

Global Innovation Index 2023

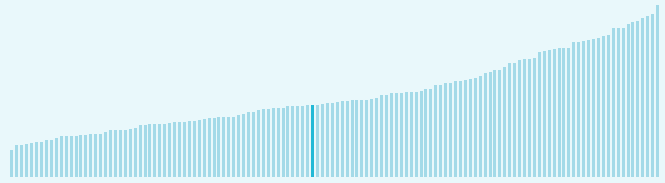


The Global Innovation Index (GII) ranks world economies according to their innovation capabilities.

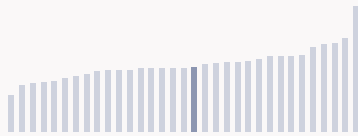
Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

Jordan ranking in the Global Innovation Index 2023

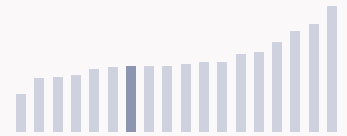
> Jordan ranks **71st** among the 132 economies featured in the GII 2023.



> 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.

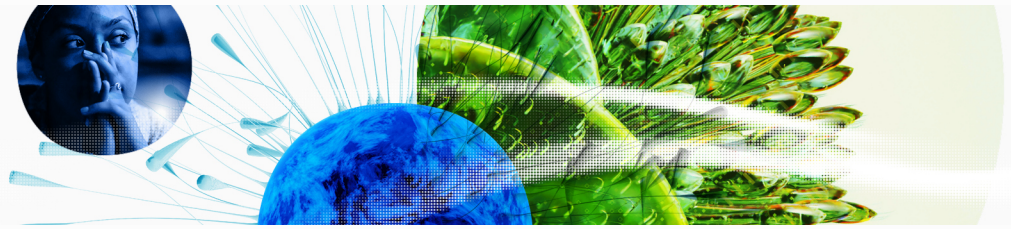
	GII Position	Innovation Inputs	Innovation Outputs
2020	81st	77th	81st
2021	81st	79th	81st
2022	78th	71st	78th
2023	71st	70th	76th

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.

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→ Expected vs. observed innovation performance

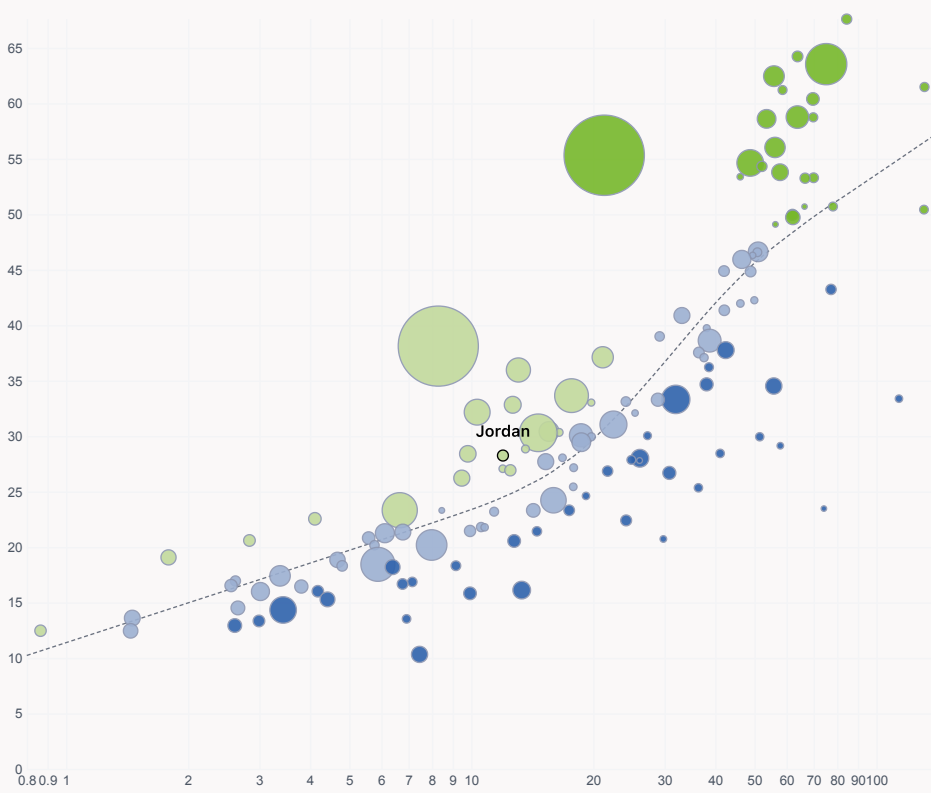
The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected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



> Relative to GDP, Jordan is performing above expectations for its level of development.

> Innovation overperformers relative to their economic development

↑ **GII Score**



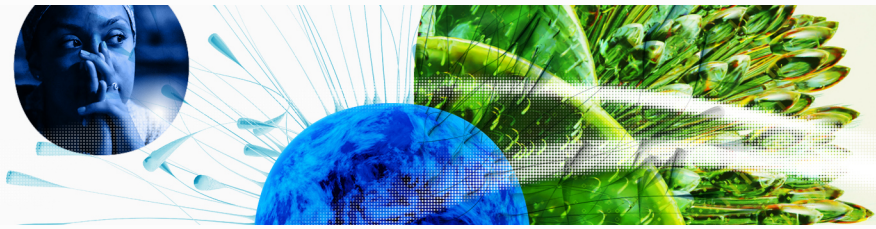
- Innovation leader
- Performing above expectations for level of development
- Performing at expectations for level of development
- Performing below expectations for level of development

Size legend (Population)



