

Global Innovation Index 2023

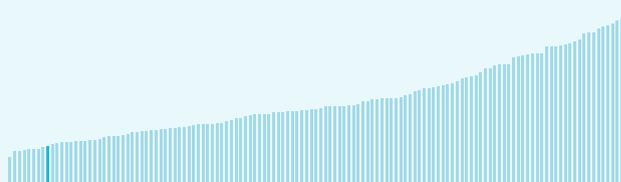


The Global Innovation Index (GII) **ranks world economies according to their innovation capabilities.**

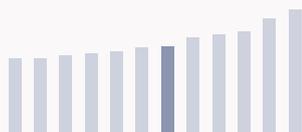
Consisting of **roughly 80 indicators**, grouped into innovation inputs and outputs, the GII **aims to capture the multi-dimensional facets of innovation.**

Burkina Faso ranking in the Global Innovation Index 2023

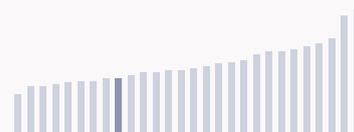
> Burkina Faso ranks **124th** among the 132 economies featured in the GII 2023.



> Burkina Faso ranks **6th** among the 12 low-income group economies.



> Burkina Faso ranks **20th** among the 28 economies in Sub-Saharan Africa.



> Burkina Faso GII Ranking (2020-2023)

The table shows the rankings of Burkina Faso 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 Burkina Faso in the GII 2023 is between ranks 122 and 128.

	GII Position	Innovation Inputs	Innovation Outputs
2020	118th	106th	124th
2021	115th	108th	123rd
2022	120th	114th	124th
2023	124th	119th	127th

Burkina Faso performs worse in innovation outputs than innovation inputs in 2023.

This year Burkina Faso ranks **119th** in innovation inputs. This position is lower than last year.

Burkina Faso ranks **127th** in innovation outputs. This position is lower than last year.

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→ Expected vs. observed innovation performance

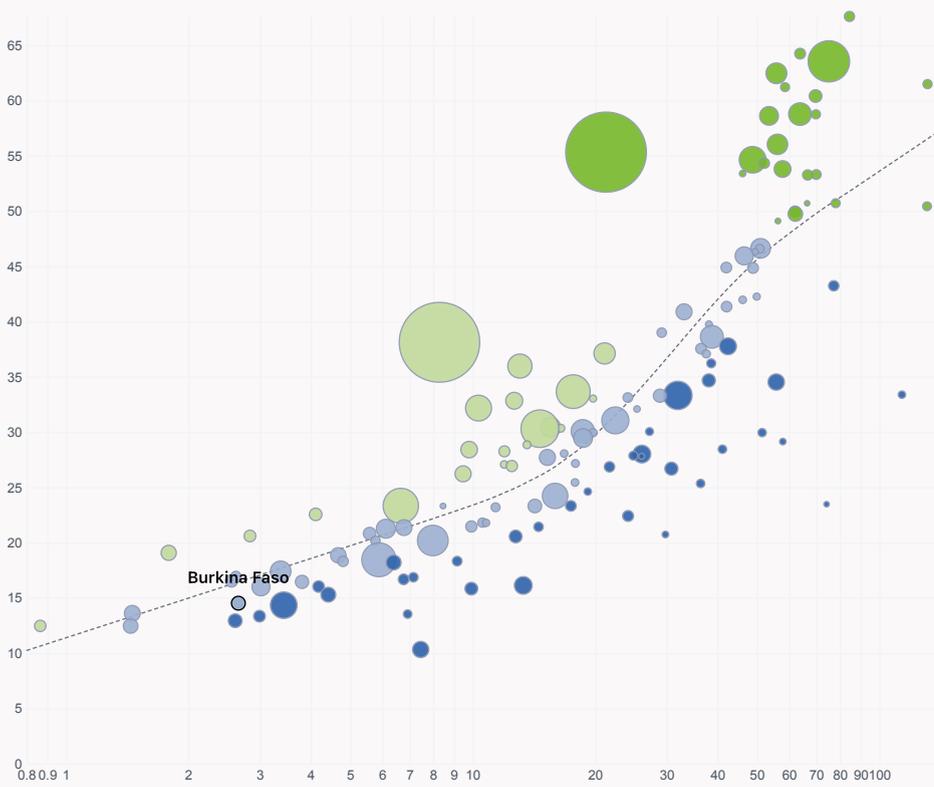
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.



> Relative to GDP, Burkina Faso's performance is at expectations for its level of development.

> Innovation overperformers relative to their economic development

↑ **GII Score**



- Innovation leader
- Performing above expectations for level of development
- Performing at expectations for level of development
- Performing below expectations for level of development

Size legend (Population)



→ GDP per capita, PPP logarithmic scale (thousands of \$)

