Global Innovation Index 2025

Malawi ranking in the Global Innovation Index 2025

Malawi ranks 125th 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.

Malawi ranks 5th among the 11 Low-income group economies.

Malawi ranks 20th among the 32 economies in Sub-Saharan Africa.

Malawi GII Ranking (2020-2025)

The table shows the rankings of Malawi 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 Malawi in the GII 2025 is between ranks 113 and 136.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	111st	114th	103rd
2021	107th	118th	93rd
2022	n/a	n/a	n/a
2023	n/a	n/a	n/a
2024	n/a	n/a	n/a
2025	125th	122nd	131st

Malawi performs worse in innovation outputs than innovation inputs in 2025.

This year Malawi ranks 122nd in innovation inputs.

Malawi ranks 131st in innovation outputs.

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

For Malawi, 3 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	▲ 7.4 % 2023 - 2024	n/a	0 % 2023 - 2024	n/a
Long term (annual growth)	▲ 7.3 % 2014 - 2024	n/a	▼ -15.9 % 2020 - 2024	n/a

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	0% 2023 - 2024	▲ 12.7% 2022 - 2023	n/a	n/a	n/a
Long term (annual growth)	▲ 4.6% 2014 - 2024	▲ 6.7% 2013 - 2023	n/a	n/a	n/a
Penetration	46.2 per 100 inhabitants in 2024	0.08 per 100 inhabitants in 2023	n/a	n/a	n/a

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	▼ -1.4 % 2023 - 2024	▲ 2 % 2022 - 2023	+ 1.9 °C 2024
Long term (annual growth)	▲ 0.4 % 2014 - 2024	▲ 1 % 2013 - 2023	+ 1.1 °C 2014
Level	5,690.8 USD in 2024	67.4 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.

