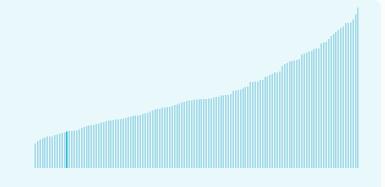


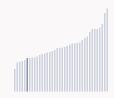
United Republic of Tanzania ranking in the Global Innovation Index 2024

United Republic of Tanzania ranks 120th among the 133 economies featured in the GII 2024.

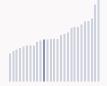
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



United Republic of Tanzania ranks 33rd among the 38 lowermiddle-income group economies.



United Republic of Tanzania ranks 17th among the 27 economies in Sub-Saharan Africa.



> United Republic of Tanzania GII Ranking (2020-2024)

The table shows the rankings of United Republic of Tanzania 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 United Republic of Tanzania in the GII 2024 is between ranks 116 and 127.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	88th	112nd	67th
2021	90th	120th	65th
2022	103rd	100th	99th
2023	113rd	105th	123rd
2024	120th	115th	118th

United Republic of Tanzania performs worse in innovation outputs than innovation inputs in 2024.

This year United Republic of Tanzania ranks 115th in innovation inputs. This position is lower than last year.

United Republic of Tanzania ranks 118th in innovation outputs. This position is higher than last year.

United Republic of Tanzania has no clusters in the top 100 S&T clusters of the Global Innovation Index.



> Global Innovation Tracker

The Global Innovation Tracker 2024 shows what is the current state of innovation in United Republic of Tanzania, how rapidly is technology being embraced and what are the resulting societal impacts.



For United Republic of Tanzania, 5 indicators have improved in the short-term and 3 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture	International patent filings	
		Deal numbers	Deal values	
▼-4.2% 2022 - 2023	n/a	▲ 20% 2022 - 2023	▼-94.4% 2022 - 2023	n/a
▲ 8.3% 2013 - 2023	n/a	▲ 19.6% 2013 - 2023	n/a	n/a

Technology adoption

Safe sanitation	Conne	ectivity	Robots	Electric vehicles
	Fixed broadband	5G		
▲ 0.4% 2021 - 2022	▲ 11.6% 2021 - 2022	n/a	n/a	n/a
▲ 3.2% 2012 - 2022	▲ 38.1% 2012 - 2022		n/a	n/a
25.1 per 100 inhabitants in 2022	2.2 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 1.5% 2022 - 2023	▲ 0.9% 2021 - 2022	▲ 1.2°C 2023
▲ 2.9% 2013 - 2023	▲ 0.7% 2012 - 2022	n/a
9,063 USD in 2023	66.8 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.

