Global Innovation Index 2021

JORDAN

81st Jordan ranks 81st among the 132 economies featured in the GII 2021.

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 Jordan 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 Jordan in the GII 2021 is between ranks 77 and 83.

Rankings for Jordan (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	81	79	81
2020	81	77	81
2019	86	91	71

- Jordan performs better in innovation inputs than innovation outputs in 2021.
- This year Jordan ranks 79th in innovation inputs, lower than last year but higher than 2019.
- As for innovation outputs, Jordan ranks 81st. This position is the same as last year but lower than 2019.

25th Jordan ranks 25th among the 34 upper middle-income group economies.

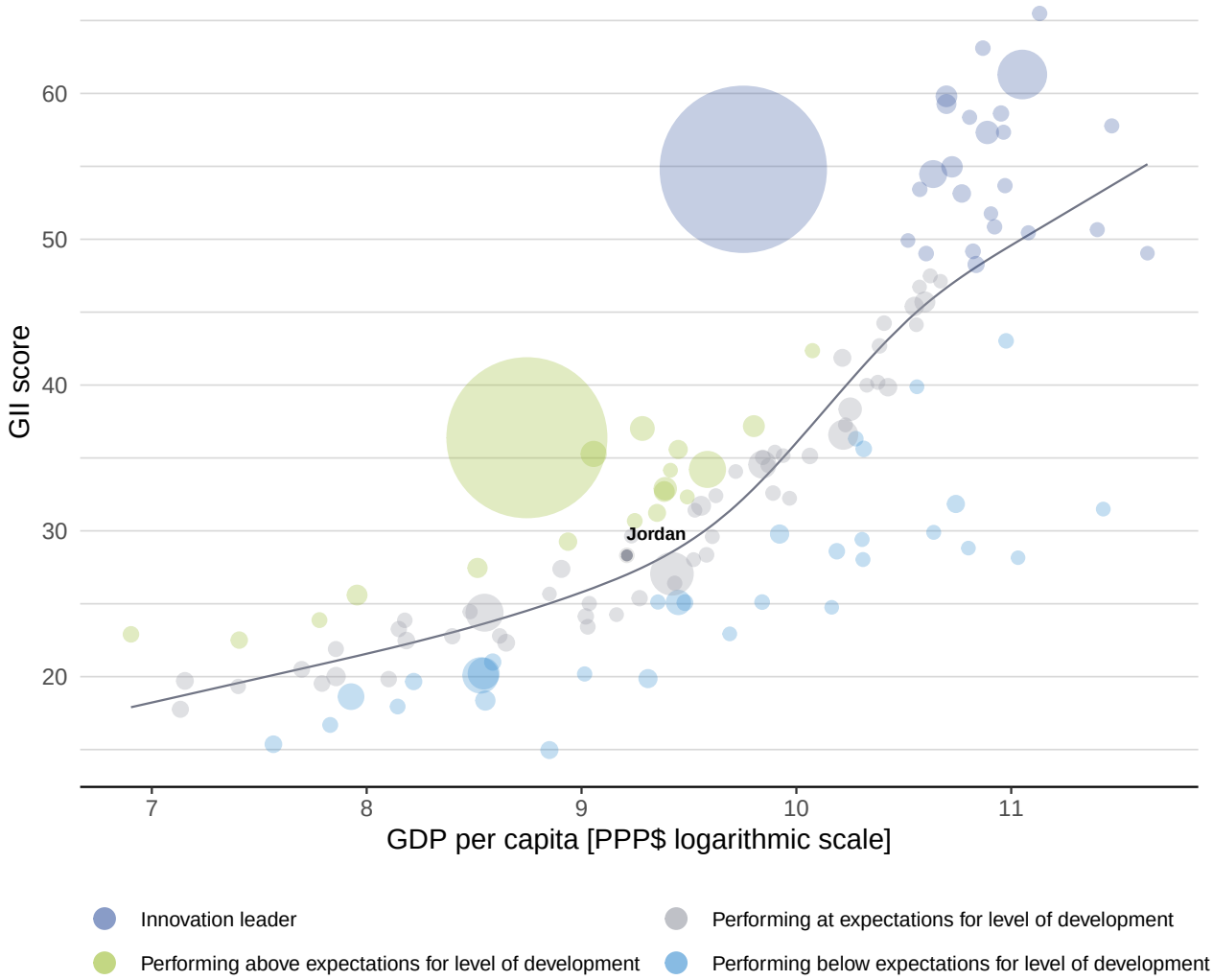
15th Jordan ranks 15th among the 19 economies in Northern Africa and Western Asia.