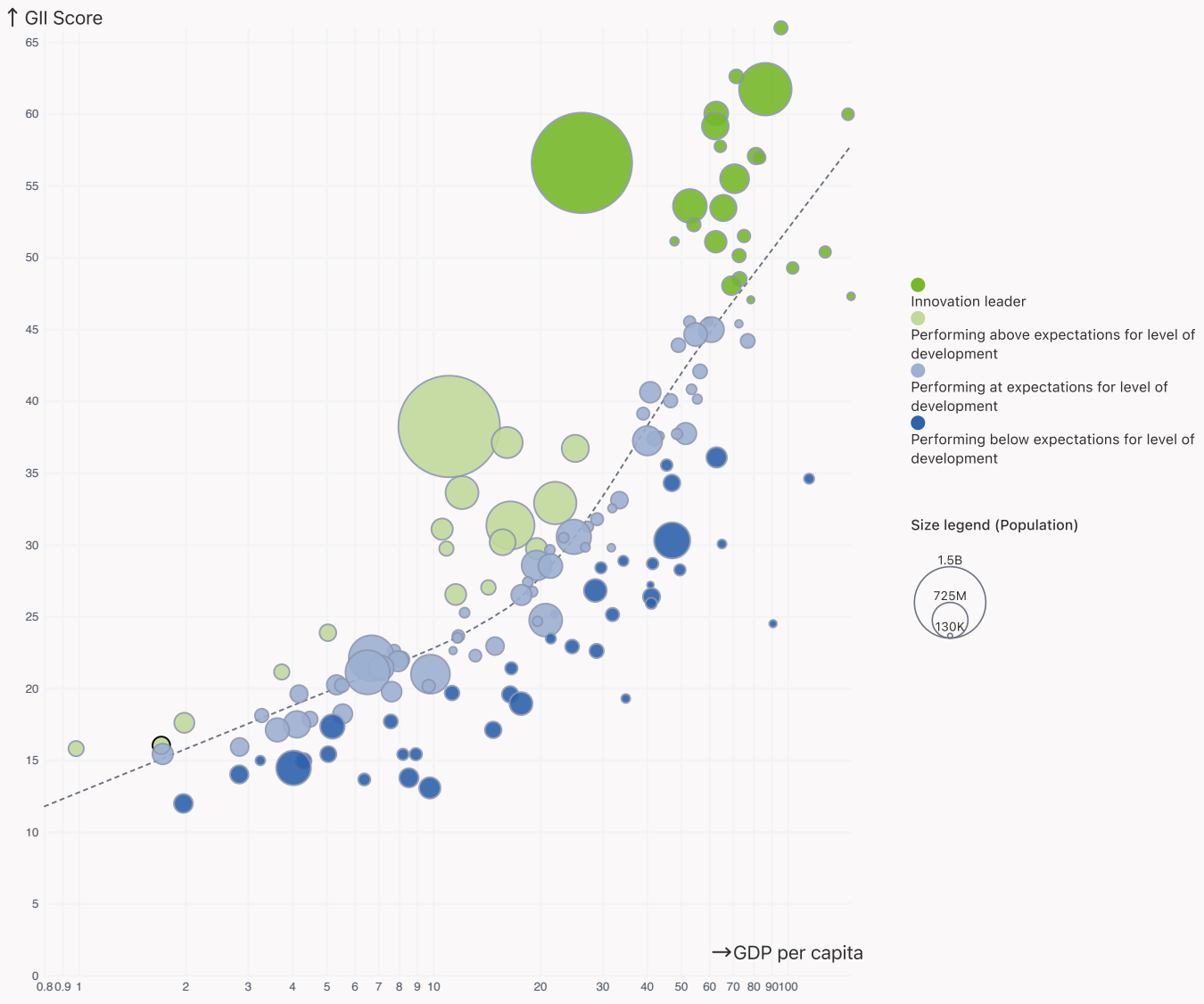
Global Innovation Index 2025

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 Malawi performs above 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.

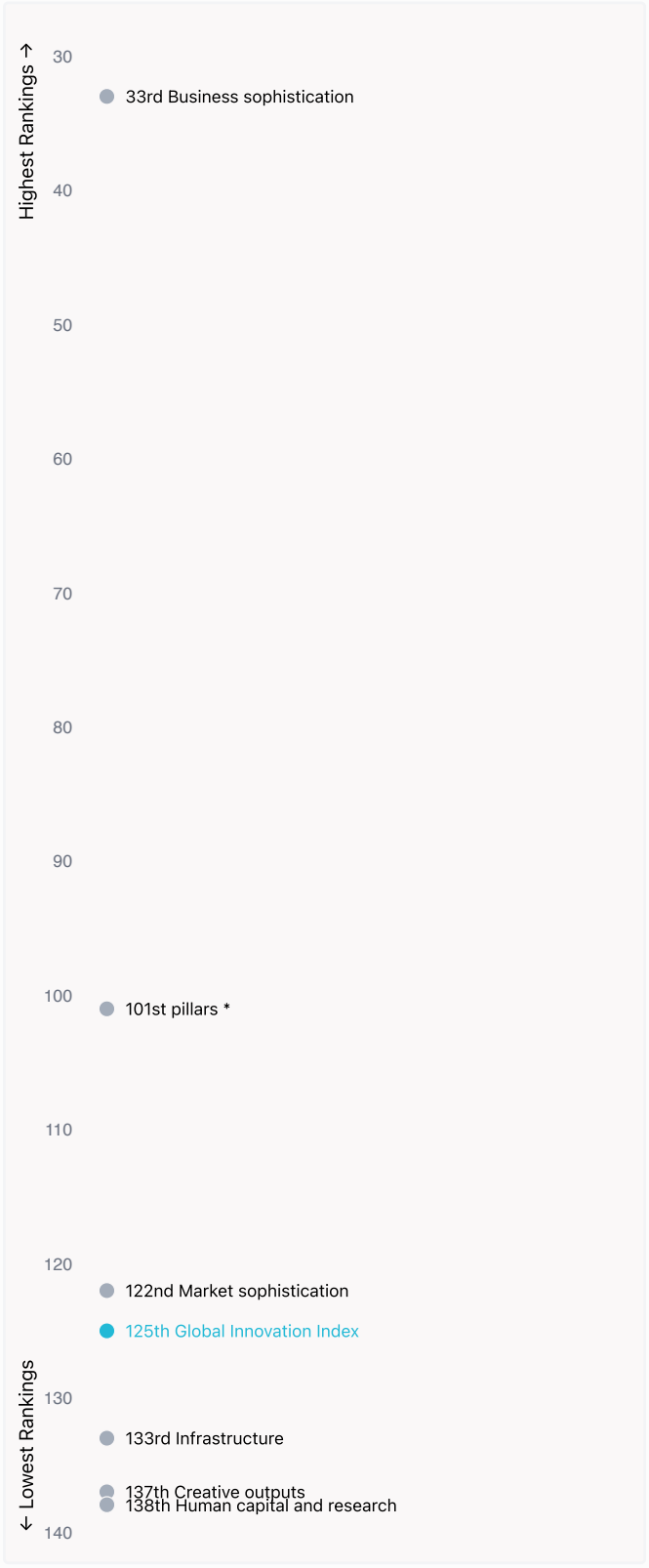
Malawi produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

Global Innovation Index 2025

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



Highest Rankings

Malawi ranks highest in Business sophistication (33rd), Institutions, Knowledge and technology outputs (101st) and Market sophistication (122nd).

