Global Innovation Index 2025

Tajikistan ranking in the Global Innovation Index 2025

Tajikistan ranks 108th among the 139 economies featured in the GII 2025.

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.

Tajikistan ranks 21st among the 37 Lower middle-income group economies.

Tajikistan ranks 10th among the 10 economies in Central and Southern Asia.

Tajikistan GII Ranking (2020-2025)

The table shows the rankings of Tajikistan over the past six 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 Tajikistan in the GII 2025 is between ranks 95 and 110.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	109th	108th	99th
2021	103rd	104th	96th
2022	104th	104th	101st
2023	111st	109th	107th
2024	107th	106th	104th
2025	108th	105th	104th

Tajikistan performs better in innovation outputs than innovation inputs in 2025.

This year **Tajikistan ranks 105th in innovation inputs.** This position is higher than last year.

Tajikistan ranks 104th in innovation outputs. This position is the same as last year.

Tajikistan has no clusters in the world's top innovation clusters of the Global Innovation Index.

Global Innovation Index 2025

> Global Innovation Tracker

The Global Innovation Tracker 2025 shows what is the current state of innovation in Tajikistan, how rapidly is technology being embraced and what are the resulting societal impacts.

For Tajikistan, 4 indicators have improved in the short-term and 2 indicators have worsened.

Science and innovation investment

	Scientific publications	R&D investments	Venture capital deal numbers	International patent filings
Short term	▲ 21.5 % 2023 - 2024	0 % 2019 - 2020	▼ -33.3 % 2023 - 2024	n/a
Long term (annual growth)	▲ 13.4 % 2014 - 2024	▲ 6.9 % 2010 - 2020	n/a	n/a

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	n/a	▲ 4% 2021 - 2022	n/a	n/a	n/a
Long term (annual growth)	n/a	▲ 1.5% 2012 - 2022	n/a	n/a	n/a
Penetration	n/a	0.06 per 100 inhabitants in 2022	n/a	n/a	n/a

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	▲ 4.6 % 2023 - 2024	▲ 0.3 % 2022 - 2023	+ 2 °C 2024
Long term (annual growth)	▲ 5 % 2014 - 2024	▲ 0.3 % 2013 - 2023	+ 0.4 °C 2014
Level	20,293.3 USD in 2024	71.8 years in 2023	n/a

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 countries. from 1951–1980. Figures are rounded.