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's performance is at expectations for its level of development.

The positive relationship between innovation and development

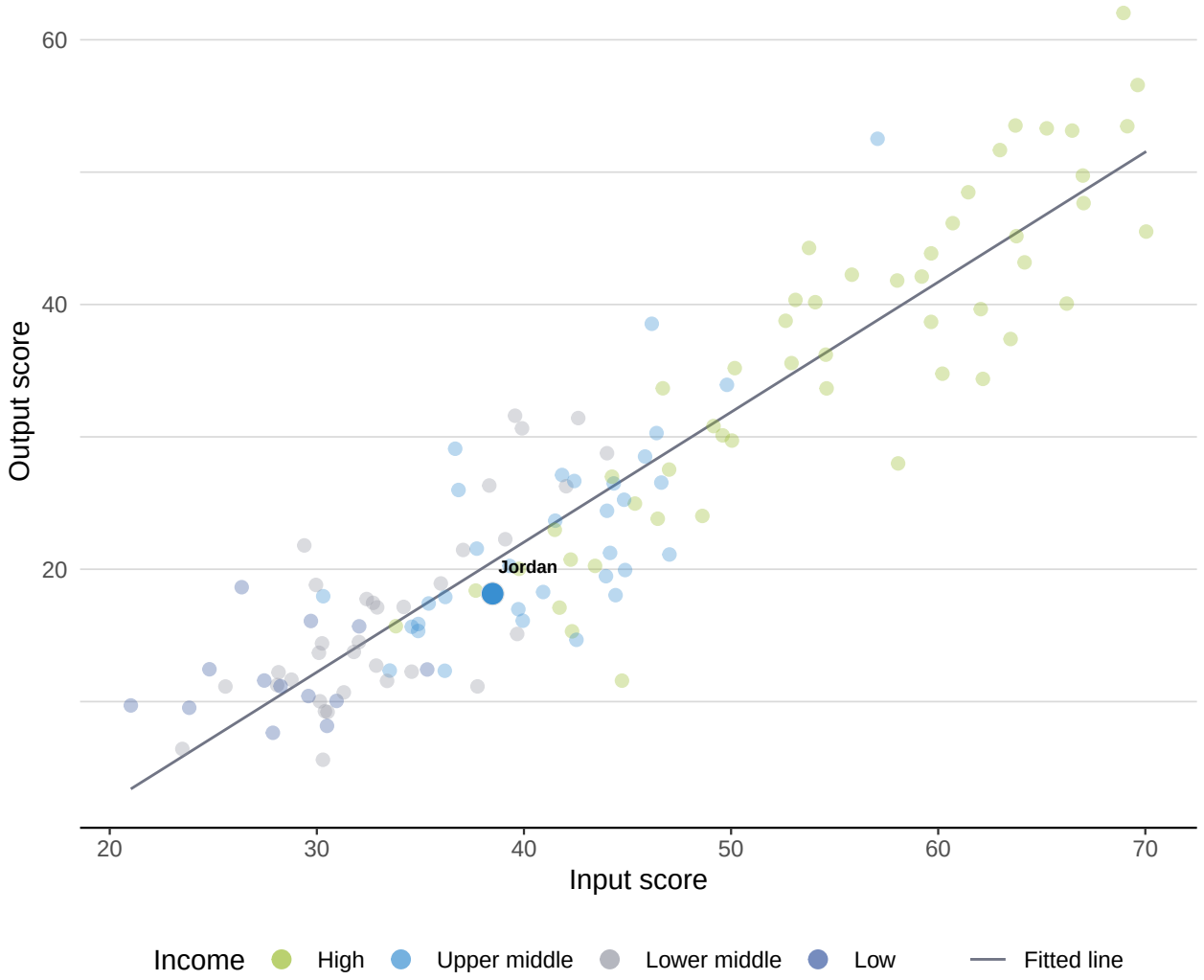


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

Innovation input to output performance



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

The seven GII pillar scores for Jordan

Upper middle-income group economies

Jordan performs above the upper middle-income group average in two pillars, namely: Institutions; and, Market sophistication.

