

TUNISIA

65th Tunisia ranks 65th 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 Tunisia 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 Tunisia in the GII 2020 is between ranks 63 and 75.

Rankings of Tunisia (2018–2020)

	GII	Innovation inputs	Innovation outputs
2020	65	78	59
2019	70	74	65
2018	66	77	63

- Tunisia performs better in innovation outputs than innovation inputs in 2020.
- This year Tunisia ranks 78th in innovation inputs, lower than last year and lower compared to 2018.
- As for innovation outputs, Tunisia ranks 59th. This position is higher than last year and higher compared to 2018.

7th Tunisia ranks 7th among the 29 lower middle-income group economies.

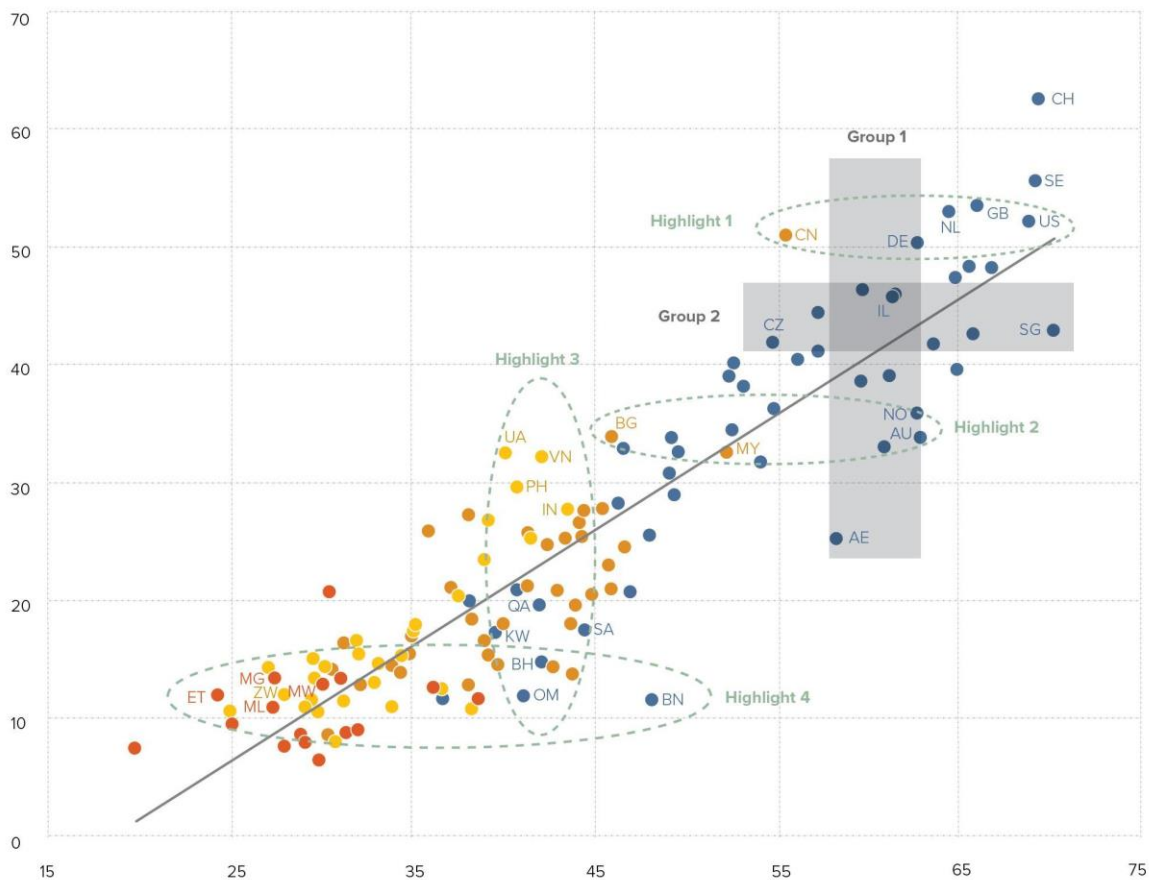
7th Tunisia ranks 7th among the 19 economies in Northern Africa and Western Asia.

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.

Tunisia produces more innovation outputs relative to its level of innovation investments.