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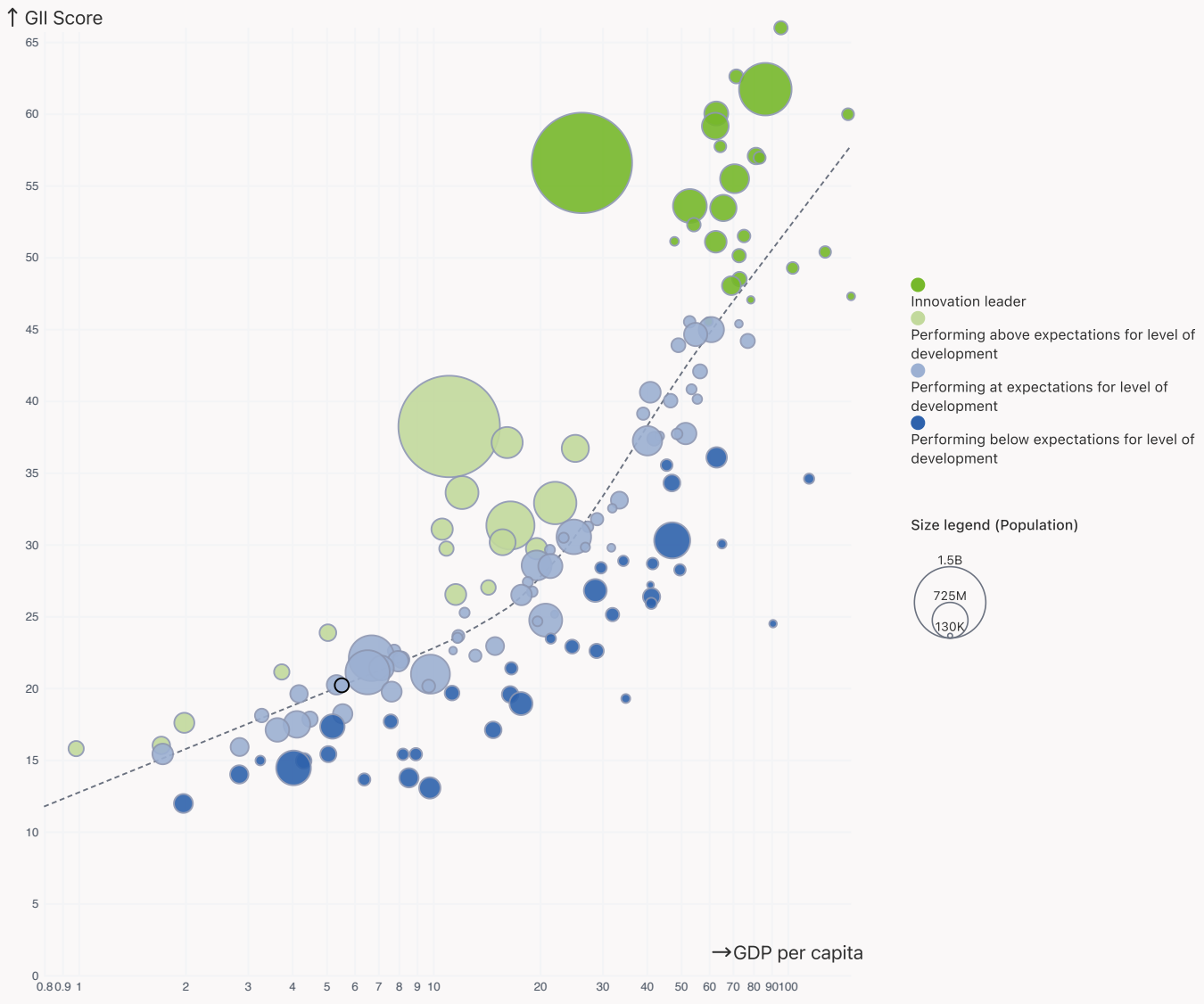
Expected vs. Observed Innovation Performance

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 Tajikistan performs at expectations for its level of development.

> Innovation overperformers relative to their economic development



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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.

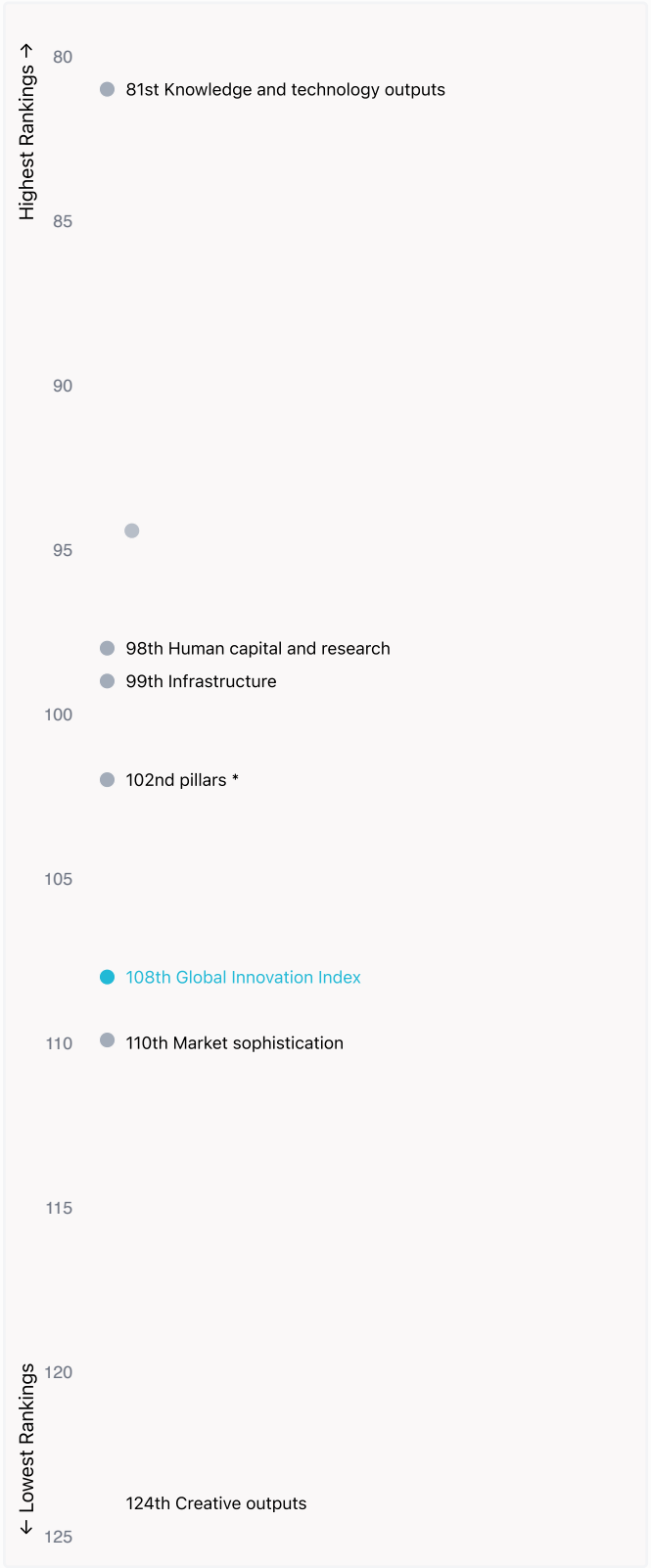
Tajikistan produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

