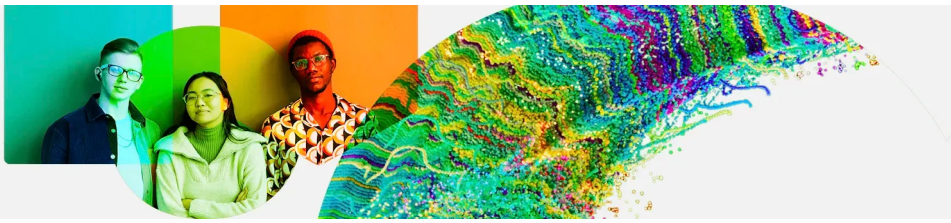
Global Innovation Index 2024



Zimbabwe ranking in the Global Innovation Index 2024

Zimbabwe ranks 118th 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.

Zimbabwe ranks 31st among the 38 lower-middle-income group economies.

Zimbabwe ranks 15th among the 27 economies in Sub-Saharan Africa.

Zimbabwe GII Ranking (2020-2024)

The table shows the rankings of Zimbabwe 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 Zimbabwe in the GII 2024 is between ranks 109 and 123.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	120th	123rd	108th
2021	113rd	116th	105th
2022	107th	120th	93rd
2023	117th	127th	97th
2024	118th	131st	96th

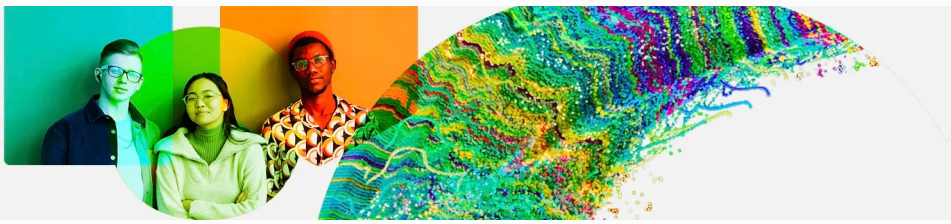
Zimbabwe performs better in innovation outputs than innovation inputs in 2024.

This year **Zimbabwe ranks 131st in innovation inputs.** This position is lower than last year.

Zimbabwe ranks 96th in innovation outputs. This position is higher than last year.

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

For Zimbabwe, 3 indicators have improved in the short-term and 5 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -16.6% 2022 - 2023	n/a	▼ -50% 2022 - 2023	▼ -99% 2022 - 2023	▲ 100% 2022 - 2023
▲ 7.7% 2013 - 2023	n/a	▼ -6.7% 2013 - 2023	▼ -47.1% 2013 - 2023	▲ 2.9% 2013 - 2023

Technology adoption

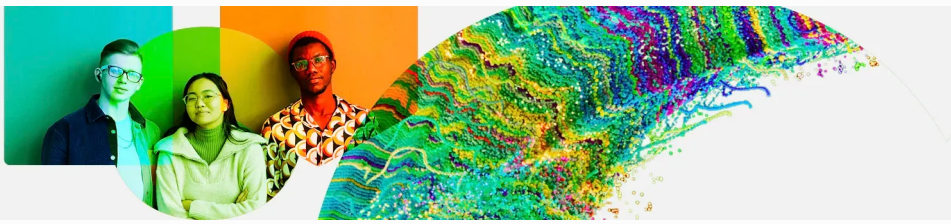
Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
0% 2021 - 2022	▼ -1.4% 2021 - 2022	n/a	n/a	n/a
▲ 1% 2012 - 2022	▲ 8.9% 2012 - 2022		n/a	n/a
31.8 per 100 inhabitants in 2022	1.3 per 100 inhabitants in 2022	2.6 per 100 inhabitants in 2022		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 1.1% 2022 - 2023	▲ 0.2% 2021 - 2022	▲ 0.6°C 2023
▼ -1.1% 2013 - 2023	▲ 0.7% 2012 - 2022	n/a
9,332 USD in 2023	59.4 years in 2022	

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

Global Innovation Index 2024

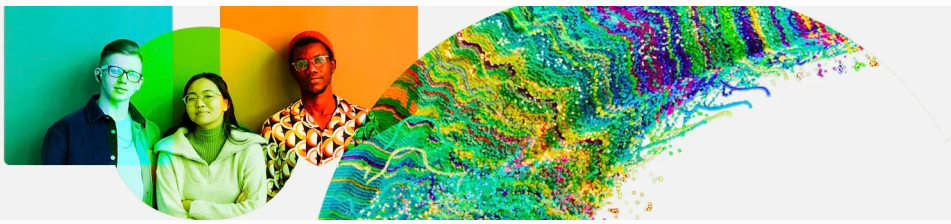


Expected vs. observed innovation performance

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, Zimbabwe's performance is at expectations for its level of development.