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

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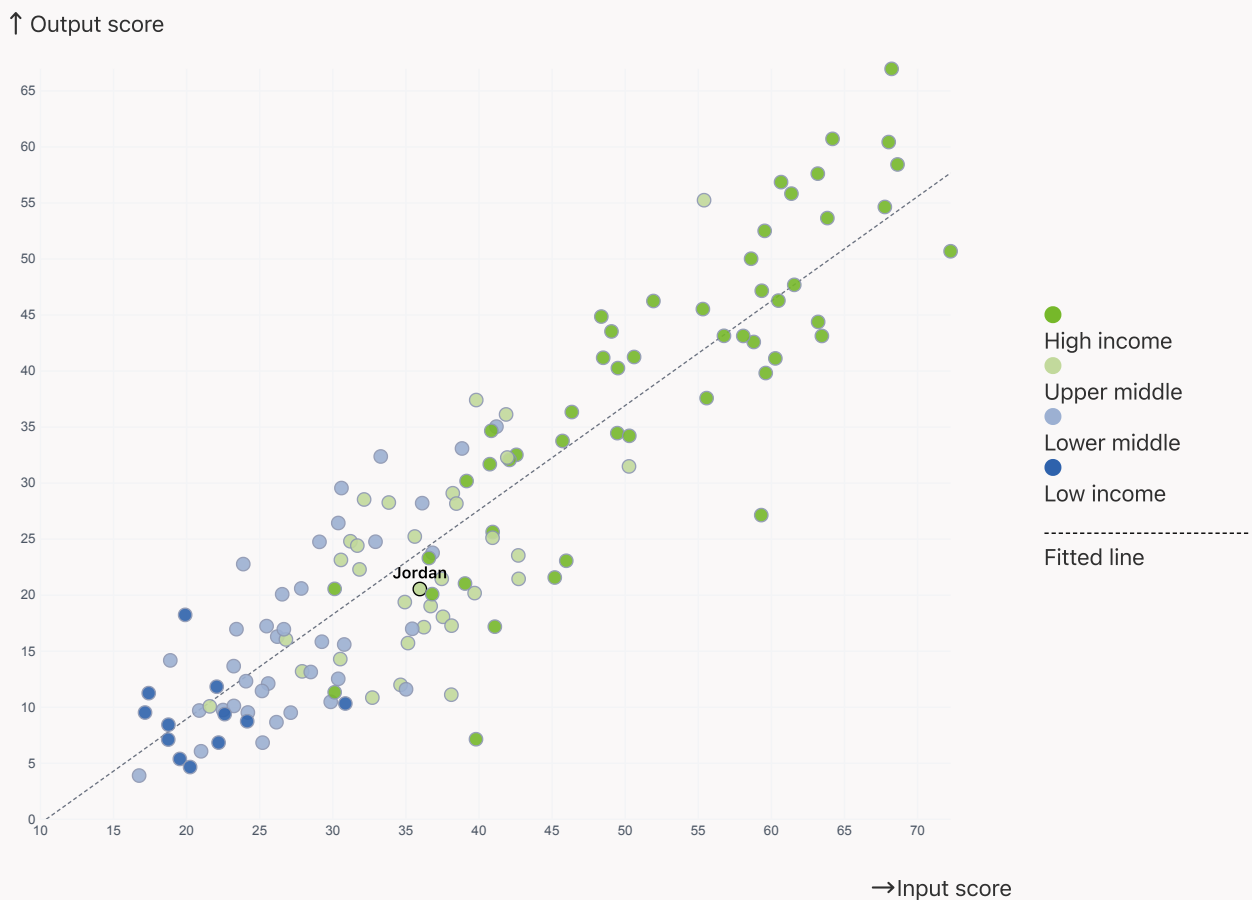
→ Effectively translating innovation investments into innovation outputs

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.

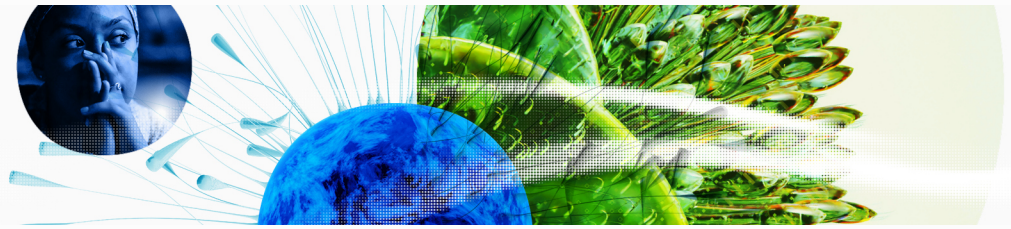


> Jordan produces less innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

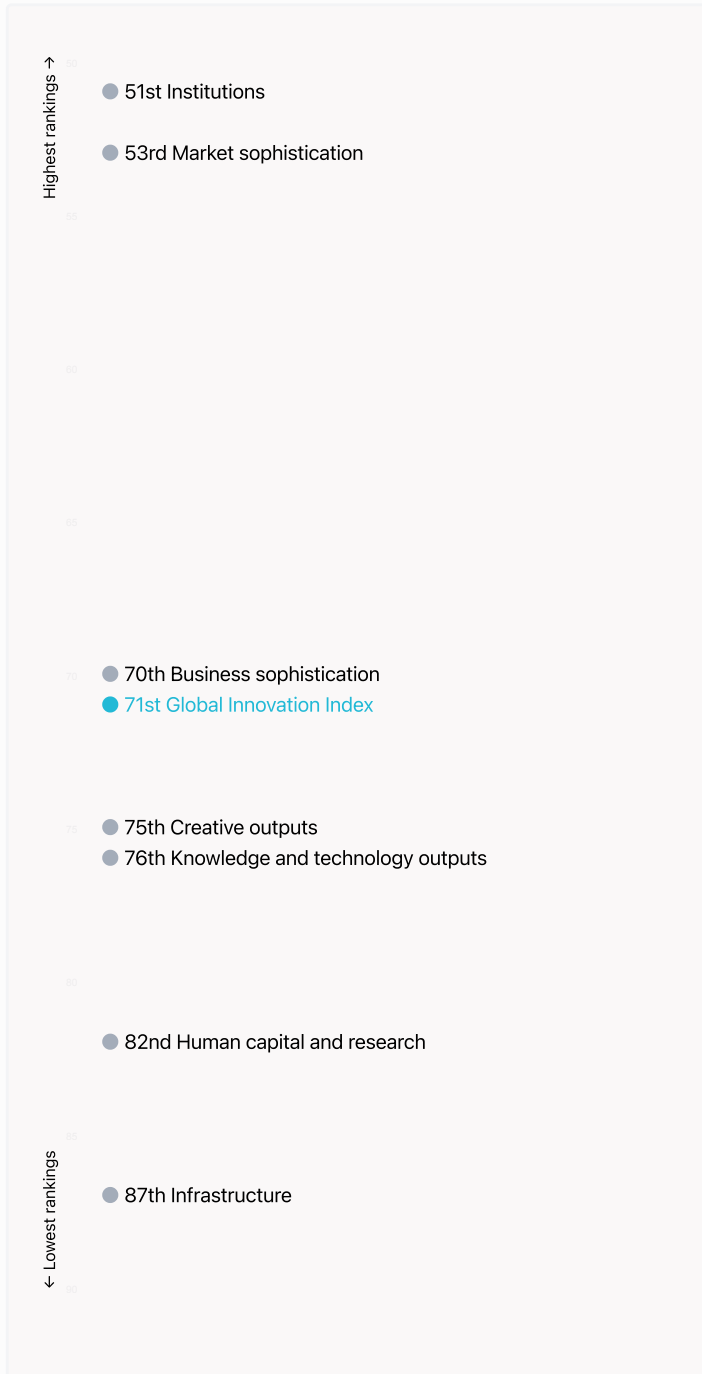


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→ Overview of Jordan's rankings in the seven areas of the GII in 2023