Lowest Rankings

Malawi ranks lowest in Human capital and research (138th), Creative outputs (137th) and Infrastructure (133rd).

* Institutions, Knowledge and technology outputs

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

Global Innovation Index 2025

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

Low-income economies

Malawi performs above the Low-income group average in Institutions, Business sophistication, Knowledge and technology outputs.

Sub-Saharan Africa

Malawi performs above the regional average in Business sophistication, Knowledge and technology outputs.

Institutions

- Top 10 | Score: 78.63
- Sub-Saharan Africa | Score: 40.29
- Malawi | Score: 35.54
- Low-income | Score: 34.81

Human capital and research

- Top 10 | Score: 59.30
- Sub-Saharan Africa | Score: 18.06
- Low-income | Score: 15.10
- Malawi | Score: 6.79

Infrastructure

- Top 10 | Score: 61.36
- Sub-Saharan Africa | Score: 27.58
- Low-income | Score: 21.77
- Malawi | Score: 21.18

Market sophistication

- Top 10 | Score: 61.82
- Sub-Saharan Africa | Score: 22.67
- Low-income | Score: 20.14
- Malawi | Score: 19.49

Business sophistication

- Top 10 | Score: 59.10
- Malawi | Score: 39.01
- Sub-Saharan Africa | Score: 25.36
- Low-income | Score: 23.04

Knowledge and technology outputs

- Top 10 | Score: 54.93
- Malawi | Score: 12.83
- Sub-Saharan Africa | Score: 11.53
- Low-income | Score: 10.90

Creative outputs

- Top 10 | Score: 55.98
- Sub-Saharan Africa | Score: 10.61
- Low-income | Score: 7.58
- Malawi | Score: 2.32

Global Innovation Index 2025

Innovation strengths and weaknesses in Malawi

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

Malawi's best-ranked innovation strengths are **ICT services imports, % total trade** (rank 1), **Intellectual property payments, % total trade** (rank 9) and **Youth demographic dividend, %** (rank 10).

Strengths

Rank	Code	Indicator name
1	5.3.3	ICT services imports, % total trade
9	5.3.1	Intellectual property payments, % total trade
10	5.1.3	Youth demographic dividend, %
15	3.3.2	Low-carbon energy use, %
17	6.3.4	ICT services exports, % total trade
36	4.1.3	Loans from microfinance institutions, % GDP
37	6.1.4	Scientific and technical articles/bn PPP$ GDP
57	6.3.1	Intellectual property receipts, % total trade
67	5.2.2	University–industry R&D collaboration†
76	1.2.2	Rule of law*

Weaknesses

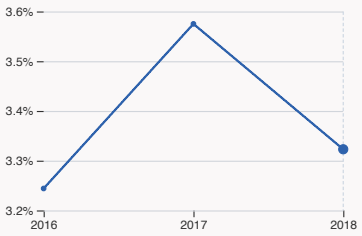
Rank	Code	Indicator name
135	4.1.2	Domestic credit to private sector, % GDP
133	2.2.1	Tertiary enrolment, % gross
130	2.1.5	Pupil–teacher ratio, secondary
128	3.1.2	ICT use*
122	5.1.2	Females employed w/advanced degrees, %
100	5.2.5	Patent families/bn PPP$ GDP
81	7.1.3	Global brand value, top 5,000, % 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

Global Innovation Index 2025

Malawi's innovation system

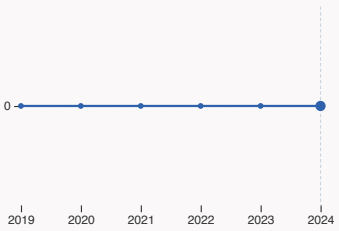
As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Malawi



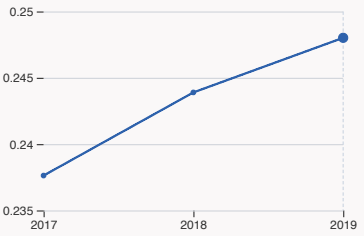
2.1.1 Expenditure on education

was equal to 3.32 % GDP in 2018, down by 0.25 percentage points from the year prior – and equivalent to an indicator rank of 99.