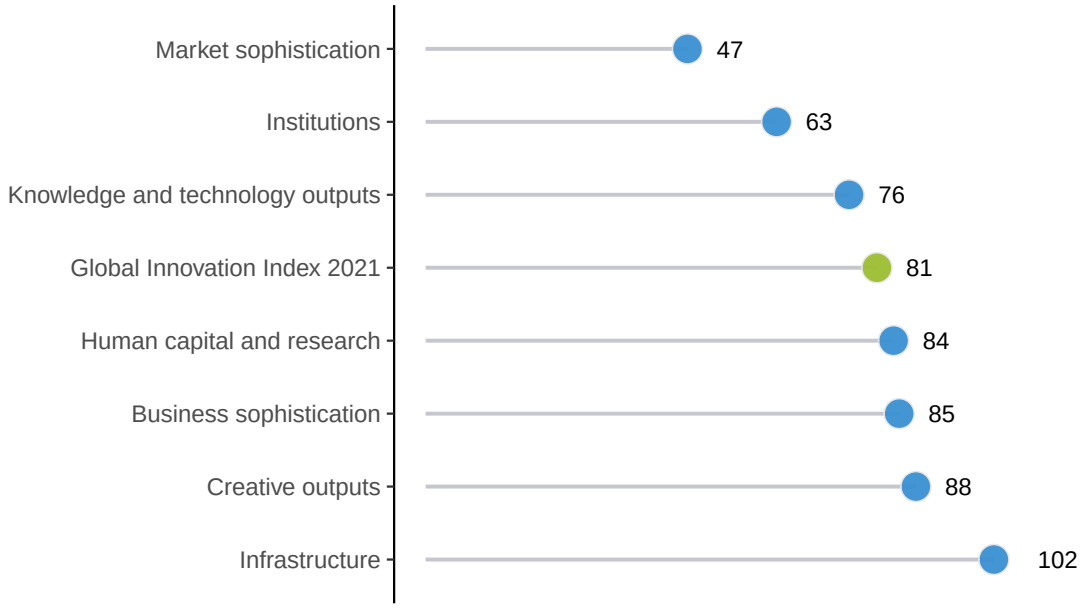
Northern Africa and Western Asia

Jordan performs above the regional average in two pillars, namely: Institutions; and, Market sophistication.

OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Jordan performs best in Market sophistication and its weakest performance is in Infrastructure.

The seven GII pillar ranks for Jordan



Note: The highest possible ranking in each pillar is one.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the strengths and weaknesses of Jordan in the GII 2021.