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



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

> Lowest rankings

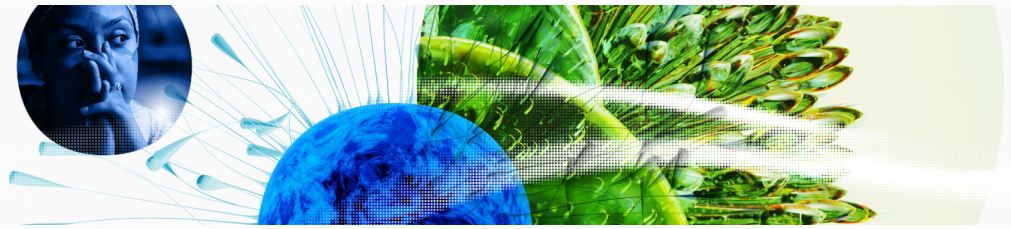


Jordan ranks lowest in Infrastructure (87th), Human capital and research (82nd) and Knowledge and technology outputs (76th).



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

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→ 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.

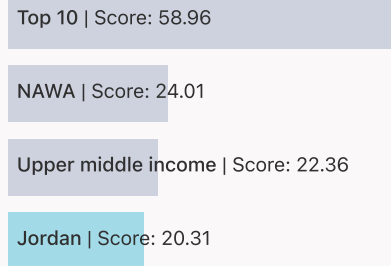


> Northern Africa And Western Asia

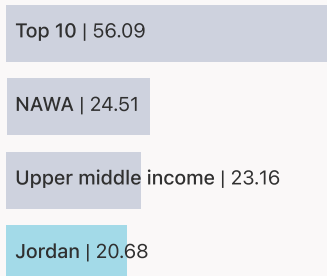
Jordan performs below the regional average in Knowledge and technology outputs, Creative outputs, Business sophistication, Human capital and research, Infrastructure.



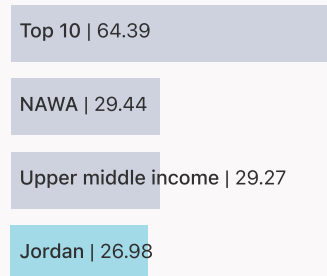
Knowledge and technology outputs



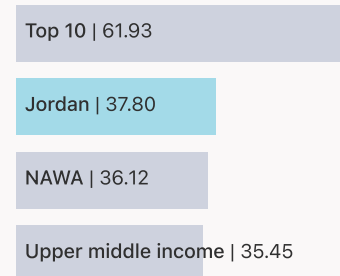
Creative outputs



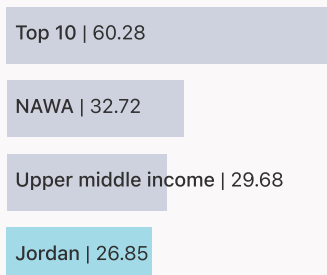
Business sophistication



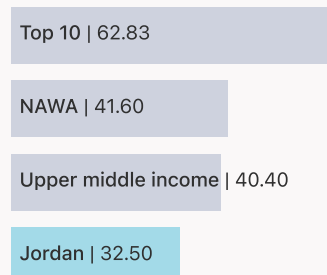
Market sophistication



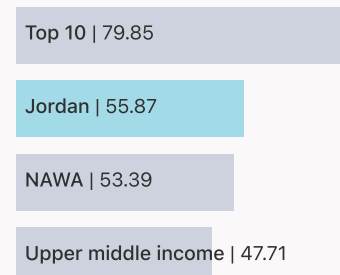
Human capital and research



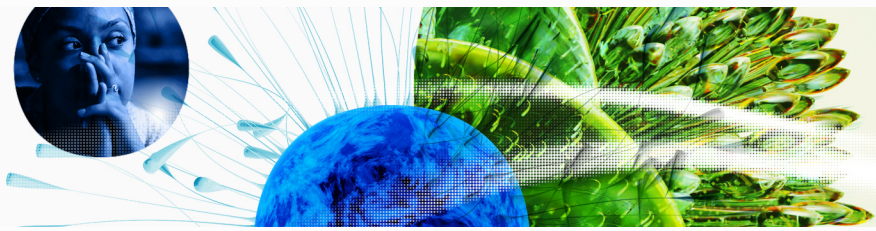
Infrastructure



Institutions



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→ Innovation strengths and weaknesses in Jordan

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



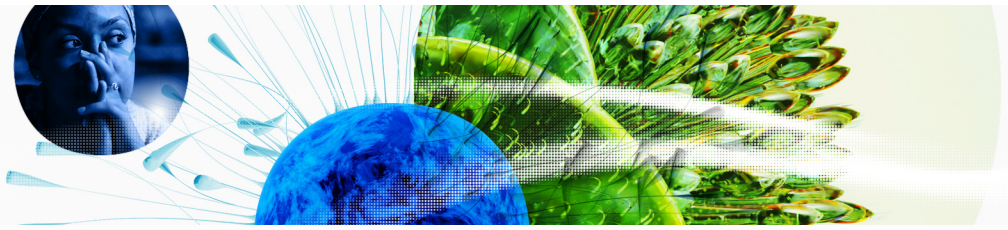
> Jordan's main innovation strengths are **Cost of redundancy dismissal** (rank 1), **Scientific and technical articles/bn PPP\$ GDP** (rank 15) and **VC received, value, % GDP** (rank 16).

