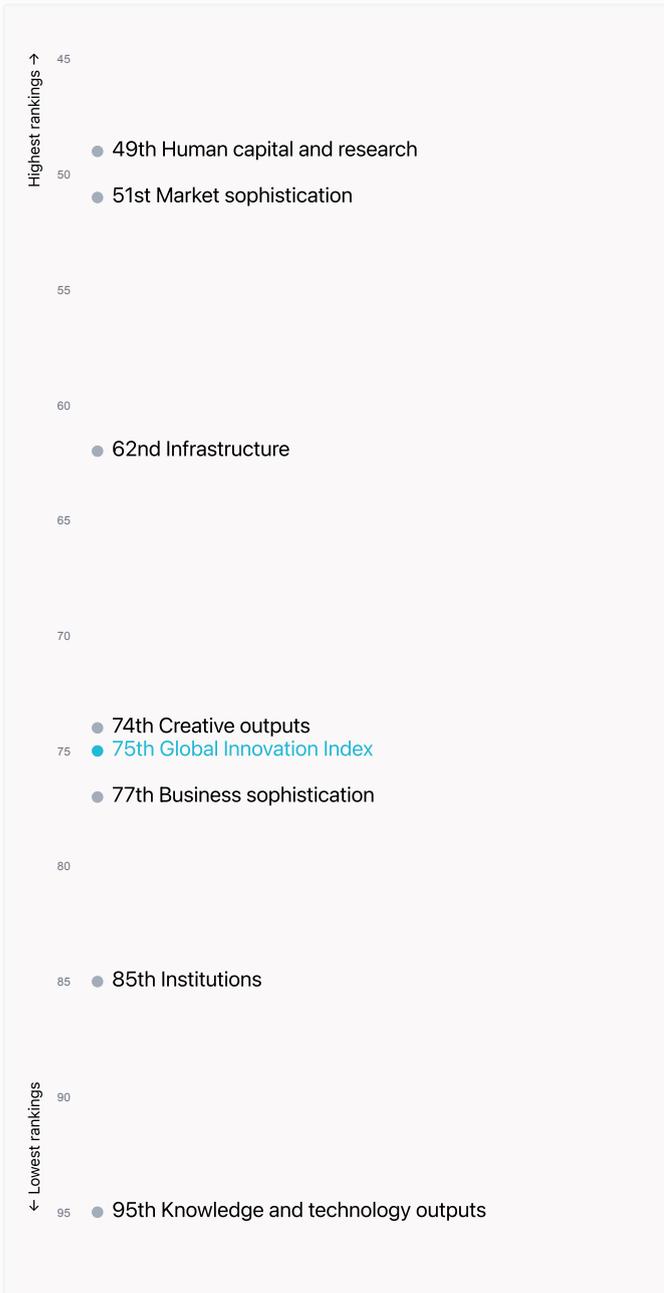


Global Innovation Index 2024



Overview of Peru's rankings in the seven areas of the GII in 2024

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



Highest rankings



Peru ranks highest in Human capital and research (49th), Market sophistication (51st), Infrastructure (62nd) and Creative outputs (74th).

Lowest rankings



Peru ranks lowest in Knowledge and technology outputs (95th), Institutions (85th) and Business sophistication (77th).

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



Benchmark of Peru against other economy groupings for each of the seven areas of the GII Index

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



Upper-Middle-Income economies

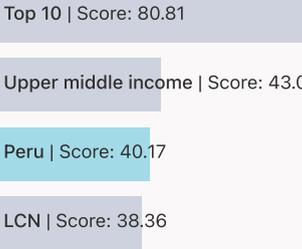
Peru performs above the upper-middle-income group average in Human capital and research, Infrastructure, Market sophistication.



Latin America And The Caribbean

Peru performs above the regional average in Institutions, Human capital and research, Infrastructure, Market sophistication, Creative outputs.