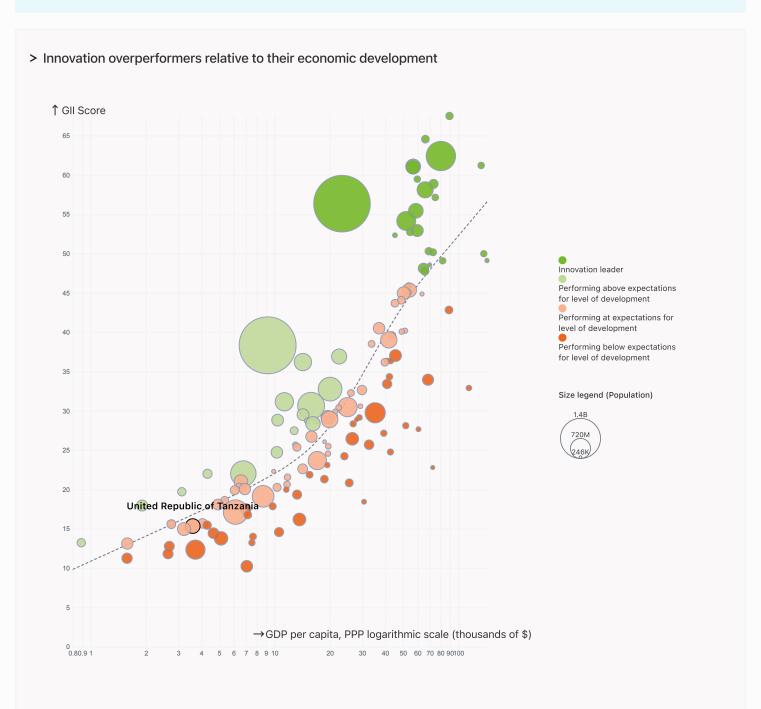


Expected vs. observed innovation performance

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, United Republic of Tanzania's performance is at expectations for its level of development.



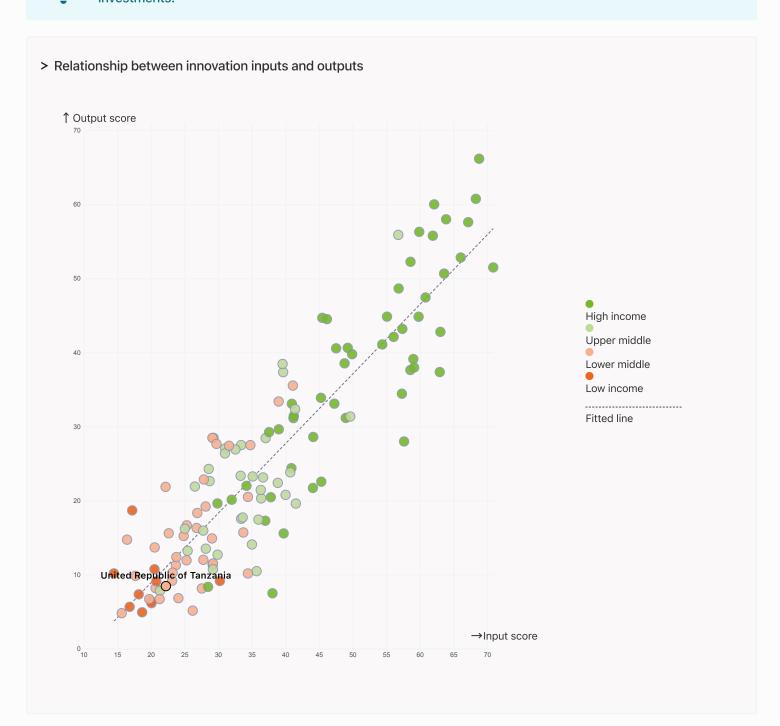


Effectively translating innovation investments into innovation outputs

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.



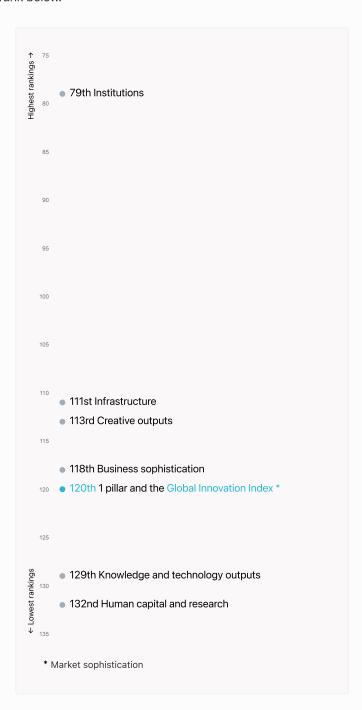
United Republic of Tanzania produces less innovation outputs relative to its level of innovation investments.





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



Highest rankings



United Republic of Tanzania ranks highest in Institutions (79th), Infrastructure (111st), Creative outputs (113rd) and Business sophistication (118th).

Lowest rankings



United Republic of Tanzania ranks lowest in Human capital and research (132nd), Knowledge and technology outputs (129th) and Market sophistication, GII Index (120th).

The full WIPO Intellectual Property

Statistics profile for United Republic of Tanzania can be found on this link.