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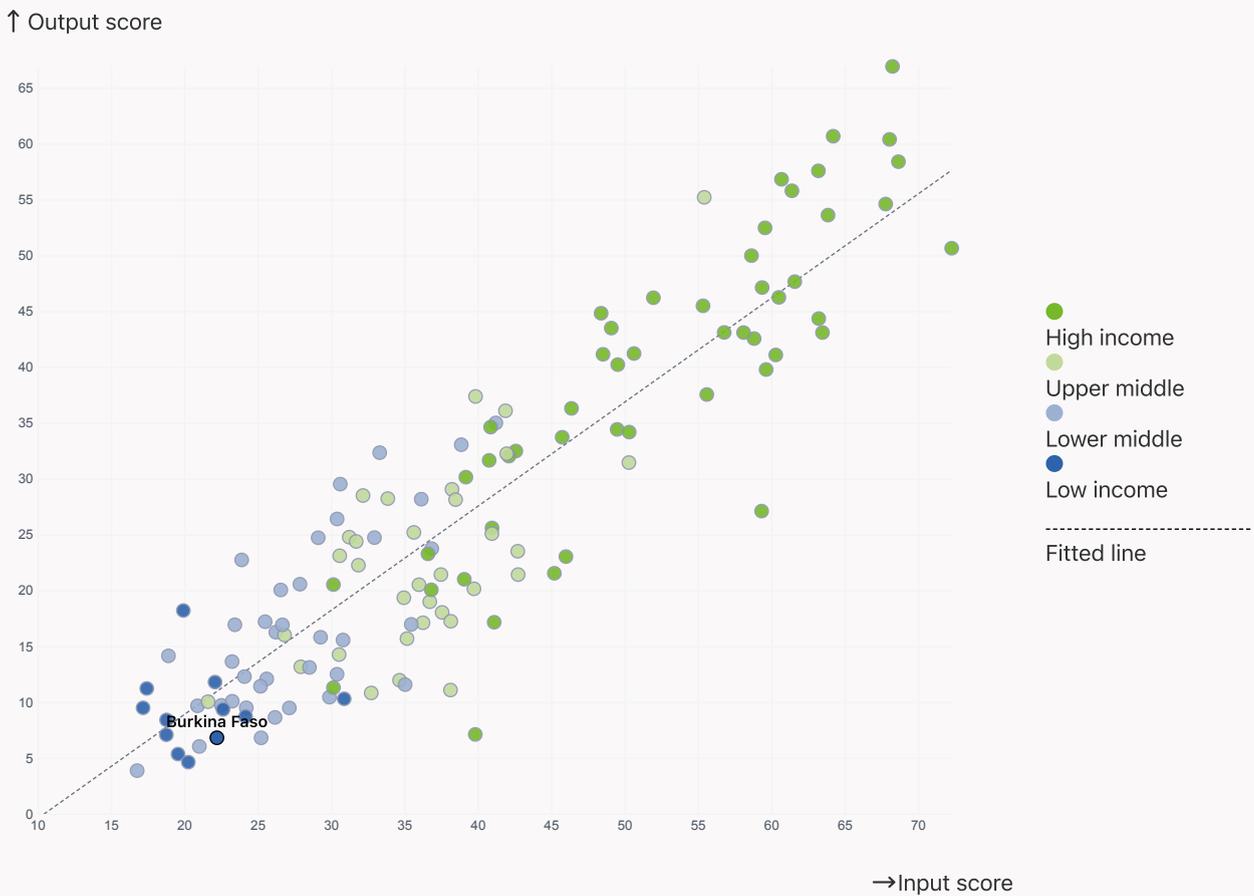
→ Effectively translating innovation investments into innovation outputs

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



> Burkina Faso produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

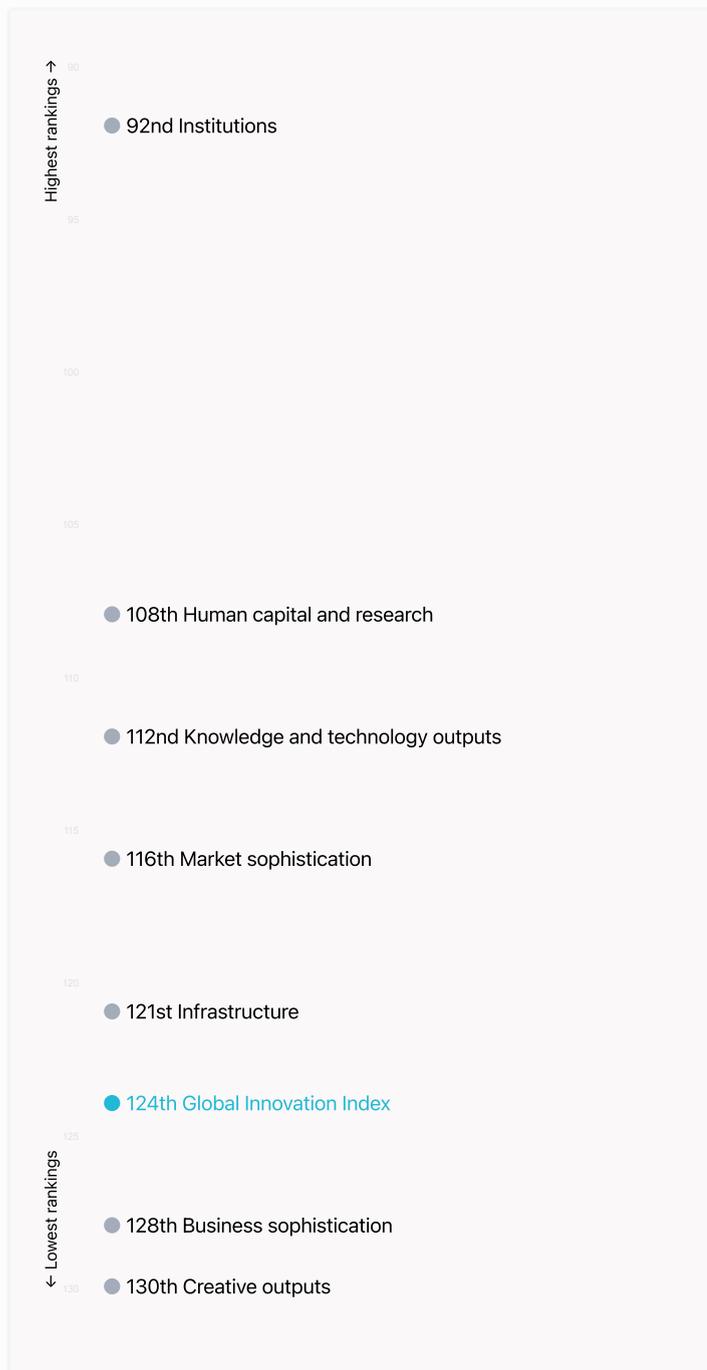


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→ Overview of Burkina Faso's rankings in the seven areas of the GII in 2023

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



> Highest rankings



Burkina Faso ranks highest in Institutions (92nd), Human capital and research (108th), Knowledge and technology outputs (112nd), Market sophistication (116th) and Infrastructure (121st).