Innovation input to output performance, 2020

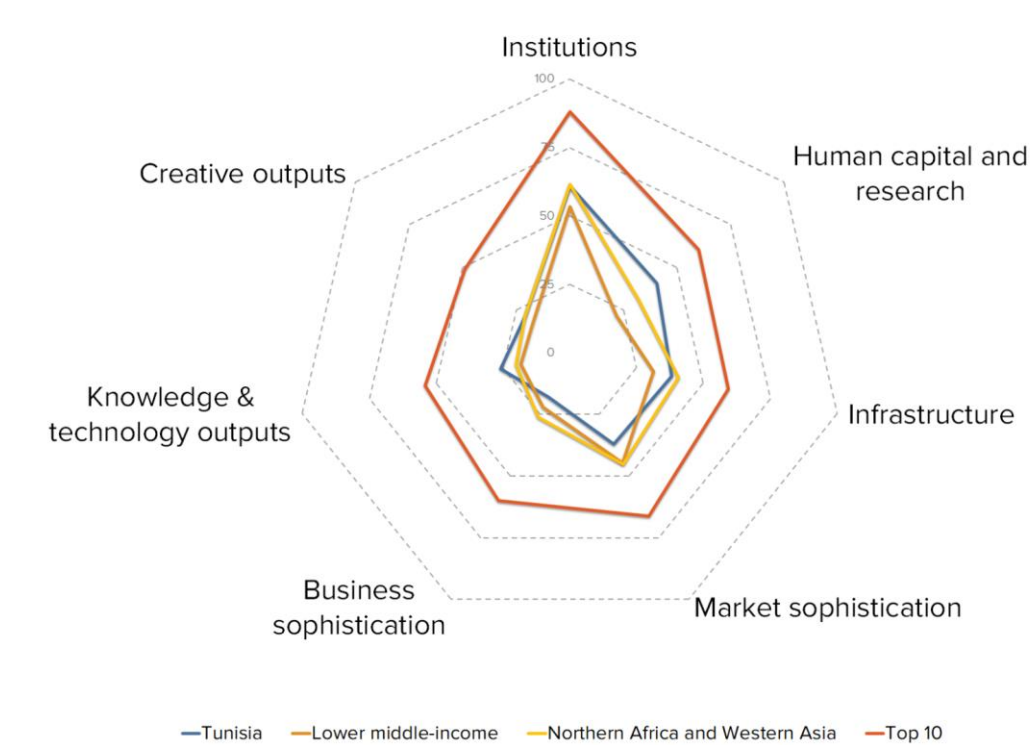


▲ Output score ● High income group ● Lower middle-income group — Fitted values
 ► Input score ● Upper middle-income group ● Low income group

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 TUNISIA AGAINST OTHER LOWER MIDDLE-INCOME GROUP ECONOMIES AND NORTHERN AFRICA AND WESTERN ASIA

Tunisia's scores in the seven GII pillars



Lower middle-income group economies

Tunisia has high scores in five out of the seven GII pillars: Institutions, Human capital & research, Infrastructure, Knowledge & technology outputs and Creative outputs, which are above average for the lower middle-income group.

Conversely, Tunisia scores below average for its income group in two pillars: Market sophistication and Business sophistication.

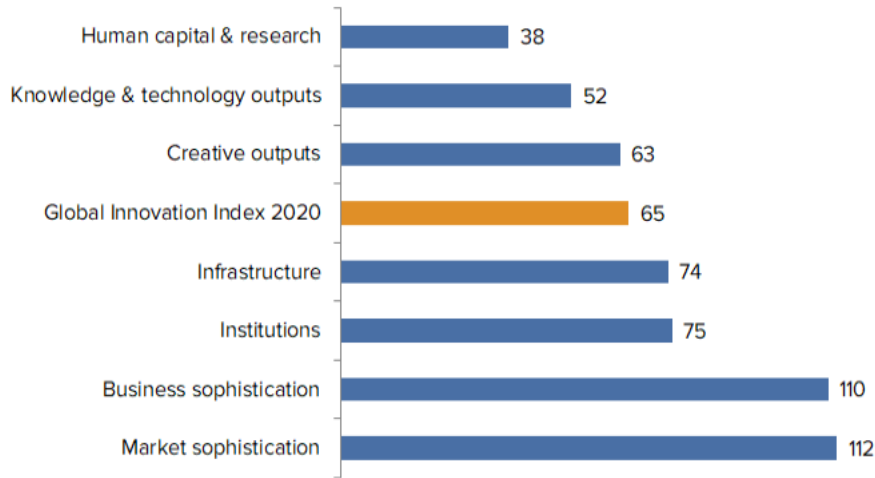
Northern Africa and Western Asia

Compared to other economies in Northern Africa and Western Asia, Tunisia performs:

