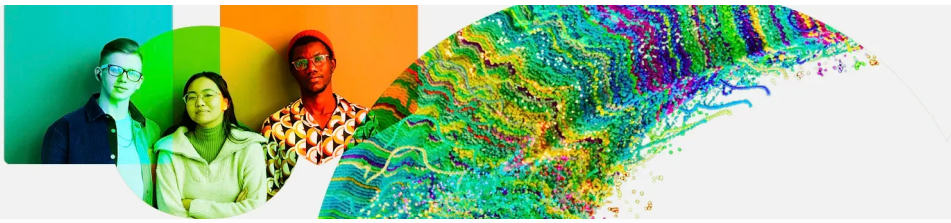
Global Innovation Index 2024



Argentina ranking in the Global Innovation Index 2024

Argentina ranks 76th 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.

Argentina ranks 21st among the 34 upper-middle-income group economies.

Argentina ranks 8th among the 20 economies in Latin America and the Caribbean.

Argentina GII Ranking (2020-2024)

The table shows the rankings of Argentina 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 Argentina in the GII 2024 is between ranks 69 and 81.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	80th	80th	73rd
2021	73rd	77th	71st
2022	69th	77th	62nd
2023	73rd	84th	59th
2024	76th	92nd	59th

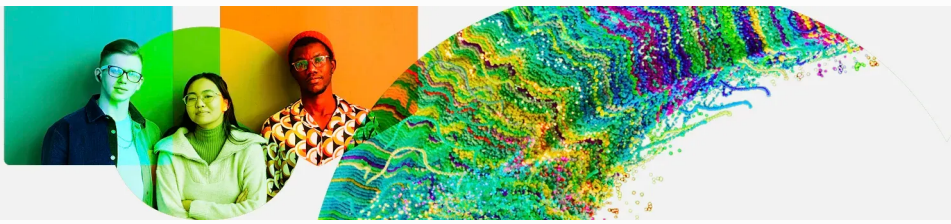
Argentina performs better in innovation outputs than innovation inputs in 2024.

This year **Argentina ranks 92nd in innovation inputs.** This position is lower than last year.

Argentina ranks 59th in innovation outputs. This position is the same as last year.

Argentina 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 Argentina, how rapidly is technology being embraced and what are the resulting societal impacts.

For Argentina, 4 indicators have improved in the short-term and 6 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -4.1% 2022 - 2023	▲ 10.4% 2021 - 2022	▼ -39.4% 2022 - 2023	▼ -70.7% 2022 - 2023	▼ -16.7% 2022 - 2023
▲ 0.6% 2013 - 2023	▼ -1.2% 2012 - 2022	▲ 5.2% 2013 - 2023	▲ 12.7% 2013 - 2023	▼ -0.4% 2013 - 2023

Technology adoption

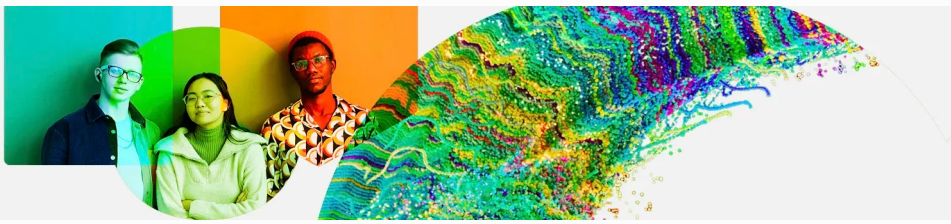
Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
n/a	▲ 6.3% 2021 - 2022	n/a	▲ 5.1% 2021 - 2022	n/a
▲ 0.2% 2006 - 2016	▲ 7.2% 2012 - 2022		▲ 11.1% 2012 - 2022	n/a
46.2 per 100 inhabitants in 2016	24.6 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▼ -8.9% 2022 - 2023	▲ 0.9% 2021 - 2022	▲ 1.5°C 2023
▼ -0.8% 2013 - 2023	▼ -0.1% 2012 - 2022	n/a
54,736 USD in 2023	76.1 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.