> Innovation overperformers relative to their economic development

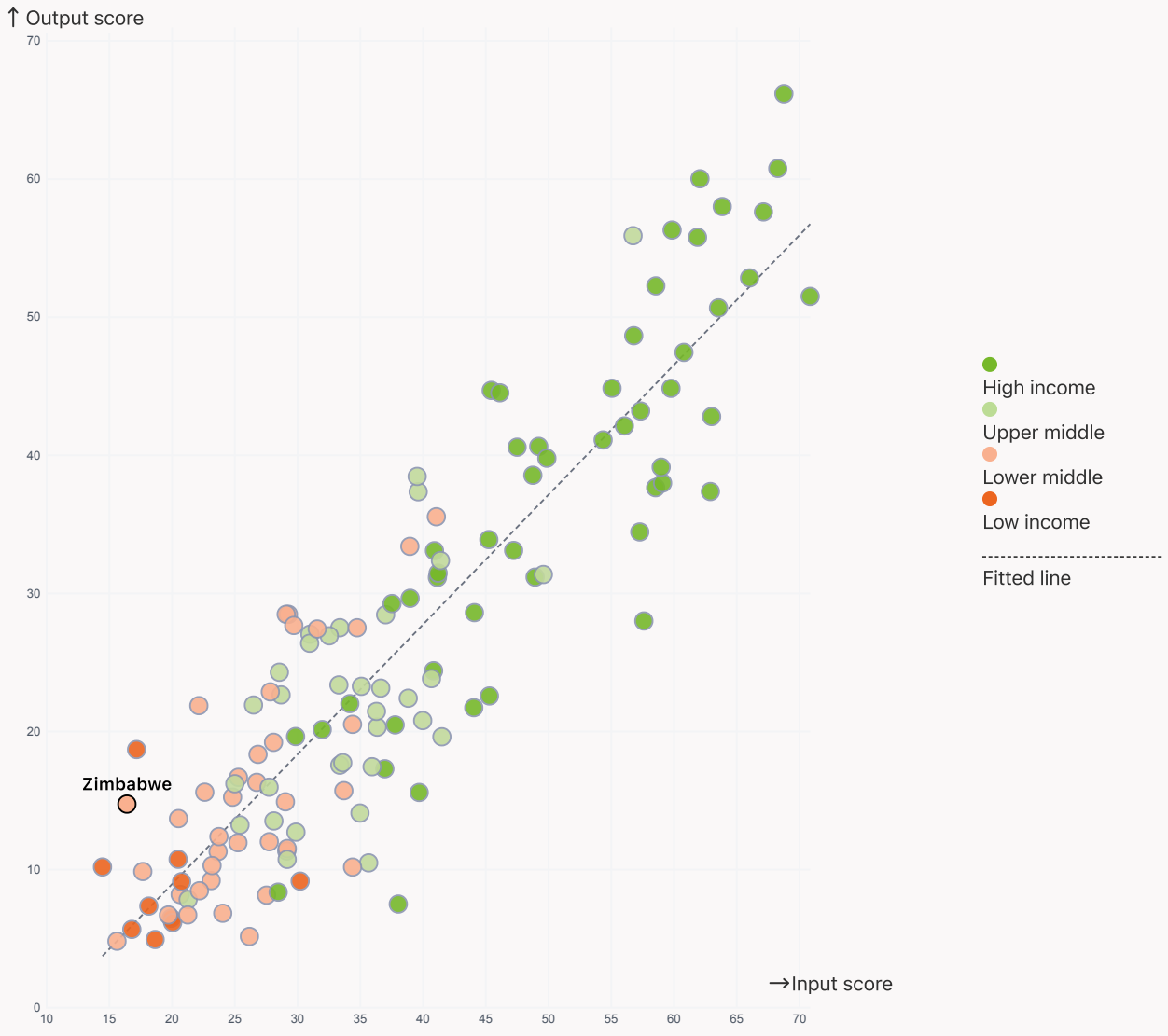


Effectively translating innovation investments into innovation outputs

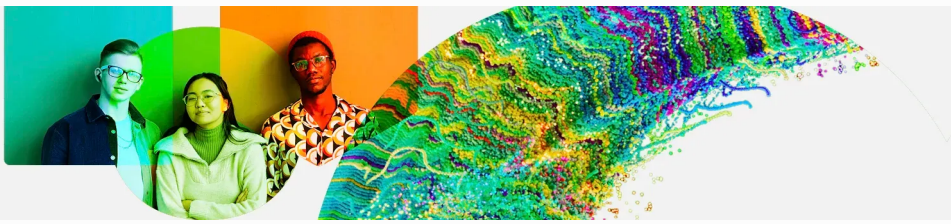
The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