Global Innovation Index 2025

Overview of Tajikistan's rankings in the seven areas of the GII in 2025

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



Highest Rankings

Tajikistan ranks highest in Knowledge and technology outputs (81st), Human capital and research (98th) and Infrastructure (99th).

Lowest Rankings

Tajikistan ranks lowest in Creative outputs (124th), Market sophistication (110th) and Institutions, Business sophistication (102nd).

* Institutions, Business sophistication

The full WIPO Intellectual Property Statistics profile for Tajikistan can be found on https://www.wipo.int/edocs/statistics-country-profile/en/tj.pdf

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

The charts shows the relative position of Tajikistan (blue bar) against other economy groupings (grey bars)

Lower middle-income economies

Tajikistan performs above the Lower middle-income group average in Human capital and research, Infrastructure, Knowledge and technology outputs.

Central and Southern Asia

Tajikistan performs below the regional average in all pillars.

Institutions

- Top 10 | Score: 78.63
- Lower middle-income | Score: 37.2
- Central and Southern Asia | Score:
- Tajikistan | Score: 35.34

Human capital and research

- Top 10 | Score: 59.30
- Central and Southern Asia | Score:
- Tajikistan | Score: 22.44
- Lower middle-income | Score: 20.9

Infrastructure

- Top 10 | Score: 61.36
- Central and Southern Asia | Score:
- Tajikistan | Score: 32.96
- Lower middle-income | Score: 32.1

Market sophistication

- Top 10 | Score: 61.82
- Central and Southern Asia | Score:
- Lower middle-income | Score: 28.1
- Tajikistan | Score: 25.94

Business sophistication

- Top 10 | Score: 59.10
- Lower middle-income | Score: 25.3
- Central and Southern Asia | Score:
- Tajikistan | Score: 23.26

Knowledge and technology outputs

- Top 10 | Score: 54.93
- Central and Southern Asia | Score:
- Tajikistan | Score: 17.52
- Lower middle-income | Score: 15.4

Creative outputs

- Top 10 | Score: 55.98
- Central and Southern Asia | Score:
- Lower middle-income | Score: 13.8
- Tajikistan | Score: 7.20

Global Innovation Index 2025

Innovation strengths and weaknesses in Tajikistan

The table below gives an overview of the indicator strengths and weaknesses of Tajikistan in the GII 2025.

Tajikistan's best-ranked innovation strengths are **Utility models by origin/bn PPP$ GDP** (rank 1), **Labor productivity growth, %** (rank 3) and **Low-carbon energy use, %** (rank 5).