Global Innovation Index 2024



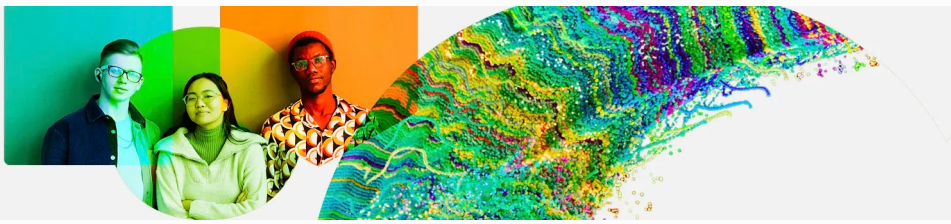
Expected vs. observed innovation performance

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, Argentina's performance is below expectations for its level of development.

> Innovation overperformers relative to their economic development

Global Innovation Index 2024

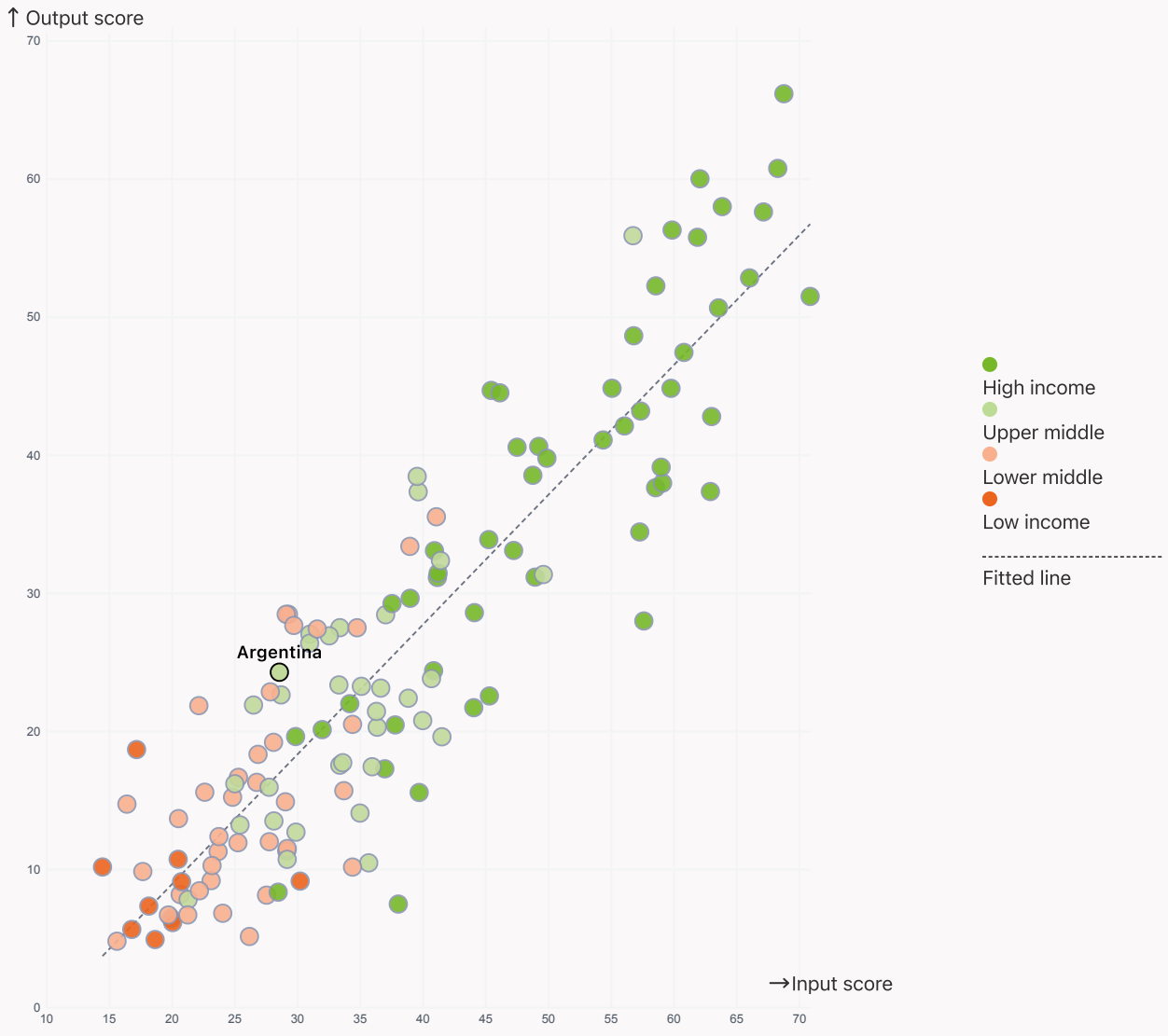


Effectively translating innovation investments into innovation outputs

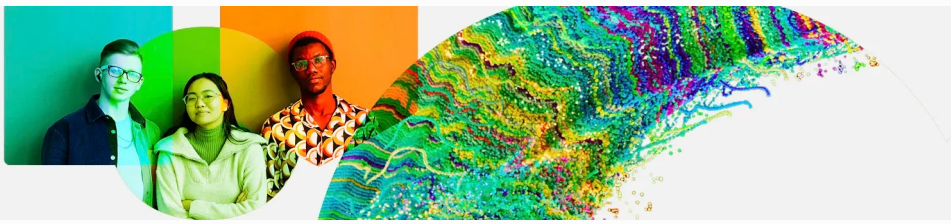
The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

Argentina produces more innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs



Global Innovation Index 2024



Overview of Argentina'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 Argentina are those that rank above the GII (shown in blue) and the weakest are those that rank below.

Highest rankings

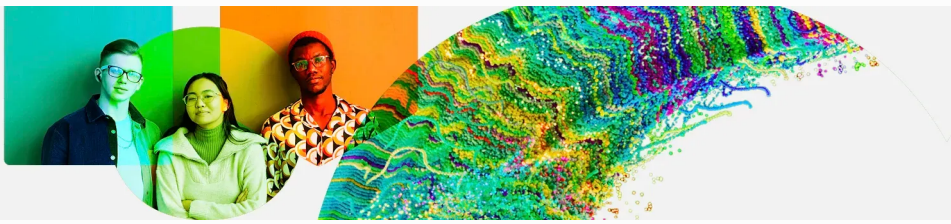
Argentina ranks highest in Creative outputs (54th), Human capital and research (55th) and Business sophistication (60th).

Lowest rankings

Argentina ranks lowest in Institutions (123rd), Market sophistication (97th) and Infrastructure, Knowledge and technology outputs (77th).

The full WIPO Intellectual Property Statistics profile for Argentina can be found on this link.

Global Innovation Index 2024



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

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

Upper-Middle-Income economies

Argentina performs above the upper-middle-income group average in Human capital and research, Business sophistication, Creative outputs.

