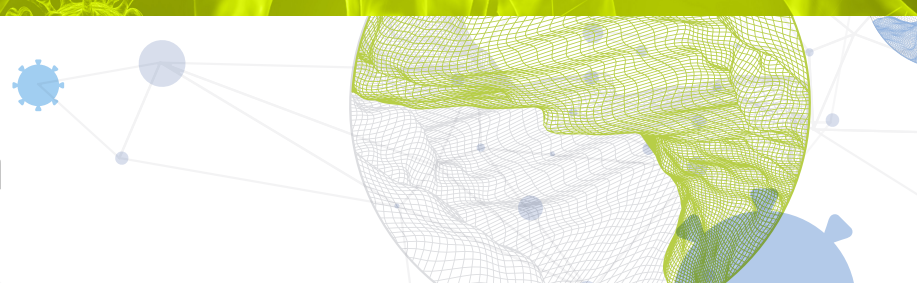




Global Innovation Index 2021



KUWAIT

72nd Kuwait ranks 72nd 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 Kuwait 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 Kuwait in the GII 2021 is between ranks 72 and 78.

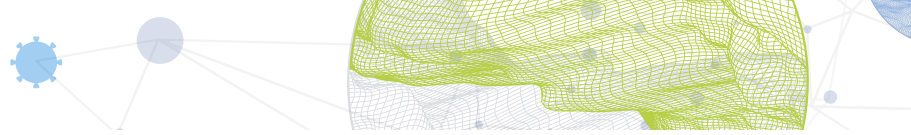
Rankings for Kuwait (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	72	73	73
2020	78	73	79
2019	60	75	56

- Kuwait performs equally in innovation inputs and outputs in 2021.
- This year Kuwait ranks 73rd in innovation inputs, the same as last year but higher than 2019.
- As for innovation outputs, Kuwait ranks 73rd. This position is higher than last year but lower than 2019.

46th Kuwait ranks 46th among the 51 high-income group economies.

10th Kuwait ranks 10th among the 19 economies in Northern Africa and Western Asia.

