Global Innovation Index 2025

Mongolia ranking in the Global Innovation Index 2025

Mongolia ranks 78th 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.

Mongolia ranks 22nd among the 36 Upper middle-income group economies.

Mongolia ranks 13th among the 17 economies in South East Asia, East Asia, and Oceania.

Mongolia GII Ranking (2020-2025)

The table shows the rankings of Mongolia 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 Mongolia in the GII 2025 is between ranks 72 and 81.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	58th	65th	54th
2021	58th	65th	55th
2022	71st	81st	64th
2023	68th	79th	60th
2024	67th	84th	51st
2025	78th	87th	69th

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

This year Mongolia ranks 87th in innovation inputs. This position is lower than last year.

Mongolia ranks 69th in innovation outputs. This position is lower than last year.

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

For Mongolia, 4 indicators have improved in the short-term and 3 indicators have worsened.

Science and innovation investment

	Scientific publications	R&D investments	Venture capital deal numbers	International patent filings
Short term	▲ 24 % 2023 - 2024	▼ -12.2 % 2021 - 2022	▼ -66.7 % 2023 - 2024	n/a
Long term (annual growth)	▲ 12.6 % 2014 - 2024	▼ -6 % 2012 - 2022	n/a	n/a

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	▲ 1.9% 2023 - 2024	▲ 14.3% 2022 - 2023	n/a	n/a	n/a
Long term (annual growth)	▲ 2% 2014 - 2024	▲ 13.6% 2013 - 2023	n/a	n/a	n/a
Penetration	69.9 per 100 inhabitants in 2024	14.6 per 100 inhabitants in 2023	n/a	n/a	n/a

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	n/a	▲ 0.3 % 2022 - 2023	+ 2.6 °C 2024
Long term (annual growth)	n/a	▲ 0.5 % 2013 - 2023	+ 1.9 °C 2014
Level	n/a	71.7 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.