Latin America And The Caribbean

Argentina performs above the regional average in Human capital and research, Infrastructure, Business sophistication, Knowledge and technology outputs, Creative outputs.

Institutions

- Top 10 | Score: 80.81
- Upper middle income | Score: 43.0
- LCN | Score: 38.36
- Argentina | Score: 21.71

Human capital and research

- Top 10 | Score: 61.30
- Argentina | Score: 33.95
- Upper middle income | Score: 29.5
- LCN | Score: 26.04

Infrastructure

- Top 10 | Score: 58.57
- Upper middle income | Score: 39.8
- Argentina | Score: 36.71
- LCN | Score: 35.16

Market sophistication

- Top 10 | Score: 62.12
- Upper middle income | Score: 32.9
- LCN | Score: 27.03
- Argentina | Score: 23.00

Business sophistication

- Top 10 | Score: 63.64
- Argentina | Score: 27.73
- Upper middle income | Score: 27.6
- LCN | Score: 24.99

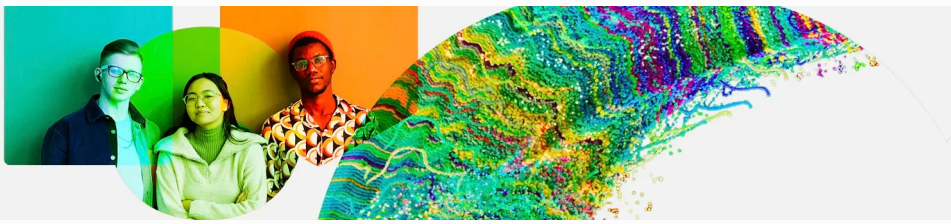
Knowledge and technology outputs

- Top 10 | Score: 57.29
- Upper middle income | Score: 20.6
- Argentina | Score: 18.56
- LCN | Score: 15.72

Creative outputs

- Top 10 | Score: 56.54
- Argentina | Score: 29.90
- Upper middle income | Score: 24.3
- LCN | Score: 19.36

Global Innovation Index 2024



Innovation strengths and weaknesses in Argentina

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

Argentina's main innovation strengths are **Tertiary enrolment, % gross** (rank 3), **School life expectancy, years** (rank 9) and **Intellectual property payments, % total trade** (rank 13).