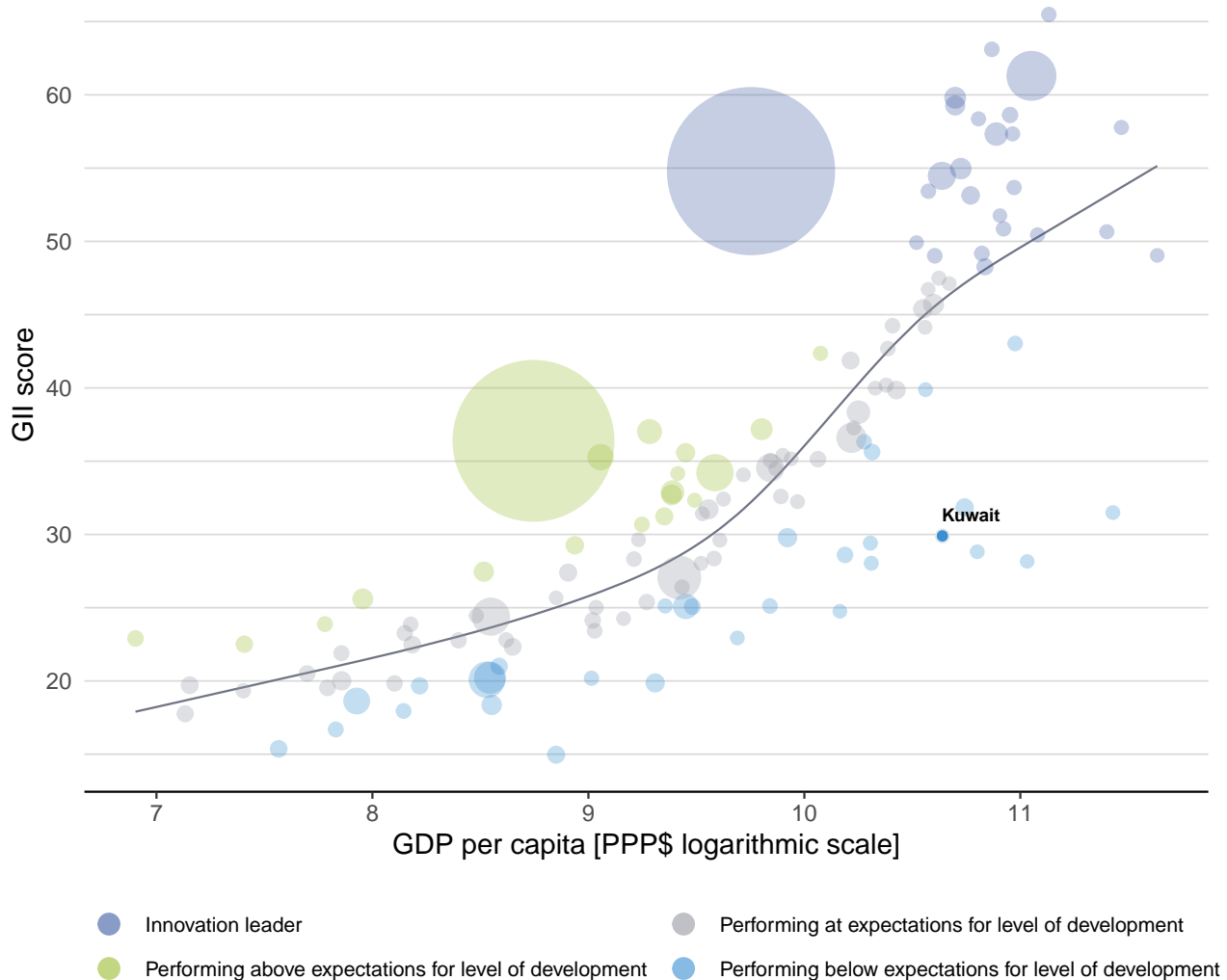


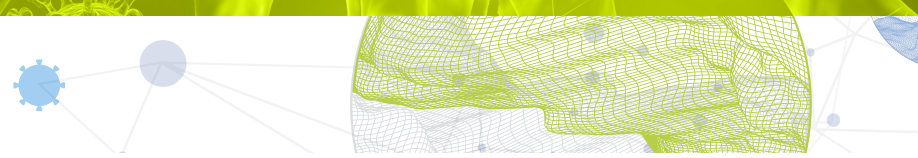
EXPECTED VS. OBSERVED INNOVATION PERFORMANCE

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, Kuwait's performance is below expectations for its level of development.