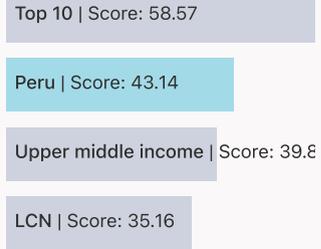
Institutions



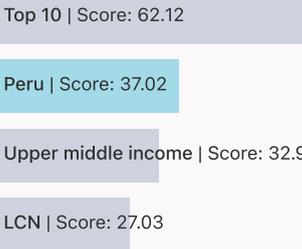
Human capital and research



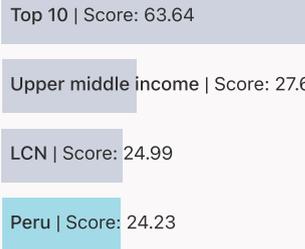
Infrastructure



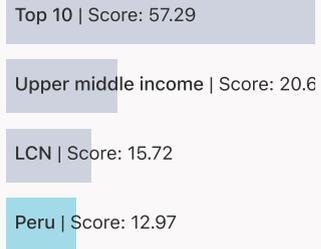
Market sophistication



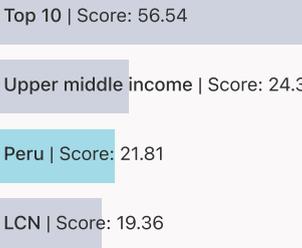
Business sophistication



Knowledge and technology outputs



Creative outputs





Innovation strengths and weaknesses in Peru

The table below gives an overview of the indicator strengths and weaknesses of Peru in the GII 2024.



Peru's main innovation strengths are **Loans from microfinance institutions, % GDP (rank 4)**, **Applied tariff rate, weighted avg., % (rank 6)** and **Firms offering formal training, % (rank 7)**.

Strengths

Weaknesses

Rank	Code	Indicator name	Rank	Code	Indicator name
4	4.1.3	Loans from microfinance institutions, % GDP	123	6.3.4	ICT services exports, % total trade
6	4.3.1	Applied tariff rate, weighted avg., %	123	5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP
7	5.1.2	Firms offering formal training, %	112	5.2.2	University-industry R&D collaboration ⁺
20	3.3.1	GDP/unit of energy use	111	5.2.3	State of cluster development ⁺
22	3.1.4	E-participation*	103	6.3.2	Production and export complexity
22	2.2.2	Graduates in science and engineering, %	93	4.2.3	VC recipients, deals/bn PPP\$ GDP
23	6.1.3	Utility models by origin/bn PPP\$ GDP	92	2.3.2	Gross expenditure on R&D, % GDP
29	7.1.2	Trademarks by origin/bn PPP\$ GDP	91	4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP
35	3.3.3	ISO 14001 environment/bn PPP\$ GDP	49	6.2.2	Unicorn valuation, % GDP
37	3.1.3	Government's online service*	41	2.3.3	Global corporate R&D investors, top 3, mn USD



Peru's innovation system

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

> Innovation inputs in Peru



2.1.1 Expenditure on education

was equal to 3.89 % GDP in 2022, down by 0.08 percentage points from the year prior – and equivalent to an indicator rank of 78.



2.2.2 Graduates in science and engineering

was equal to 29.64 % of total graduates in 2017, up by 6.17 percentage points from the year prior – and equivalent to an indicator rank of 22.



2.3.2 Gross expenditure on R&D

was equal to 0.16 % GDP in 2022, up by 0.03 percentage points from the year prior – and equivalent to an indicator rank of 92.



2.3.4 QS university ranking

was equal to an average score of 18.33 for the top three universities in 2023, down by 12.002% from the year prior – and equivalent to an indicator rank of 50.



4.2.4 VC received, value

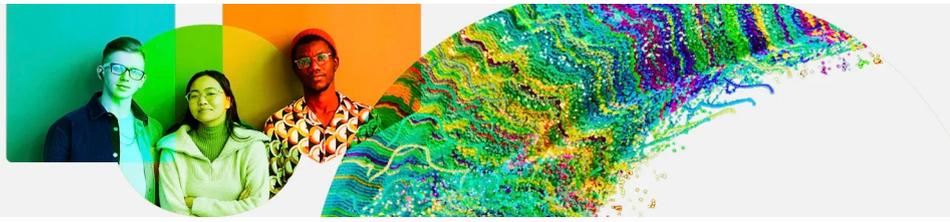
was equal to 6.12 thousand USD in 2023, down by 44.007% from the year prior – and equivalent to an indicator rank of 80.