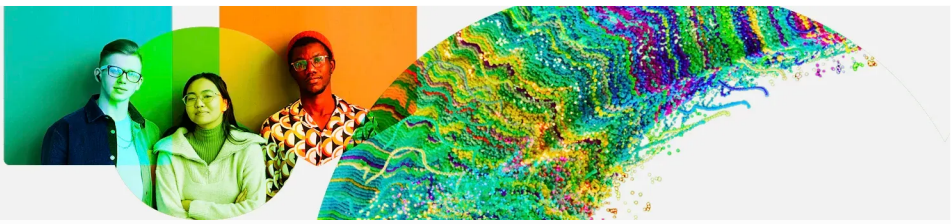
Strengths

Rank	Code	Indicator name
3	2.2.1	Tertiary enrolment, % gross
9	2.1.3	School life expectancy, years
13	5.3.1	Intellectual property payments, % total trade
19	7.2.2	National feature films/mn pop. 15–69
25	5.3.2	High-tech imports, % total trade
25	7.1.2	Trademarks by origin/bn PPP$ GDP
26	5.3.3	ICT services imports, % total trade
28	7.2.1	Cultural and creative services exports, % total trade
29	4.3.3	Domestic market scale, bn PPP$
36	6.1.5	Citable documents H-index
37	2.3.4	QS university ranking, top 3*

Weaknesses

Rank	Code	Indicator name
130	1.3.1	Policy stability for doing business†
127	6.2.1	Labor productivity growth, %
119	4.1.2	Domestic credit to private sector, % GDP
116	3.2.3	Gross capital formation, % GDP
114	1.1.1	Operational stability for businesses*
113	7.2.4	Creative goods exports, % total trade
103	2.2.2	Graduates in science and engineering, %
83	1.3.2	Entrepreneurship policies and culture†
77	4.2.1	Market capitalization, % GDP
76	4.1.1	Finance for startups and scaleups†

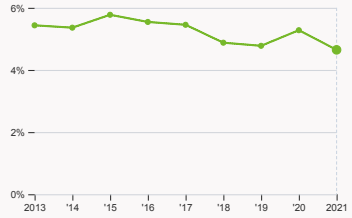
Global Innovation Index 2024



Argentina's innovation system

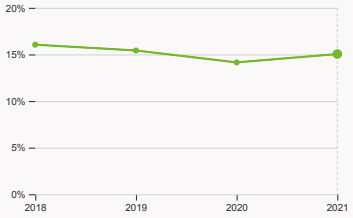
As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Argentina



2.1.1 **Expenditure on education**

was equal to 4.65 % GDP in 2021, down by 0.63 percentage points from the year prior – and equivalent to an indicator rank of 49.



2.2.2 **Graduates in science and engineering**

was equal to 15.04 % of total graduates in 2021, up by 0.9 percentage points from the year prior – and equivalent to an indicator rank of 103.

2.3.1 **Researchers**

was equal to 1271.83 FTE per million population in 2022, down by 0.09% from the year prior – and equivalent to an indicator rank of 49.

2.3.2 **Gross expenditure on R&D**

was equal to 0.55 % GDP in 2022, up by 0.03 percentage points from the year prior – and equivalent to an indicator rank of 57.

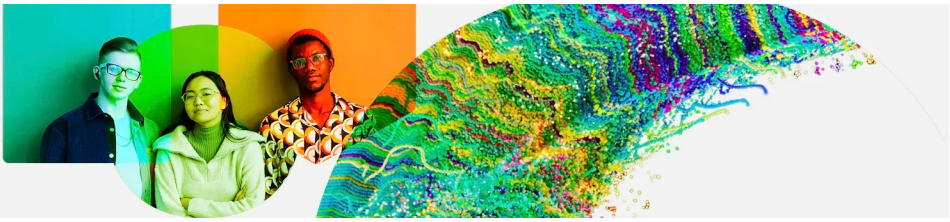
2.3.4 **QS university ranking**

was equal to an average score of 35.43 for the top three universities in 2023, down by 19.05% from the year prior – and equivalent to an indicator rank of 37.

4.2.4 **VC received, value**

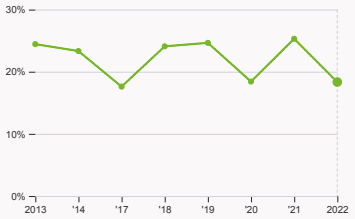
was equal to 51.62 thousand USD in 2023, down by 70.67% from the year prior – and equivalent to an indicator rank of 64.