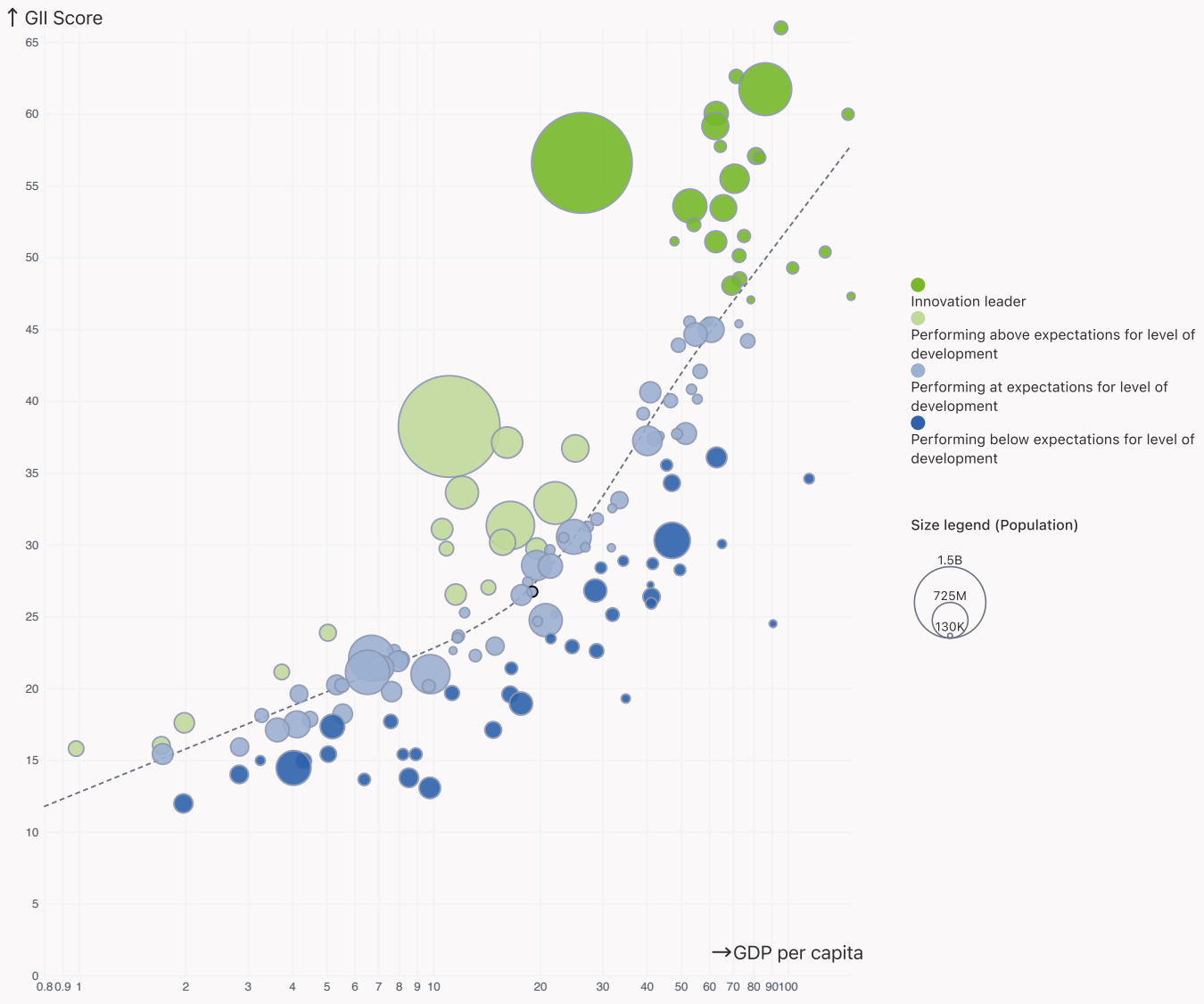
Global Innovation Index 2025

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 Mongolia performs at expectations for its level of development.

> Innovation overperformers relative to their economic development



Global Innovation Index 2025

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.

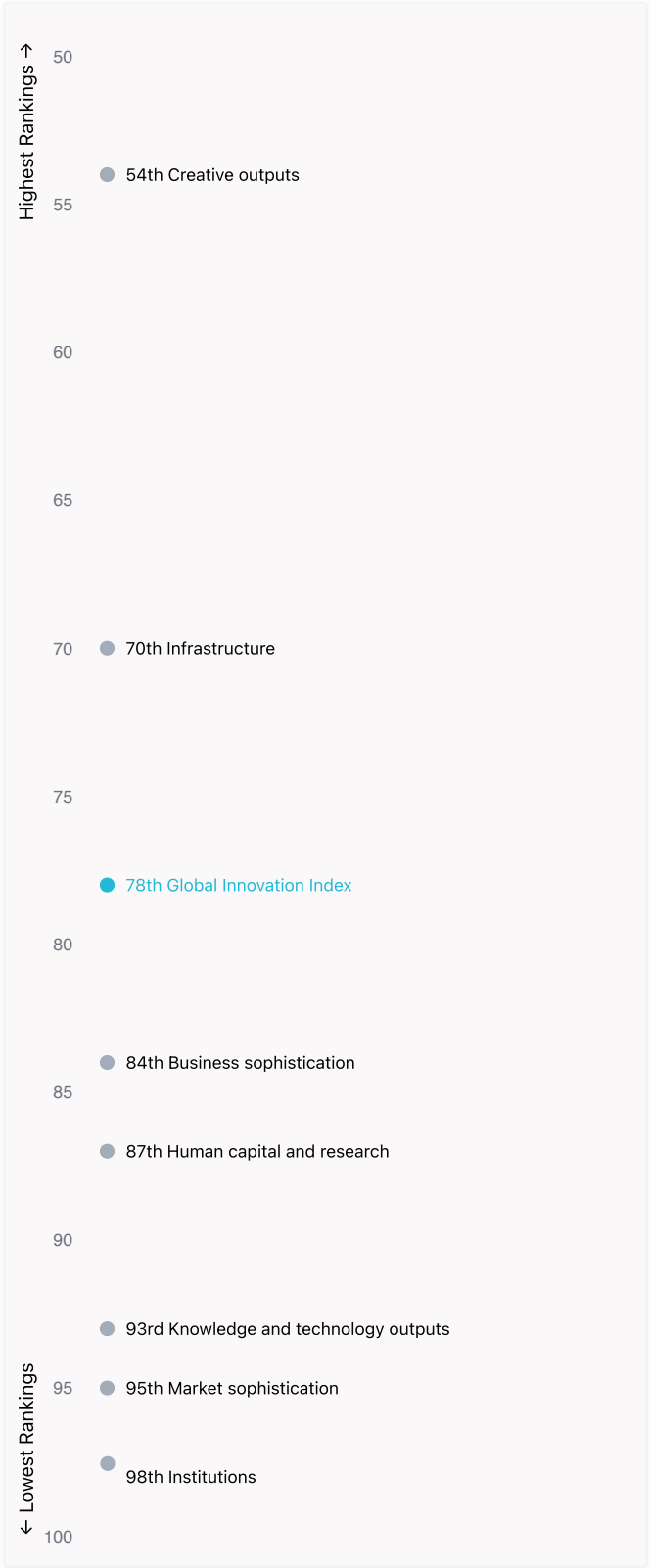
Mongolia produces more innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