- above average in three out of the seven GII pillars: Human capital & research, Knowledge & technology outputs and Creative outputs; and
- below average in four out of the seven GII pillars: Institutions, Infrastructure, Market sophistication and Business sophistication.

OVERVIEW OF TUNISIA RANKINGS IN THE SEVEN GII AREAS

Tunisia 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 Tunisia in the GII 2020.

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
1.3.1	Ease of starting a business*	18	2.1.4	PISA scales in reading, maths, & science	74
2	Human capital & research	38	2.3.3	Global R&D companies, top 3, mn US\$	42
2.1	Education	9	2.3.4	QS university ranking, average score top 3*	77
2.1.1	Expenditure on education, % GDP	8	3.2	General infrastructure	117
2.1.2	Government funding/pupil, secondary, % GDP/cap	1	4	Market sophistication	112
2.2	Tertiary education	21	4.2	Investment	117
2.2.2	Graduates in science & engineering, %	2	4.3.1	Applied tariff rate, weighted avg., %	110
6.1	Knowledge creation	38	5	Business sophistication	110
6.1.4	Scientific & technical articles/bn PPP\$ GDP	13	5.2	Innovation linkages	118
6.2.3	Computer software spending, % GDP	34	5.2.2	State of cluster development†	104
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	41	5.2.4	JV–strategic alliance deals/bn PPP\$ GDP	117
6.3.2	High-tech net exports, % total trade	37	5.3	Knowledge absorption	114
6.3.4	FDI net outflows, % GDP	31	5.3.1	Intellectual property payments, % total trade	103
7.2.5	Creative goods exports, % total trade	29	5.3.5	Research talent, % in business enterprise	72
			7.1.4	ICTs & organizational model creation†	105
			7.2.3	Entertainment & Media market/th pop. 15–69	57

STRENGTHS

GII strengths for Tunisia are found in four of the seven GII pillars.

- Institutions (75): exhibits strengths in the indicator Ease of starting a business (18).
- Human capital & research (38): shows strengths in the sub-pillars Education (9) and Tertiary education (21) and in the indicators Expenditure on education (8), Government funding/pupil (1) and Graduates in science & engineering (2).
- Knowledge & technology outputs (52): reveals strengths in the sub-pillar Knowledge creation (38) and in the indicators Scientific & technical articles (13), Computer software spending (34), ISO 9001 quality certificates (41), High-tech net exports (37) and FDI net outflows (31).
- Creative outputs (63): demonstrates strengths in the indicator Creative goods exports (29).

WEAKNESSES

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

- Human capital & research (38): exhibits weaknesses in the indicators PISA scales in reading, maths, & science (74), Global R&D companies (42) and QS university ranking (77).
- Infrastructure (74): displays weaknesses in the sub-pillar General infrastructure (117).
- Market sophistication (112): shows weaknesses in the sub-pillar Investment (117) and in the indicator Applied tariff rate (110).
- Business sophistication (110): demonstrates weaknesses in the sub-pillars Innovation linkages (118) and Knowledge absorption (114) and in the indicators State of cluster development (104), JV–strategic alliance deals (117), Intellectual property payments (103) and Research talent (72).
- Creative outputs (63): reveals weaknesses in the indicators ICTs & organizational model creation (105) and Entertainment & Media market (57).