2.3.4 QS university ranking

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

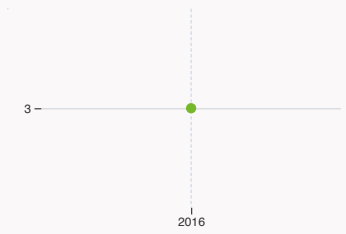


4.3.2 Domestic industry diversification

was equal to an index score of 0.248 in 2019, up by 1.69% from the year prior – and equivalent to an indicator rank of 93.

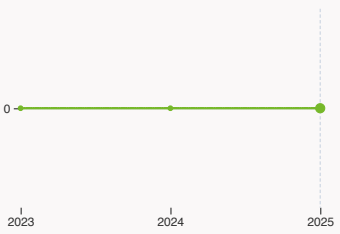
Global Innovation Index 2025

Innovation outputs in Malawi



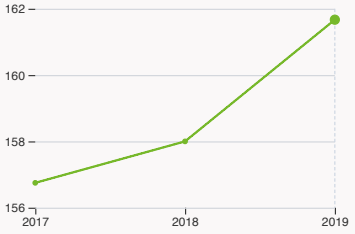
6.1.1 Patents by origin

was equal to 3 patents in 2016 – and equivalent to an indicator rank of 109.



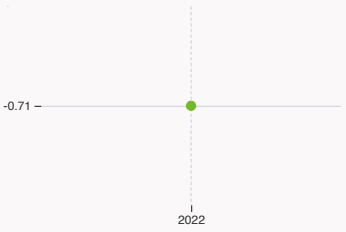
6.2.2 Unicorn valuation

The country does not have unicorns in 2025.



6.2.4 High-tech manufacturing

was equal to 161.67 high-tech manufacturing output in million USD in 2019, up by 2.32% from the year prior – and equivalent to an indicator rank of 95.

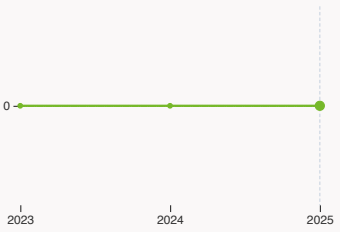


6.3.2 Production and export complexity

was equal to a score of -0.71 in 2022 – and equivalent to an indicator rank of 102.

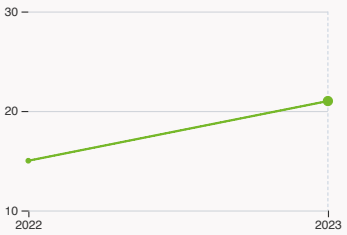
6.3.3 High-tech exports

was equal to 4.5 million USD in 2023, up by 52.54% from the year prior – and equivalent to an indicator rank of 123.



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.



7.2.2 National feature films

was equal to 21 films in 2023, up by 40% from the year prior – and equivalent to an indicator rank of 62.

Malawi

GII 2025 rank **125**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
131	122	Low	Sub-Saharan Africa	21.7	40.1	1,713.8