Strengths

Rank	Code	Indicator name
1	6.1.3	Utility models by origin/bn PPP$ GDP
3	6.2.1	Labor productivity growth, %
5	3.3.2	Low-carbon energy use, %
18	4.1.3	Loans from microfinance institutions, % GDP
25	2.1.1	Expenditure on education, % GDP
29	5.1.3	Youth demographic dividend, %
51	7.3.3	Mobile app creation/bn PPP$ GDP
57	1.3.1	Policy stability for doing business†
72	4.3.1	Applied tariff rate, weighted avg., %

Weaknesses

Rank	Code	Indicator name
139	3.3.3	ISO 14001 environment/bn PPP$ GDP
139	6.3.5	ISO 9001 quality/bn PPP$ GDP
136	1.2.2	Rule of law*
135	5.2.1	Public research–industry co-publications, %
100	5.2.5	Patent families/bn PPP$ GDP
81	7.1.3	Global brand value, top 5,000, % GDP
80	2.3.4	QS university ranking, top 3*
53	6.2.2	Unicorn valuation, % GDP
44	2.3.3	Global corporate R&D investors, top 3, mn USD

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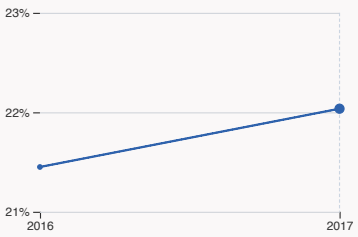
Tajikistan's innovation system

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

Innovation inputs in Tajikistan

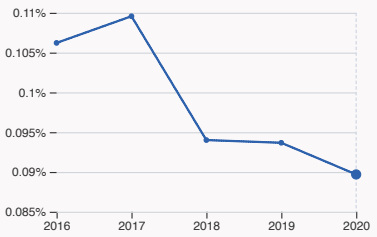
2.1.1 Expenditure on education

was equal to 5.44 % GDP in 2023, up by 0.04 percentage points from the year prior – and equivalent to an indicator rank of 25.



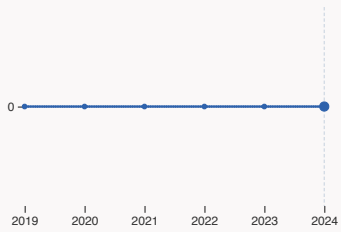
2.2.2 Graduates in science and engineering

was equal to 22.04 % of total graduates in 2017, up by 0.59 percentage points from the year prior – and equivalent to an indicator rank of 69.



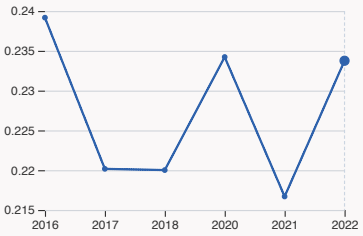
2.3.2 Gross expenditure on R&D

was equal to 0.09 % GDP in 2020, down by 0.004 percentage points from the year prior – and equivalent to an indicator rank of 104.



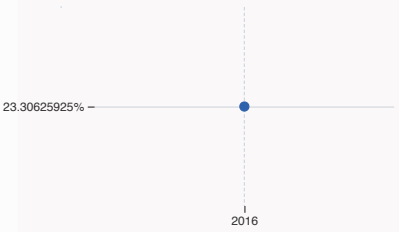
2.3.4 QS university ranking

The country does not have any universities in the QS world universities ranking in 2024.



4.3.2 Domestic industry diversification

was equal to an index score of 0.23 in 2022, up by 7.87% from the year prior – and equivalent to an indicator rank of 84.



5.1.1 Knowledge-intensive employment

was equal to 23.31 % in 2016 – and equivalent to an indicator rank of 64.

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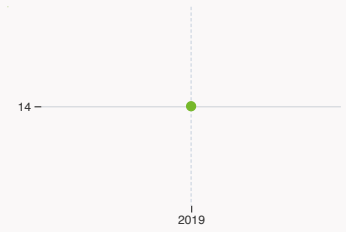
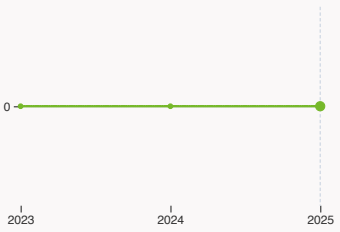
Innovation outputs in Tajikistan



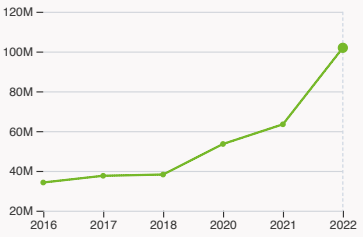
6.1.1 Patents by origin

was equal to 14 patents in 2019 – and equivalent to an indicator rank of 77.