Strengths

Weaknesses

Rank	Code	Indicator name	Rank	Code	Indicator name
1	1.2.3	Cost of redundancy dismissal	125	6.3.4	ICT services exports, % total trade
15	6.1.4	Scientific and technical articles/bn PPP\$ GDP	125	5.3.3	ICT services imports, % total trade
16	4.2.4	VC received, value, % GDP	117	6.2.1	Labor productivity growth, %
19	2.2.3	Tertiary inbound mobility, %	113	7.3.2	Country-code TLDs/th pop. 15-69
27	7.3.4	Mobile app creation/bn PPP\$ GDP	106	7.2.1	Cultural and creative services exports, % total trade
27	5.2.2	State of cluster development	98	2.1.3	School life expectancy, years
30	4.3.2	Domestic industry diversification	88	5.1.2	Firms offering formal training, %
35	2.2.2	Graduates in science and engineering, %	57	7.2.3	Entertainment and media market/th pop. 15-69
40	4.1.2	Domestic credit to private sector, % GDP	48	6.2.2	Unicorn valuation, % GDP
40	5.2.1	University-industry R&D collaboration	40	2.3.3	Global corporate R&D investors, top 3, mn US\$

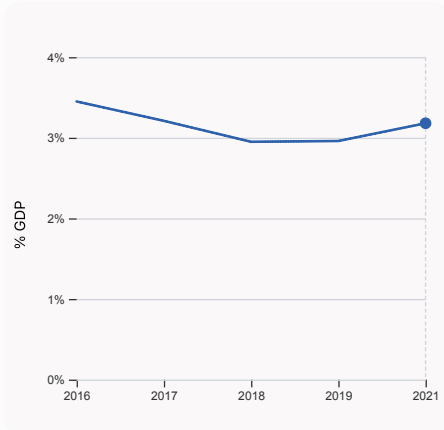
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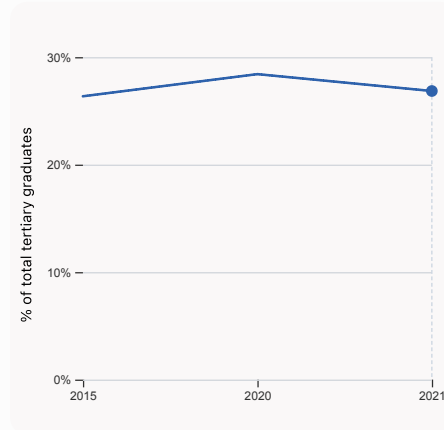
→ Jordan's innovation system

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

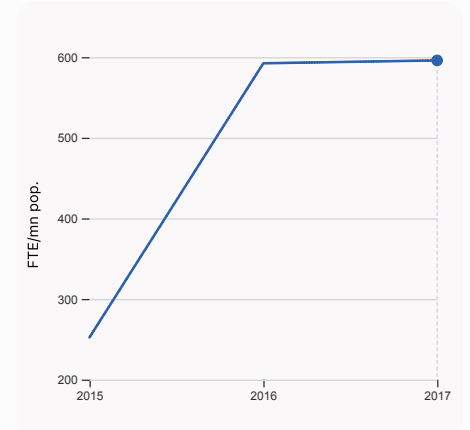
> Innovation inputs in Jordan



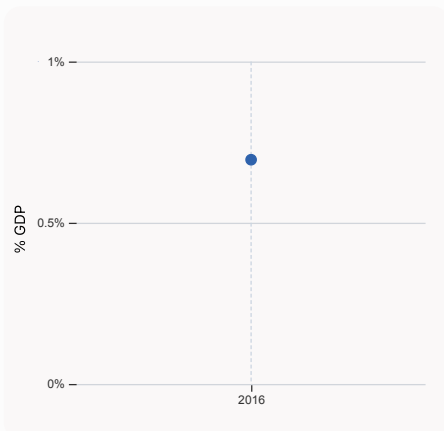
2.1.1 Expenditure on education, % GDP
was equal to 3.18% GDP in 2021, up by 0.22 percentage points from the year prior – and equivalent to an indicator rank of 102.



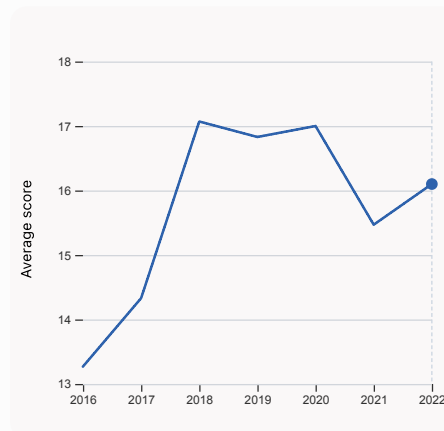
2.2.2 Graduates in science and engineering, %
was equal to 26.85% of total tertiary graduates in 2021, down by 1.57 percentage points from the year prior – and equivalent to an indicator rank of 35.



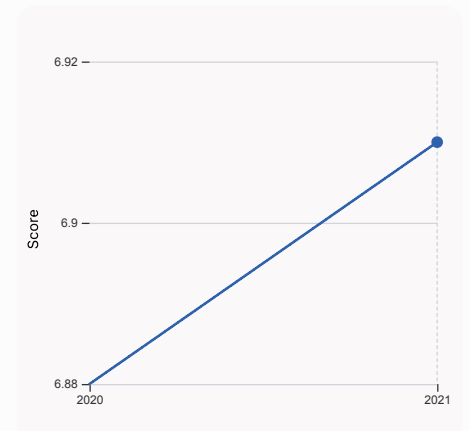
2.3.1 Researchers, FTE/mn pop.
was equal to 595.96 FTE/mn pop. in 2017, up by 0.6% from the year prior – and equivalent to an indicator rank of 65.



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

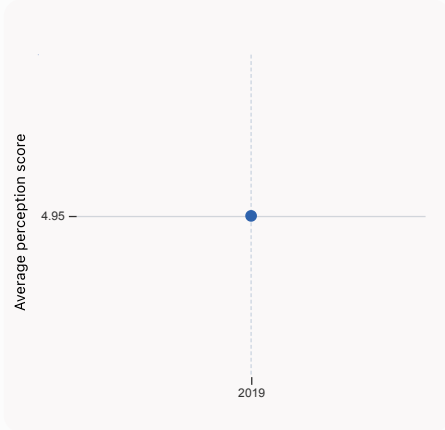
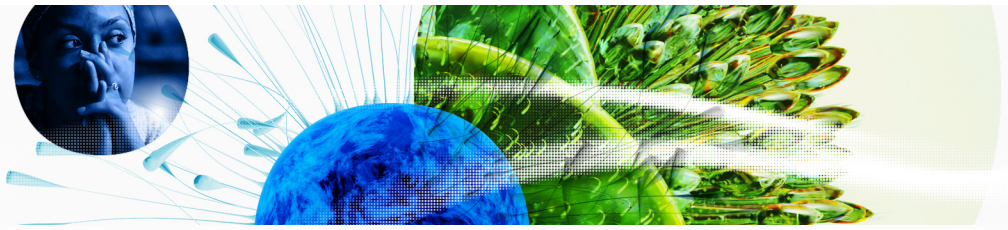


2.3.4 QS university ranking, top 3
was equal to an average score of 16.1 for the top 3 universities in 2022, up by 4.072% from the year prior – and equivalent to an indicator rank of 59.

