

## ALGERIA

**121st** Algeria ranks 121st among the 131 economies featured in the GII 2020.

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.

The following table shows the rankings of Algeria over the past three years, noting that 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 Algeria in the GII 2020 is between ranks 115 and 123.

Rankings of Algeria (2018–2020)

	GII	Innovation inputs	Innovation outputs
<b>2020</b>	121	111	126
<b>2019</b>	113	100	118
<b>2018</b>	110	100	116

- Algeria performs better in innovation inputs than innovation outputs in 2020.
- This year Algeria ranks 111th in innovation inputs, lower than last year and lower compared to 2018.
- As for innovation outputs, Algeria ranks 126th. This position is lower than last year and lower compared to 2018.

**37th** Algeria ranks 37th among the 37 upper middle-income group economies.

**18th** Algeria ranks 18th among the 19 economies in Northern Africa and Western Asia.

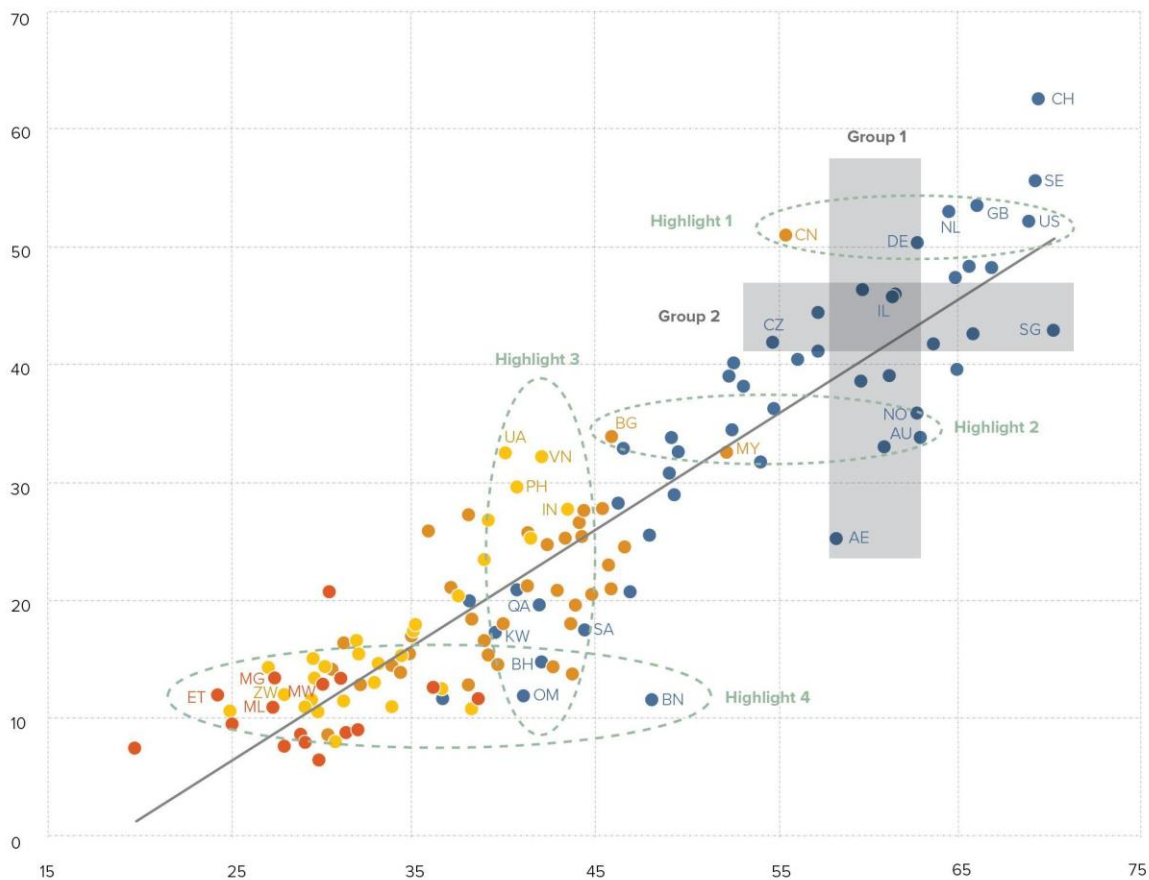


## EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Algeria produces less innovation outputs relative to its level of innovation investments.

