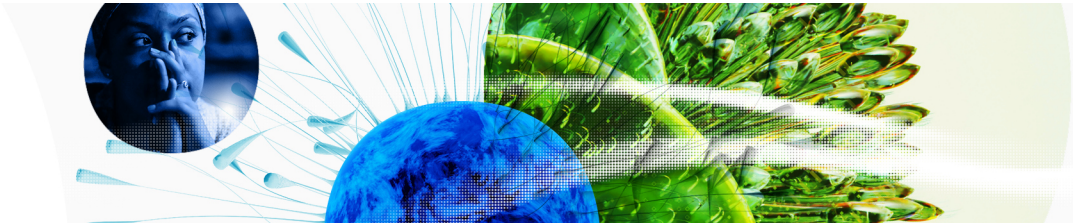


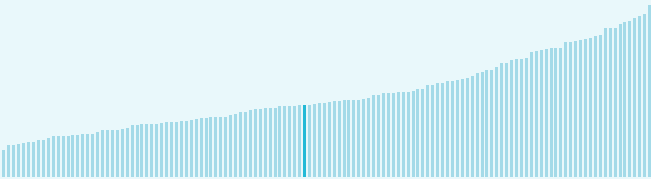
Global Innovation Index 2023



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**.

Jordan ranking in the Global Innovation Index 2023

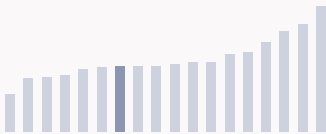
> Jordan ranks **71st** among the 132 economies featured in the GII 2023.



> Jordan ranks **16th** among the 33 upper-middle-income group economies.



> Jordan ranks **12th** among the 18 economies in Northern Africa and Western Asia.



> Jordan GII Ranking (2020-2023)

The table shows the rankings of Jordan 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 Jordan in the GII 2023 is between ranks 68 and 77.

	GII Position	Innovation Inputs	Innovation Outputs
2020	81st	77th	81st
2021	81st	79th	81st
2022	78th	71st	78th
2023	71st	70th	76th

Jordan performs worse in innovation outputs than innovation inputs in 2023.

This year Jordan ranks 70th in innovation inputs. This position is higher than last year.

Jordan ranks 76th in innovation outputs. This position is higher than last year.

Global Innovation Index 2023



→ Expected vs. observed innovation performance

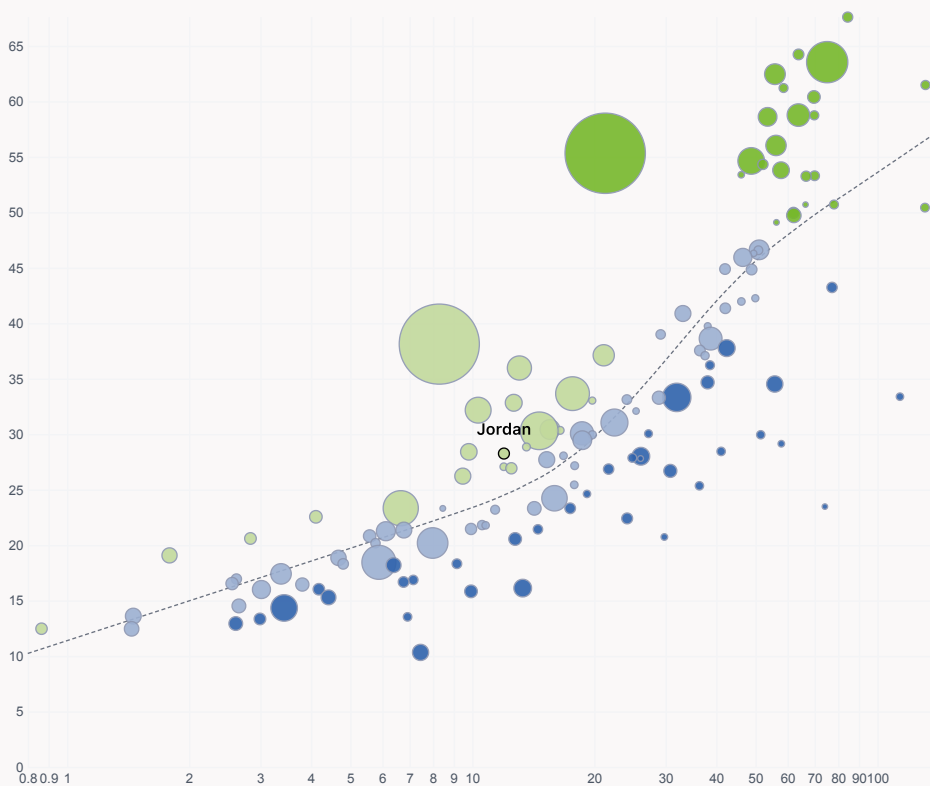
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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



> Relative to GDP, Jordan is performing above 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 \$)