Benchmark of United Republic of Tanzania against other economy groupings for each of the seven areas of the GII Index

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



Lower-Middle-Income economies

United Republic of Tanzania performs above the lower-middleincome group average in Institutions.



Sub-Saharan Africa

United Republic of Tanzania performs above the regional average in Institutions, Infrastructure.

Institutions Human capital and research Infrastructure Top 10 | Score: 80.81 Top 10 | Score: 61.30 Top 10 | Score: 58.57 Tanzania | Score: 43.33 Lower middle income | Score: 22.1: Lower middle income | Score: 29.8 Sub-Saharan Africa | Score: 37.83 Sub-Saharan Africa | Score: 17.86 Tanzania | Score: 25.81 Lower middle income | Score: 34.0 Tanzania | Score: 9.99 Sub-Saharan Africa | Score: 25.40 Market sophistication Business sophistication Knowledge and technology outputs Top 10 | Score: 62.12 Top 10 | Score: 63.64 Top 10 | Score: 57.29 Lower middle income | Score: 25.9 Lower middle income | Score: 20.8 Lower middle income | Score: 15.6 Sub-Saharan Africa | Score: 18.73 Sub-Saharan Africa | Score: 18.79 Sub-Saharan Africa | Score: 10.99 Tanzania | Score: 16.88 Tanzania | Score: 15.22 Tanzania | Score: 8.87 Creative outputs

Top 10 | Score: 56.54

Lower middle income | Score: 15.71

Sub-Saharan Africa | Score: 10.35

Tanzania | Score: 7.94



Innovation strengths and weaknesses in United Republic of Tanzania

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



United Republic of Tanzania's main innovation strengths are **Gross capital formation**, % **GDP** (rank 8), **Labor productivity growth**, % (rank 26) and **University-industry R&D collaboration**[†] (rank 40).

Strengths Weaknesses

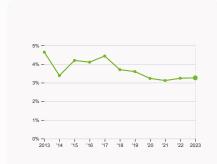
Rank	Code	Indicator name	Rank	Code	Indicator name
8	3.2.3	Gross capital formation, % GDP	131	6.2.3	Software spending, % GDP
26	6.2.1	Labor productivity growth, %	127	5.1.5	Females employed w/advanced degrees, %
40	5.2.2	University-industry R&D collaboration [†]	126	5.1.1	Knowledge-intensive employment, %
41	1.3.1	Policy stability for doing business [†]	125	2.2.1	Tertiary enrolment, % gross
41	5.2.3	State of cluster development ⁺	112	2.2.2	Graduates in science and engineering, %
49	5.3.2	High-tech imports, % total trade	102	5.2.5	Patent families/bn PPP\$ GDP
68	4.3.3	Domestic market scale, bn PPP\$	99	6.1.2	PCT patents by origin/bn PPP\$ GDP
70	4.2.4	VC received, value, % GDP	75	2.3.4	QS university ranking, top 3*
79	6.1.5	Citable documents H-index	49	6.2.2	Unicorn valuation, % GDP
88	3.3.2	Low-carbon energy use, %	41	2.3.3	Global corporate R&D investors, top 3, mn USD
88	1.2.2	Rule of law*			



United Republic of Tanzania's innovation system

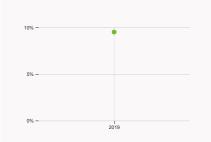
As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in United Republic of Tanzania



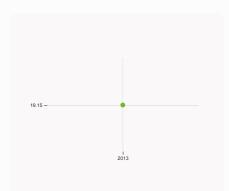
2.1.1 Expenditure on education

was equal to 3.26 % GDP in 2023, up by 0.02 percentage points from the year prior – and equivalent to an indicator rank of 96.



2.2.2 Graduates in science and engineering

was equal to 9.5 % of total graduates in 2019 – and equivalent to an indicator rank of 112.



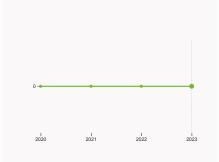
2.3.1 Researchers

was equal to 19.15 FTE per million population in 2013 – and equivalent to an indicator rank of NA.