### Innovation input to output performance, 2020

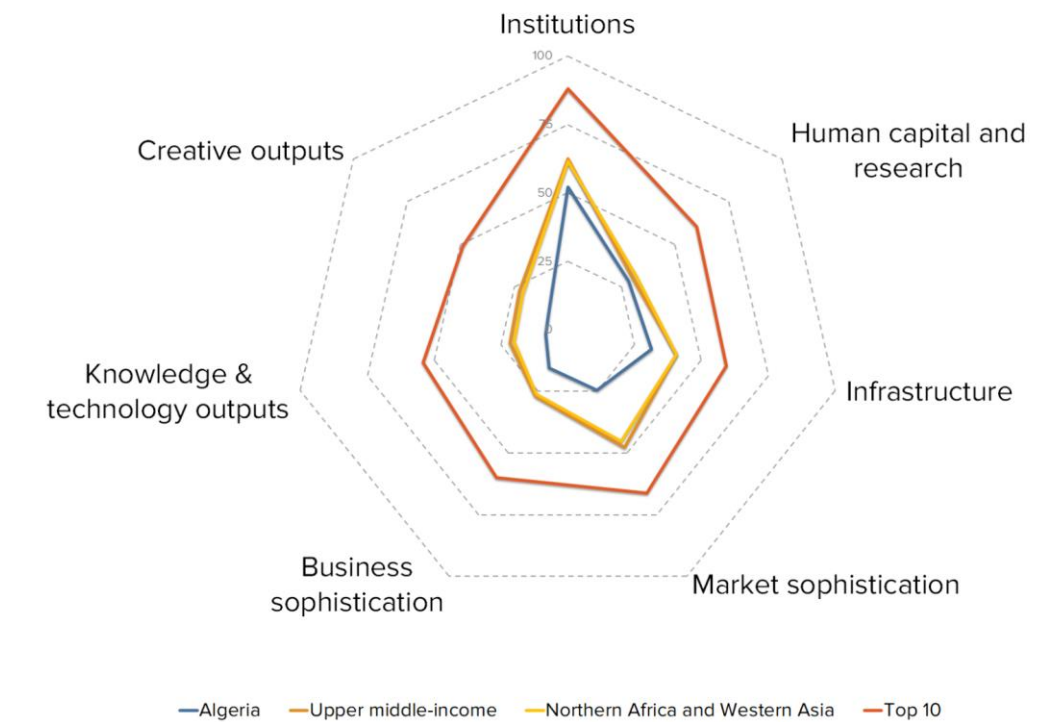


- ▲ Output score
- ▶ Input score
- High income group
- Upper middle-income group
- Lower middle-income group
- Low income group
- Fitted values

AU	Australia	IN	India	NL	Netherlands	CH	Switzerland
BH	Bahrain	IL	Israel	NO	Norway	UA	Ukraine
BN	Brunei Darussalam	KW	Kuwait	OM	Oman	AE	United Arab Emirates
BG	Bulgaria	MG	Madagascar	PH	Philippines	GB	United Kingdom
CN	China	MW	Malawi	QA	Qatar	US	United States of America
CZ	Czech Republic	ML	Mali	SA	Saudi Arabia	VN	Viet Nam
ET	Ethiopia	MY	Malaysia	SG	Singapore	ZW	Zimbabwe
DE	Germany			SE	Sweden		

# BENCHMARKING ALGERIA AGAINST OTHER UPPER MIDDLE-INCOME GROUP ECONOMIES AND NORTHERN AFRICA AND WESTERN ASIA

## Algeria's scores in the seven GII pillars



### Upper middle-income group economies

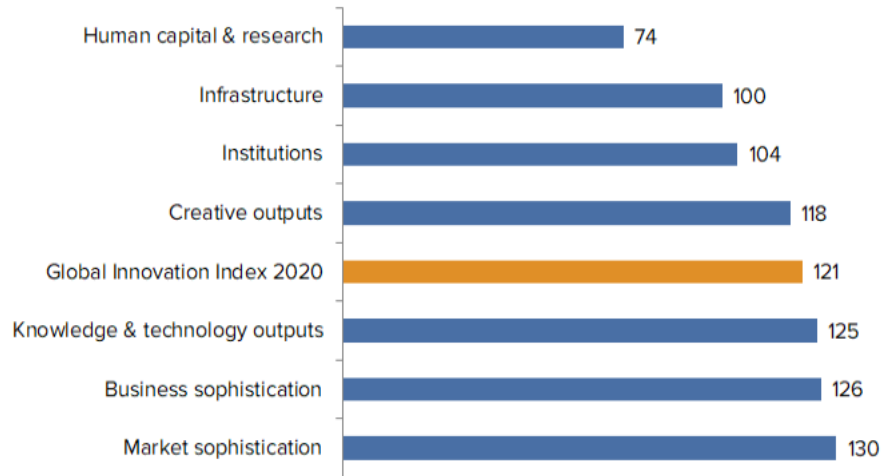
Algeria scores below average for its income group in all pillars.