Global Innovation Index 2023



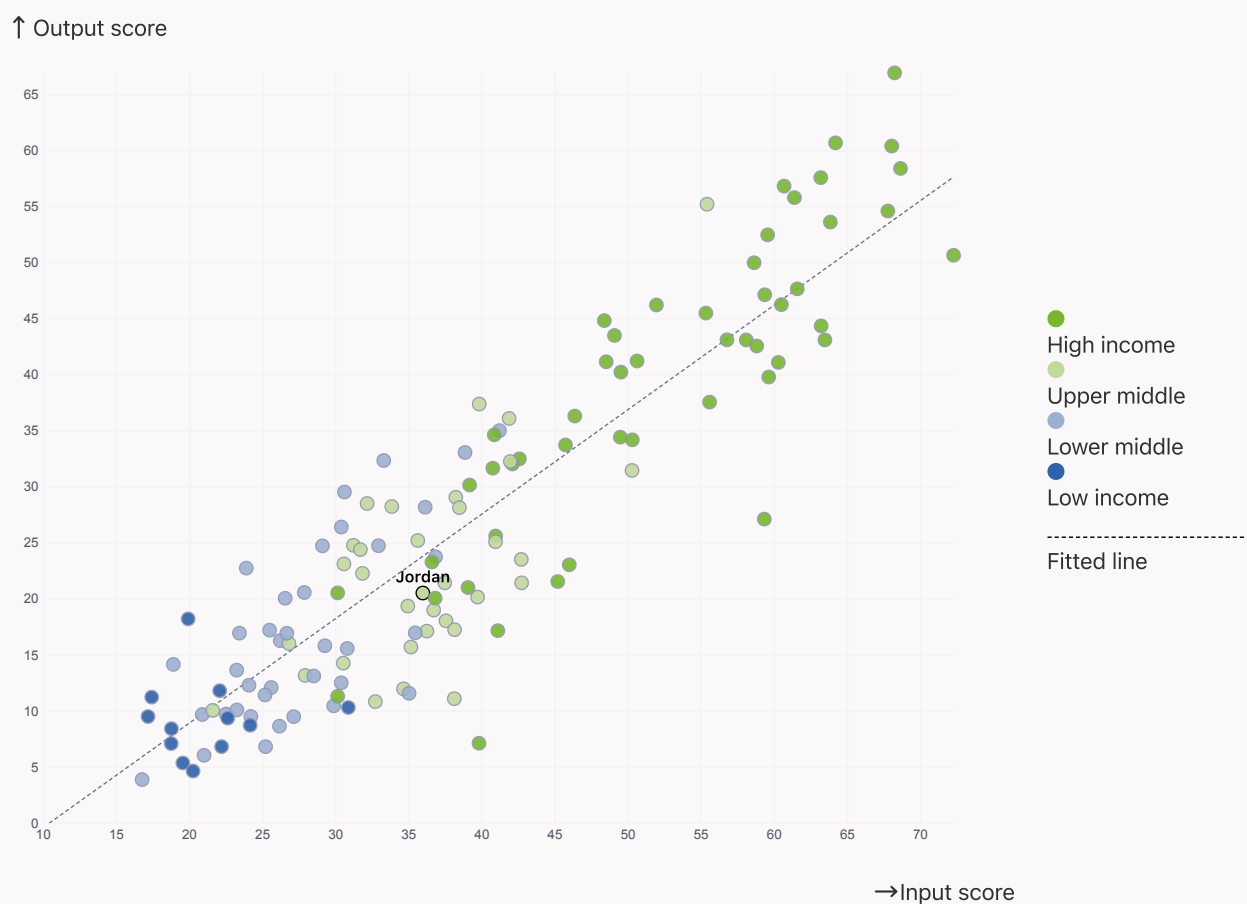
→ Effectively translating innovation investments into innovation outputs

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.

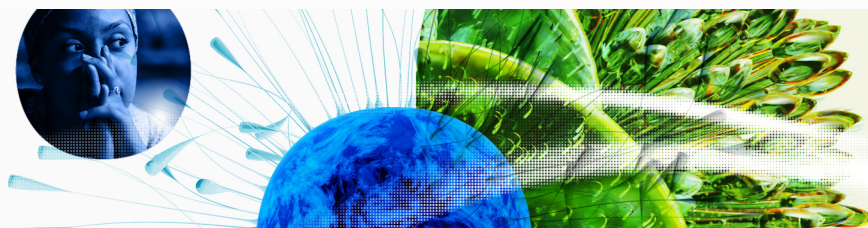


> Jordan produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs



Global Innovation Index 2023



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

Highest rankings →

- 51st Institutions
- 53rd Market sophistication

- 70th Business sophistication
- 71st Global Innovation Index
- 75th Creative outputs
- 76th Knowledge and technology outputs

- 82nd Human capital and research

- 87th Infrastructure

← Lowest rankings

> Highest rankings



Jordan ranks highest in Institutions (51st), Market sophistication (53rd) and Business sophistication (70th).

> Lowest rankings



Jordan ranks lowest in Infrastructure (87th), Human capital and research (82nd) and Knowledge and technology outputs (76th).