Strengths and weaknesses for Jordan

Strengths			Weaknesses		
Code	**Indicator name**	**Rank**	**Code**	**Indicator name**	**Rank**
1.2	Regulatory environment	39	2.1.1	Expenditure on education, % GDP	97
1.2.3	Cost of redudancy dismissal	1	2.1.3	School life expectancy, years	103
2.2.2	Graduates in science and engineering, %	31	2.3.3	Global corporate R&D investors, top 3, mn US$	41
2.2.3	Tertiary inbound mobility, %	13	3.1.3	Government's online service	121
4.1	Credit	25	3.1.4	E-participation	120
4.1.1	Ease of getting credit	4	5.1.2	Firms offering formal training, %	87
4.1.2	Domestic credit to private sector, % GDP	40	5.3.3	ICT services imports, % total trade	126
4.2.4	Venture capital recipients, deals/bn PPP$ GDP	30	6.3.4	ICT services exports, % total trade	129
4.3.2	Domestic industry diversification	29	7.2.1	Cultural and creative services exports, % total trade	108
5.2.2	State of cluster development and depth	30	7.2.3	Entertainment and media market/th pop. 15–69	54
6.1.4	Scientific and technical articles/bn PPP$ GDP	30			
7.2.4	Printing and other media, % manufacturing	9			

Jordan

GII 2021 rank
81

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$	GII 2020 rank
81	**79**	**Upper middle**	**NAWA**	**10.2**	**102.2**	**10,007**	**81**

		Score/ Value	Rank	
Institutions		**64.4**	**63**	
1.1	**Political environment**	**57.3**	**69**	
1.1.1	Political and operational stability*	66.1	74	
1.1.2	Government effectiveness*	52.9	65	
1.2	**Regulatory environment**	**73.7**	**39**	● ◆
1.2.1	Regulatory quality*	44.4	68	
1.2.2	Rule of law*	50.5	56	
1.2.3	Cost of redundancy dismissal	8.0	1	● ◆
1.3	**Business environment**	**62.1**	**97**	
1.3.1	Ease of starting a business*	84.5	92	
1.3.2	Ease of resolving insolvency*	39.7	98	
Human capital and research		**26.2**	**84**	
2.1	**Education**	**32.9**	**110**	◇
2.1.1	Expenditure on education, % GDP	3.1	97	○
2.1.2	Government funding/pupil, secondary, % GDP/cap	15.5	72	
2.1.3	School life expectancy, years	10.6	103	○ ◇
2.1.4	PISA scales in reading, maths and science	416.0	58	
2.1.5	Pupil-teacher ratio, secondary	14.4	67	
2.2	**Tertiary education**	**36.3**	**54**	
2.2.1	Tertiary enrolment, % gross	33.1	81	
2.2.2	Graduates in science and engineering, %	26.4	31	●
2.2.3	Tertiary inbound mobility, %	14.0	13	● ◆
2.3	**Research and development (R&D)**	**9.5**	**60**	
2.3.1	Researchers, FTE/mn pop.	596.0	62	
2.3.2	Gross expenditure on R&D, % GDP	0.7	51	
2.3.3	Global corporate R&D investors, top 3, mn US$	0.0	41	○ ◇
2.3.4	QS university ranking, top 3*	17.0	56	
Infrastructure		**30.1**	**102**	◇
3.1	**Information and communication technologies (ICTs)**	**41.4**	**106**	◇
3.1.1	ICT access*	45.9	97	◇
3.1.2	ICT use*	50.4	80	
3.1.3	Government's online service*	35.9	121	○ ◇
3.1.4	E-participation*	33.3	120	○ ◇
3.2	**General infrastructure**	**20.5**	**108**	
3.2.1	Electricity output, GWh/mn pop.	2,057.2	80	
3.2.2	Logistics performance*	29.8	83	
3.2.3	Gross capital formation, % GDP	19.8	89	
3.3	**Ecological sustainability**	**28.5**	**65**	
3.3.1	GDP/unit of energy use	9.8	71	
3.3.2	Environmental performance*	53.4	46	◆
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	1.2	62	
Market sophistication		**49.7**	**47**	
4.1	**Credit**	**51.7**	**25**	● ◆
4.1.1	Ease of getting credit*	95.0	4	● ◆
4.1.2	Domestic credit to private sector, % GDP	76.9	40	●
4.1.3	Microfinance gross loans, % GDP	0.4	40	
4.2	**Investment**	**26.3**	**76**	
4.2.1	Ease of protecting minority investors*	50.0	92	
4.2.2	Market capitalization, % GDP	52.7	34	
4.2.3	Venture capital investors, deals/bn PPP$ GDP	0.1	30	◆
4.2.4	Venture capital recipients, deals/bn PPP$ GDP	0.0	30	● ◆
4.3	**Trade, diversification, and market scale**	**71.2**	**58**	
4.3.1	Applied tariff rate, weighted avg., %	4.4	79	
4.3.2	Domestic industry diversification	94.8	29	●
4.3.3	Domestic market scale, bn PPP$	102.2	83	