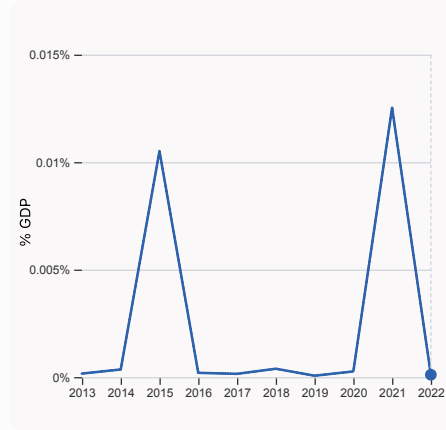


3.1.1 ICT access
was equal to a score of 6.91 in 2021, up by 0.44% from the year prior – and equivalent to an indicator rank of 104.

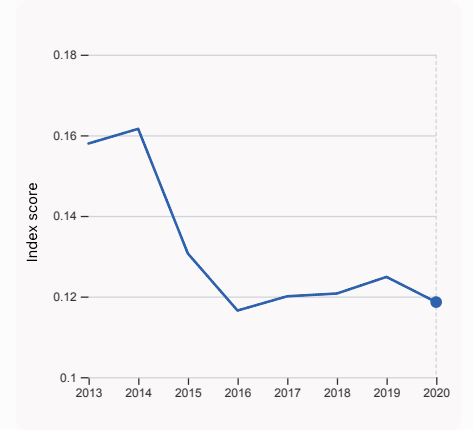
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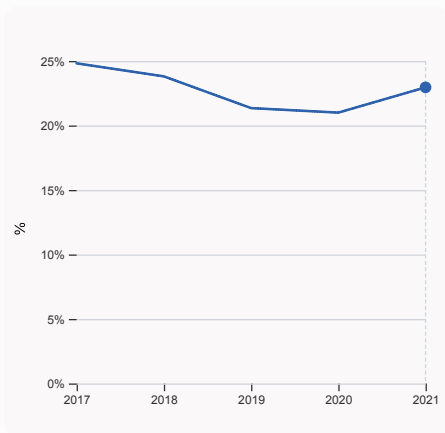
4.1.1 Finance for startups and scaleups was equal to an average perception score of 4.95 in 2019, equivalent to an indicator rank of 35.



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.

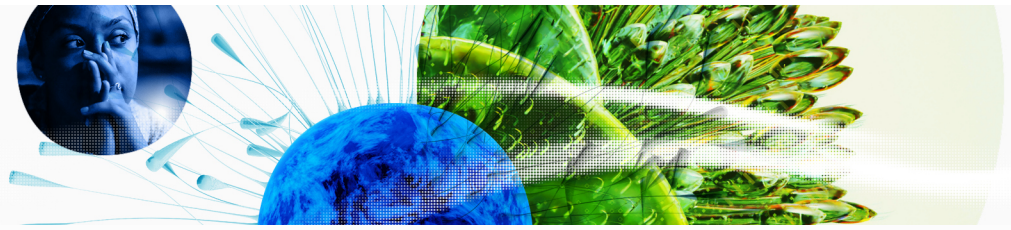


4.3.2 Domestic industry diversification was equal to an index score of 0.119 in 2020, down by 5.0068% from the year prior – and equivalent to an indicator rank of 30.

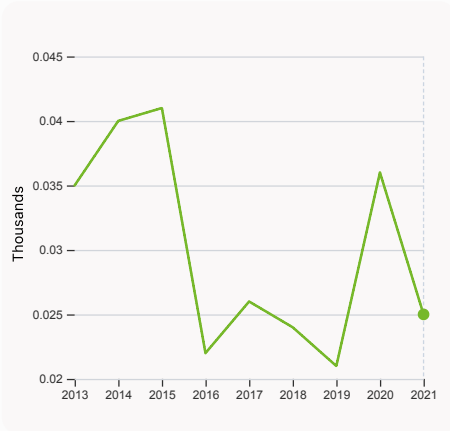


5.1.1 Knowledge-intensive employment, % was equal to 22.96% in 2021, up by 1.96 percentage points from the year prior – and equivalent to an indicator rank of 64.

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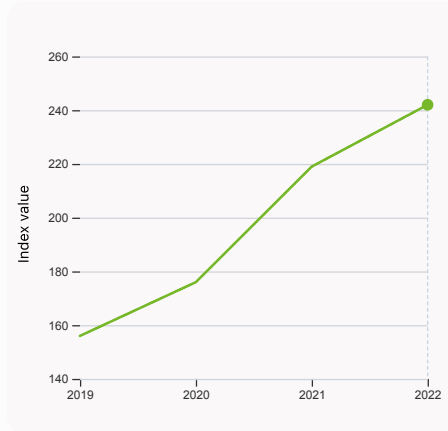


> Innovation outputs in Jordan



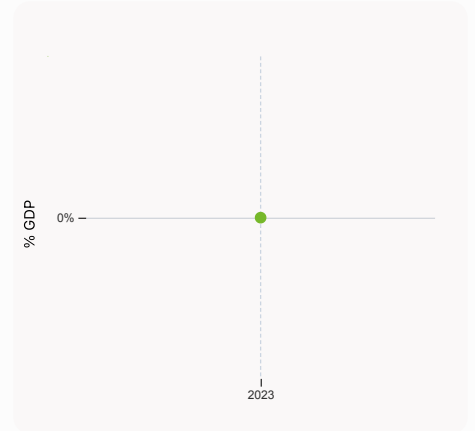
6.1.1 Patents by origin

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



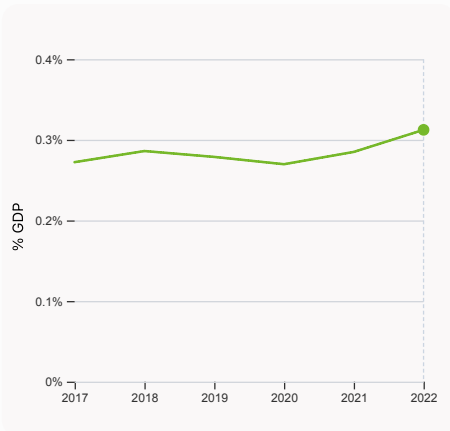
6.1.5 Citable documents H-index

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.