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

Global Innovation Index 2023



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

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

> Upper-Middle-Income economies

Jordan performs below the upper-middle-income group average in Knowledge and technology outputs, Creative outputs, Business sophistication, Human capital and research, Infrastructure.



> Northern Africa And Western Asia

Jordan performs below the regional average in Knowledge and technology outputs, Creative outputs, Business sophistication, Human capital and research, Infrastructure.



Knowledge and technology outputs

Top 10 | Score: 58.96

NAWA | Score: 24.01

Upper middle income | Score: 22.36

Jordan | Score: 20.31

Creative outputs

Top 10 | 56.09

NAWA | 24.51

Upper middle income | 23.16

Jordan | 20.68

Business sophistication

Top 10 | 64.39

NAWA | 29.44

Upper middle income | 29.27

Jordan | 26.98

Market sophistication

Top 10 | 61.93

Jordan | 37.80

NAWA | 36.12

Upper middle income | 35.45

Human capital and research

Top 10 | 60.28

NAWA | 32.72

Upper middle income | 29.68

Jordan | 26.85

Infrastructure

Top 10 | 62.83

NAWA | 41.60

Upper middle income | 40.40

Jordan | 32.50

Institutions

Top 10 | 79.85

Jordan | 55.87

NAWA | 53.39

Upper middle income | 47.71

Global Innovation Index 2023



→ Innovation strengths and weaknesses in Jordan

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



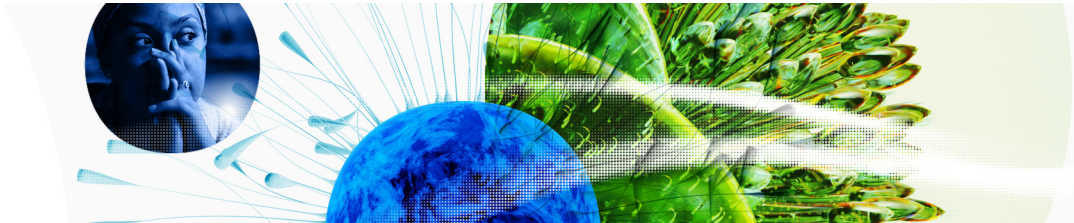
> Jordan's main innovation strengths are **Cost of redundancy dismissal** (rank 1), **Scientific and technical articles/bn PPP\$ GDP** (rank 15) and **VC received, value, % GDP** (rank 16).

Strengths

Rank	Code	Indicator name
1	1.2.3	Cost of redundancy dismissal
15	6.1.4	Scientific and technical articles/bn PPP\$ GDP
16	4.2.4	VC received, value, % GDP
19	2.2.3	Tertiary inbound mobility, %
27	7.3.4	Mobile app creation/bn PPP\$ GDP
27	5.2.2	State of cluster development
30	4.3.2	Domestic industry diversification
35	2.2.2	Graduates in science and engineering, %
40	4.1.2	Domestic credit to private sector, % GDP
40	5.2.1	University-industry R&D collaboration

Weaknesses

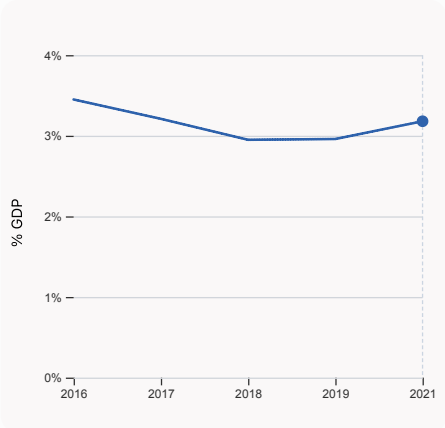
Rank	Code	Indicator name
125	6.3.4	ICT services exports, % total trade
125	5.3.3	ICT services imports, % total trade
117	6.2.1	Labor productivity growth, %
113	7.3.2	Country-code TLDs/th pop. 15-69
106	7.2.1	Cultural and creative services exports, % total trade
98	2.1.3	School life expectancy, years
88	5.1.2	Firms offering formal training, %
57	7.2.3	Entertainment and media market/th pop. 15-69
48	6.2.2	Unicorn valuation, % GDP
40	2.3.3	Global corporate R&D investors, top 3, mn US\$