### Northern Africa and Western Asia

Compared to other economies in Northern Africa and Western Asia, Algeria performs below average in all seven GII pillars.

## OVERVIEW OF ALGERIA RANKINGS IN THE SEVEN GII AREAS

Algeria performs best in Human capital & research and its weakest performance is in Market sophistication.



\*The highest possible ranking in each pillar is 1.

## INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of Algeria in the GII 2020.

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
2.2	Tertiary education	36	1.2.1	Regulatory quality*	128
2.2.1	Tertiary enrolment, % gross	56	2.1.4	PISA scales in reading, maths & science	77
2.2.2	Graduates in science & engineering, %	9	2.3.3	Global R&D companies, top 3, mn US\$	42
2.3.1	Researchers, FTE/mn pop.	55	2.3.4	QS university ranking, average score top 3*	77
2.3.2	Gross expenditure on R&D, % GDP	61	4	Market sophistication	130
3.2	General infrastructure	42	4.1	Credit	129
3.2.3	Gross capital formation, % GDP	5	4.1.1	Ease of getting credit*	129
3.3.1	GDP/unit of energy use	53	4.2	Investment	130
4.3.3	Domestic market scale, bn PPP\$	34	4.2.1	Ease of protecting minority investors*	129
5.2.2	State of cluster development†	58	4.2.2	Market capitalization, % GDP	73
5.3.2	High-tech imports, % total trade	49	6.2.3	Computer software spending, % GDP	122
7.1.3	Industrial designs by origin/bn PPP\$ GDP	56	6.3	Knowledge diffusion	128
			7.1.2	Global brand value, top 5,000, % GDP	80
			7.3.4	Mobile app creation/bn PPP\$ GDP	100

## **STRENGTHS**

GII strengths for Algeria are found in five of the seven GII pillars.

- Human capital & research (74): shows strengths in the sub-pillar Tertiary education (36) and in the indicators Tertiary enrolment (56), Graduates in science & engineering (9), Researchers (55) and Gross expenditure on R&D (61).
- Infrastructure (100): demonstrates strengths in the sub-pillar(s) General infrastructure (42) and in the indicators Gross capital formation (5) and GDP/unit of energy use (53).
- Market sophistication (130): the indicator Domestic market scale (34) reveals a strength.
- Business sophistication (126): displays strengths in the indicators State of cluster development (58) and High-tech imports (49).
- Creative outputs (118): exhibits strength in the indicator Industrial designs by origin (56).

## **WEAKNESSES**

GII weaknesses for Algeria are found in five of the seven GII pillars.

- Institutions (104): the indicator Regulatory quality (128) reveals a weakness.
- Human capital & research (74): shows weaknesses in the indicators PISA scales in reading, maths & science (77), Global R&D companies (42) and QS university ranking (77).
- Market sophistication (130): exhibits weaknesses in the sub-pillars Credit (129) and Investment (130) and in the indicators Ease of getting credit (129), Ease of protecting minority investors (129) and Market capitalization (73).
- Knowledge & technology outputs (125): displays weaknesses in the sub-pillar Knowledge diffusion (128) and in the indicator Computer software spending (122).
- Creative outputs (118): shows weaknesses in the indicators Global brand value (80) and Mobile app creation (100).



## DATA AVAILABILITY

The following tables list data that are either missing or outdated for Algeria.

### Missing data

Code	Indicator name	Country year	Model year	Source
2.1.1	Expenditure on education, % GDP	n/a	2018	UNESCO Institute for Statistics
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2016	UNESCO Institute for Statistics
2.1.5	Pupil-teacher ratio, secondary	n/a	2018	UNESCO Institute for Statistics
4.1.3	Microfinance gross loans, % GDP	n/a	2018	Microfinance Information Exchange
4.2.3	Venture capital deals/bn PPP\$ GDP	n/a	2019	Thomson Reuters
5.1.2	Firms offering formal training, %	n/a	2018	World Bank
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2018	World Intellectual Property Organization