> Lowest rankings



Burkina Faso ranks lowest in Creative outputs (130th), Business sophistication (128th) and Infrastructure (121st).



The full WIPO Intellectual Property Statistics profile for Burkina Faso can be found on [this link](#).

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→ Benchmark of Burkina Faso against other country groupings for each of the seven areas of the GII Index

The charts show the relative position of Burkina Faso (blue bar) against other country groupings (grey bars), for each of the seven areas of the GII Index.

> Low-Income economies

Burkina Faso performs above the low-income group average in Knowledge and technology outputs, Market sophistication, Human capital and research, Infrastructure, Institutions.

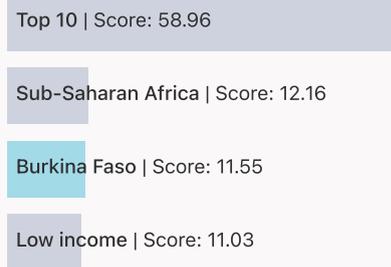


> Sub-Saharan Africa

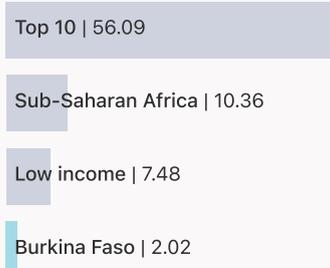
Burkina Faso performs below the regional average in Knowledge and technology outputs, Creative outputs, Business sophistication, Market sophistication, Infrastructure, Institutions.



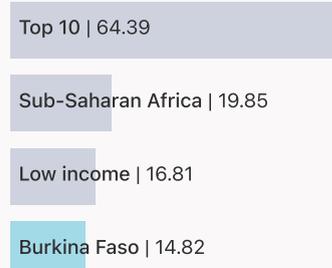
Knowledge and technology outputs



Creative outputs



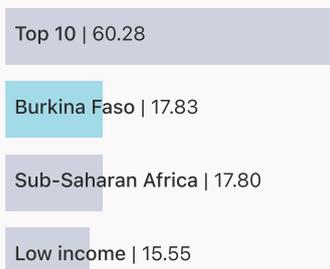
Business sophistication



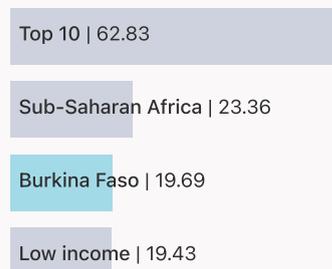
Market sophistication



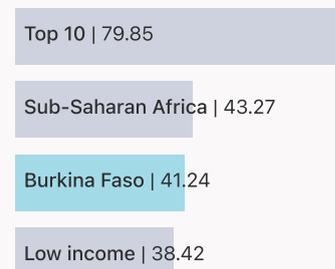
Human capital and research



Infrastructure



Institutions





→ Innovation strengths and weaknesses in Burkina Faso

The table below gives an overview of the indicator strengths and weaknesses of Burkina Faso in the GII 2023.



> Burkina Faso's main innovation strengths are **Loans from microfinance institutions, % GDP** (rank 15), **Expenditure on education, % GDP** (rank 29) and **ICT services imports, % total trade** (rank 29).

Strengths

Weaknesses

Rank	Code	Indicator name	Rank	Code	Indicator name
15	4.1.3	Loans from microfinance institutions, % GDP	130	7.3.3	GitHub commits/mn pop. 15-69
29	2.1.1	Expenditure on education, % GDP	129	3.3.3	ISO 14001 environment/bn PPP\$ GDP
29	5.3.3	ICT services imports, % total trade	129	5.2.2	State of cluster development
33	1.2.3	Cost of redundancy dismissal	101	6.1.2	PCT patents by origin/bn PPP\$ GDP
35	3.2.3	Gross capital formation, % GDP	100	4.2.4	VC received, value, % GDP
42	1.3.2	Entrepreneurship policies and culture	75	6.1.3	Utility models by origin/bn PPP\$ GDP
49	6.2.1	Labor productivity growth, %	74	7.1.3	Global brand value, top 5,000
51	4.2.3	VC recipients, deals/bn PPP\$ GDP	71	2.3.4	QS university ranking, top 3
55	5.2.3	GERD financed by abroad, % GDP	48	6.2.2	Unicorn valuation, % GDP
71	1.3.1	Policies for doing business	40	2.3.3	Global corporate R&D investors, top 3, mn US\$