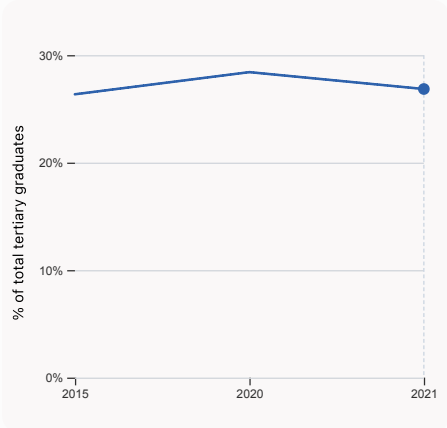
→ Jordan's innovation system

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

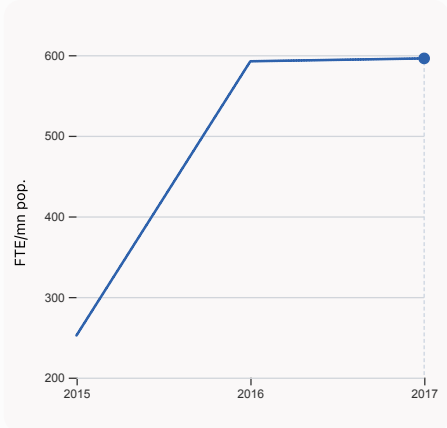
> Innovation inputs in Jordan



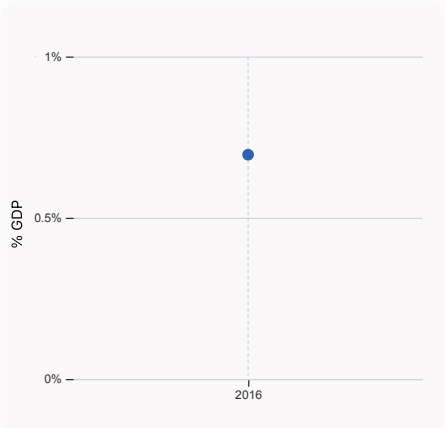
2.1.1 Expenditure on education, % GDP
was equal to 3.18% GDP in 2021, up by 0.22 percentage points from the year prior – and equivalent to an indicator rank of 102.



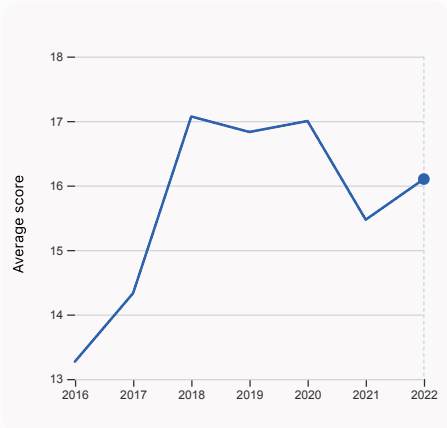
2.2.2 Graduates in science and engineering, %
was equal to 26.85% of total tertiary graduates in 2021, down by 1.57 percentage points from the year prior – and equivalent to an indicator rank of 35.



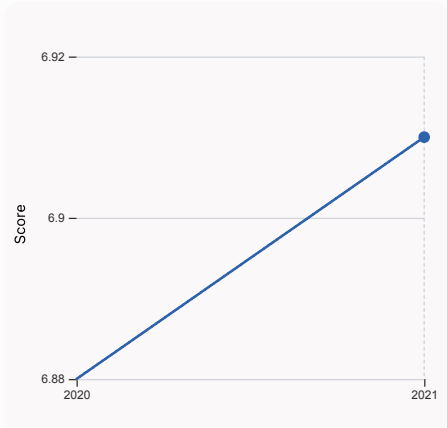
2.3.1 Researchers, FTE/mn pop.
was equal to 595.96 FTE/mn pop. in 2017, up by 0.6% from the year prior – and equivalent to an indicator rank of 65.



2.3.2 Gross expenditure on R&D, % GDP
was equal to 0.695 % GDP in 2016, equivalent to an indicator rank of 50.

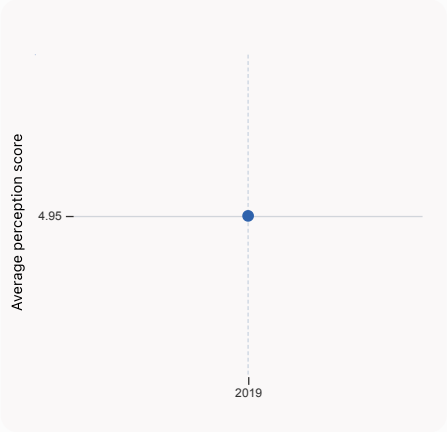


2.3.4 QS university ranking, top 3
was equal to an average score of 16.1 for the top 3 universities in 2022, up by 4.072% from the year prior – and equivalent to an indicator rank of 59.

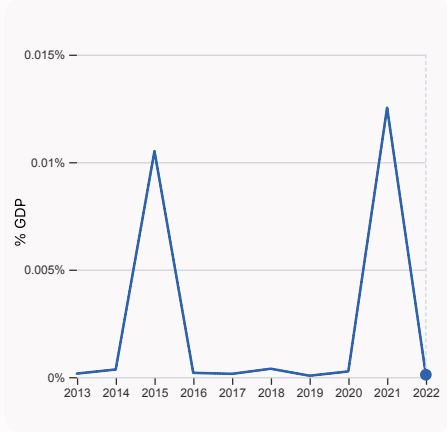


3.1.1 ICT access
was equal to a score of 6.91 in 2021, up by 0.44% from the year prior – and equivalent to an indicator rank of 104.