Global Innovation Index 2025

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



Highest Rankings

Mongolia ranks highest in Creative outputs (54th) and Infrastructure (70th).

Lowest Rankings

Mongolia ranks lowest in Institutions (98th), Market sophistication (95th) and Knowledge and technology outputs (93rd).

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

Global Innovation Index 2025

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

Upper middle-income economies

Mongolia performs above the Upper middle-income group average in Infrastructure, Creative outputs.

South East Asia, East Asia, and Oceania

Mongolia performs below the regional average in all pillars.

Institutions

- Top 10 | Score: 78.63
- SEAO | Score: 60.86
- Upper middle-income | Score: 44.7
- Mongolia | Score: 38.14

Human capital and research

- Top 10 | Score: 59.30
- SEAO | Score: 39.16
- Upper middle-income | Score: 29.7
- Mongolia | Score: 25.54

Infrastructure

- Top 10 | Score: 61.36
- SEAO | Score: 48.25
- Mongolia | Score: 41.77
- Upper middle-income | Score: 41.1

Market sophistication

- Top 10 | Score: 61.82
- SEAO | Score: 48.50
- Upper middle-income | Score: 34.8
- Mongolia | Score: 29.03

Business sophistication

- Top 10 | Score: 59.10
- SEAO | Score: 39.02
- Upper middle-income | Score: 27.7
- Mongolia | Score: 26.27

Knowledge and technology outputs

- Top 10 | Score: 54.93
- SEAO | Score: 29.47
- Upper middle-income | Score: 20.0
- Mongolia | Score: 13.95

Creative outputs

- Top 10 | Score: 55.98
- SEAO | Score: 32.64
- Mongolia | Score: 28.53
- Upper middle-income | Score: 22.6

Global Innovation Index 2025

Innovation strengths and weaknesses in Mongolia

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

Mongolia's best-ranked innovation strengths are **Trademarks by origin/bn PPP$ GDP** (rank 3), **FDI net inflows, % GDP** (rank 6) and **Loans from microfinance institutions, % GDP** (rank 6).

Strengths

Rank	Code	Indicator name
3	7.1.2	Trademarks by origin/bn PPP$ GDP
6	5.3.4	FDI net inflows, % GDP
6	4.1.3	Loans from microfinance institutions, % GDP
8	7.1.4	Industrial designs by origin/bn PPP$ GDP
9	3.2.3	Gross capital formation, % GDP
12	6.1.3	Utility models by origin/bn PPP$ GDP
35	5.1.2	Females employed w/advanced degrees, %
36	6.2.1	Labor productivity growth, %
37	2.1.5	Pupil–teacher ratio, secondary
41	3.1.3	Government's online service*

Weaknesses

Rank	Code	Indicator name
125	6.3.2	Production and export complexity
109	6.1.2	PCT patents by inventor origin/bn PPP$ GDP
104	6.2.4	High-tech manufacturing, %
100	5.2.5	Patent families/bn PPP$ GDP
98	4.2.3	Late-stage VC deal count, % global VC
82	5.1.4	GERD performed by business, % 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