### Outdated data

Code	Indicator name	Country year	Model year	Source
2.1.3	School life expectancy, years	2011	2017	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths & science	2015	2018	OECD Programme for International Student Assessment (PISA)
2.3.1	Researchers, FTE/mn pop.	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
5.1.1	Knowledge-intensive employment, %	2017	2018	International Labour Organization
5.1.3	GERD performed by business, % GDP	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
5.1.5	Females employed w/advanced degrees, %	2017	2018	International Labour Organization
5.3.1	Intellectual property payments, % total trade	2017	2018	World Trade Organization
5.3.2	High-tech imports, % total trade	2017	2018	United Nations, COMTRADE
5.3.3	ICT services imports, % total trade	2017	2018	World Trade Organization
5.3.5	Research talent, % in business enterprise	2017	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
6.2.5	High- & medium-high-tech manufacturing, %	2015	2017	United Nations Industrial Development Organization
6.3.1	Intellectual property receipts, % total trade	2017	2018	World Trade Organization
6.3.2	High-tech net exports, % total trade	2017	2018	United Nations, COMTRADE
6.3.3	ICT services exports, % total trade	2017	2018	World Trade Organization
7.2.4	Printing & other media, % manufacturing	2015	2017	United Nations Industrial Development Organization
7.2.5	Creative goods exports, % total trade	2017	2018	United Nations, COMTRADE

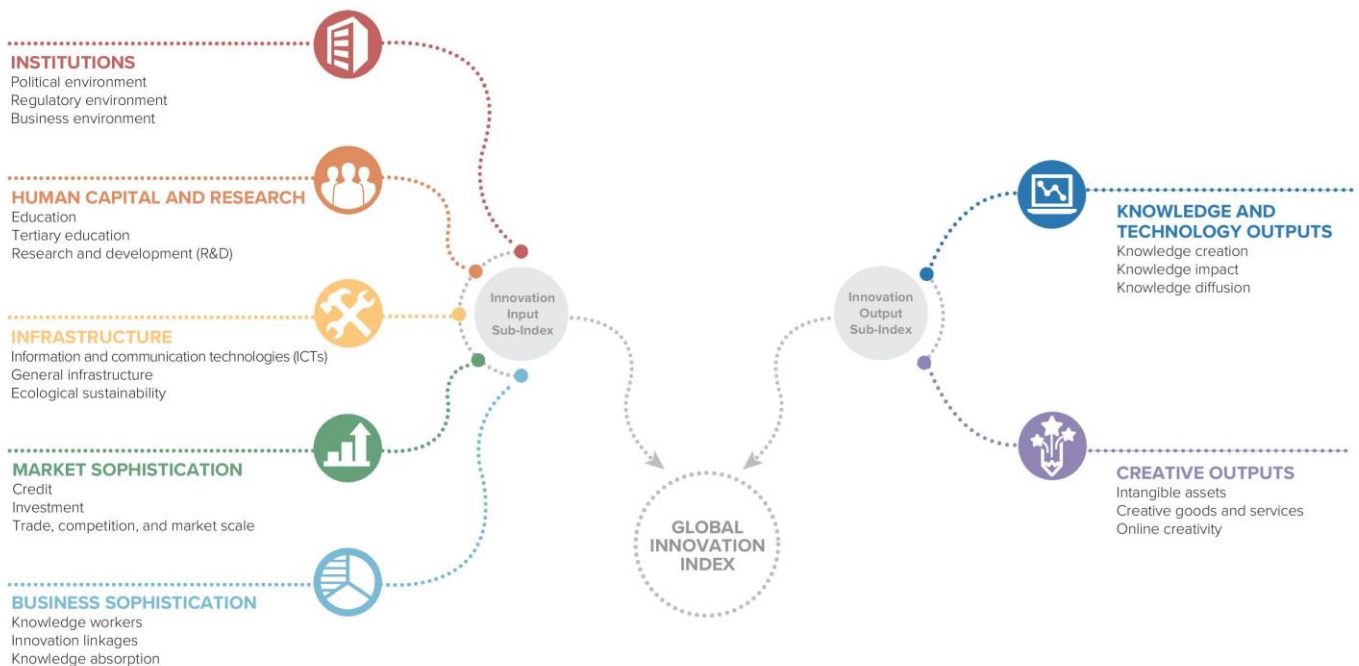


## ABOUT THE GLOBAL INNOVATION INDEX

The Global Innovation Index (GII) is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. In 2020, the GII presents its 13<sup>th</sup> edition devoted to the theme *Who Will Finance Innovation?*

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.

### Framework of the Global Innovation Index 2020



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.