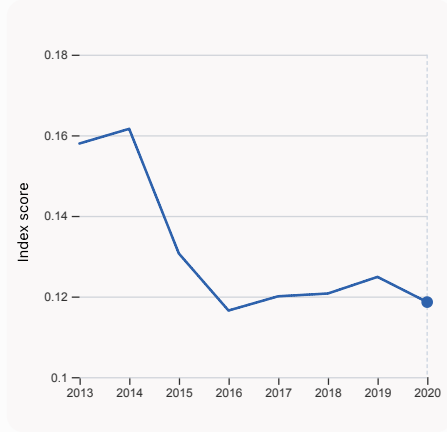
Global Innovation Index 2023



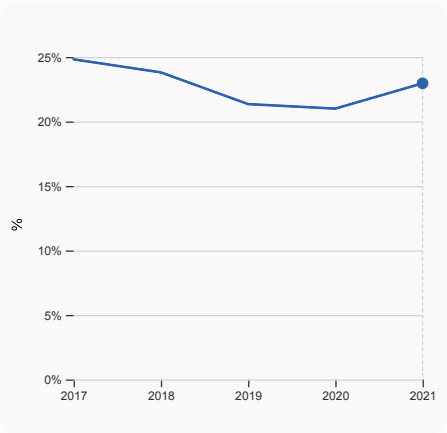
4.1.1 Finance for startups and scaleups was equal to an average perception score of 4.95 in 2019, equivalent to an indicator rank of 35.



4.2.4 VC received, value, % GDP was equal to 0.00011% GDP in 2022, down by 0.012 percentage points from the year prior – and equivalent to an indicator rank of 16.



4.3.2 Domestic industry diversification was equal to an index score of 0.119 in 2020, down by 5.0068% from the year prior – and equivalent to an indicator rank of 30.

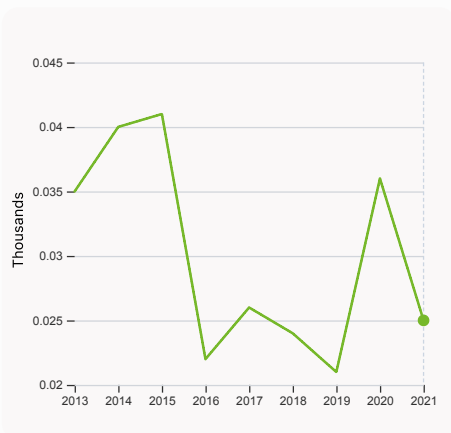


5.1.1 Knowledge-intensive employment, % was equal to 22.96% in 2021, up by 1.96 percentage points from the year prior – and equivalent to an indicator rank of 64.

Global Innovation Index 2023

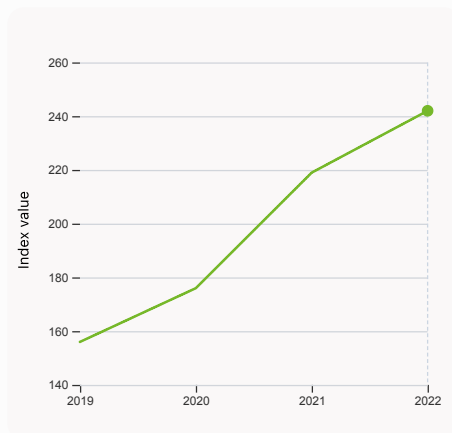


> Innovation outputs in Jordan



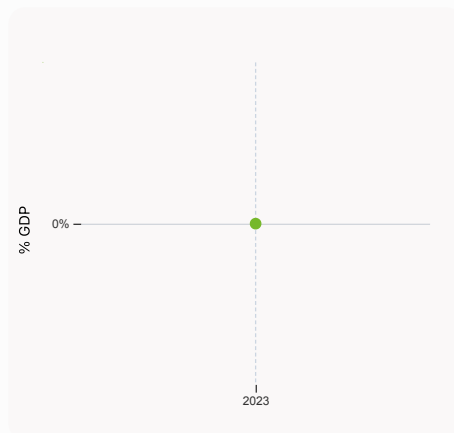
6.1.1 Patents by origin

was equal to 0.025 Thousands in 2021, down by 30.56% from the year prior – and equivalent to an indicator rank of 95.



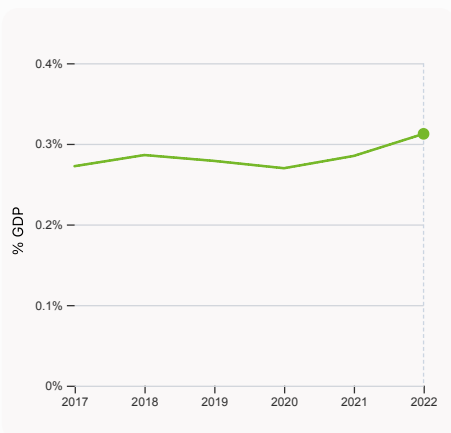
6.1.5 Citable documents H-index

was equal to an index value of 242 in 2022, up by 10.5% from the year prior – and equivalent to an indicator rank of 71.