Global Innovation Index 2025

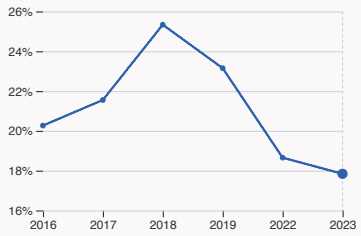
Mongolia's innovation system

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

Innovation inputs in Mongolia

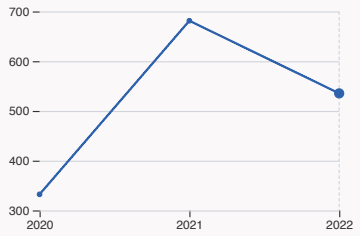
2.1.1 Expenditure on education

was equal to 3.74 % GDP in 2023, down by 0.44 percentage points from the year prior – and equivalent to an indicator rank of 89.



2.2.2 Graduates in science and engineering

was equal to 17.84 % of total graduates in 2023, down by 0.81 percentage points from the year prior – and equivalent to an indicator rank of 95.

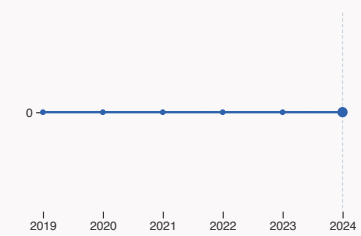


2.3.1 Researchers

was equal to 535.37 FTE per million population in 2022, down by 21.43% from the year prior – and equivalent to an indicator rank of 72.

2.3.2 Gross expenditure on R&D

was equal to 0.08 % GDP in 2022, down by 0.02 percentage points from the year prior – and equivalent to an indicator rank of 105.

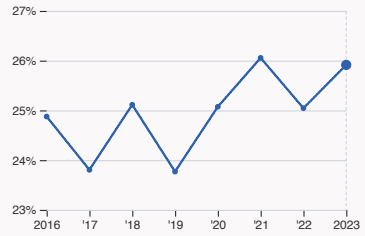


2.3.4 QS university ranking

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 0.284 in 2022, up by 1.48% from the year prior – and equivalent to an indicator rank of 102.



5.1.1 Knowledge-intensive employment

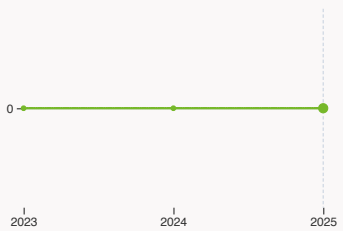
was equal to 25.91 % of total workforce in 2023, up by 0.87 percentage points from the year prior – and equivalent to an indicator rank of 56.

Global Innovation Index 2025

Innovation outputs in Mongolia

6.1.1 Patents by origin

was equal to 75 patents in 2023, down by 33.04% from the year prior – and equivalent to an indicator rank of 47.

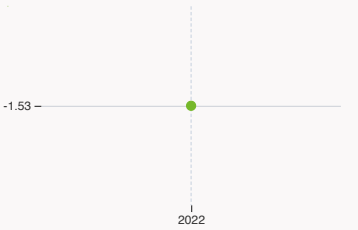


6.2.2 Unicorn valuation

The country does not have unicorns in 2025.

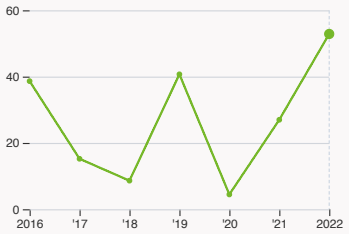
6.2.4 High-tech manufacturing

was equal to 179.95 high-tech manufacturing output in million USD in 2022, up by 11.47% from the year prior – and equivalent to an indicator rank of 104.



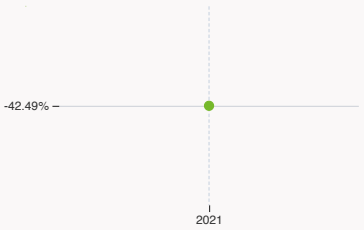
6.3.2 Production and export complexity

was equal to a score of -1.53 in 2022 – and equivalent to an indicator rank of 125.