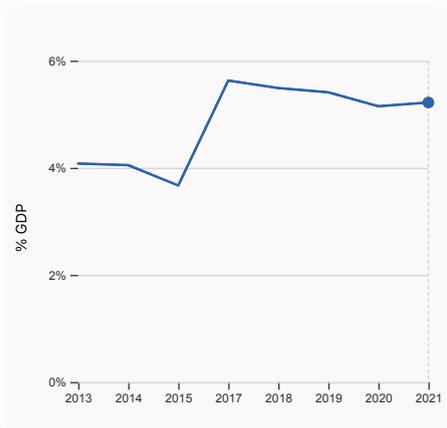
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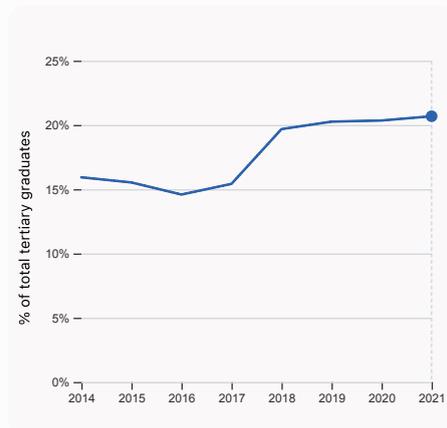
→ Burkina Faso's innovation system

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

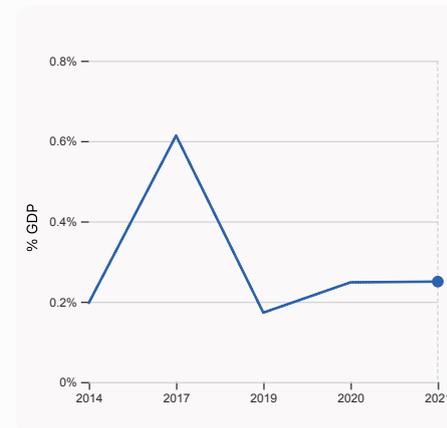
> Innovation inputs in Burkina Faso



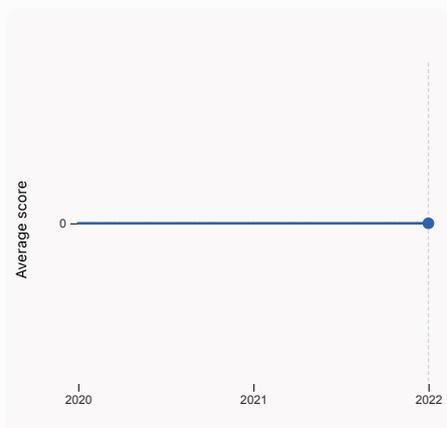
2.1.1 Expenditure on education, % GDP was equal to 5.22% GDP in 2021, up by 0.07 percentage points from the year prior – and equivalent to an indicator rank of 29.



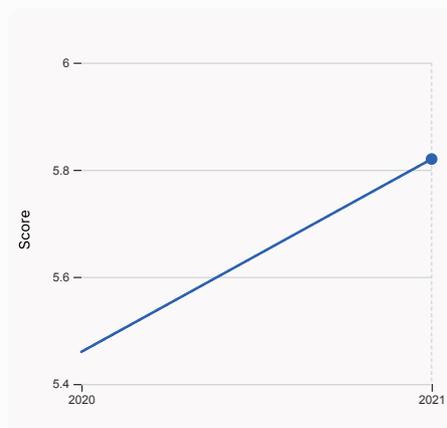
2.2.2 Graduates in science and engineering, % was equal to 20.68% of total tertiary graduates in 2021, up by 0.33 percentage points from the year prior – and equivalent to an indicator rank of 66.



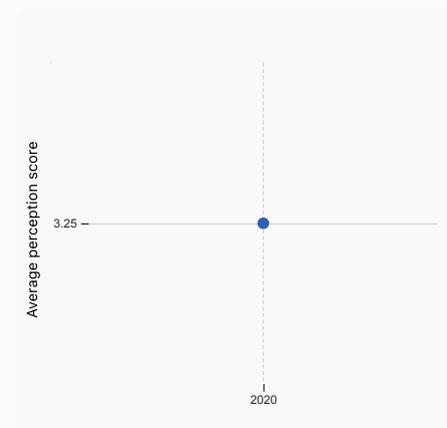
2.3.2 Gross expenditure on R&D, % GDP was equal to 0.25% GDP in 2021, up by 0.0018 percentage points from the year prior – and equivalent to an indicator rank of 84.



2.3.4 QS university ranking, top 3 was equal to an average score of 0 for the top 3 universities in 2022, equivalent to an indicator rank of 71.

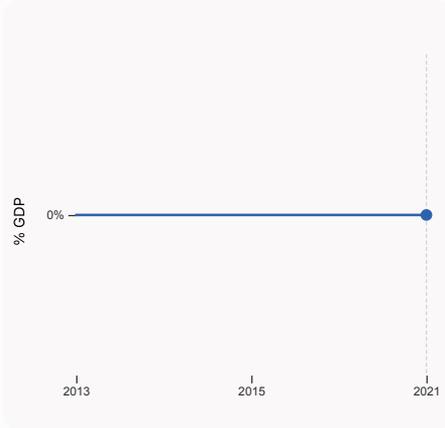


3.1.1 ICT access was equal to a score of 5.82 in 2021, up by 6.59% from the year prior – and equivalent to an indicator rank of 120.



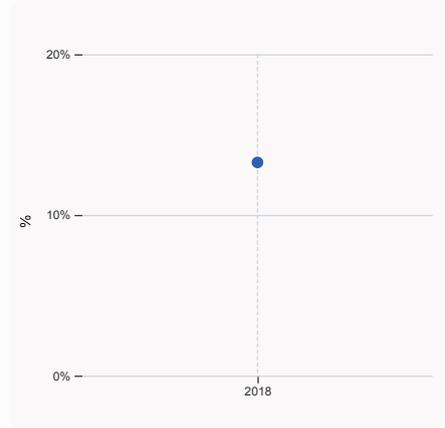
4.1.1 Finance for startups and scaleups was equal to an average perception score of 3.25 in 2020, equivalent to an indicator rank of 78.