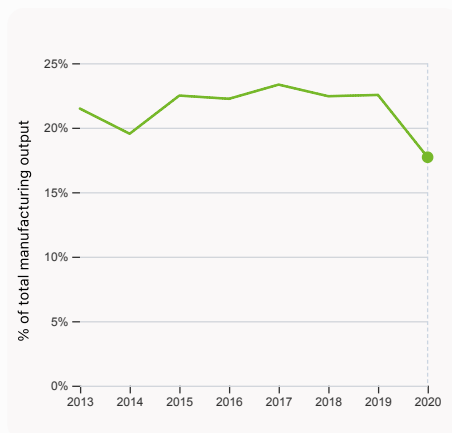
6.2.2 Unicorn valuation, % GDP

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



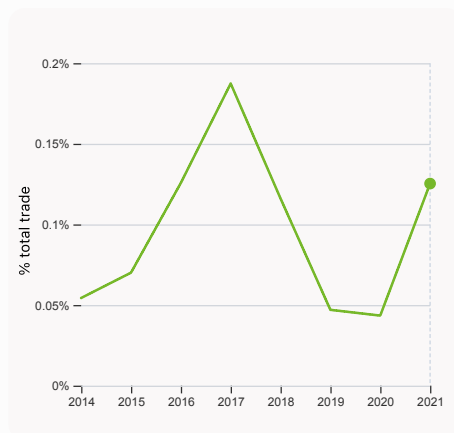
6.2.3 Software spending, % GDP

was equal to 0.312% GDP in 2022, up by 0.027 percentage points from the year prior – and equivalent to an indicator rank of 41.



6.2.4 High-tech manufacturing, %

was equal to 17.71% of total manufacturing output in 2020, down by 4.83 percentage points from the year prior – and equivalent to an indicator rank of 67.



6.3.1 Intellectual property receipts, % total trade

was equal to 0.125% total trade in 2021, up by 0.082 percentage points from the year prior – and equivalent to an indicator rank of 65.

Global Innovation Index 2023



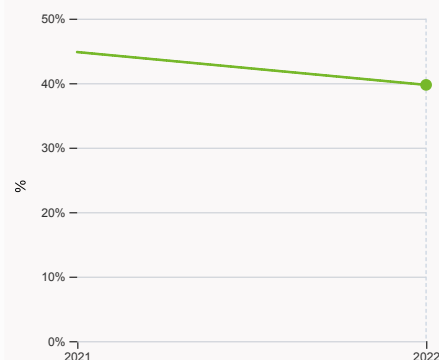
6.3.2 Production and export complexity

was equal to a score of 0.068 in 2020, up by 273.24% from the year prior – and equivalent to an indicator rank of 58.



6.3.3 High-tech exports

was equal to 222,898,877 USD in 2021, up by 21.22% from the year prior – and equivalent to an indicator rank of 71.



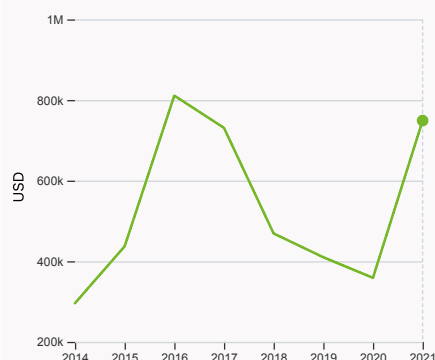
7.1.1 Intangible asset intensity, top 15, %

was equal to 39.73% in 2022, down by 5.09 percentage points from the year prior – and equivalent to an indicator rank of 62.



7.1.3 Global brand value, top 5,000

was equal to 0.436 bn USD in 2023, up by 22.19% from the year prior – and equivalent to an indicator rank of 55.



7.2.1 Cultural and creative services exports

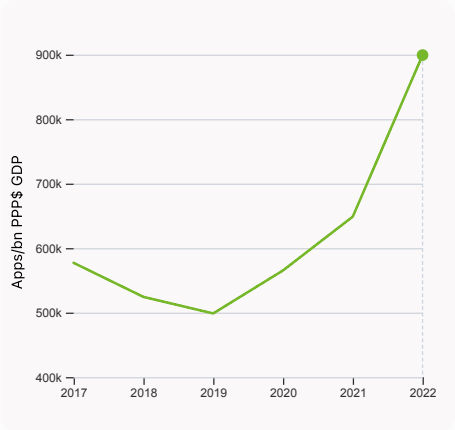
was equal to 749,000 USD in 2021, up by 108.64% from the year prior – and equivalent to an indicator rank of 106.



7.2.2 National feature films/mn pop. 15-69

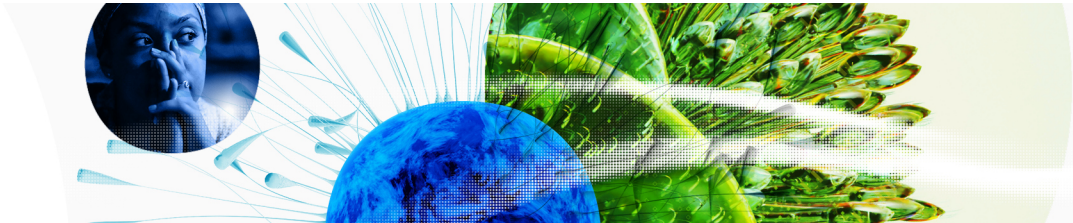
was equal to 0.55 films/mn pop. 15-69 in 2021, up by 289.66% from the year prior – and equivalent to an indicator rank of 68.