		Score/ Value	Rank	
Business sophistication		**21.9**	**85**	
5.1	**Knowledge workers**	**23.1**	**[92]**	
5.1.1	Knowledge-intensive employment, %	21.4	75	
5.1.2	Firms offering formal training, %	16.9	87	○ ◇
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, %	7.6	82	
5.2	**Innovation linkages**	**26.5**	**42**	◆
5.2.1	University-industry R&D collaboration†	46.8	50	
5.2.2	State of cluster development and depth†	57.6	30	● ◆
5.2.3	GERD financed by abroad, % GDP	n/a	n/a	
5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	0.0	47	
5.2.5	Patent families/bn PPP$ GDP	0.0	72	
5.3	**Knowledge absorption**	**16.2**	**112**	◇
5.3.1	Intellectual property payments, % total trade	0.1	100	
5.3.2	High-tech imports, % total trade	7.0	79	
5.3.3	ICT services imports, % total trade	0.2	126	○ ◇
5.3.4	FDI net inflows, % GDP	3.0	49	
5.3.5	Research talent, % in businesses	n/a	n/a	
Knowledge and technology outputs		**18.0**	**76**	
6.1	**Knowledge creation**	**16.6**	**63**	
6.1.1	Patents by origin/bn PPP$ GDP	0.2	98	
6.1.2	PCT patents by origin/bn PPP$ GDP	0.2	50	
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	n/a	
6.1.4	Scientific and technical articles/bn PPP$ GDP	29.2	30	● ◆
6.1.5	Citable documents H-index	10.0	78	
6.2	**Knowledge impact**	**26.8**	**78**	
6.2.1	Labor productivity growth, %	–0.8	79	
6.2.2	New businesses/th pop. 15–64	0.5	95	
6.2.3	Software spending, % GDP	0.3	42	
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	5.6	53	
6.2.5	High-tech manufacturing, %	22.1	57	
6.3	**Knowledge diffusion**	**10.7**	**93**	
6.3.1	Intellectual property receipts, % total trade	0.1	52	
6.3.2	Production and export complexity	47.8	51	
6.3.3	High-tech exports, % total trade	1.4	66	
6.3.4	ICT services exports, % total trade	0.1	129	○
Creative outputs		**18.3**	**88**	
7.1	**Intangible assets**	**22.0**	**92**	
7.1.1	Trademarks by origin/bn PPP$ GDP	25.7	81	
7.1.2	Global brand value, top 5,000, % GDP	7.9	64	
7.1.3	Industrial designs by origin/bn PPP$ GDP	0.7	80	
7.1.4	ICTs and organizational model creation†	52.6	68	
7.2	**Creative goods and services**	**13.8**	**68**	
7.2.1	Cultural and creative services exports, % total trade	0.0	108	○
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	1.8	54	○ ◇
7.2.4	Printing and other media, % manufacturing	2.4	9	● ◆
7.2.5	Creative goods exports, % total trade	0.9	46	
7.3	**Online creativity**	**15.4**	**73**	
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	4.8	54	
7.3.2	Country-code TLDs/th pop. 15–69	0.2	108	
7.3.3	Wikipedia edits/mn pop. 15–69	45.5	74	
7.3.4	Mobile app creation/bn PPP$ GDP	11.6	44	

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 Appendix IV for details, including the year of the data, at http://globalinnovationindex.org. 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 data that are either missing or outdated for Jordan.