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

> Relationship between innovation inputs and outputs

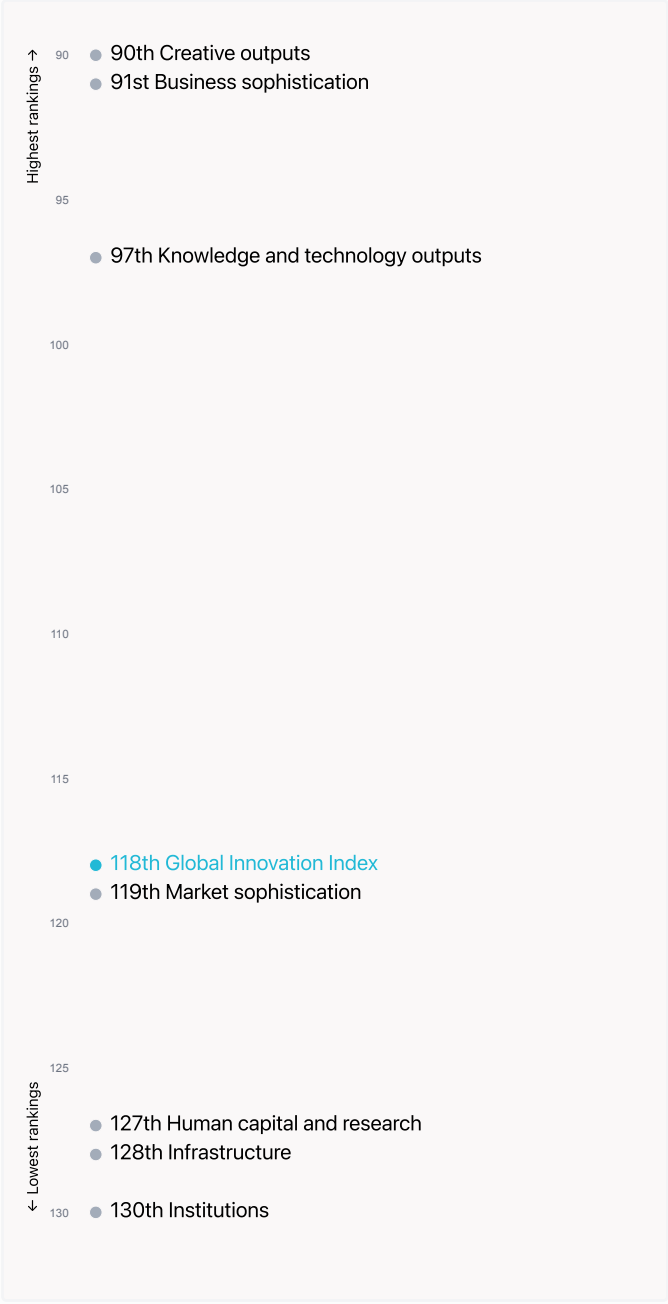


Global Innovation Index 2024



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



Highest rankings

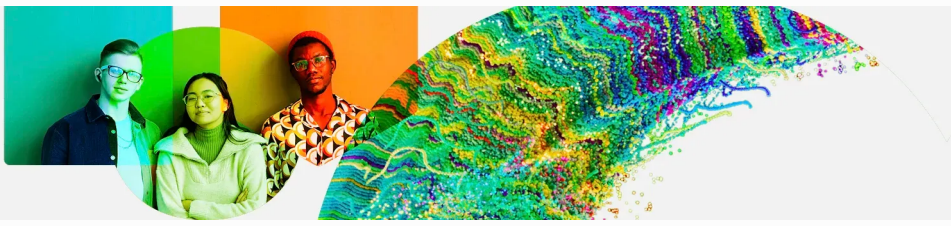
Zimbabwe ranks highest in Creative outputs (90th), Business sophistication (91st) and Knowledge and technology outputs (97th).

Lowest rankings

Zimbabwe ranks lowest in Institutions (130th), Infrastructure (128th) and Human capital and research (127th).

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

Global Innovation Index 2024



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

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

Lower-Middle-Income economies

Zimbabwe performs above the lower-middle-income group average in Business sophistication, Creative outputs.

Sub-Saharan Africa

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

Institutions

- Top 10 | Score: 80.81
- Sub-Saharan Africa | Score: 37.83
- Lower middle income | Score: 34.0
- Zimbabwe | Score: 13.76

Human capital and research

- Top 10 | Score: 61.30
- Lower middle income | Score: 22.1
- Sub-Saharan Africa | Score: 17.86
- Zimbabwe | Score: 11.71

Infrastructure

- Top 10 | Score: 58.57
- Lower middle income | Score: 29.8
- Sub-Saharan Africa | Score: 25.40
- Zimbabwe | Score: 19.55

Market sophistication

- Top 10 | Score: 62.12
- Lower middle income | Score: 25.9
- Sub-Saharan Africa | Score: 18.79
- Zimbabwe | Score: 15.27

Business sophistication

- Top 10 | Score: 63.64
- Zimbabwe | Score: 22.05
- Lower middle income | Score: 20.8
- Sub-Saharan Africa | Score: 18.73