	Score / Value	Rank	
Institutions	**35.5**	**101**	
1.1 Institutional environment	**30**	**120**	
1.1.1 Operational stability for businesses*	38	119	
1.1.2 Government effectiveness*	21.9	121	
1.2 Regulatory environment	**38.7**	**98**	
1.2.1 Regulatory quality*	28.9	116	
1.2.2 Rule of law*	48.5	76	●◆
1.3 Business environment	**37.9**	**[83]**	
1.3.1 Policy stability for doing business†	37.9	86	
1.3.2 Entrepreneurship policies and culture†	n/a	n/a	
Human capital and research	**6.8**	**[138]**	
2.1 Education	**20.4**	**136**	◇
2.1.1 Expenditure on education, % GDP	3.3	99	
2.1.2 Government funding/pupil, secondary, % GDP/cap	16.8	59	
2.1.3 School life expectancy, years	9.9	113	
2.1.4 PISA scales in reading, maths and science	n/a	n/a	
2.1.5 Pupil–teacher ratio, secondary	68.1	130	○◇
2.2 Tertiary education	**0**	**[134]**	
2.2.1 Tertiary enrolment, % gross	2.7	133	○◇
2.2.2 Graduates in science and engineering, %	n/a	n/a	
2.2.3 Tertiary inbound mobility, %	n/a	n/a	
2.3 Research and development (R&D)	**0**	**[124]**	
2.3.1 Researchers, FTE/mn pop.	n/a	n/a	
2.3.2 Gross expenditure on R&D, % GDP	n/a	n/a	
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	**21.2**	**133**	
3.1 Information and communication technologies (ICTs)	**25.4**	**132**	
3.1.1 ICT access*	30.8	133	
3.1.2 ICT use*	9.9	128	○
3.1.3 Government's online service*	35.3	112	
3.2 General infrastructure	**8.9**	**[133]**	
3.2.1 Electricity output, GWh/mn pop.	n/a	n/a	
3.2.2 Logistics performance*	n/a	n/a	
3.2.3 Gross capital formation, % GDP	14.5	128	◇
3.3 Ecological sustainability	**29.3**	**41**	◆
3.3.1 GDP/unit of energy use	n/a	n/a	
3.3.2 Low-carbon energy use, %	46.5	15	●
3.3.3 ISO 14001 environment/bn PPP$ GDP	0.3	104	
Market sophistication	**19.5**	**122**	
4.1 Credit	**4.6**	**129**	
4.1.1 Finance for startups and scaleups†	n/a	n/a	
4.1.2 Domestic credit to private sector, % GDP	8.1	135	○◇
4.1.3 Loans from microfinance institutions, % GDP	0.9	36	●
4.2 Investment	**1.3**	**[109]**	
4.2.1 Market capitalization, % GDP	n/a	n/a	
4.2.2 Venture capital (VC) received, deal count/bn PPP$ GDP	0.04	93	
4.2.3 Late-stage VC deal count, % global VC	0.003	95	◇
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	**52.6**	**104**	◆
4.3.1 Applied tariff rate, weighted avg., %	5	96	◆
4.3.2 Domestic industry diversification	62.5	93	◆
4.3.3 Domestic market scale, bn PPP$	40.1	128	

	Score / Value	Rank	
Business sophistication	**39**	**33**	◆
5.1 Knowledge workers	**45.7**	**[34]**	
5.1.1 Knowledge-intensive employment, %	n/a	n/a	
5.1.2 Females employed w/advanced degrees, %	0.6	122	○
5.1.3 Youth demographic dividend, %	61.9	10	●
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	**20.4**	**90**	
5.2.1 Public research–industry co-publications, %	0.5	123	
5.2.2 University–industry R&D collaboration†	35.5	67	●◆
5.2.3 University industry & international engagement, top 5*	n/a	n/a	
5.2.4 State of cluster development†	42.5	78	
5.2.5 Patent families/bn PPP$ GDP	0	100	○◇
5.3 Knowledge absorption	**50.9**	**6**	◆
5.3.1 Intellectual property payments, % total trade	3.1	9	●◆
5.3.2 High-tech imports, % total trade	6.5	94	
5.3.3 ICT services imports, % total trade	8.1	1	●◆
5.3.4 FDI net inflows, % GDP	1.4	100	
5.3.5 Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs	**12.8**	**101**	
6.1 Knowledge creation	**12**	**77**	◆
6.1.1 Patents by origin/bn PPP$ GDP	0.1	109	
6.1.2 PCT patents by inventor origin/bn PPP$ GDP	0.01	93	◆
6.1.3 Utility models by origin/bn PPP$ GDP	-	-	
6.1.4 Scientific and technical articles/bn PPP$ GDP	18.1	37	●◆
6.1.5 Citable documents H-index	7.1	90	
6.2 Knowledge impact	**9.8**	**133**	◇
6.2.1 Labor productivity growth, %	-1.5	126	◇
6.2.2 Unicorn valuation, % GDP	0	53	○◇
6.2.3 Software spending, % GDP	0.05	112	
6.2.4 High-tech manufacturing, %	7.3	95	
6.3 Knowledge diffusion	**16.7**	**76**	◆
6.3.1 Intellectual property receipts, % total trade	0.1	57	●◆
6.3.2 Production and export complexity	32.9	102	
6.3.3 High-tech exports, % total trade	0.1	123	
6.3.4 ICT services exports, % total trade	5.9	17	●◆
6.3.5 ISO 9001 quality/bn PPP$ GDP	0.5	126	
Creative outputs	**2.3**	**137**	◇
7.1 Intangible assets	**2.2**	**[133]**	
7.1.1 Intangible asset intensity, top 15, %	n/a	n/a	
7.1.2 Trademarks by origin/bn PPP$ GDP	8.9	116	
7.1.3 Global brand value, top 5,000, % GDP	0	81	○◇
7.1.4 Industrial designs by origin/bn PPP$ GDP	n/a	n/a	
7.2 Creative goods and services	**4.6**	**101**	
7.2.1 Cultural and creative services exports, % total trade	0.3	77	
7.2.2 National feature films/mn pop. 15–69	1.7	62	
7.2.3 Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4 Creative goods exports, % total trade	0.009	131	
7.3 Online creativity	**0.2**	**137**	◇
7.3.1 Top-level domains (TLDs)/th pop. 15–69	0.09	133	
7.3.2 GitHub commits/mn pop. 15–69	0.4	127	
7.3.3 Mobile app creation/bn PPP$ GDP	n/a	n/a	