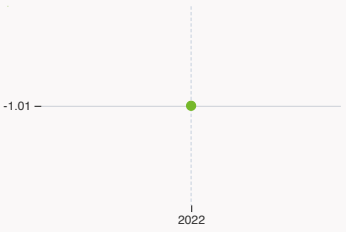
6.2.2 Unicorn valuation

The country does not have unicorns in 2025.



6.2.4 High-tech manufacturing

was equal to 101.88 high-tech manufacturing output in million USD in 2022, up by 60.62% from the year prior – and equivalent to an indicator rank of 103.

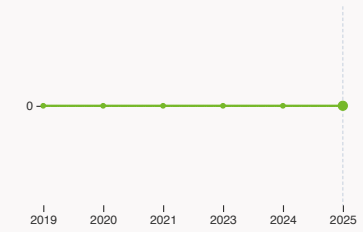


6.3.2 Production and export complexity

was equal to a score of -1.01 in 2022 – and equivalent to an indicator rank of 118.

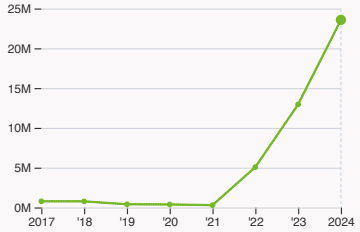
6.3.3 High-tech exports

was equal to 34.4 million USD in 2023, up by 1024.18% from the year prior – and equivalent to an indicator rank of 84.



7.1.3 Global brand value, top 5,000

The country does not have any brands that make the top 5,000 ranking in 2025.



7.3.3 Mobile app creation

was equal to 23.57 million global downloads of mobile apps in 2024, up by 82.008% from the year prior – and equivalent to an indicator rank of 51.

Tajikistan

GII 2025 rank **108**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
104	105	Lower middle	Central and Southern Asia	10.6	56.4	5,532.8

	Score / Value	Rank	
Institutions	**35.3**	**102**	
1.1 Institutional environment	**31.4**	**117**	
1.1.1 Operational stability for businesses*	38.7	118	
1.1.2 Government effectiveness*	24.1	116	
1.2 Regulatory environment	**20.4**	**134**	◇
1.2.1 Regulatory quality*	19.6	133	◇
1.2.2 Rule of law*	21.2	136	○ ◇
1.3 Business environment	**54.3**	**[51]**	
1.3.1 Policy stability for doing business†	54.3	57	●
1.3.2 Entrepreneurship policies and culture†	n/a	n/a	
Human capital and research	**22.4**	**98**	
2.1 Education	**46.3**	**[83]**	
2.1.1 Expenditure on education, % GDP	5.4	25	●
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	11.6	100	
2.1.4 PISA scales in reading, maths and science	n/a	n/a	
2.1.5 Pupil–teacher ratio, secondary	n/a	n/a	
2.2 Tertiary education	**20.6**	**94**	
2.2.1 Tertiary enrolment, % gross	35.6	87	
2.2.2 Graduates in science and engineering, %	22	69	
2.2.3 Tertiary inbound mobility, %	0.8	92	
2.3 Research and development (R&D)	**0.4**	**112**	
2.3.1 Researchers, FTE/mn pop.	n/a	n/a	
2.3.2 Gross expenditure on R&D, % GDP	0.09	104	
2.3.3 Global corporate R&D investors, top 3, mn USD	0	44	○ ◇
2.3.4 QS university ranking, top 3*	0	80	○ ◇
Infrastructure	**33**	**99**	
3.1 Information and communication technologies (ICTs)	**46.6**	**116**	
3.1.1 ICT access*	59.6	109	
3.1.2 ICT use*	n/a	n/a	
3.1.3 Government's online service*	33.5	118	
3.2 General infrastructure	**17.9**	**118**	
3.2.1 Electricity output, GWh/mn pop.	2,159.8	78	
3.2.2 Logistics performance*	18.2	90	
3.2.3 Gross capital formation, % GDP	20.4	101	
3.3 Ecological sustainability	**34.4**	**32**	
3.3.1 GDP/unit of energy use	10.8	69	
3.3.2 Low-carbon energy use, %	67.1	5	●
3.3.3 ISO 14001 environment/bn PPP$ GDP	0.04	139	○ ◇
Market sophistication	**25.9**	**110**	
4.1 Credit	**14.6**	**104**	
4.1.1 Finance for startups and scaleups†	n/a	n/a	
4.1.2 Domestic credit to private sector, % GDP	12.4	128	
4.1.3 Loans from microfinance institutions, % GDP	2.6	18	●
4.2 Investment	**1.8**	**[102]**	
4.2.1 Market capitalization, % GDP	n/a	n/a	
4.2.2 Venture capital (VC) received, deal count/bn PPP$ GDP	0.05	81	
4.2.3 Late-stage VC deal count, % global VC	0.002	98	
4.2.4 VC investors, deal count/bn PPP$ GDP	n/a	n/a	
4.2.5 VC investor co-participation/bn PPP$ GDP	n/a	n/a	
4.3 Trade, diversification and market scale	**61.5**	**89**	
4.3.1 Applied tariff rate, weighted avg., %	2.4	72	●
4.3.2 Domestic industry diversification	65.5	84	
4.3.3 Domestic market scale, bn PPP$	56.4	115	