Global Innovation Index 2024



4.3.2 Domestic industry diversification

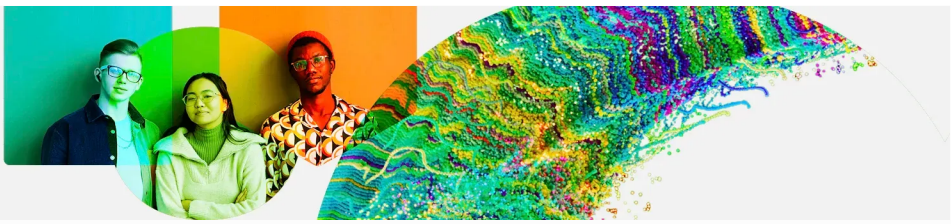
was equal to an index score of 0.15 in 2022, down by 3.76% from the year prior – and equivalent to an indicator rank of 60.



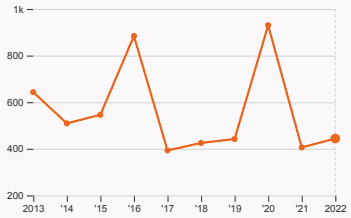
5.1.1 Knowledge-intensive employment

was equal to 18.34 % in 2022, down by 6.96 percentage points from the year prior – and equivalent to an indicator rank of 83.

Global Innovation Index 2024

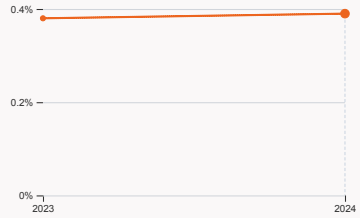


Innovation outputs in Argentina



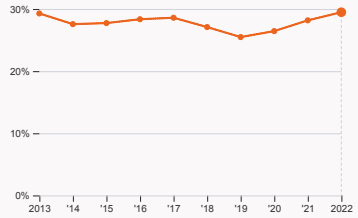
6.1.1 Patents by origin

was equal to 444 patents in 2022, up by 9.36% from the year prior – and equivalent to an indicator rank of 86.



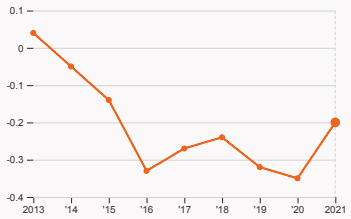
6.2.2 Unicorn valuation

was equal to 0.39 % GDP in 2024, up by 0.01 percentage points from the year prior – and equivalent to an indicator rank of 41.



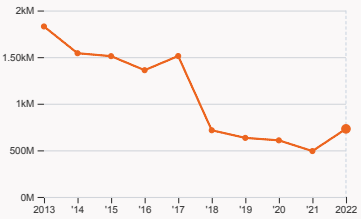
6.2.4 High-tech manufacturing

was equal to 29.48 % of total manufacturing output in 2022, up by 1.31 percentage points from the year prior – and equivalent to an indicator rank of 41.



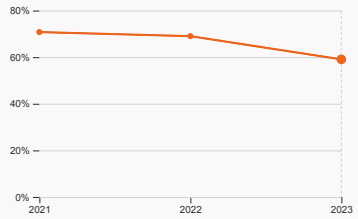
6.3.2 Production and export complexity

was equal to a score of -0.2 in 2021, up by 42.86% from the year prior – and equivalent to an indicator rank of 73.



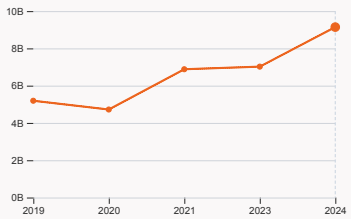
6.3.3 High-tech exports

was equal to 730.49 million USD in 2022, up by 48.39% from the year prior – and equivalent to an indicator rank of 84.



7.1.1 Intangible asset intensity

was equal to 59.04 % for the top 15 companies in 2023, down by 9.96 percentage points from the year prior – and equivalent to an indicator rank of 34.

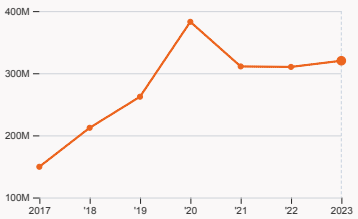


7.1.3 Global brand value

was equal to 9.14 billion USD for the brands in the top 5,000 in 2024, up by 30.2% from the year prior – and equivalent to an indicator rank of 51.