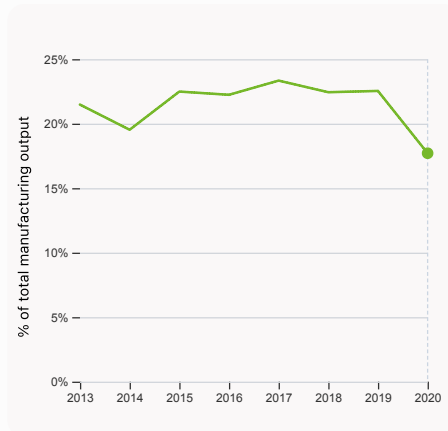
6.2.2 Unicorn valuation, % GDP

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

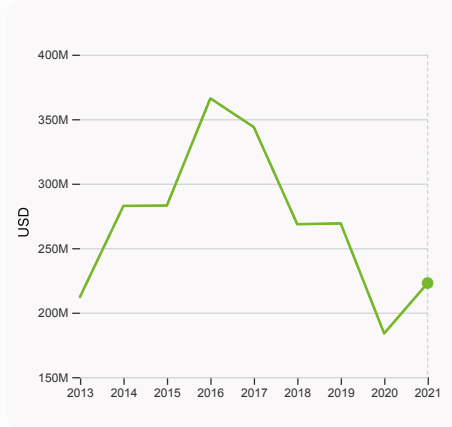
was equal to 0.125% total trade in 2021, up by 0.082 percentage points from the year prior – and equivalent to an indicator rank of 65.

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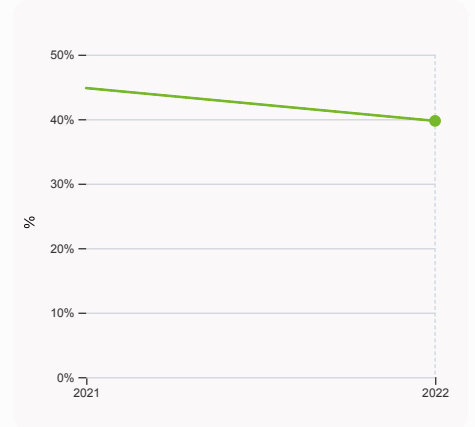
6.3.2 Production and export complexity

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.



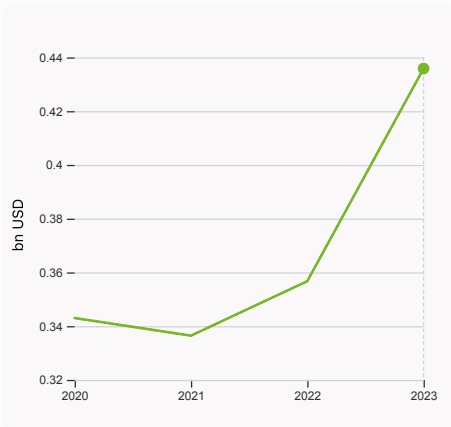
6.3.3 High-tech exports

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.



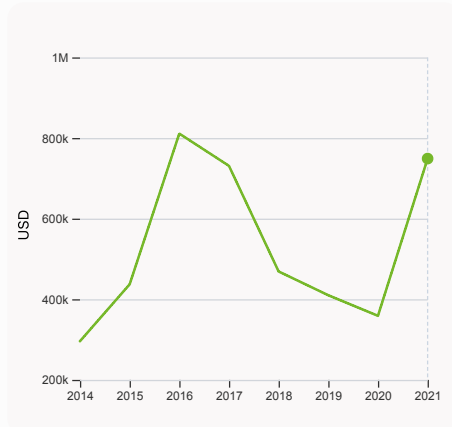
7.1.1 Intangible asset intensity, top 15, %

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.



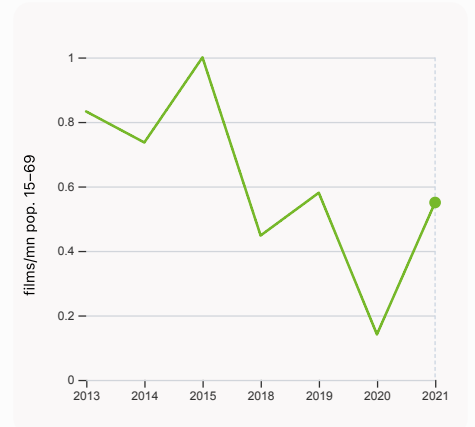
7.1.3 Global brand value, top 5,000

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

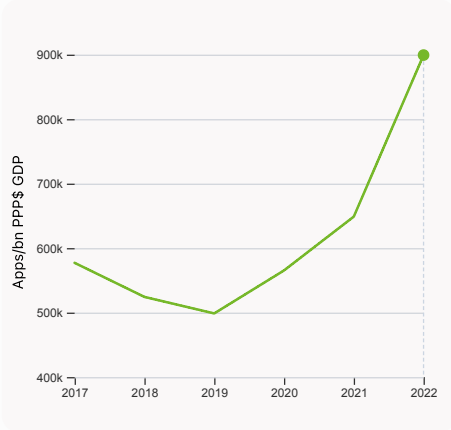
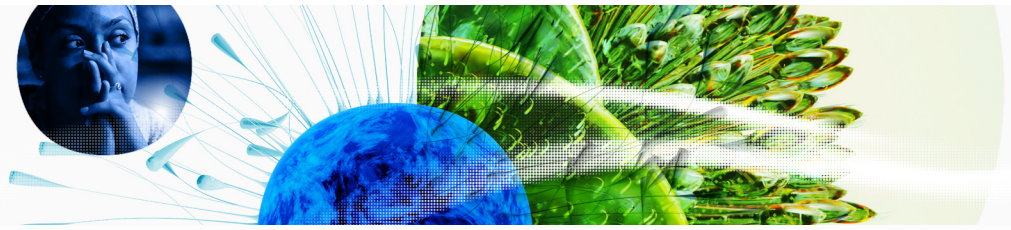
was equal to 749,000 USD in 2021, up by 108.64% from the year prior – and equivalent to an indicator rank of 106.