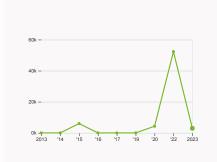
2.3.2 Gross expenditure on R&D

was equal to 0.51 % GDP in 2013 – and equivalent to an indicator rank of NA.



2.3.4 QS university ranking

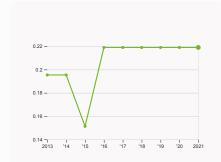
was equal to an average score of 0 for the top three universities in 2023 with no change from the year prior – and equivalent to an indicator rank of 75



4.2.4 VC received, value

was equal to 2.94 thousand USD in 2023, down by 94.38% from the year prior – and equivalent to an indicator rank of 70.





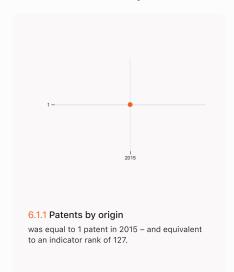
4.3.2 Domestic industry diversification was equal to an index score of 0.22 in 2021, down by – and equivalent to an indicator rank of 81.

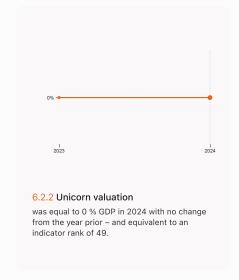


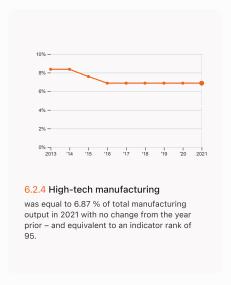
5.1.1 Knowledge-intensive employment was equal to 3.23 % in 2020, down by 0.15 percentage points from the year prior – and equivalent to an indicator rank of 126.

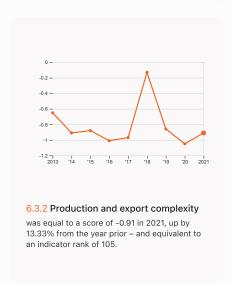


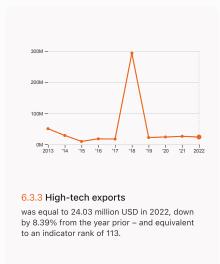
> Innovation outputs in United Republic of Tanzania

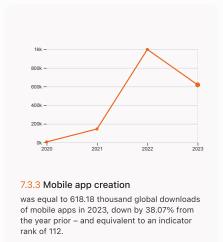














United Republic of Tanzania's innovation top performers

7.1.1 Top 15 intangible-asset intensive companies in United Republic of Tanzania

Rank	Firm	Intensity, %
1	TANZANIA BREWERIES PUBLIC LIMITED COMPANY	67.20
2	VODACOM TANZANIA PUBLIC LIMITED COMPANY	48.97
3	NMB BANK PLC	17.39