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4.2.4 VC received, value, % GDP

was equal to 0 % GDP in 2021, equivalent to an indicator rank of 100.



5.1.1 Knowledge-intensive employment, %

was equal to 13.27 % in 2018, equivalent to an indicator rank of 97.

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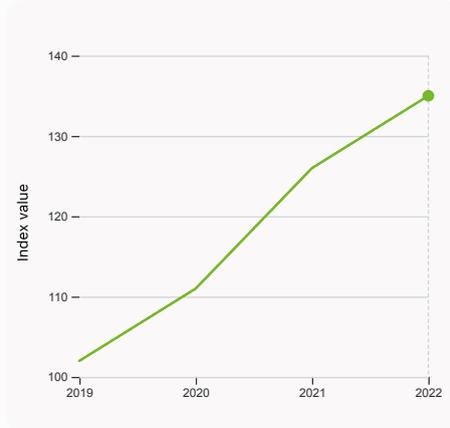


> Innovation outputs in Burkina Faso



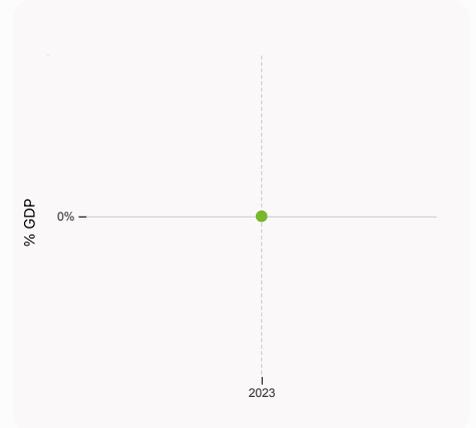
6.1.1 Patents by origin

was equal to 0.005 Thousands in 2021, down by 44.44% from the year prior – and equivalent to an indicator rank of 113.



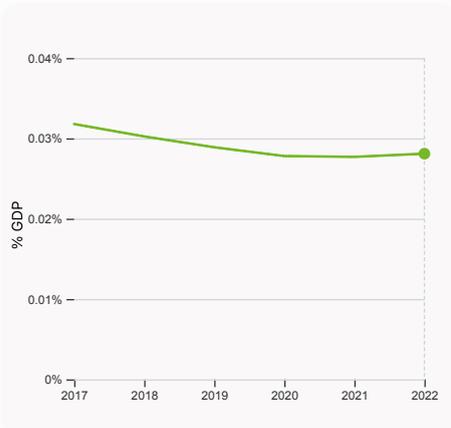
6.1.5 Citable documents H-index

was equal to an index value of 135 in 2022, up by 7.14% from the year prior – and equivalent to an indicator rank of 101.



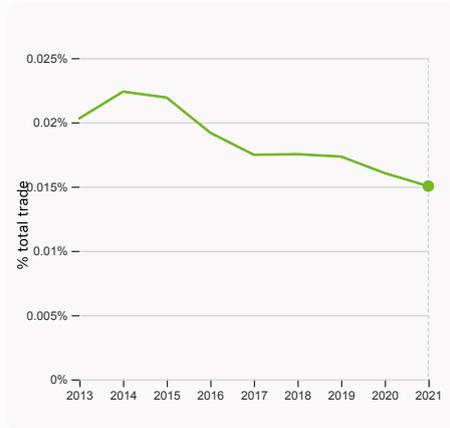
6.2.2 Unicorn valuation, % GDP

was equal to 0 % GDP in 2023 – and equivalent to an indicator rank of 48.



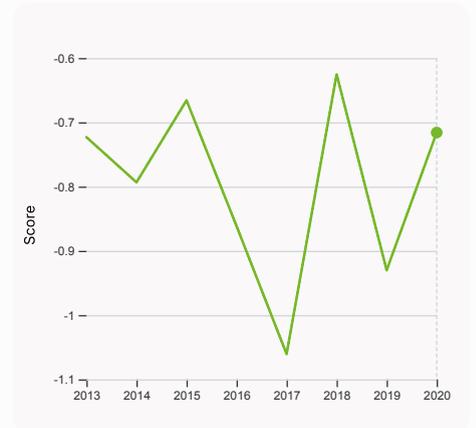
6.2.3 Software spending, % GDP

was equal to 0.028% GDP in 2022, up by 0.00039 percentage points from the year prior – and equivalent to an indicator rank of 115.



6.3.1 Intellectual property receipts, % total trade

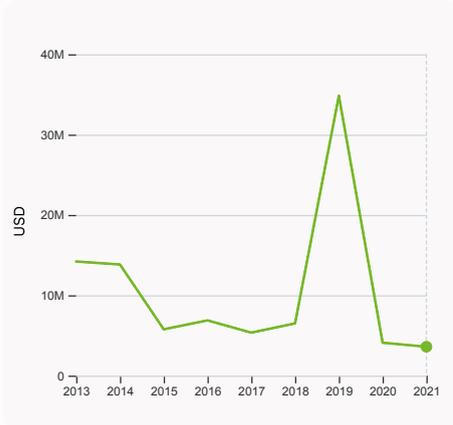
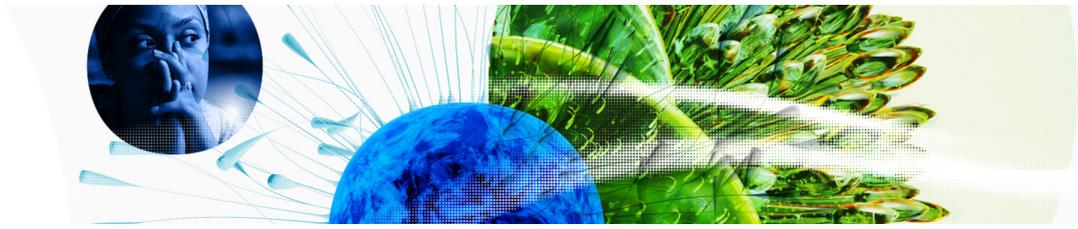
was equal to 0.015% total trade in 2021, down by 0.001 percentage points from the year prior – and equivalent to an indicator rank of 89.