4.3.2 Domestic industry diversification

was equal to an index score of 0.13 in 2021, down by 13.31% from the year prior – and equivalent to an indicator rank of 52.

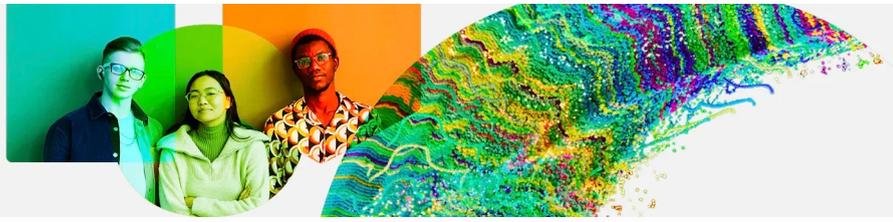
Global Innovation Index 2024



5.1.1 Knowledge-intensive employment

was equal to 15.55 % in 2023, up by 1.2 percentage points from the year prior – and equivalent to an indicator rank of 89.

Global Innovation Index 2024



> Innovation outputs in Peru



6.1.1 Patents by origin

was equal to 176 patents in 2022, up by 87.23% from the year prior – and equivalent to an indicator rank of 88.



6.2.2 Unicorn valuation

was equal to 0 % GDP in 2024 with no change from the year prior – and equivalent to an indicator rank of 49.



6.2.4 High-tech manufacturing

was equal to 11.71 % of total manufacturing output in 2021, up by 0.18 percentage points from the year prior – and equivalent to an indicator rank of 82.



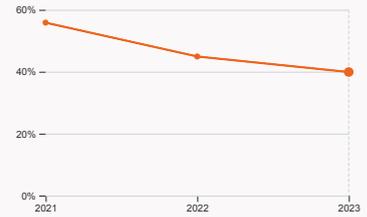
6.3.2 Production and export complexity

was equal to a score of -0.86 in 2021, up by 1.15% from the year prior – and equivalent to an indicator rank of 103.



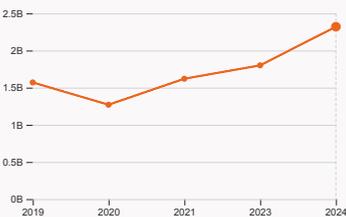
6.3.3 High-tech exports

was equal to 268.15 million USD in 2022, up by 17.6% from the year prior – and equivalent to an indicator rank of 95.



7.1.1 Intangible asset intensity

was equal to 39.9 % for the top 15 companies in 2023, down by 5.02 percentage points from the year prior – and equivalent to an indicator rank of 60.



7.1.3 Global brand value

was equal to 2.32 billion USD for the brands in the top 5,000 in 2024, up by 28.89% from the year prior – and equivalent to an indicator rank of 58.



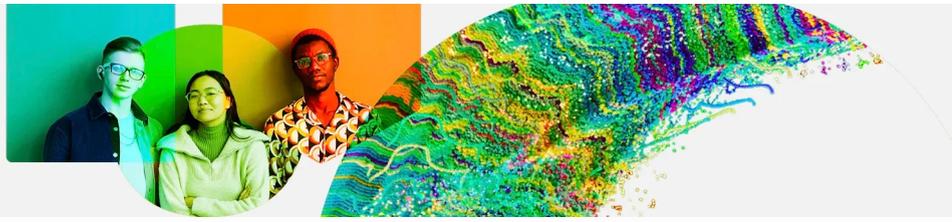
7.2.2 National feature films

was equal to 22 films in 2022, up by 1000% from the year prior – and equivalent to an indicator rank of 67.