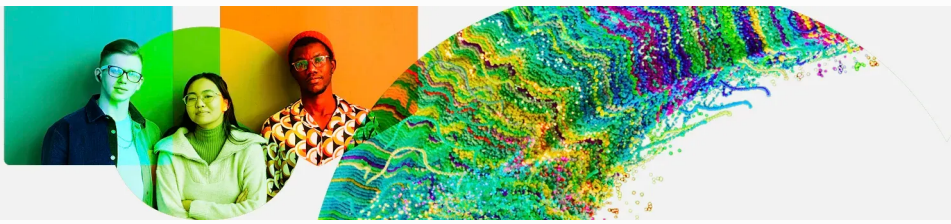
Knowledge and technology outputs

- Top 10 | Score: 57.29
- Lower middle income | Score: 15.6
- Zimbabwe | Score: 12.52
- Sub-Saharan Africa | Score: 10.99

Creative outputs

- Top 10 | Score: 56.54
- Zimbabwe | Score: 16.85
- Lower middle income | Score: 15.7
- Sub-Saharan Africa | Score: 10.35

Global Innovation Index 2024



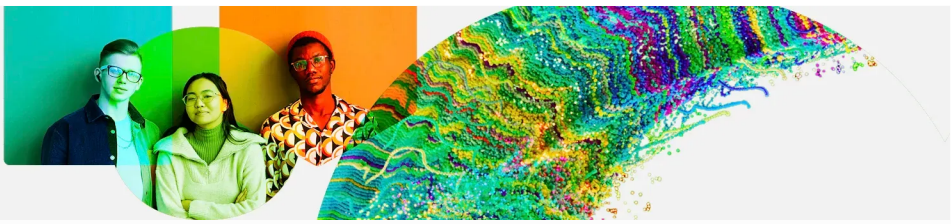
Innovation strengths and weaknesses in Zimbabwe

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

Zimbabwe's main innovation strengths are **Low-carbon energy use, %** (rank 31), **Utility models by origin/bn PPP$ GDP** (rank 38) and **Joint venture/strategic alliance deals/bn PPP$ GDP** (rank 42).

Strengths			Weaknesses		
Rank	Code	Indicator name	Rank	Code	Indicator name
31	3.3.2	Low-carbon energy use, %	132	1.1.1	Operational stability for businesses*
38	6.1.3	Utility models by origin/bn PPP$ GDP	132	1.2.1	Regulatory quality*
42	5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	130	1.1.2	Government effectiveness*
54	3.3.3	ISO 14001 environment/bn PPP$ GDP	129	4.1.2	Domestic credit to private sector, % GDP
54	6.1.4	Scientific and technical articles/bn PPP$ GDP	125	3.3.1	GDP/unit of energy use
55	5.2.1	Public Research-Industry co-publications, %	102	5.2.5	Patent families/bn PPP$ GDP
62	6.1.1	Patents by origin/bn PPP$ GDP	75	7.1.3	Global brand value, top 5,000, % GDP
64	6.3.5	ISO 9001 quality/bn PPP$ GDP	75	2.3.4	QS university ranking, top 3*
66	5.3.3	ICT services imports, % total trade	49	6.2.2	Unicorn valuation, % GDP
			41	2.3.3	Global corporate R&D investors, top 3, mn USD

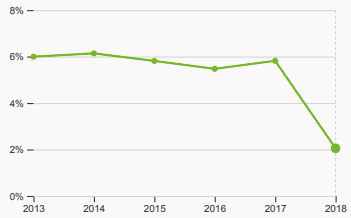
Global Innovation Index 2024



Zimbabwe's innovation system

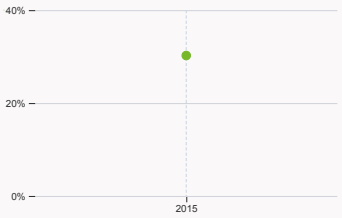
As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Zimbabwe



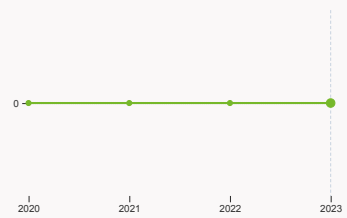
2.1.1 **Expenditure on education**

was equal to 2.05 % GDP in 2018, down by 3.77 percentage points from the year prior – and equivalent to an indicator rank of 121.



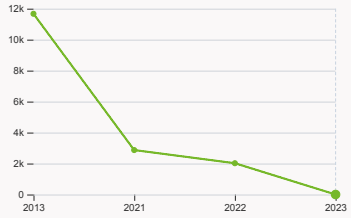
2.2.2 **Graduates in science and engineering**

was equal to 30.22 % of total graduates in 2015 – and equivalent to an indicator rank of 19.