7.2.2 National feature films/mn pop. 15-69

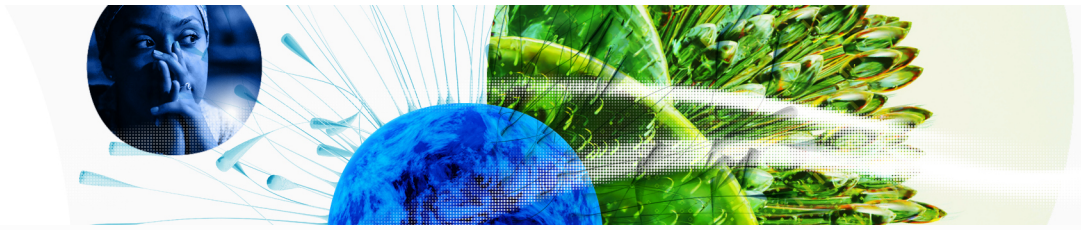
was equal to 0.55 films/mn pop. 15-69 in 2021, up by 289.66% from the year prior – and equivalent to an indicator rank of 68.

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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.

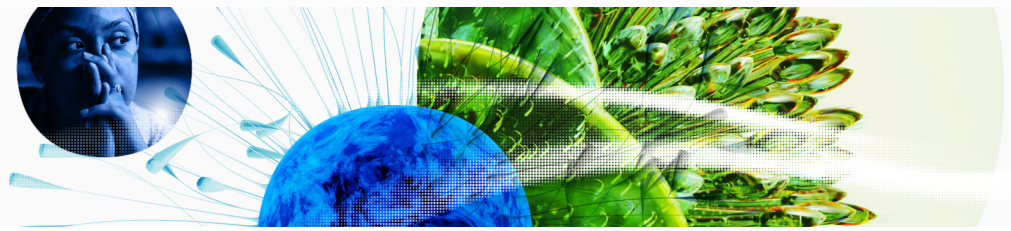
> 7.1.3 Top 5,000 companies in Jordan with highest global brand value

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.

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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				Business sophistication		
			55.9 51			27.0 70
1.1 Institutional environment			45.1 65	5.1 Knowledge workers		24.6 [79]
1.1.1 Operational stability for businesses*			47.2 75	5.1.1 Knowledge-intensive employment, %		23.0 64
1.1.2 Government effectiveness*			43.0 59	5.1.2 Firms offering formal training, %		16.9 88 ○ ◇
1.2 Regulatory environment			73.0 37 ● ◆	5.1.3 GERD performed by business, % GDP		n/a n/a
1.2.1 Regulatory quality*			46.0 63	5.1.4 GERD financed by business, %		n/a n/a
1.2.2 Rule of law*			46.0 55	5.1.5 Females employed w/advanced degrees, %		8.4 82
1.2.3 Cost of redundancy dismissal			8.0 1 ● ◆	5.2 Innovation linkages		34.1 37 ● ◆
1.3 Business environment			49.5 54	5.2.1 University-industry R&D collaboration†		57.0 40 ● ◆
1.3.1 Policies for doing business†			56.6 46	5.2.2 State of cluster development†		67.7 27 ● ◆
1.3.2 Entrepreneurship policies and culture†			42.4 46	5.2.3 GERD financed by abroad, % GDP		n/a n/a
Human capital and research			26.8 82	5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP		0.0 41
2.1 Education			36.9 108 ○ ◇	5.2.5 Patent families/bn PPP\$ GDP		0.0 82
2.1.1 Expenditure on education, % GDP			3.2 102	5.3 Knowledge absorption		22.3 119 ○ ◇
2.1.2 Government funding/pupil, secondary, % GDP/cap			16.9 68	5.3.1 Intellectual property payments, % total trade		0.2 94 ○ ◇
2.1.3 School life expectancy, years			10.9 98 ○ ◇	5.3.2 High-tech imports, % total trade		7.2 82
2.1.4 PISA scales in reading, maths and science			416.0 58	5.3.3 ICT services imports, % total trade		0.2 125 ○ ◇
2.1.5 Pupil-teacher ratio, secondary			15.4 80	5.3.4 FDI net inflows, % GDP		1.6 86
2.2 Tertiary education			34.9 47	5.3.5 Research talent, % in businesses		n/a n/a
2.2.1 Tertiary enrolment, % gross			34.1 84	Knowledge and technology outputs		20.3 76
2.2.2 Graduates in science and engineering, %			26.9 35 ● ◆	6.1 Knowledge creation		21.5 50
2.2.3 Tertiary inbound mobility, %			12.3 19 ● ◆	6.1.1 Patents by origin/bn PPP\$ GDP		0.2 95
2.3 Research and development (R&D)			8.7 65	6.1.2 PCT patents by origin/bn PPP\$ GDP		0.2 45
2.3.1 Researchers, FTE/mn pop.			596.0 65	6.1.3 Utility models by origin/bn PPP\$ GDP		n/a n/a
2.3.2 Gross expenditure on R&D, % GDP			0.7 50	6.1.4 Scientific and technical articles/bn PPP\$ GDP		n/a n/a
2.3.3 Global corporate R&D investors, top 3, mn US\$			0.0 40 ○ ◇	6.1.5 Citable documents H-index		11.1 71
2.3.4 QS university ranking, top 3*			16.3 59	6.2 Knowledge impact		21.4 95
Infrastructure			32.5 87 ○ ◇	6.2.1 Labor productivity growth, %		-1.0 117 ○ ◇
3.1 Information and communication technologies (ICTs)			58.7 84	6.2.2 Unicorn valuation, % GDP		0.0 48 ○ ◇
3.1.1 ICT access*			53.4 104 ○ ◇	6.2.3 Software spending, % GDP		0.3 41 ◆
3.1.2 ICT use*			65.7 82	6.2.4 High-tech manufacturing, %		17.7 67
3.1.3 Government's online service*			62.4 73	6.3 Knowledge diffusion		18.0 82
3.1.4 E-participation*			53.5 67	6.3.1 Intellectual property receipts, % total trade		0.1 65
3.2 General infrastructure			12.4 118 ○ ◇	6.3.2 Production and export complexity		53.9 58
3.2.1 Electricity output, GWh/mn pop.			2,063.1 81	6.3.3 High-tech exports, % total trade		1.2 71
3.2.2 Logistics performance*			n/a n/a	6.3.4 ICT services exports, % total trade		0.1 125 ○
3.2.3 Gross capital formation, % GDP			20.7 94	6.3.5 ISO 9001 quality/bn PPP\$ GDP		4.8 55
3.3 Ecological sustainability			26.3 60	Creative outputs		20.7 75
3.3.1 GDP/unit of energy use			11.0 56	7.1 Intangible assets		28.7 70
3.3.2 Environmental performance*			41.9 60	7.1.1 Intangible asset intensity, top 15, %		39.7 62
3.3.3 ISO 14001 environment/bn PPP\$ GDP			1.5 58	7.1.2 Trademarks by origin/bn PPP\$ GDP		28.8 80
Market sophistication			37.8 53	7.1.3 Global brand value, top 5,000		0.9 55
4.1 Credit			32.8 59	7.1.4 Industrial designs by origin/bn PPP\$ GDP		1.0 68
4.1.1 Finance for startups and scaleups†			58.1 35	7.2 Creative goods and services		4.4 88
4.1.2 Domestic credit to private sector, % GDP			82.2 40 ● ◆	7.2.1 Cultural and creative services exports, % total trade		0.0 106 ○ ◇
4.1.3 Loans from microfinance institutions, % GDP			0.8 30	7.2.2 National feature films/mn pop. 15-69		0.6 68
4.2 Investment			23.5 30 ● ◆	7.2.3 Entertainment and media market/th pop. 15-69		0.2 57 ○ ◇
4.2.1 Market capitalization, % GDP			46.8 37	7.2.4 Creative goods exports, % total trade		1.2 43
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP			0.1 37	7.3 Online creativity		20.9 63
4.2.3 VC recipients, deals/bn PPP\$ GDP			0.1 36	7.3.1 Generic top-level domains (TLDs)/th pop. 15-69		4.9 57
4.2.4 VC received, value, % GDP			0.0 16 ● ◆	7.3.2 Country-code TLDs/th pop. 15-69		0.2 113 ○
4.3 Trade, diversification, and market scale			57.1 71	7.3.3 GitHub commits/mn pop. 15-69		3.7 84
4.3.1 Applied tariff rate, weighted avg., %			4.0 83	7.3.4 Mobile app creation/bn PPP\$ GDP		74.7 27 ● ◆
4.3.2 Domestic industry diversification			94.6 30 ● ◆			
4.3.3 Domestic market scale, bn PPP\$			123.4 83			