7.3.3 Mobile app creation

was equal to 35.76 million global downloads of mobile apps in 2023, up by 7.45% from the year prior – and equivalent to an indicator rank of 84.



Peru's innovation top performers

2.3.4 QS university ranking of Peru's top universities

Rank	University	Score
336	PONTIFICIA UNIVERSIDAD CATOLICA DEL PERU	32.20
901-950	UNIVERSIDAD NACIONAL MAYOR DE SAN MARCOS	11.60
951-1000	UNIVERSIDAD NACIONAL DE INGENIERIA PERU	11.20

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".

7.1.1 Top 15 intangible-asset intensive companies in Peru

Rank	Firm	Intensity, %
1	CREDICORP LTD.	24.26
2	ALICORP S.A.A.	45.93
3	COMPANIA MINERA PODEROSA S.A.	75.10

Source: Brand Finance (<https://brandirectory.com/reports/gift-2022>).
 Note: Brand Finance only provides within economy ranks.

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

Rank	Brand	Industry	Brand Value, mn USD
1	BCP	Banking	789.1
2	SCC	Mining, Iron & Steel	610.3
3	INTERBANK	Banking	373.2

Source: Brand Finance (<https://brandirectory.com>).
 Note: Rank corresponds to within economy ranks.

Global Innovation Index 2024



Peru

GII 2024 rank

75

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
85	63	Upper middle	LCN	33.8	548.5	15,893.5
			Score / Value Rank			
Institutions			40.2 85	Business sophistication		
1.1 Institutional environment			45.5 84	5.1 Knowledge workers		
1.1.1 Operational stability for businesses*			57.3 78	32.1 65		
1.1.2 Government effectiveness*			33.6 95	5.1.1 Knowledge-intensive employment, %		
1.2 Regulatory environment			37.7 77	5.1.2 Firms offering formal training, %		
1.2.1 Regulatory quality*			47.3 59	5.1.3 GERD performed by business, % GDP		
1.2.2 Rule of law*			28 97	5.1.4 GERD financed by business, %		
1.3 Business environment			37.4 85	5.1.5 Females employed w/advanced degrees, %		
1.3.1 Policy stability for doing business*			32.2 101	5.2 Innovation linkages		
1.3.2 Entrepreneurship policies and culture*			42.5 39	12.4 116		
Human capital and research			35.5 49	5.2.1 Public Research-Industry co-publications, %		
2.1 Education			43.4 86	5.2.2 University-industry R&D collaboration†		
2.1.1 Expenditure on education, % GDP			3.9 78	5.2.3 State of cluster development†		
2.1.2 Government funding/pupil, secondary, % GDP/cap			15.2 69	5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP		
2.1.3 School life expectancy, years			14.5 59	5.2.5 Patent families/bn PPP\$ GDP		
2.1.4 PISA scales in reading, maths and science			402.4 62	5.3 Knowledge absorption		
2.1.5 Pupil-teacher ratio, secondary			13.9 68	28.2 60		
2.2 Tertiary education			56 6	5.3.1 Intellectual property payments, % total trade		
2.2.1 Tertiary enrolment, % gross			71.2 41	5.3.2 High-tech imports, % total trade		
2.2.2 Graduates in science and engineering, %			29.6 22	5.3.3 ICT services imports, % total trade		
2.2.3 Tertiary inbound mobility, %			n/a n/a	5.3.4 FDI net inflows, % GDP		
2.3 Research and development (R&D)			7 68	5.3.5 Research talent, % in businesses		
2.3.1 Researchers, FTE/mn pop.			n/a n/a	Knowledge and technology outputs		
2.3.2 Gross expenditure on R&D, % GDP			0.2 92	13 95		