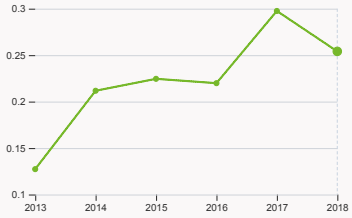
2.3.4 **QS university ranking**

was equal to an average score of 0 for the top three universities in 2023 with no change from the year prior – and equivalent to an indicator rank of 75.



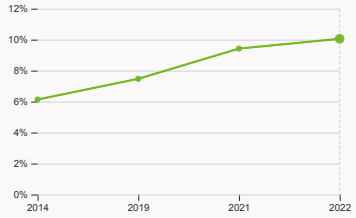
4.2.4 **VC received, value**

was equal to 0 USD in 2023, down by 100% from the year prior – and equivalent to an indicator rank of 90.



4.3.2 **Domestic industry diversification**

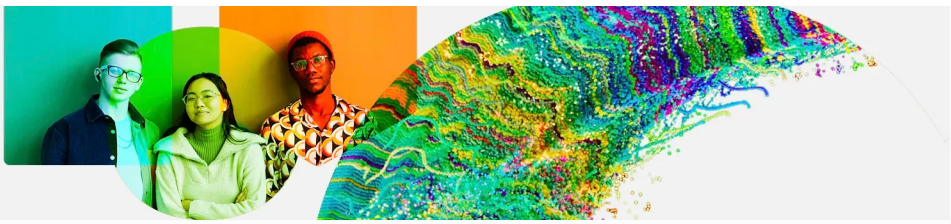
was equal to an index score of 0.25 in 2018, down by 14.62% from the year prior – and equivalent to an indicator rank of 98.



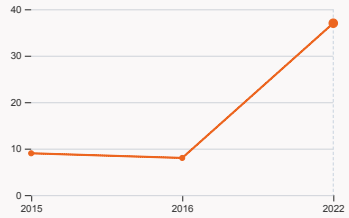
5.1.1 **Knowledge-intensive employment**

was equal to 10.05 % in 2022, up by 0.63 percentage points from the year prior – and equivalent to an indicator rank of 110.

Global Innovation Index 2024



Innovation outputs in Zimbabwe

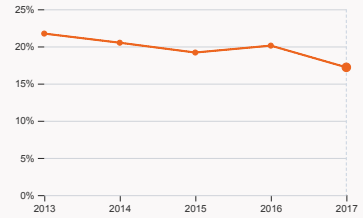


6.1.1 Patents by origin

was equal to 37 patents in 2022, up by 362.5% from the year prior – and equivalent to an indicator rank of 62.

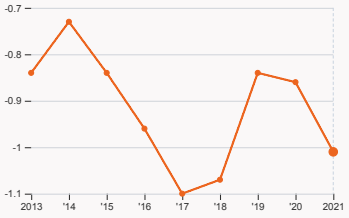
6.2.2 Unicorn valuation

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



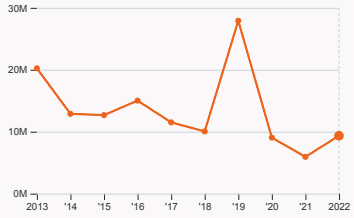
6.2.4 High-tech manufacturing

was equal to 17.19 % of total manufacturing output in 2017, down by 2.92 percentage points from the year prior – and equivalent to an indicator rank of 68.



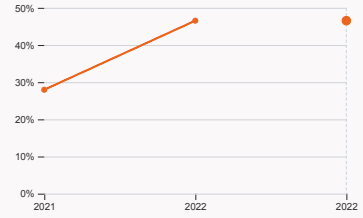
6.3.2 Production and export complexity

was equal to a score of -1.01 in 2021, down by 17.44% from the year prior – and equivalent to an indicator rank of 109.



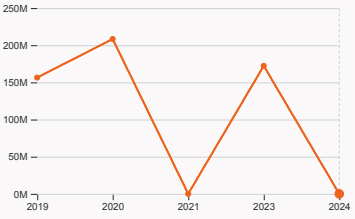
6.3.3 High-tech exports

was equal to 9.35 million USD in 2022, up by 57.41% from the year prior – and equivalent to an indicator rank of 121.



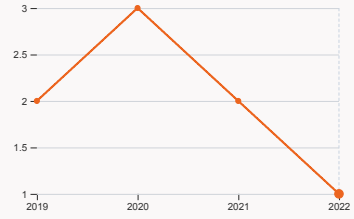
7.1.1 Intangible asset intensity

was equal to 46.54 % for the top 15 companies in 2022 with no change from the year prior – and equivalent to an indicator rank of 53.



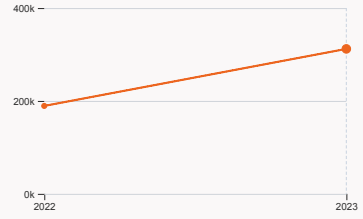
7.1.3 Global brand value

was equal to 0 million USD for the brands in the top 5,000 in 2024, down by 100% from the year prior – and equivalent to an indicator rank of 75.