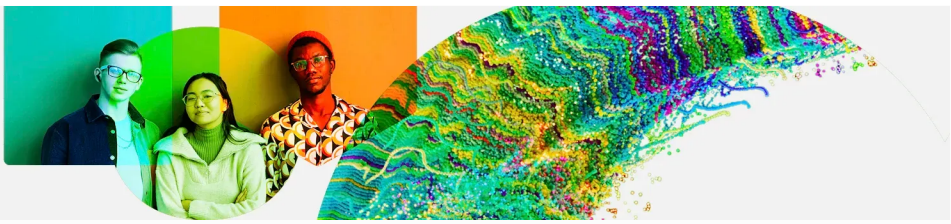
7.2.2 National feature films

was equal to 196 films in 2022, down by 8.41% from the year prior – and equivalent to an indicator rank of 19.



7.3.3 Mobile app creation

was equal to 320.07 million global downloads of mobile apps in 2023, up by 3.2% from the year prior – and equivalent to an indicator rank of 59.



Argentina's innovation top performers

2.3.4 QS university ranking of Argentina's top universities

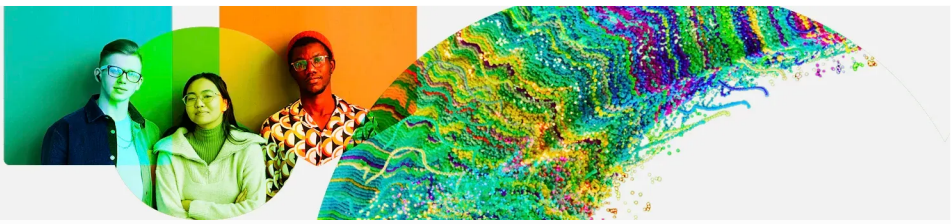
Rank	University	Score
95	UNIVERSIDAD DE BUENOS AIRES (UBA)	61.00
514	PONTIFICIA UNIVERSIDAD CATOLICA ARGENTINA	22.70
520	UNIVERSIDAD AUSTRAL	22.60

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 Argentina

Rank	Unicorn Company	Industry	City	Valuation, bn USD
1	UALA	Financial Services	Buenos Aires	2

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 Argentina

Rank	Firm	Intensity, %
1	ALUAR ALUMINIO ARGENTINO S.A.I.C.	85.69
2	TELECOM ARGENTINA S.A.	70.95
3	PAMPA ENERGIA S.A.	58.05

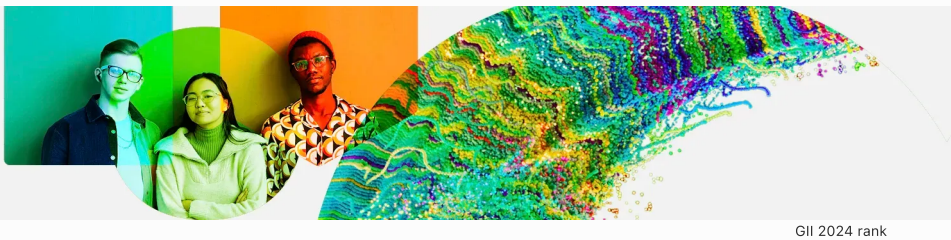
Source: Brand Finance (https://brandirectory.com/reports/gift-2022).
Note: Brand Finance only provides within economy ranks.

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

Rank	Brand	Industry	Brand Value, mn USD
1	MERCADOLIBRE	Retail	4,620.7
2	GLOBANT	IT Services	1,625.1
3	PERSONAL	Telecoms	915.6

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

Global Innovation Index 2024



Argentina

GII 2024 rank
76

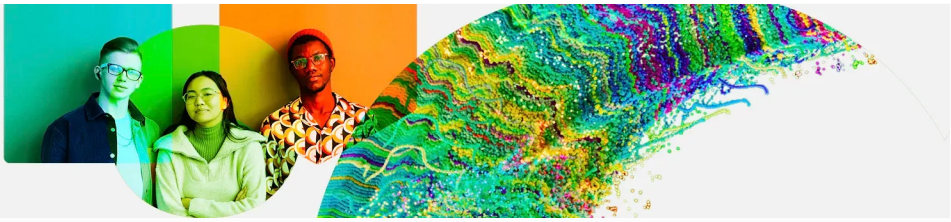
Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
59	92	Upper middle	LCN	45.5	1,239.5	26,506.1