2.3.3 Global corporate R&D investors, top 3, mn USD			0 41	6.1 Knowledge creation		
2.3.4 QS university ranking, top 3*			18.6 50	11.3 76		
Infrastructure			43.1 62	6.1.1 Patents by origin/bn PPP\$ GDP		
3.1 Information and communication technologies (ICTs)			74.9 57	6.1.2 PCT patents by origin/bn PPP\$ GDP		
3.1.1 ICT access*			67.8 95	6.1.3 Utility models by origin/bn PPP\$ GDP		
3.1.2 ICT use*			77.4 69	6.1.4 Scientific and technical articles/bn PPP\$ GDP		
3.1.3 Government's online service*			79 37	6.1.5 Citable documents H-index		
3.1.4 E-participation*			75.6 22	6.2 Knowledge impact		
3.2 General infrastructure			23.6 90	19.5 104		
3.2.1 Electricity output, GWh/mn pop.			1,683.8 88	6.2.1 Labor productivity growth, %		
3.2.2 Logistics performance*			40.9 60	6.2.2 Unicorn valuation, % GDP		
3.2.3 Gross capital formation, % GDP			21.5 88	6.2.3 Software spending, % GDP		
3.3 Ecological sustainability			30.9 38	6.2.4 High-tech manufacturing, %		
3.3.1 GDP/unit of energy use			17.2 20	6.3 Knowledge diffusion		
3.3.2 Low-carbon energy use, %			26.1 47	8.1 103		
3.3.3 ISO 14001 environment/bn PPP\$ GDP			2.9 35	6.3.1 Intellectual property receipts, % total trade		
Market sophistication			37 51	6.3.2 Production and export complexity		
4.1 Credit			42.4 33	6.3.3 High-tech exports, % total trade		
4.1.1 Finance for startups and scaleups†			44.3 51	6.3.4 ICT services exports, % total trade		
4.1.2 Domestic credit to private sector, % GDP			47.7 72	6.3.5 ISO 9001 quality/bn PPP\$ GDP		
4.1.3 Loans from microfinance institutions, % GDP			6.1 4	Creative outputs		
4.2 Investment			4.5 85	21.8 74		
4.2.1 Market capitalization, % GDP			35.8 43	7.1 Intangible assets		
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP			0.02 91	29.5 64		
4.2.3 VC recipients, deals/bn PPP\$ GDP			0.02 93	7.1.1 Intangible asset intensity, top 15, %		
4.2.4 VC received, value, % GDP			0.0001 80	7.1.2 Trademarks by origin/bn PPP\$ GDP		
4.3 Trade, diversification and market scale			64.2 30	7.1.3 Global brand value, top 5,000, % GDP		
4.3.1 Applied tariff rate, weighted avg., %			0.5 6	7.1.4 Industrial designs by origin/bn PPP\$ GDP		
4.3.2 Domestic industry diversification			85.5 52	7.2 Creative goods and services		
4.3.3 Domestic market scale, bn PPP\$			548.5 45	5.1 95		

NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question, ● that the economy's data is outdated. Square brackets [] indicate the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level; n/a represents missing values; a dash - indicates an indicator which is not relevant to this economy and thus not considered for DMC thresholds.



Data availability

The following tables list indicators that are either missing or outdated for Peru.



Peru has missing data for five indicators and outdated data for eight indicators.

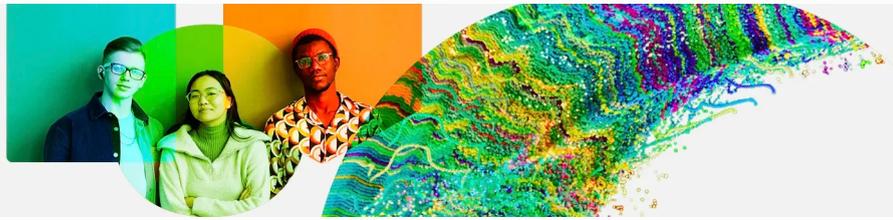
Missing data for Peru

Code	Indicator name	Economy Year	Model Year	Source
2.2.3	Tertiary inbound mobility, %	n/a	2022	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
7.2.1	Cultural and creative services exports, % total trade	n/a	2022	World Trade Organization Global Services Trade Data Hub