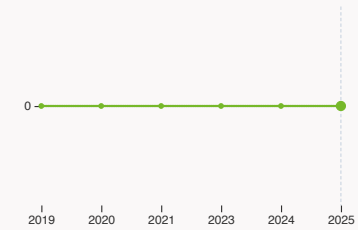
6.3.3 High-tech exports

was equal to 52.87 million USD in 2022, up by 95.96% from the year prior – and equivalent to an indicator rank of 97.



7.1.1 Intangible asset intensity, top 15

was equal to -42.49 % for the top 15 companies in 2021 – and equivalent to an indicator rank of NA.



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 1.77 million global downloads of mobile apps in 2024, up by 0.57% from the year prior – and equivalent to an indicator rank of 95.

Mongolia

GII 2025 rank **78**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
69	87	Upper middle	South East Asia, East Asia, and Oceania	3.5	67.7	19,063.4

	Score / Value	Rank	
Institutions	**38.1**	**98**	
1.1 Institutional environment	**45.7**	**87**	
1.1.1 Operational stability for businesses*	60	73	
1.1.2 Government effectiveness*	31.5	99	
1.2 Regulatory environment	**45.2**	**78**	
1.2.1 Regulatory quality*	42.7	84	
1.2.2 Rule of law*	47.8	81	
1.3 Business environment	**23.4**	**[115]**	
1.3.1 Policy stability for doing business†	23.4	118	
1.3.2 Entrepreneurship policies and culture†	n/a	n/a	
Human capital and research	**25.5**	**87**	
2.1 Education	**51.2**	**67**	
2.1.1 Expenditure on education, % GDP	3.7	89	
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	13.6	76	
2.1.4 PISA scales in reading, maths and science	405.1	56	
2.1.5 Pupil–teacher ratio, secondary	10.3	37	●
2.2 Tertiary education	**23.9**	**85**	
2.2.1 Tertiary enrolment, % gross	66.8	48	
2.2.2 Graduates in science and engineering, %	17.8	95	
2.2.3 Tertiary inbound mobility, %	2.5	73	
2.3 Research and development (R&D)	**1.6**	**96**	
2.3.1 Researchers, FTE/mn pop.	535.4	72	
2.3.2 Gross expenditure on R&D, % GDP	0.08	105	
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	**41.8**	**70**	
3.1 Information and communication technologies (ICTs)	**81.8**	**54**	
3.1.1 ICT access*	83.9	73	
3.1.2 ICT use*	82.9	45	
3.1.3 Government's online service*	78.6	41	●
3.2 General infrastructure	**35.2**	**59**	
3.2.1 Electricity output, GWh/mn pop.	2,279.4	77	
3.2.2 Logistics performance*	18.2	90	
3.2.3 Gross capital formation, % GDP	37.4	9	● ◆
3.3 Ecological sustainability	**8.2**	**121**	◇
3.3.1 GDP/unit of energy use	6.1	110	◇
3.3.2 Low-carbon energy use, %	2.3	120	
3.3.3 ISO 14001 environment/bn PPP$ GDP	1.4	60	
Market sophistication	**29**	**95**	
4.1 Credit	**34.4**	**51**	
4.1.1 Finance for startups and scaleups†	n/a	n/a	
4.1.2 Domestic credit to private sector, % GDP	38.6	79	
4.1.3 Loans from microfinance institutions, % GDP	5.3	6	● ◆
4.2 Investment	**0.8**	**117**	
4.2.1 Market capitalization, % GDP	n/a	n/a	
4.2.2 Venture capital (VC) received, deal count/bn PPP$ GDP	0.03	102	
4.2.3 Late-stage VC deal count, % global VC	0.002	98	○
4.2.4 VC investors, deal count/bn PPP$ GDP	0.02	102	
4.2.5 VC investor co-participation/bn PPP$ GDP	0.009	104	
4.3 Trade, diversification and market scale	**51.9**	**107**	◇
4.3.1 Applied tariff rate, weighted avg., %	5	95	
4.3.2 Domestic industry diversification	55	102	◇
4.3.3 Domestic market scale, bn PPP$	67.7	106	