Global Innovation Index 2023



7.3.4 Mobile app creation/bn PPP\$ GDP

was equal to 899,339.61 Apps/bn PPP\$ GDP in 2022, up by 38.61% from the year prior – and equivalent to an indicator rank of 27.



→ Jordan's innovation top performers

> 2.3.4 QS university ranking of Jordan’s top universities

Rank	University	Score
591-600	UNIVERSITY OF JORDAN	21.10
801-1000	JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY	14.50
801-1000	GERMAN JORDANIAN UNIVERSITY	12.70

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2023>).

Note: QS Quacquarelli Symonds Ltd annually assesses over 1,200 universities across the globe and scores them between [0,100]. Ranks can represent a single value "x", a tie "x=" or a range "x-y".

> 7.1.1 Top 15 intangible-asset intensive companies in Jordan

Rank	Firm	Intensity, %
1	ARAB POTASH	57.86
2	JORDAN PHOSPHATE MINES	64.02
3	HIKMA PHARMACEUTICALS PLC	38.35

Source: Brand Finance (<https://brandirectory.com/reports/gift-2022>).

Note: Brand Finance only provides within economy ranks.

> 7.1.3 Top 5,000 companies in Jordan with highest global brand value

Rank	Brand	Industry	Brand Value, mn USD
1	ARAB BANK	Banking	435.9

Source: Brand Finance (<https://brandirectory.com>).

Note: Rank corresponds to within economy ranks.