7.2.2 National feature films

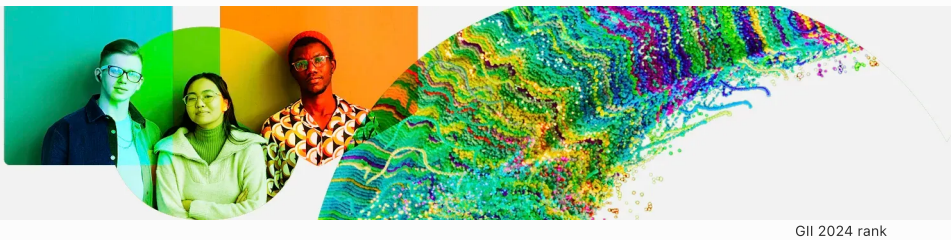
was equal to 1 film in 2022, down by 50% from the year prior – and equivalent to an indicator rank of 83.



7.3.3 Mobile app creation

was equal to 312.03 thousand global downloads of mobile apps in 2023, up by 64.85% from the year prior – and equivalent to an indicator rank of 106.

Global Innovation Index 2024



Zimbabwe

GII 2024 rank **118**

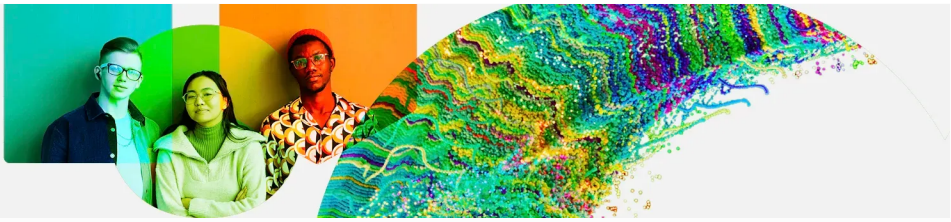
Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
96	131	Lower middle	SSA	16.3	44.4	2,749.8

	Score / Value	Rank
Institutions	**13.8**	**130**
1.1 Institutional environment	**11.6**	**131**
1.1.1 Operational stability for businesses*	12	132
1.1.2 Government effectiveness*	11.2	130
1.2 Regulatory environment	**6.4**	**132**
1.2.1 Regulatory quality*	4.4	132
1.2.2 Rule of law*	8.4	128
1.3 Business environment	**23.3**	**[113]**
1.3.1 Policy stability for doing business†	23.3	117
1.3.2 Entrepreneurship policies and culture†	n/a	n/a
Human capital and research	**11.7**	**[127]**
2.1 Education	**10.8**	**[133]**
2.1.1 Expenditure on education, % GDP	2.1	121
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a
2.1.3 School life expectancy, years	n/a	n/a
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	**24.3**	**86**
2.2.1 Tertiary enrolment, % gross	9.7	119
2.2.2 Graduates in science and engineering, %	30.2	19
2.2.3 Tertiary inbound mobility, %	0.5	100
2.3 Research and development (R&D)	**0**	**[120]**
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	41
2.3.4 QS university ranking, top 3*	0	75
Infrastructure	**19.5**	**128**
3.1 Information and communication technologies (ICTs)	**30**	**123**
3.1.1 ICT access*	36	120
3.1.2 ICT use*	30.9	114
3.1.3 Government's online service*	32	120
3.1.4 E-participation*	20.9	123
3.2 General infrastructure	**10.1**	**124**
3.2.1 Electricity output, GWh/mn pop.	541.6	109
3.2.2 Logistics performance*	18.2	89
3.2.3 Gross capital formation, % GDP	n/a	n/a
3.3 Ecological sustainability	**18.6**	**71**
3.3.1 GDP/unit of energy use	3.3	125
3.3.2 Low-carbon energy use, %	31.9	31
3.3.3 ISO 14001 environment/bn PPP$ GDP	1.9	54
Market sophistication	**15.3**	**119**
4.1 Credit	**2.7**	**130**
4.1.1 Finance for startups and scaleups†	n/a	n/a
4.1.2 Domestic credit to private sector, % GDP	8.8	129
4.1.3 Loans from microfinance institutions, % GDP	0.5	42
4.2 Investment	**4.7**	**[81]**
4.2.1 Market capitalization, % GDP	n/a	n/a
4.2.2 Venture capital (VC) investors, deals/bn PPP$ GDP	n/a	n/a
4.2.3 VC recipients, deals/bn PPP$ GDP	0.03	68
4.2.4 VC received, value, % GDP	0.00005	90
4.3 Trade, diversification and market scale	**38.4**	**103**
4.3.1 Applied tariff rate, weighted avg., %	5.9	104
4.3.2 Domestic industry diversification	60.8	98
4.3.3 Domestic market scale, bn PPP$	44.4	116