6.3.2 Production and export complexity

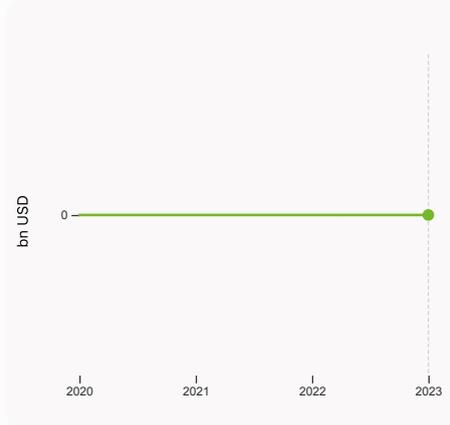
was equal to a score of -0.716 in 2020, up by 23.033% from the year prior – and equivalent to an indicator rank of 97.

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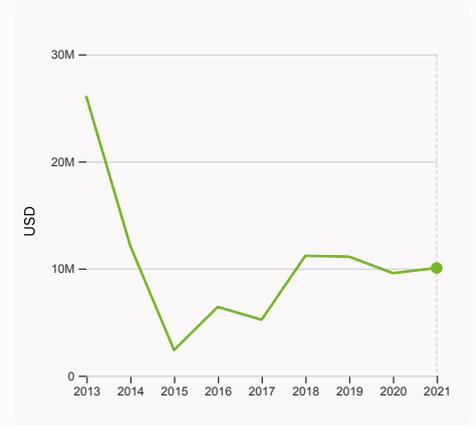
6.3.3 High-tech exports

was equal to 3,595,394 USD in 2021, down by 12.25% from the year prior – and equivalent to an indicator rank of 125.



7.1.3 Global brand value, top 5,000

was equal to 0 bn USD in 2023 – and equivalent to an indicator rank of 74.



7.2.1 Cultural and creative services exports

was equal to 10,051,000 USD in 2021, up by 5.048% from the year prior – and equivalent to an indicator rank of 73.



Burkina Faso

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
127	119	Low	SSA	22.7	58.8	2,655.6

Score / Value Rank

Score / Value Rank

Institutions		41.2	92
1.1 Institutional environment			
1.1.1 Operational stability for businesses*		17.4	125
1.1.2 Government effectiveness*		18.1	125
1.1.2 Government effectiveness*		16.7	111
1.2 Regulatory environment			
1.2.1 Regulatory quality*		61.8	67 ●◆
1.2.2 Rule of law*		30.0	97
1.2.3 Cost of redundancy dismissal		26.9	89
1.2.3 Cost of redundancy dismissal		10.5	33 ●◆
1.3 Business environment			
1.3.1 Policies for doing business*		44.6	71 ●◆
1.3.1 Policies for doing business*		45.7	71 ●◆
1.3.2 Entrepreneurship policies and culture*		43.5	42 ●◆
Human capital and research		17.8	108
2.1 Education			
2.1.1 Expenditure on education, % GDP		37.9	105
2.1.2 Government funding/pupil, secondary, % GDP/cap		5.2	29 ●◆
2.1.3 School life expectancy, years		16.2	70
2.1.4 PISA scales in reading, maths and science		9.1	106
2.1.5 Pupil-teacher ratio, secondary		n/a	n/a
2.1.5 Pupil-teacher ratio, secondary		20.1	97
2.2 Tertiary education			
2.2.1 Tertiary enrolment, % gross		14.1	105
2.2.2 Graduates in science and engineering, %		9.5	116
2.2.3 Tertiary inbound mobility, %		20.7	66
2.2.3 Tertiary inbound mobility, %		1.9	78
2.3 Research and development (R&D)			
2.3.1 Researchers, FTE/mn pop.		1.4	94
2.3.1 Researchers, FTE/mn pop.		n/a	n/a
2.3.2 Gross expenditure on R&D, % GDP		0.3	84
2.3.3 Global corporate R&D investors, top 3, mn US\$		0.0	40 ○◇
2.3.4 QS university ranking, top 3*		0.0	71 ○◇
Infrastructure		19.7	121
3.1 Information and communication technologies (ICTs)			
3.1.1 ICT access*		27.8	123
3.1.1 ICT access*		36.9	120
3.1.2 ICT use*		22.8	123
3.1.3 Government's online service*		30.7	122
3.1.4 E-participation*		20.9	122
3.2 General infrastructure			
3.2.1 Electricity output, GWh/mn pop.		17.1	100
3.2.1 Electricity output, GWh/mn pop.		n/a	n/a
3.2.2 Logistics performance*		9.1	106 ○
3.2.3 Gross capital formation, % GDP		27.3	35 ●◆
3.3 Ecological sustainability			
3.3.1 GDP/unit of energy use		14.1	108
3.3.1 GDP/unit of energy use		n/a	n/a
3.3.2 Environmental performance*		28.1	91
3.3.3 ISO 14001 environment/bn PPP\$ GDP		0.1	129 ○◇
Market sophistication		17.6	116
4.1 Credit			
4.1.1 Finance for startups and scaleups*		20.3	92 ◆
4.1.1 Finance for startups and scaleups*		21.8	78
4.1.2 Domestic credit to private sector, % GDP		28.3	99 ●◆
4.1.3 Loans from microfinance institutions, % GDP		2.6	15 ●◆
4.2 Investment			
4.2.1 Market capitalization, % GDP		5.0	[77]
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		0.0	51 ●◆
4.2.4 VC received, value, % GDP		0.0	100 ○◇
4.3 Trade, diversification, and market scale			
4.3.1 Applied tariff rate, weighted avg., %		27.5	117
4.3.1 Applied tariff rate, weighted avg., %		7.2	102
4.3.2 Domestic industry diversification		n/a	n/a
4.3.3 Domestic market scale, bn PPP\$		58.8	102