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 Jordan.



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

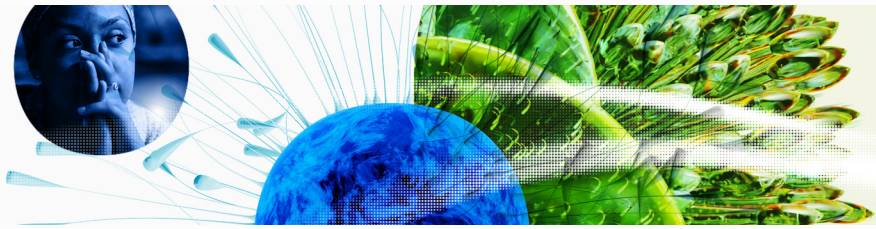
> Missing data for Jordan

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 ÔÇô 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

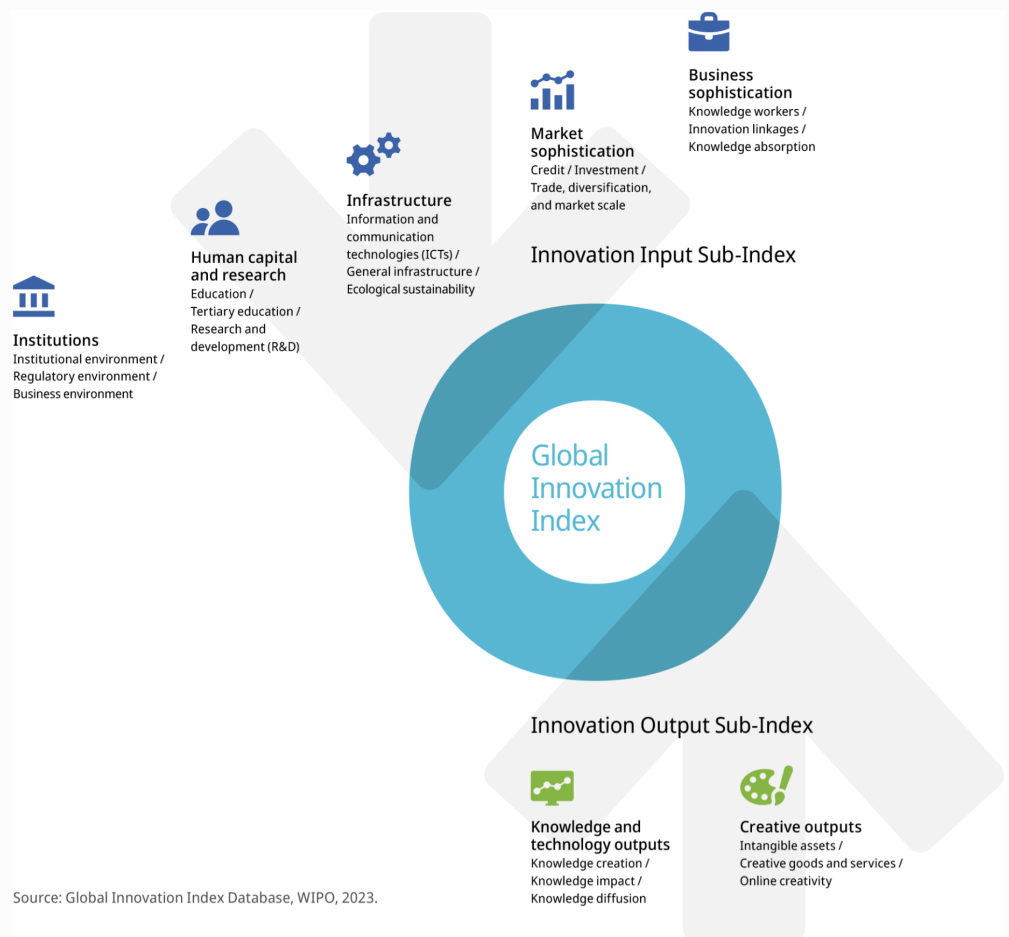
Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture	2019	2022	Global Entrepreneurship Monitor
2.3.1	Researchers, FTE/mn pop.	2017	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2016	2021	UNESCO Institute for 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.