Outdated data for Peru

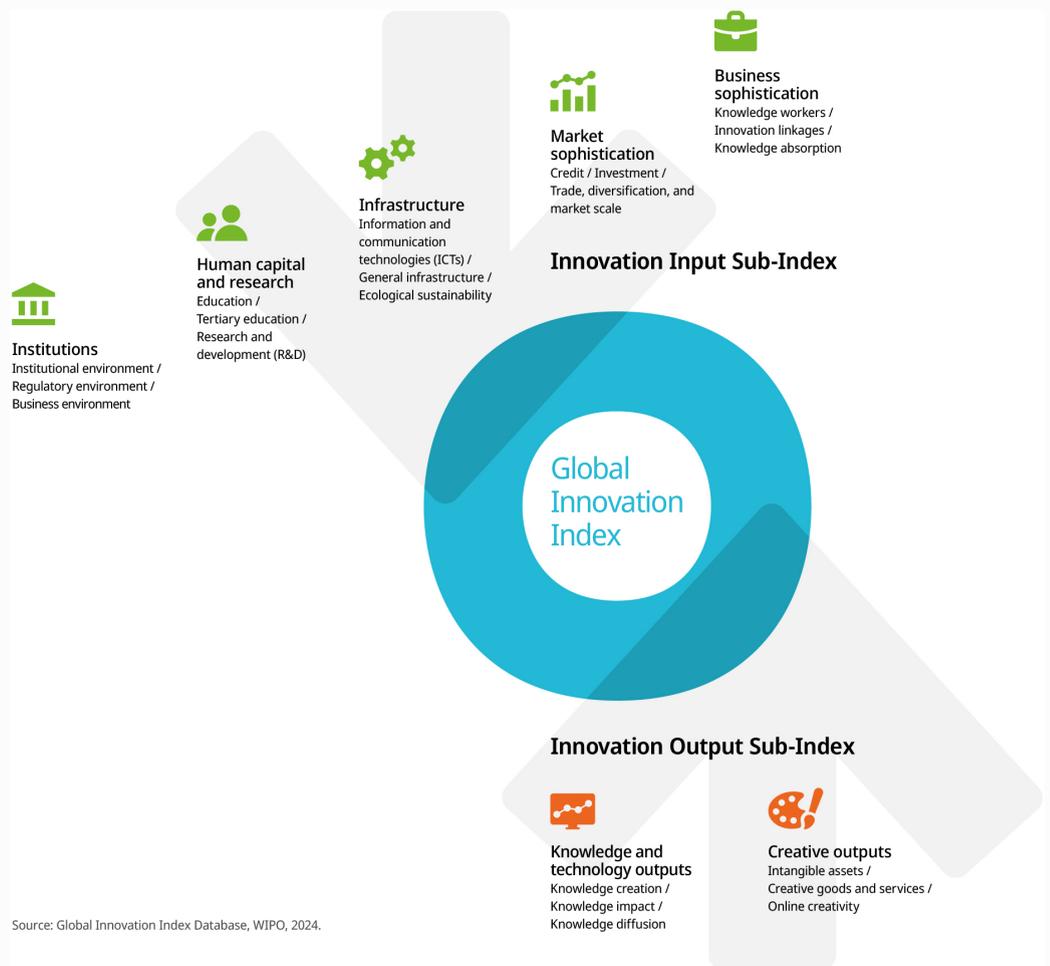
Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture [†]	2018	2023	Global Entrepreneurship Monitor
2.1.3	School life expectancy, years	2017	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2017	2022	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2017	2021	UNESCO Institute for Statistics; Eurostat; OECD
3.2.1	Electricity output, GWh/mn pop.	2021	2022	International Energy Agency
4.1.1	Finance for startups and scaleups [†]	2018	2023	Global Entrepreneurship Monitor
4.1.2	Domestic credit to private sector, % GDP	2021	2022	International Monetary Fund; World Bank and OECD GDP estimates.
5.1.3	GERD performed by business, % GDP	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT

Global Innovation Index 2024



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.