Business sophistication		14.8	128
5.1 Knowledge workers			
5.1.1 Knowledge-intensive employment, %		9.7	[122]
5.1.1 Knowledge-intensive employment, %		13.3	97 ◆
5.1.2 Firms offering formal training, %		n/a	n/a
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, %		0.8	120
5.2 Innovation linkages			
5.2.1 University-industry R&D collaboration*		6.0	128 ○
5.2.1 University-industry R&D collaboration*		16.7	120 ○
5.2.2 State of cluster development*		0.0	129 ○◇
5.2.2 State of cluster development*		0.0	129 ○◇
5.2.3 GERD financed by abroad, % GDP		0.0	55 ●◆
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP		0.0	110 ○
5.2.5 Patent families/bn PPP\$ GDP		n/a	n/a
5.3 Knowledge absorption			
5.3.1 Intellectual property payments, % total trade		28.8	84
5.3.1 Intellectual property payments, % total trade		0.0	113
5.3.2 High-tech imports, % total trade		4.4	121
5.3.3 ICT services imports, % total trade		2.2	29 ●◆
5.3.4 FDI net inflows, % GDP		0.4	119
5.3.5 Research talent, % in businesses		n/a	n/a
Knowledge and technology outputs		11.6	112
6.1 Knowledge creation			
6.1.1 Patents by origin/bn PPP\$ GDP		5.1	112
6.1.1 Patents by origin/bn PPP\$ GDP		0.1	113
6.1.2 PCT patents by origin/bn PPP\$ GDP		0.0	101 ○◇
6.1.3 Utility models by origin/bn PPP\$ GDP		0.0	75 ○◇
6.1.4 Scientific and technical articles/bn PPP\$ GDP		n/a	n/a
6.1.5 Citable documents H-index		5.1	101
6.2 Knowledge impact			
6.2.1 Labor productivity growth, %		19.8	105
6.2.1 Labor productivity growth, %		1.4	49 ●◆
6.2.2 Unicorn valuation, % GDP		0.0	48 ○◇
6.2.3 Software spending, % GDP		0.0	115
6.2.4 High-tech manufacturing, %		n/a	n/a
6.3 Knowledge diffusion			
6.3.1 Intellectual property receipts, % total trade		9.7	109
6.3.1 Intellectual property receipts, % total trade		0.0	89
6.3.2 Production and export complexity		37.5	97
6.3.3 High-tech exports, % total trade		0.1	125
6.3.4 ICT services exports, % total trade		1.0	87
6.3.5 ISO 9001 quality/bn PPP\$ GDP		0.5	122
Creative outputs		2.0	130 ○
7.1 Intangible assets			
7.1.1 Intangible asset intensity, top 15, %		3.1	124
7.1.1 Intangible asset intensity, top 15, %		n/a	n/a
7.1.2 Trademarks by origin/bn PPP\$ GDP		6.7	116
7.1.3 Global brand value, top 5,000		0.0	74 ○◇
7.1.4 Industrial designs by origin/bn PPP\$ GDP		0.2	104
7.2 Creative goods and services			
7.2.1 Cultural and creative services exports, % total trade		1.9	[106]
7.2.1 Cultural and creative services exports, % total trade		0.2	73
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		0.0	126
7.3 Online creativity			
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69		0.1	132 ○◇
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69		0.1	127
7.3.2 Country-code TLDs/th pop. 15-69		0.0	128
7.3.3 GitHub commits/mn pop. 15-69		0.1	130 ○
7.3.4 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, ● indicates that the economy's data are older than the base year; see appendices for details, including the year of the data, at <https://www.wipo.int/gii-ranking>. Square brackets [] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.



→ Data availability

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



> Burkina Faso has missing data for seventeen indicators and outdated data for thirteen indicators.

> Missing data for Burkina Faso

Code	Indicator name	Economy Year	Model Year	Source
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD, PISA
2.3.1	Researchers, FTE/mn pop.	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	n/a	2021	International Energy Agency
3.3.1	GDP/unit of energy use	n/a	2020	International Energy Agency
4.2.1	Market capitalization, % GDP	n/a	2020	World Federation of Exchanges; World Bank
4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP	n/a	2022	Refinitiv; International Monetary Fund
4.3.2	Domestic industry diversification	n/a	2020	United Nations Industrial Development Organization
5.1.2	Firms offering formal training, %	n/a	2019	World Bank Enterprise Surveys
5.1.3	GERD performed by business, % GDP	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.2.5	Patent families/bn PPP\$ GDP	n/a	2019	World Intellectual Property Organization; International Monetary Fund
5.3.5	Research talent, % in businesses	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	n/a	2020	United Nations Industrial Development Organization
7.1.1	Intangible asset intensity, top 15, %	n/a	2022	Brand Finance
7.2.2	National feature films/mn pop. 15-69	n/a	2021	OMDIA; United Nations, World Population Prospects
7.2.3	Entertainment and media market/th pop. 15-69	n/a	2022	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