	Score / Value	Rank	
Business sophistication	**23.3**	**102**	
5.1 Knowledge workers	**42.3**	**[48]**	
5.1.1 Knowledge-intensive employment, %	23.3	64	
5.1.2 Females employed w/advanced degrees, %	7.3	88	
5.1.3 Youth demographic dividend, %	52.9	29	●
5.1.4 GERD performed by business, % GDP	n/a	n/a	
5.1.5 GERD financed by business, %	n/a	n/a	
5.2 Innovation linkages	**11.1**	**127**	
5.2.1 Public research–industry co-publications, %	0.3	135	○ ◇
5.2.2 University–industry R&D collaboration†	22.5	106	
5.2.3 University industry & international engagement, top 5*	n/a	n/a	
5.2.4 State of cluster development†	21.2	124	
5.2.5 Patent families/bn PPP$ GDP	0	100	○ ◇
5.3 Knowledge absorption	**16.4**	**129**	
5.3.1 Intellectual property payments, % total trade	0.003	129	◇
5.3.2 High-tech imports, % total trade	7.2	86	
5.3.3 ICT services imports, % total trade	0.3	128	
5.3.4 FDI net inflows, % GDP	1.2	105	
5.3.5 Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs	**17.5**	**81**	
6.1 Knowledge creation	**23.1**	**45**	
6.1.1 Patents by origin/bn PPP$ GDP	0.4	77	
6.1.2 PCT patents by inventor origin/bn PPP$ GDP	0.02	86	
6.1.3 Utility models by origin/bn PPP$ GDP	3.4	1	●
6.1.4 Scientific and technical articles/bn PPP$ GDP	2.8	123	
6.1.5 Citable documents H-index	1.3	133	
6.2 Knowledge impact	**23.5**	**75**	
6.2.1 Labor productivity growth, %	4.7	3	●
6.2.2 Unicorn valuation, % GDP	0	53	○ ◇
6.2.3 Software spending, % GDP	0.05	108	
6.2.4 High-tech manufacturing	4.3	103	◇
6.3 Knowledge diffusion	**6**	**128**	
6.3.1 Intellectual property receipts, % total trade	0.000008	125	
6.3.2 Production and export complexity	26.1	118	
6.3.3 High-tech exports, % total trade	0.9	84	
6.3.4 ICT services exports, % total trade	0.2	129	
6.3.5 ISO 9001 quality/bn PPP$ GDP	0.04	139	○ ◇
Creative outputs	**7.2**	**124**	
7.1 Intangible assets	**2.2**	**132**	◇
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a	
7.1.2 Trademarks by origin/bn PPP$ GDP	13.6	106	
7.1.3 Global brand value, top 5,000, % GDP	0	81	○ ◇
7.1.4 Industrial designs by origin/bn PPP$ GDP	0	130	
7.2 Creative goods and services	**0.9**	**[126]**	
7.2.1 Cultural and creative services exports, % total trade	0.05	104	
7.2.2 National feature films/mn pop. 15–69	n/a	n/a	
7.2.3 Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4 Creative goods exports, % total trade	0.07	104	
7.3 Online creativity	**23.4**	**82**	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	0.3	119	
7.3.2 GitHub commits/mn pop. 15–69	0.7	122	
7.3.3 Mobile app creation/bn PPP$ GDP	69.1	51	●

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.