	Score / Value	Rank	
Business sophistication	**26.3**	**84**	
5.1 Knowledge workers	**34**	**74**	
5.1.1 Knowledge-intensive employment, %	25.9	56	
5.1.2 Females employed w/advanced degrees, %	20.3	35	● ◆
5.1.3 Youth demographic dividend, %	46.3	42	◆
5.1.4 GERD performed by business, % GDP	0.009	82	○
5.1.5 GERD financed by business, %	8.1	75	
5.2 Innovation linkages	**15.9**	**108**	
5.2.1 Public research–industry co-publications, %	1.6	62	
5.2.2 University–industry R&D collaboration†	23.9	102	
5.2.3 University industry & international engagement, top 5*	12.9	88	
5.2.4 State of cluster development†	27	115	
5.2.5 Patent families/bn PPP$ GDP	0	100	○ ◇
5.3 Knowledge absorption	**29**	**59**	
5.3.1 Intellectual property payments, % total trade	0.3	90	
5.3.2 High-tech imports, % total trade	6	104	
5.3.3 ICT services imports, % total trade	1.1	86	
5.3.4 FDI net inflows, % GDP	13.3	6	● ◆
5.3.5 Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs	**13.9**	**93**	
6.1 Knowledge creation	**16.4**	**60**	
6.1.1 Patents by origin/bn PPP$ GDP	1.2	47	
6.1.2 PCT patents by inventor origin/bn PPP$ GDP	0	109	○ ◇
6.1.3 Utility models by origin/bn PPP$ GDP	1.3	12	●
6.1.4 Scientific and technical articles/bn PPP$ GDP	10.3	67	
6.1.5 Citable documents H-index	4.7	106	
6.2 Knowledge impact	**17.5**	**110**	
6.2.1 Labor productivity growth, %	1.8	36	●
6.2.2 Unicorn valuation, % GDP	0	53	○ ◇
6.2.3 Software spending, % GDP	0.09	93	
6.2.4 High-tech manufacturing, %	4.2	104	○ ◇
6.3 Knowledge diffusion	**8**	**119**	◇
6.3.1 Intellectual property receipts, % total trade	0.01	107	
6.3.2 Production and export complexity	14.5	125	○ ◇
6.3.3 High-tech exports, % total trade	0.5	97	
6.3.4 ICT services exports, % total trade	0.4	114	
6.3.5 ISO 9001 quality/bn PPP$ GDP	6.1	42	
Creative outputs	**28.5**	**54**	
7.1 Intangible assets	**45.4**	**23**	◆
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a	
7.1.2 Trademarks by origin/bn PPP$ GDP	133.4	3	● ◆
7.1.3 Global brand value, top 5,000, % GDP	0	81	○ ◇
7.1.4 Industrial designs by origin/bn PPP$ GDP	8.5	8	● ◆
7.2 Creative goods and services	**2**	**[114]**	
7.2.1 Cultural and creative services exports, % total trade	0.2	84	
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	0.02	124	
7.3 Online creativity	**21.4**	**92**	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	2	86	
7.3.2 GitHub commits/mn pop. 15–69	6.6	69	
7.3.3 Mobile app creation/bn PPP$ GDP	55.5	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 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 2025

Data Availability

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

Mongolia has missing data for eight indicators and outdated data for ten indicators.

Missing data for Mongolia

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
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
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

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Outdated data for Mongolia

Code	Indicator name	Economy year	Model year*	Source
2.3.1	Researchers, FTE/mn pop.	2022	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2022	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2022	2023	International Energy Agency
5.1.1	Knowledge-intensive employment, %	2023	2024	International Labour Organization
5.1.2	Females employed w/advanced degrees, %	2023	2024	International Labour Organization
5.1.4	GERD performed by business, % GDP	2018	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	GERD financed by business, %	2018	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT

Global Innovation Index 2025

Code	Indicator name	Economy year	Model year*	Source
5.3.2	High-tech imports, % total trade	2022	2023	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
6.3.3	High-tech exports, % total trade	2022	2023	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development; Trade Data Monitor.
7.2.4	Creative goods exports, % total trade	2022	2023	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

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.