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



GII 2024 rank

120

United Republic of Tanzania

Output rank 118	Input rank 115	Income Lower middle		gion SA		Population (mn) 66.6	GDP, PPP\$ (bn) 227.7	GDP per cap 3,595		PPP\$
			Score / Value	Rank				Score / Value	Rank	
			43.3	79	••	Business sophisticatio	n	16.9	118	3
1.1 Institutional enviro	onment		41.1	96		5.1 Knowledge workers		7.9	[12	.5]
1.1.1 Operational stabili	ity for businesses*		49.3	95		5.1.1 Knowledge-intensive em	ployment, %	3 .2	126	00
1.1.2 Government effect	tiveness*		32.8	97		5.1.2 Firms offering formal tra	ining, %	20	80	
1.2 Regulatory enviro	nment		29.1	96		5.1.3 GERD performed by bus	iness, % GDP	n/a	n/a	
1.2.1 Regulatory quality	/*		27	104		5.1.4 GERD financed by busine	ess, %	n/a	n/a	
1.2.2 Rule of law*			31.1	88	• •	5.1.5 Females employed w/adv	vanced degrees, %	0.2	127	7 00
1.3 Business environr	ment		59.8	[33]		5.2 Innovation linkages		25.7	58	•+
1.3.1 Policy stability for	doing business†		59.8	41	• •	5.2.1 Public Research-Industry	y co-publications, %	0.9	92	
1.3.2 Entrepreneurship	policies and culture ⁺		n/a	n/a		5.2.2 University-industry R&D	collaboration [†]	58.4	40	•+
🙎 Human capital a	nd research			132	$\circ \diamond$	5.2.3 State of cluster develop	ment [†]	58.6	41	•+
2.1 Education			28.6	104		5.2.4 Joint venture/strategic a	alliance deals/bn PPP\$ GDP	0.007	101	
2.1 Education	Jugatian IV CDD		3.3	96		5.2.5 Patent families/bn PPP\$	GDP	0	102	2 0 0
2.1.1 Expenditure on ec			\$ 15.2			5.3 Knowledge absorption		17	112	1
	ing/pupil, secondary, % GDP/cap		- 1012		^	5.3.1 Intellectual property pay	ments, % total trade	0.04	112	
2.1.3 School life expect				108	\Diamond	5.3.2 High-tech imports, % to	tal trade	9.3	49	•+
	ading, maths and science		n/a			5.3.3 ICT services imports, %	total trade	0.3	126	ì
2.1.5 Pupil-teacher ratio					0 0	5.3.4 FDI net inflows, % GDP		1.3	93	
2.2 Tertiary education			1.3 5.4	125		5.3.5 Research talent, % in bu	ısinesses	n/a	n/a	
2.2.1 Tertiary enrolmen	ence and engineering, %		9.5	112	00	✓ Knowledge and technology	ology outputs	8.9	129	Э
2.2.3 Tertiary inbound			n/a	n/a	0 0	6.1 Knowledge creation		4.7	113	
2.3 Research and dev			0		1	6.1.1 Patents by origin/bn PPP	\$ GDP	0.009		
2.3.1 Researchers, FTE			n/a		'1	6.1.2 PCT patents by origin/br		0		
2.3.2 Gross expenditur			n/a	n/a		6.1.3 Utility models by origin/b		0.006		
	R&D investors, top 3, mn USD		0	41	0 0	6.1.4 Scientific and technical			91	
2.3.4 QS university ran			0		0 0	6.1.5 Citable documents H-ind		9.6	79	•+
	3,		25.8			6.2 Knowledge impact			117	,
⇔ Infrastructure			25.6	- 111		6.2.1 Labor productivity growt	th, %	2		•+
3.1 Information and c	ommunication technologies (IC1	Ts)	31.1	121	\Diamond	6.2.2 Unicorn valuation, % GD		0	49	0 ◊
3.1.1 ICT access*			31.1	123	\Diamond	6.2.3 Software spending, % G	DP	0.01	131	00
3.1.2 ICT use*			26.5	116	\Diamond	6.2.4 High-tech manufacturin	g, %	6.9	95	
3.1.3 Government's onl	line service*		41.4	108		6.3 Knowledge diffusion		4.9	123	3
3.1.4 E-participation*			25.6	112		6.3.1 Intellectual property rec	eipts, % total trade	0.0001	113	;
3.2 General infrastruc	cture		38.3	41	• •	6.3.2 Production and export c	omplexity	20	105	5
3.2.1 Electricity output	, GWh/mn pop.		137.7	119		6.3.3 High-tech exports, % to	tal trade	0.2	113	;
3.2.2 Logistics perform	nance*		n/a	n/a		6.3.4 ICT services exports, %	total trade	0.3	115	j
3.2.3 Gross capital form	mation, % GDP		38.5	8	• •	6.3.5 ISO 9001 quality/bn PPP	\$ GDP	0.8	117	
3.3 Ecological sustair	nability		8	115	\Diamond	Creative outputs		7.9	[11	31
3.3.1 GDP/unit of energ	y use		6.6	105		Croamro carpano				
3.3.2 Low-carbon ener			8.7	88	• •	7.1 Intangible assets		7.8	[10	3]
3.3.3 ISO 14001 enviro	nment/bn PPP\$ GDP		0.4	103		7.1.1 Intangible asset intensity			n/a	
Market sophistic Market sophist Market sophistic Ma	ation		15.2	120		7.1.2 Trademarks by origin/bn		9 11.4		
4.1 Credit			2	121	0 0	7.1.3 Global brand value, top 5		n/a	n/a	
4.1.1 Finance for startu	ns and scaleuns†			n/a	0 0	7.1.4 Industrial designs by orig	•		n/a	
	o private sector, % GDP			120		7.2 Creative goods and serv			[117	
	finance institutions, % GDP			55		7.2.1 Cultural and creative ser			n/a	
4.2 Investment	mande motitations, 70 doi		3.5	93		7.2.2 National feature films/mi			n/a	
4.2.1 Market capitalizat	tion. % GDP			76		7.2.3 Entertainment and media			n/a	
	√C) investors, deals/bn PPP\$ GDP		0.007			7.2.4 Creative goods exports,	% total trade	0.09		
4.2.3 VC recipients, de			0.03			7.3 Online creativity	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		115	
4.2.4 VC received, value			0.0004		• •	7.3.1 Top-level domains (TLDs			121	
	tion and market scale			100		7.3.2 GitHub commits/mn pop			126	
4.3.1 Applied tariff rate				110		7.3.3 Mobile app creation/bn F	PPP\$ GDP	44.9	112	
4.3.2 Domestic industr				81						
4.3.3 Domestic market			227.7		• •					
	,									