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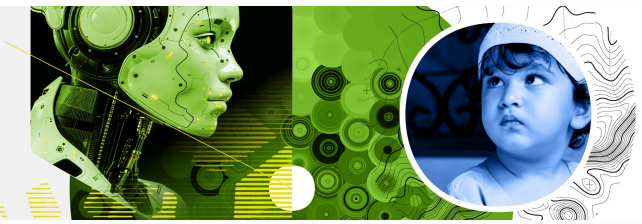

Data Availability

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

Tajikistan has missing data for seventeen indicators and outdated data for fifteen indicators.

Missing data for Tajikistan

Code	Indicator name	Economy year	Model year	Source
1.3.2	Entrepreneurship policies and culture†	n/a	2024	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2021	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
2.1.5	Pupil–teacher ratio, secondary	n/a	2023	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.1.2	ICT use*	n/a	2023	World Intellectual Property Organization; based on International Telecommunication Union (ITU)
4.1.1	Finance for startups and scaleups†	n/a	2024	Global Entrepreneurship Monitor
4.2.1	Market capitalization, % GDP	n/a	2022	World Federation of Exchanges; World Bank
4.2.4	VC investors, deal count/bn PPP$ GDP	n/a	2024	PitchBook Data, Inc.; International Monetary Fund
4.2.5	VC investor co-participation/bn PPP$ GDP	n/a	2024	PitchBook Data, Inc.; International Monetary Fund
5.1.4	GERD performed by business, % GDP	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	GERD financed by business, %	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.2.3	University industry & international engagement, top 5*	n/a	2025	Times Higher Education, World University Rankings 2025
5.3.5	Research talent, % in businesses	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
7.1.1	Intangible asset intensity, top 15, %	n/a	2024	Brand Finance
7.2.2	National feature films/mn pop. 15–69	n/a	2023	OMDIA; United Nations, World Population Prospects
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2024	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

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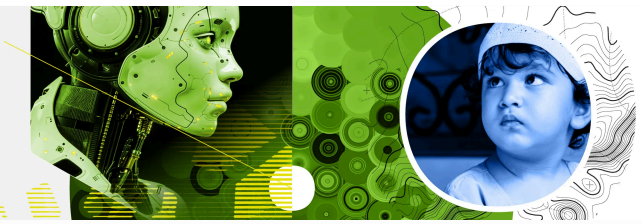

Outdated data for Tajikistan

Code	Indicator name	Economy year	Model year	Source
1.3.1	Policy stability for doing business[+]	2021	2024	World Economic Forum, Executive Opinion Survey (EOS)
2.2.2	Graduates in science and engineering, %	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD
2.2.3	Tertiary inbound mobility, %	2017	2023	UNESCO Institute for Statistics
2.3.2	Gross expenditure on R&D, % GDP	2020	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2022	2023	International Energy Agency
4.1.3	Loans from microfinance institutions, % GDP	2022	2023	International Monetary Fund, Financial Access Survey (FAS)
4.3.1	Applied tariff rate, weighted avg., %	2022	2023	World Trade Organization
5.1.1	Knowledge-intensive employment, %	2016	2024	International Labour Organization
5.1.2	Females employed w/advanced degrees, %	2016	2024	International Labour Organization
5.2.2	University–industry R&D collaboration[+]	2021	2024	World Economic Forum, Executive Opinion Survey (EOS)
5.2.4	State of cluster development[+]	2021	2024	World Economic Forum, Executive Opinion Survey (EOS)
6.1.1	Patents by origin/bn PPP$ GDP	2019	2023	World Intellectual Property Organization; International Monetary Fund
6.1.3	Utility models by origin/bn PPP$ GDP	2022	2023	World Intellectual Property Organization; International Monetary Fund
7.1.2	Trademarks by origin/bn PPP$ GDP	2020	2023	World Intellectual Property Organization; International Monetary Fund
7.1.4	Industrial designs by origin/bn PPP$ GDP	2015	2023	World Intellectual Property Organization; International Monetary Fund

Global Innovation Index 2025

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 140 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.