Missing data for Jordan

Code	Indicator name	Economy year	Model year	Source
5.1.3	GERD performed by business, % GDP	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.4	GERD financed by business, %	n/a	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.2.3	GERD financed by abroad, % GDP	n/a	2018	UNESCO Institute for Statistics
5.3.5	Research talent, % in businesses	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	2019	World Intellectual Property Organization
7.2.2	National feature films/mn pop. 15–69	n/a	2017	UNESCO Institute for Statistics

Outdated data for Jordan

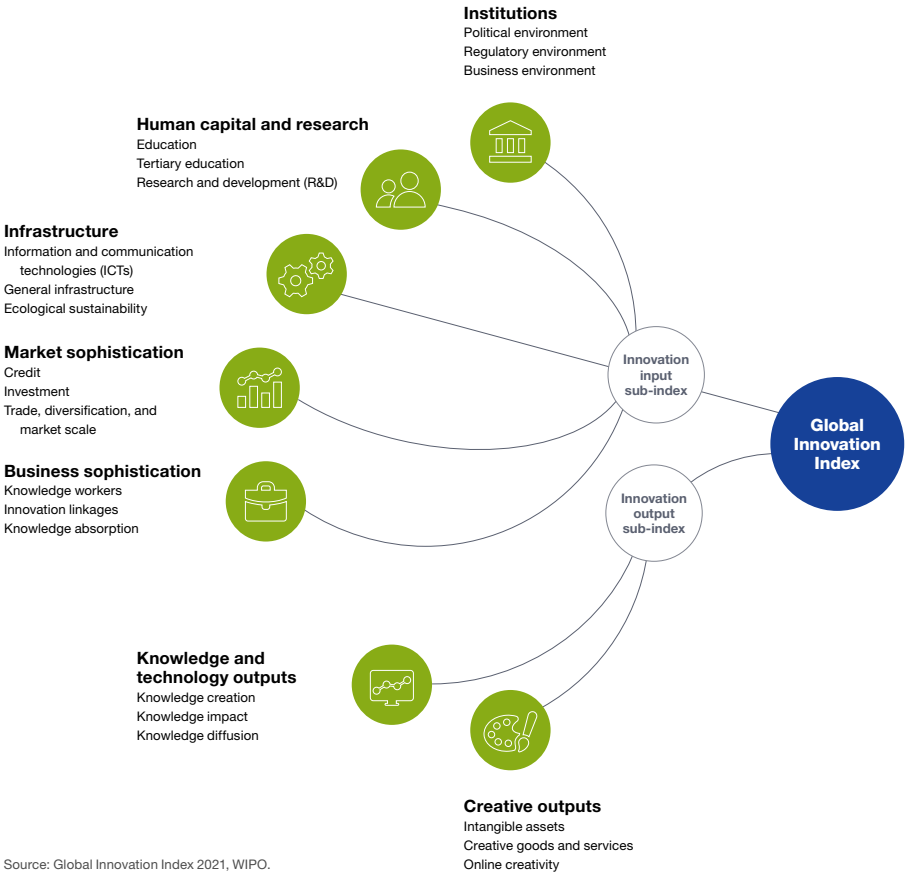
Code	Indicator name	Economy year	Model year	Source
2.2.2	Graduates in science and engineering, %	2015	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.1	Researchers, FTE/mn pop.	2017	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2016	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
4.3.1	Applied tariff rate, weighted avg., %	2017	2019	World Bank
7.2.4	Printing and other media, % manufacturing	2016	2018	United Nations Industrial Development Organization

Code	Indicator name	Economy year	Model year	Source
7.2.5	Creative goods exports, % total trade	2018	2019	United Nations, COMTRADE

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.



Source: Global Innovation Index 2021, WIPO.

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.