Data availability

The following tables list indicators that are either missing or outdated for United Republic of Tanzania.



United Republic of Tanzania has missing data for sixteen indicators and outdated data for ten indicators.

Missing data for United Republic of Tanzania

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture [†]	n/a	2023	Global Entrepreneurship Monitor
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
2.2.3	Tertiary inbound mobility, %	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
3.2.2	Logistics performance*	n/a	2023	World Bank, Logistics Performance Index 2023 (https://lpi.worldbank.org/); and World Bank 2023, Connecting to Compete 2023: Trade Logistics in the Global Economy The Logistics Performance Index and its Indicators.
4.1.1	Finance for startups and scaleups [†]	n/a	2023	Global Entrepreneurship Monitor
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
7.1.1	Intangible asset intensity, top 15, %	n/a	2023	Brand Finance
7.1.3	Global brand value, top 5,000, % GDP	n/a	2024	Brand Finance; International Monetary Fund
7.1.4	Industrial designs by origin/bn PPP\$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund
7.2.1	Cultural and creative services exports, % total trade	n/a	2022	World Trade Organization Global Services Trade Data Hub
7.2.2	National feature films/mn pop. 15–69	n/a	2022	OMDIA; United Nations, World Population Prospects



Code	Indicator name	Economy Year	Model Year	Source
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2023	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund



Outdated data for United Republic of Tanzania

Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	2014	2020	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2021	2022	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	2020	2022	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2019	2021	UNESCO Institute for Statistics; Eurostat; OECD
4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP	2022	2023	LSEG Data & Analytics; International Monetary Fund
5.1.1	Knowledge-intensive employment, %	2020	2022	International Labour Organization
5.1.5	Females employed w/advanced degrees, %	2020	2023	International Labour Organization
6.1.1	Patents by origin/bn PPP\$ GDP	2015	2022	World Intellectual Property Organization; International Monetary Fund
6.1.3	Utility models by origin/bn PPP\$ GDP	2020	2022	World Intellectual Property Organization; International Monetary Fund
7.1.2	Trademarks by origin/bn PPP\$ GDP	2020	2022	World Intellectual Property Organization; International Monetary Fund



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.



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.