Global Innovation Index 2023



GII 2023 rank

71

Jordan

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
76	70	Upper middle	NAWA	11.3	123.4	11,974.9
Score / Value Rank						
Score / Value Rank						
Institutions						
1.1 Institutional environment						
1.1.1 Operational stability for businesses*	45.1	65				
1.1.2 Government effectiveness*	47.2	75				
1.2 Regulatory environment	43.0	59				
1.2.1 Regulatory quality*	73.0	37				
1.2.2 Rule of law*	46.0	63				
1.2.3 Cost of redundancy dismissal	46.0	55				
1.3 Business environment	8.0	1	●			
1.3.1 Policies for doing business*	49.5	54				
1.3.2 Entrepreneurship policies and culture*	56.6	46				
1.3.2 Entrepreneurship policies and culture*	42.4	46				
Human capital and research						
2.1 Education						
2.1.1 Expenditure on education, % GDP	36.9	108	◇			
2.1.2 Government funding/pupil, secondary, % GDP/cap	3.2	102				
2.1.3 School life expectancy, years	16.9	68				
2.1.4 PISA scales in reading, maths and science	10.9	98	○ ◇			
2.1.5 Pupil-teacher ratio, secondary	416.0	58				
2.2 Tertiary education	15.4	80				
2.2.1 Tertiary enrolment, % gross	34.9	47				
2.2.2 Graduates in science and engineering, %	34.1	84				
2.2.3 Tertiary inbound mobility, %	26.9	35	●			
2.3 Research and development (R&D)	12.3	19	●			
2.3.1 Researchers, FTE/mn pop.	8.7	65				
2.3.2 Gross expenditure on R&D, % GDP	596.0	65				
2.3.3 Global corporate R&D investors, top 3, mn US\$	0.7	50				
2.3.4 QS university ranking, top 3*	0.0	40	○ ◇			
2.3.4 QS university ranking, top 3*	16.3	59				
Infrastructure						
3.1 Information and communication technologies (ICTs)						
3.1.1 ICT access*	58.7	84				
3.1.2 ICT use*	53.4	104	◇			
3.1.3 Government's online service*	65.7	82				
3.1.4 E-participation*	62.4	73				
3.2 General infrastructure	53.5	67				
3.2.1 Electricity output, GWh/mn pop.	12.4	118	◇			
3.2.2 Logistics performance*	2,063.1	81				
3.2.3 Gross capital formation, % GDP	n/a	n/a				
3.3 Ecological sustainability	20.7	94				
3.3.1 GDP/unit of energy use	26.3	60				
3.3.2 Environmental performance*	11.0	56				
3.3.3 ISO 14001 environment/bn PPP\$ GDP	41.9	60				
3.3.3 ISO 14001 environment/bn PPP\$ GDP	1.5	58				
Market sophistication						
4.1 Credit						
4.1.1 Finance for startups and scaleups*	37.8	53				
4.1.2 Domestic credit to private sector, % GDP	32.8	59				
4.1.3 Loans from microfinance institutions, % GDP	58.1	35				
4.2 Investment	82.2	40	●			
4.2.1 Market capitalization, % GDP	0.8	30				
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP	23.5	30				
4.2.3 VC recipients, deals/bn PPP\$ GDP	46.8	37				
4.2.4 VC received, value, % GDP	0.1	37				
4.3 Trade, diversification, and market scale	0.1	36				
4.3.1 Applied tariff rate, weighted avg., %	0.0	16	●			
4.3.2 Domestic industry diversification	57.1	71				
4.3.3 Domestic market scale, bn PPP\$	4.0	83				
4.3.3 Domestic market scale, bn PPP\$	94.6	30	●			
4.3.3 Domestic market scale, bn PPP\$	123.4	83				
Business sophistication						
5.1 Knowledge workers						
5.1.1 Knowledge-intensive employment, %	24.6	79				
5.1.2 Firms offering formal training, %	23.0	64				
5.1.3 GERD performed by business, % GDP	16.9	88	○ ◇			
5.1.4 GERD financed by business, %	n/a	n/a				
5.1.5 Females employed w/advanced degrees, %	n/a	n/a				
5.2 Innovation linkages	8.4	82				
5.2.1 University-industry R&D collaboration*	34.1	37				
5.2.2 State of cluster development*	57.0	40	●			
5.2.3 GERD financed by abroad, % GDP	67.7	27	●			
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	n/a	n/a				
5.2.5 Patent families/bn PPP\$ GDP	0.0	41				
5.3 Knowledge absorption	0.0	82				
5.3.1 Intellectual property payments, % total trade	22.3	119	◇			
5.3.2 High-tech imports, % total trade	0.2	94	◇			
5.3.3 ICT services imports, % total trade	7.2	82				
5.3.4 FDI net inflows, % GDP	0.2	125	○ ◇			
5.3.5 Research talent, % in businesses	1.6	86				
5.3.5 Research talent, % in businesses	n/a	n/a				
Knowledge and technology outputs						
6.1 Knowledge creation						
6.1.1 Patents by origin/bn PPP\$ GDP	20.3	76				
6.1.2 PCT patents by origin/bn PPP\$ GDP	21.5	50				
6.1.3 Utility models by origin/bn PPP\$ GDP	0.2	95				
6.1.4 Scientific and technical articles/bn PPP\$ GDP	0.2	45				
6.1.5 Citable documents H-index	n/a	n/a				
6.2 Knowledge impact	11.1	71				
6.2.1 Labor productivity growth, %	21.4	95				
6.2.2 Unicorn valuation, % GDP	-1.0	117	○ ◇			
6.2.3 Software spending, % GDP	0.0	48	○ ◇			
6.2.4 High-tech manufacturing, %	0.3	41				
6.3 Knowledge diffusion	17.7	67				
6.3.1 Intellectual property receipts, % total trade	18.0	82				
6.3.2 Production and export complexity	0.1	65				
6.3.3 High-tech exports, % total trade	53.9	58				
6.3.4 ICT services exports, % total trade	1.2	71				
6.3.5 ISO 9001 quality/bn PPP\$ GDP	0.1	125	○			
6.3.5 ISO 9001 quality/bn PPP\$ GDP	4.8	55				
Creative outputs						
7.1 Intangible assets						
7.1.1 Intangible asset intensity, top 15, %	20.7	75				
7.1.2 Trademarks by origin/bn PPP\$ GDP	28.7	70				
7.1.3 Global brand value, top 5,000	39.7	62				
7.1.4 Industrial designs by origin/bn PPP\$ GDP	28.8	80				
7.2 Creative goods and services	0.9	55				
7.2.1 Cultural and creative services exports, % total trade	1.0	68				
7.2.2 National feature films/mn pop. 15-69	4.4	88				
7.2.3 Entertainment and media market/th pop. 15-69	0.0	106	○ ◇			
7.2.4 Creative goods exports, % total trade	0.6	68				
7.3 Online creativity	0.2	57	○ ◇			
7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	1.2	43				
7.3.2 Country-code TLDs/th pop. 15-69	20.9	63				
7.3.3 GitHub commits/mn pop. 15-69	4.9	57				
7.3.4 Mobile app creation/bn PPP\$ GDP	0.2	113	○			
7.3.4 Mobile app creation/bn PPP\$ GDP	3.7	84				
7.3.4 Mobile app creation/bn PPP\$ GDP	74.7	27	●			

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.

Global Innovation Index 2023



→ Data availability

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



> Jordan has missing data for six indicators and outdated data for seven indicators.

> Missing data for Jordan

Code	Indicator name	Economy Year	Model Year	Source
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 òôô The Logistics Performance Index and its Indicators.
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
5.2.3	GERD financed by abroad, % GDP	n/a	2020	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2021	World Intellectual Property Organization; International Monetary Fund

> Outdated data for Jordan

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture	2019	2022	Global Entrepreneurship Monitor
2.3.1	Researchers, FTE/mn pop.	2017	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2016	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2020	2021	International Energy Agency
4.1.1	Finance for startups and scaleups	2019	2022	Global Entrepreneurship Monitor
5.1.1	Knowledge-intensive employment, %	2021	2022	International Labour Organization
5.1.5	Females employed w/advanced degrees, %	2021	2022	International Labour Organization

Global Innovation Index 2023



→ 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.