DATA AVAILABILITY

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

Missing data

Code	Indicator name	Country year	Model year	Source
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2018	World Intellectual Property Organization
7.1.1	Trademarks by origin/bn PPP\$ GDP	n/a	2018	World Intellectual Property Organization
7.1.2	Global brand value, top 5000, % GDP	n/a	2019	Brand Finance
7.2.1	Cultural & creative services exports, % total trade	n/a	2018	World Trade Organization
7.2.4	Printing and other media, % manufacturing	n/a	2017	United Nations Industrial Development Organization

Outdated data

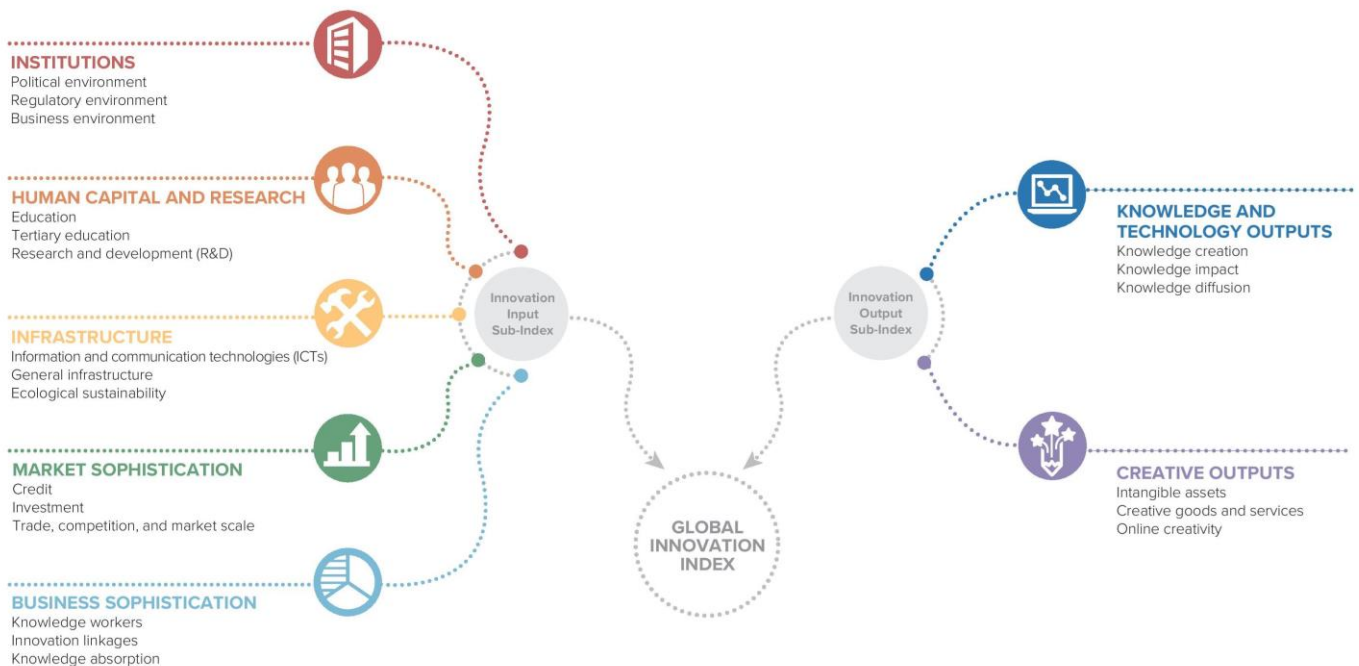
Code	Indicator name	Country year	Model year	Source
2.1.1	Expenditure on education, % GDP	2015	2018	UNESCO Institute for Statistics
2.1.2	Government funding/pupil, secondary, % GDP/cap	2015	2016	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2016	2017	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths, & science	2015	2018	OECD Programme for International Student Assessment (PISA)
2.1.5	Pupil-teacher ratio, secondary	2011	2018	UNESCO Institute for Statistics
4.3.1	Applied tariff rate, weighted avg., %	2016	2018	World Bank
5.1.1	Knowledge-intensive employment, %	2012	2018	International Labour Organization
5.1.2	Firms offering formal training, %	2012	2018	World Bank
5.1.3	GERD performed by business, % GDP	2014	2018	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
5.1.4	GERD financed by business, %	2015	2017	UNESCO Institute for Statistics; Eurostat; OECD – Main Science and Technology Indicators
5.1.5	Females employed w/advanced degrees, %	2015	2018	International Labour Organization
5.2.3	GERD financed by abroad, % GDP	2015	2017	UNESCO Institute for Statistics
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
6.2.5	High- and 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
7.2.2	National feature films/mn pop. 15–69	2015	2017	UNESCO Institute for Statistics
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 13th 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.