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 Malawi.

Malawi has missing data for twenty two indicators and outdated data for sixteen indicators.

Missing data for Malawi

Code	Indicator name	Economy year	Model year*	Source
1.3.2	Entrepreneurship policies and culture†	n/a	2024	Global Entrepreneurship Monitor
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
2.2.2	Graduates in science and engineering, %	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD
2.2.3	Tertiary inbound mobility, %	n/a	2023	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	n/a	2023	International Energy Agency
3.2.2	Logistics performance*	n/a	2023	World Bank, Logistics Performance Index 2023
3.3.1	GDP/unit of energy use	n/a	2022	International Energy Agency
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
5.1.1	Knowledge-intensive employment, %	n/a	2024	International Labour Organization
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
7.1.4	Industrial designs by origin/bn PPP$ GDP	n/a	2023	World Intellectual Property Organization; International Monetary Fund

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Code	Indicator name	Economy year	Model year*	Source
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2024	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund
7.3.3	Mobile app creation/bn PPP$ GDP	n/a	2024	data.ia (a Sensor Tower Company); International Monetary Fund

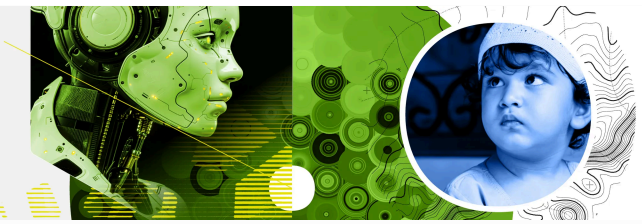
*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Outdated data for Malawi

Code	Indicator name	Economy year	Model year*	Source
2.1.1	Expenditure on education, % GDP	2018	2023	UNESCO Institute for Statistics
2.1.2	Government funding/pupil, secondary, % GDP/cap	2016	2021	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2021	2023	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	2019	2023	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2022	2023	UNESCO Institute for Statistics
4.1.3	Loans from microfinance institutions, % GDP	2021	2023	International Monetary Fund, Financial Access Survey (FAS)
4.2.3	Late-stage VC deal count, % global VC	2023	2024	PitchBook Data, Inc.
4.3.2	Domestic industry diversification	2019	2022	United Nations Industrial Development Organization (UNIDO)
5.1.2	Females employed w/advanced degrees, %	2020	2024	International Labour Organization
5.3.1	Intellectual property payments, % total trade	2022	2023	World Trade Organization, Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development
5.3.3	ICT services imports, % total trade	2022	2023	World Trade Organization and United Nations Conference on Trade and Development
6.1.1	Patents by origin/bn PPP$ GDP	2016	2023	World Intellectual Property Organization; International Monetary Fund
6.2.4	High-tech manufacturing, %	2019	2022	United Nations Industrial Development Organization (UNIDO)
6.3.1	Intellectual property receipts, % total trade	2022	2023	World Trade Organization, Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development
6.3.4	ICT services exports, % total trade	2022	2023	World Trade Organization and United Nations Conference on Trade and Development
7.2.1	Cultural and creative services exports, % total trade	2022	2023	World Trade Organization, Organisation for Economic Co-operation and Development; 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



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.