	Score / Value	Rank	
Institutions	**21.7**	**123**	○ ◇
1.1 Institutional environment	**37.3**	**103**	◇
1.1.1 Operational stability for businesses*	38	114	○ ◇
1.1.2 Government effectiveness*	36.6	84	
1.2 Regulatory environment	**26.8**	**103**	
1.2.1 Regulatory quality*	23.5	110	◇
1.2.2 Rule of law*	30.1	93	
1.3 Business environment	**1.1**	**132**	○ ◇
1.3.1 Policy stability for doing business†	0	130	○ ◇
1.3.2 Entrepreneurship policies and culture†	2.1	83	○ ◇
Human capital and research	**33.9**	**55**	
2.1 Education	**44.6**	**81**	
2.1.1 Expenditure on education, % GDP	4.6	49	
2.1.2 Government funding/pupil, secondary, % GDP/cap	16.2	66	
2.1.3 School life expectancy, years	19	9	● ◆
2.1.4 PISA scales in reading, maths and science	394.8	66	
2.1.5 Pupil–teacher ratio, secondary	n/a	n/a	
2.2 Tertiary education	**32.7**	**69**	
2.2.1 Tertiary enrolment, % gross	107.1	3	● ◆
2.2.2 Graduates in science and engineering, %	15	103	○ ◇
2.2.3 Tertiary inbound mobility, %	3.2	63	
2.3 Research and development (R&D)	**24.5**	**41**	◆
2.3.1 Researchers, FTE/mn pop.	1,271.8	49	
2.3.2 Gross expenditure on R&D, % GDP	0.5	57	
2.3.3 Global corporate R&D investors, top 3, mn USD	40.7	40	◆
2.3.4 QS university ranking, top 3*	35.9	37	● ◆
Infrastructure	**36.7**	**77**	
3.1 Information and communication technologies (ICTs)	**76.4**	**53**	
3.1.1 ICT access*	94.9	50	
3.1.2 ICT use*	67.7	88	
3.1.3 Government's online service*	78.9	38	
3.1.4 E-participation*	64	51	
3.2 General infrastructure	**17.9**	**103**	
3.2.1 Electricity output, GWh/mn pop.	3,132.7	62	
3.2.2 Logistics performance*	31.8	71	
3.2.3 Gross capital formation, % GDP	17.2	116	○ ◇
3.3 Ecological sustainability	**15.8**	**88**	
3.3.1 GDP/unit of energy use	10.7	65	
3.3.2 Low-carbon energy use, %	13.3	79	
3.3.3 ISO 14001 environment/bn PPP$ GDP	1.3	63	
Market sophistication	**23**	**97**	
4.1 Credit	**12.1**	**107**	
4.1.1 Finance for startups and scaleups†	21.3	76	○
4.1.2 Domestic credit to private sector, % GDP	16	119	○ ◇
4.1.3 Loans from microfinance institutions, % GDP	n/a	n/a	
4.2 Investment	**3.5**	**94**	
4.2.1 Market capitalization, % GDP	8.4	77	○
4.2.2 Venture capital (VC) investors, deals/bn PPP$ GDP	0.03	78	
4.2.3 VC recipients, deals/bn PPP$ GDP	0.02	92	
4.2.4 VC received, value, % GDP	0.0005	64	
4.3 Trade, diversification and market scale	**53.3**	**74**	
4.3.1 Applied tariff rate, weighted avg., %	5.8	102	◇
4.3.2 Domestic industry diversification	81.4	60	
4.3.3 Domestic market scale, bn PPP$	1,239.5	29	● ◆