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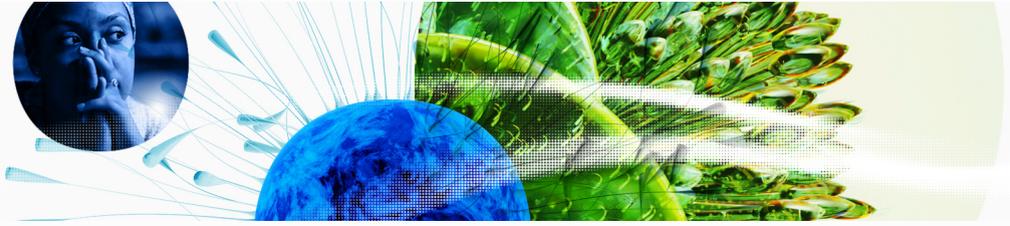


Code	Indicator name	Economy Year	Model Year	Source
7.3.4	Mobile app creation/bn PPP\$ GDP	n/a	2022	data.ia; International Monetary Fund

> Outdated data for Burkina Faso

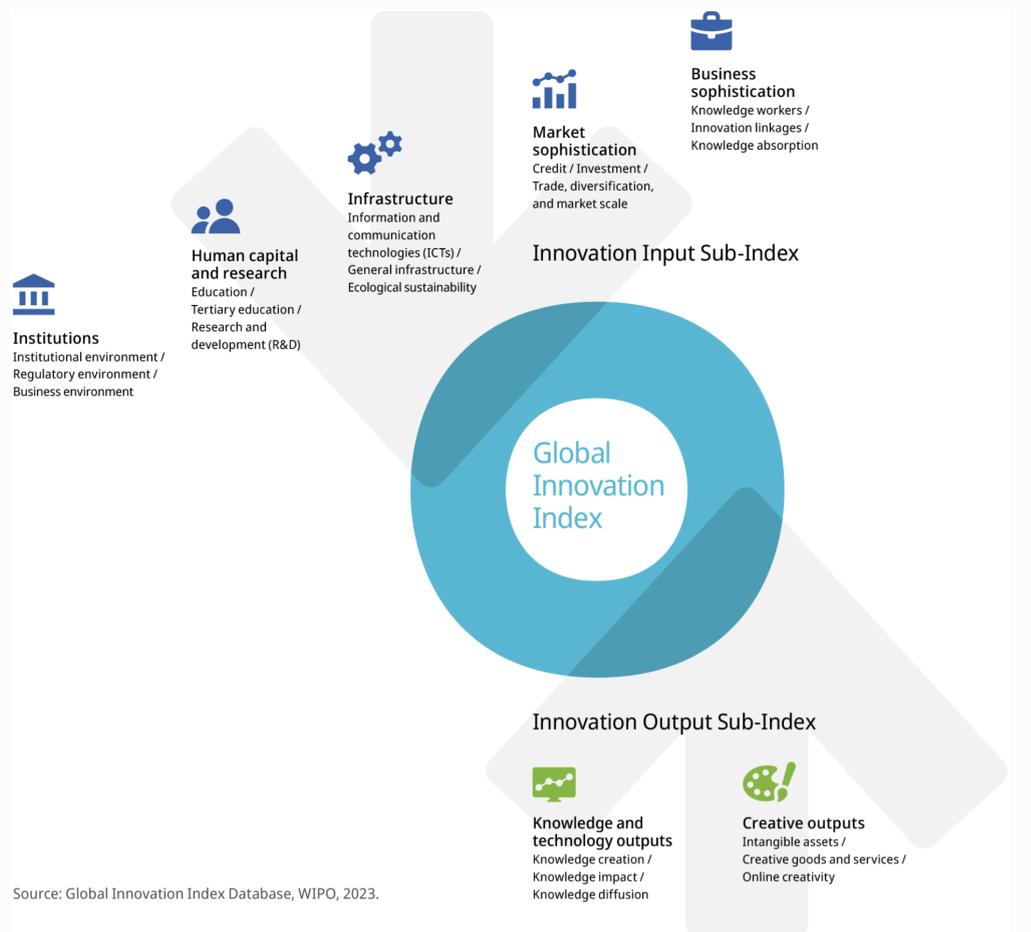
Code	Indicator name	Economy Year	Model Year	Source
1.3.1	Policies for doing business	2019	2022	World Economic Forum, Executive Opinion Survey (EOS)
1.3.2	Entrepreneurship policies and culture	2020	2022	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	2016	2019	UNESCO Institute for Statistics
4.1.1	Finance for startups and scaleups	2020	2022	Global Entrepreneurship Monitor
4.2.3	VC recipients, deals/bn PPP\$ GDP	2021	2022	Refinitiv; International Monetary Fund
4.2.4	VC received, value, % GDP	2021	2022	Refinitiv; International Monetary Fund
5.1.1	Knowledge-intensive employment, %	2018	2022	International Labour Organization
5.1.5	Females employed w/advanced degrees, %	2018	2022	International Labour Organization
5.2.1	University-industry R&D collaboration	2019	2022	World Economic Forum, Executive Opinion Survey (EOS)
5.2.2	State of cluster development	2019	2022	World Economic Forum, Executive Opinion Survey (EOS)
5.2.3	GERD financed by abroad, % GDP	2017	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	2020	2022	Refinitiv; International Monetary Fund
6.1.3	Utility models by origin/bn PPP\$ GDP	2020	2021	World Intellectual Property Organization; International Monetary Fund

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→ 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.