	Score / Value	Rank
Business sophistication	**22.1**	**91**
5.1 Knowledge workers	**25.2**	**[87]**
5.1.1 Knowledge-intensive employment, %	10.1	110
5.1.2 Firms offering formal training, %	26.4	64
5.1.3 GERD performed by business, % GDP	n/a	n/a
5.1.4 GERD financed by business, %	n/a	n/a
5.1.5 Females employed w/advanced degrees, %	9.7	78
5.2 Innovation linkages	**21.9**	**74**
5.2.1 Public Research-Industry co-publications, %	1.7	55
5.2.2 University-industry R&D collaboration†	43.2	71
5.2.3 State of cluster development†	37.5	90
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	0.03	42
5.2.5 Patent families/bn PPP$ GDP	0	102
5.3 Knowledge absorption	**19.1**	**98**
5.3.1 Intellectual property payments, % total trade	0.06	110
5.3.2 High-tech imports, % total trade	6.1	97
5.3.3 ICT services imports, % total trade	1.2	66
5.3.4 FDI net inflows, % GDP	0.9	99
5.3.5 Research talent, % in businesses	n/a	n/a
Knowledge and technology outputs	**12.5**	**97**
6.1 Knowledge creation	**11.6**	**74**
6.1.1 Patents by origin/bn PPP$ GDP	0.9	62
6.1.2 PCT patents by origin/bn PPP$ GDP	0.09	65
6.1.3 Utility models by origin/bn PPP$ GDP	0.2	38
6.1.4 Scientific and technical articles/bn PPP$ GDP	12.8	54
6.1.5 Citable documents H-index	7.4	87
6.2 Knowledge impact	**18.8**	**109**
6.2.1 Labor productivity growth, %	-1.2	122
6.2.2 Unicorn valuation, % GDP	0	49
6.2.3 Software spending, % GDP	0.2	73
6.2.4 High-tech manufacturing, %	17.2	68
6.3 Knowledge diffusion	**7.1**	**106**
6.3.1 Intellectual property receipts, % total trade	0.003	104
6.3.2 Production and export complexity	17.7	109
6.3.3 High-tech exports, % total trade	0.09	121
6.3.4 ICT services exports, % total trade	0.5	98
6.3.5 ISO 9001 quality/bn PPP$ GDP	4.7	64
Creative outputs	**16.8**	**90**
7.1 Intangible assets	**25**	**70**
7.1.1 Intangible asset intensity, top 15, %	46.5	53
7.1.2 Trademarks by origin/bn PPP$ GDP	24	76
7.1.3 Global brand value, top 5,000, % GDP	0	75
7.1.4 Industrial designs by origin/bn PPP$ GDP	0.7	72
7.2 Creative goods and services	**1.1**	**[118]**
7.2.1 Cultural and creative services exports, % total trade	n/a	n/a
7.2.2 National feature films/mn pop. 15–69	0.1	83
7.2.3 Entertainment and media market/th pop. 15–69	n/a	n/a
7.2.4 Creative goods exports, % total trade	0.1	90
7.3 Online creativity	**16.4**	**110**
7.3.1 Top-level domains (TLDs)/th pop. 15–69	0.8	99
7.3.2 GitHub commits/mn pop. 15–69	1	115
7.3.3 Mobile app creation/bn PPP$ GDP	47.3	106

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

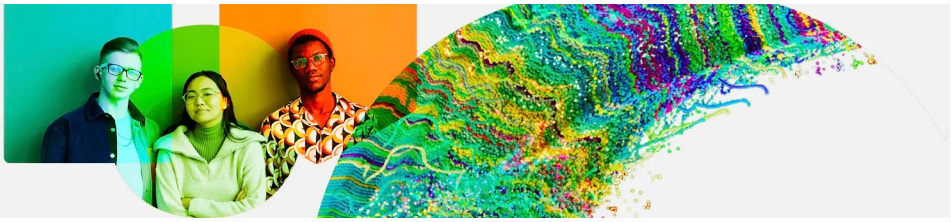
The following tables list indicators that are either missing or outdated for Zimbabwe.

Zimbabwe has missing data for sixteen indicators and outdated data for nine indicators.