	Score / Value	Rank	
Business sophistication	**27.7**	**60**	
5.1 Knowledge workers	**31.7**	**68**	
5.1.1 Knowledge-intensive employment, %	18.3	83	
5.1.2 Firms offering formal training, %	40.2	36	
5.1.3 GERD performed by business, % GDP	0.2	52	
5.1.4 GERD financed by business, %	20.6	69	
5.1.5 Females employed w/advanced degrees, %	15.5	49	
5.2 Innovation linkages	**17.6**	**95**	
5.2.1 Public Research-Industry co-publications, %	1.4	68	
5.2.2 University-industry R&D collaboration†	37	84	
5.2.3 State of cluster development†	31.5	104	
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	0.008	90	
5.2.5 Patent families/bn PPP$ GDP	0.06	69	
5.3 Knowledge absorption	**33.9**	**45**	
5.3.1 Intellectual property payments, % total trade	1.8	13	● ◆
5.3.2 High-tech imports, % total trade	11.5	25	● ◆
5.3.3 ICT services imports, % total trade	2.2	26	● ◆
5.3.4 FDI net inflows, % GDP	1.7	82	
5.3.5 Research talent, % in businesses	11.5	61	
Knowledge and technology outputs	**18.6**	**77**	
6.1 Knowledge creation	**13.2**	**71**	
6.1.1 Patents by origin/bn PPP$ GDP	0.4	86	
6.1.2 PCT patents by origin/bn PPP$ GDP	n/a	n/a	
6.1.3 Utility models by origin/bn PPP$ GDP	0.1	47	
6.1.4 Scientific and technical articles/bn PPP$ GDP	7	90	
6.1.5 Citable documents H-index	27.7	36	● ◆
6.2 Knowledge impact	**24.9**	**67**	
6.2.1 Labor productivity growth, %	-1.9	127	○ ◇
6.2.2 Unicorn valuation, % GDP	0.4	41	
6.2.3 Software spending, % GDP	0.3	41	
6.2.4 High-tech manufacturing, %	29.5	41	
6.3 Knowledge diffusion	**17.6**	**67**	
6.3.1 Intellectual property receipts, % total trade	0.3	38	◆
6.3.2 Production and export complexity	38.1	73	
6.3.3 High-tech exports, % total trade	0.7	84	
6.3.4 ICT services exports, % total trade	2.8	46	
6.3.5 ISO 9001 quality/bn PPP$ GDP	5.6	52	
Creative outputs	**29.9**	**54**	
7.1 Intangible assets	**36**	**44**	
7.1.1 Intangible asset intensity, top 15, %	59	34	
7.1.2 Trademarks by origin/bn PPP$ GDP	59.6	25	● ◆
7.1.3 Global brand value, top 5,000, % GDP	1.4	51	
7.1.4 Industrial designs by origin/bn PPP$ GDP	1.1	54	
7.2 Creative goods and services	**17.8**	**59**	
7.2.1 Cultural and creative services exports, % total trade	1	28	● ◆
7.2.2 National feature films/mn pop. 15–69	6.3	19	● ◆
7.2.3 Entertainment and media market/th pop. 15–69	3.3	50	◇
7.2.4 Creative goods exports, % total trade	0.04	113	○
7.3 Online creativity	**29.8**	**53**	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	4.1	60	
7.3.2 GitHub commits/mn pop. 15–69	17.3	47	
7.3.3 Mobile app creation/bn PPP$ GDP	68	59	

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 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.

Global Innovation Index 2024



Data availability

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

Argentina has missing data for three indicators and outdated data for seven indicators.

Missing data for Argentina

Code	Indicator name	Economy Year	Model Year	Source
2.1.5	Pupil–teacher ratio, secondary	n/a	2022	UNESCO Institute for Statistics
4.1.3	Loans from microfinance institutions, % GDP	n/a	2022	International Monetary Fund, Financial Access Survey (FAS)
6.1.2	PCT patents by origin/bn PPP$ GDP	n/a	2023	World Intellectual Property Organization; International Monetary Fund

Outdated data for Argentina

Code	Indicator name	Economy Year	Model Year	Source
2.1.1	Expenditure on education, % GDP	2021	2022	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2021	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2021	2022	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	2021	2022	UNESCO Institute for Statistics
4.1.2	Domestic credit to private sector, % GDP	2017	2022	International Monetary Fund; World Bank and OECD GDP estimates.
5.1.2	Firms offering formal training, %	2017	2023	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	2022	2023	International Labour Organization

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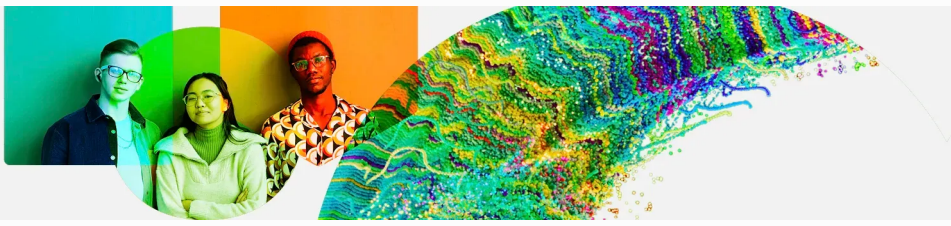

About the Global Innovation Index

- 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.

Source: Global Innovation Index Database, WIPO, 2024.

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.