Missing data for Zimbabwe

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture†	n/a	2023	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2020	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	n/a	2022	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	2022	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.3	Gross capital formation, % GDP	n/a	2023	International Monetary Fund
4.1.1	Finance for startups and scaleups†	n/a	2023	Global Entrepreneurship Monitor
4.2.1	Market capitalization, % GDP	n/a	2022	World Federation of Exchanges; World Bank
4.2.2	Venture capital (VC) investors, deals/bn PPP$ GDP	n/a	2023	LSEG Data & Analytics; International Monetary Fund
5.1.3	GERD performed by business, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
7.2.1	Cultural and creative services exports, % total trade	n/a	2022	World Trade Organization Global Services Trade Data Hub
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2023	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

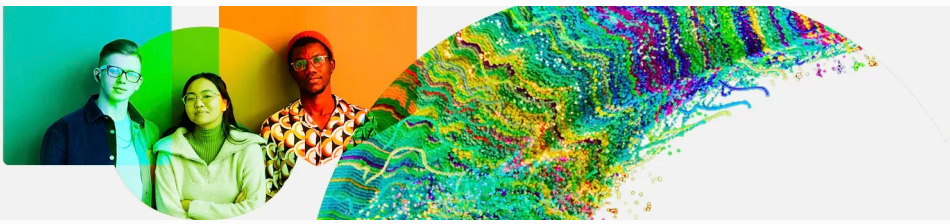
Global Innovation Index 2024



Outdated data for Zimbabwe

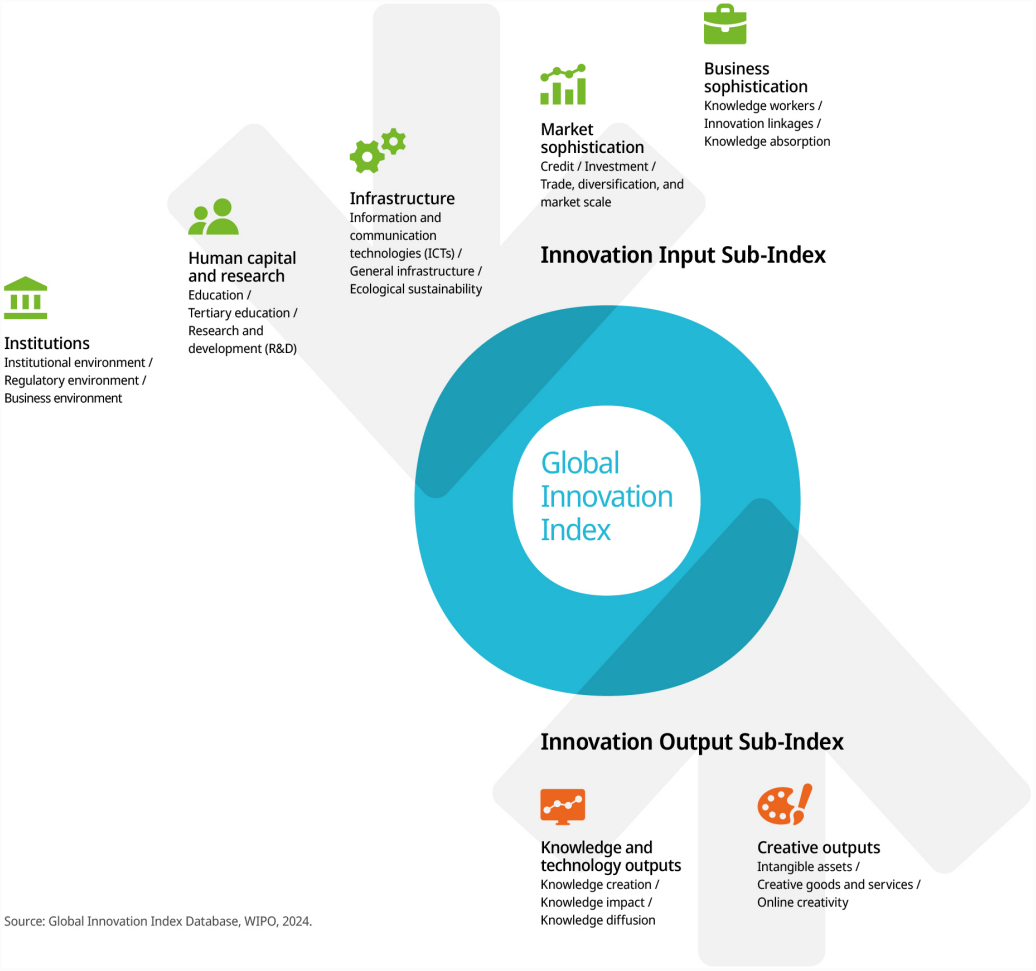
Code	Indicator name	Economy Year	Model Year	Source
2.1.1	Expenditure on education, % GDP	2018	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2020	2022	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2015	2021	UNESCO Institute for Statistics; Eurostat; OECD
2.2.3	Tertiary inbound mobility, %	2015	2022	UNESCO Institute for Statistics
4.3.2	Domestic industry diversification	2018	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4
5.1.2	Firms offering formal training, %	2016	2023	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	2022	2023	International Labour Organization
6.2.4	High-tech manufacturing, %	2017	2021	United Nations Industrial Development Organization
7.1.1	Intangible asset intensity, top 15, %	2022	2023	Brand Finance

Global Innovation Index 2024



About the Global Innovation Index

- The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.
- Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a "tool for action" for economies that incorporate the GII into their innovation agendas.



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.