The positive relationship between innovation and development



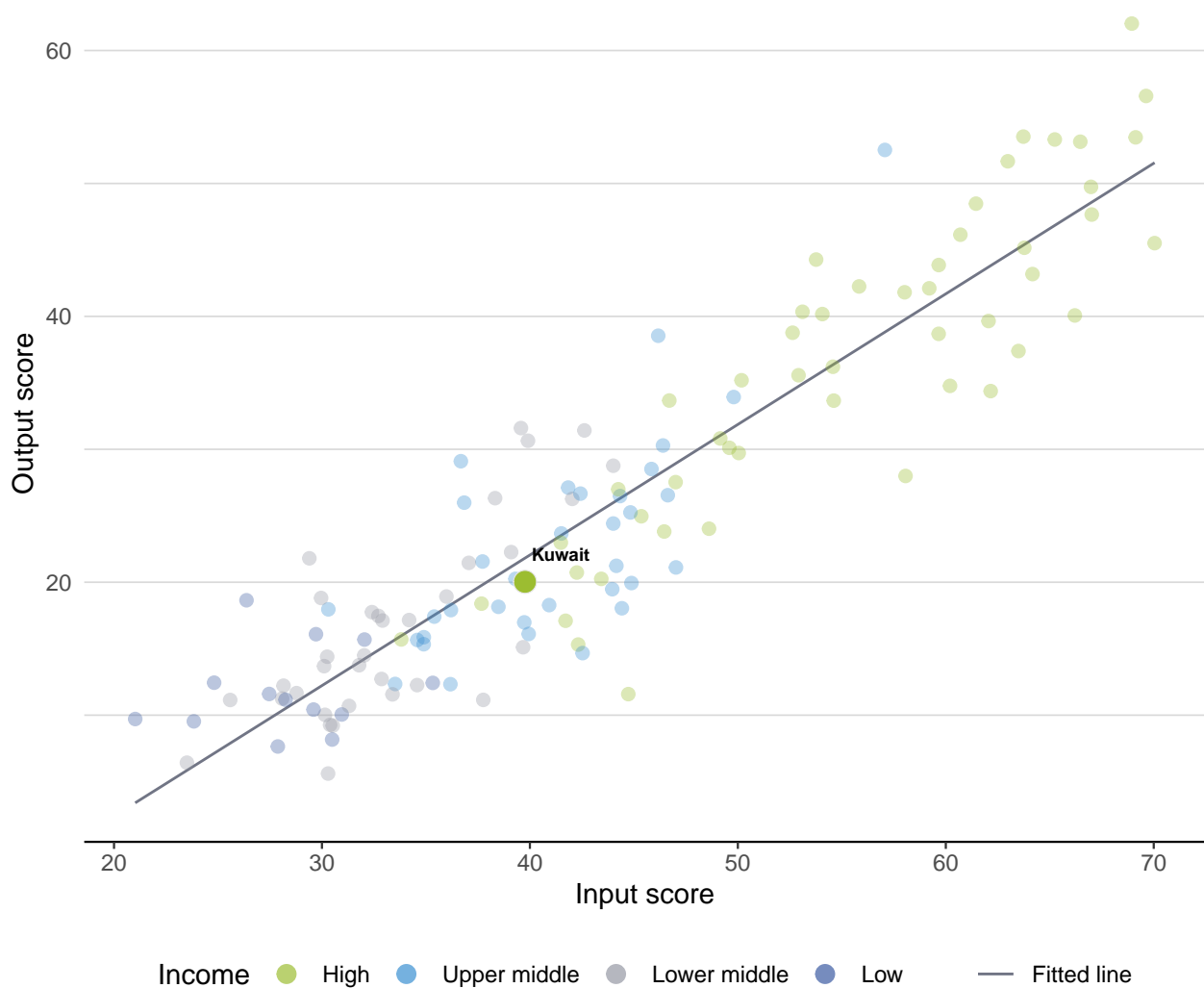


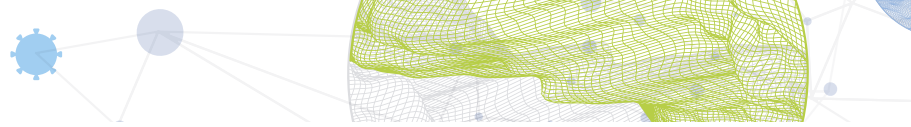
EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

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

Innovation input to output performance





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

The seven GII pillar scores for Kuwait

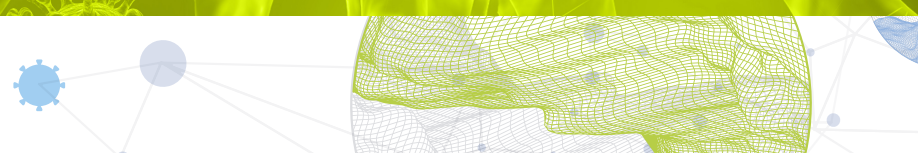


High-income group economies

Kuwait performs below the high-income group average in all GII pillars.

Northern Africa and Western Asia

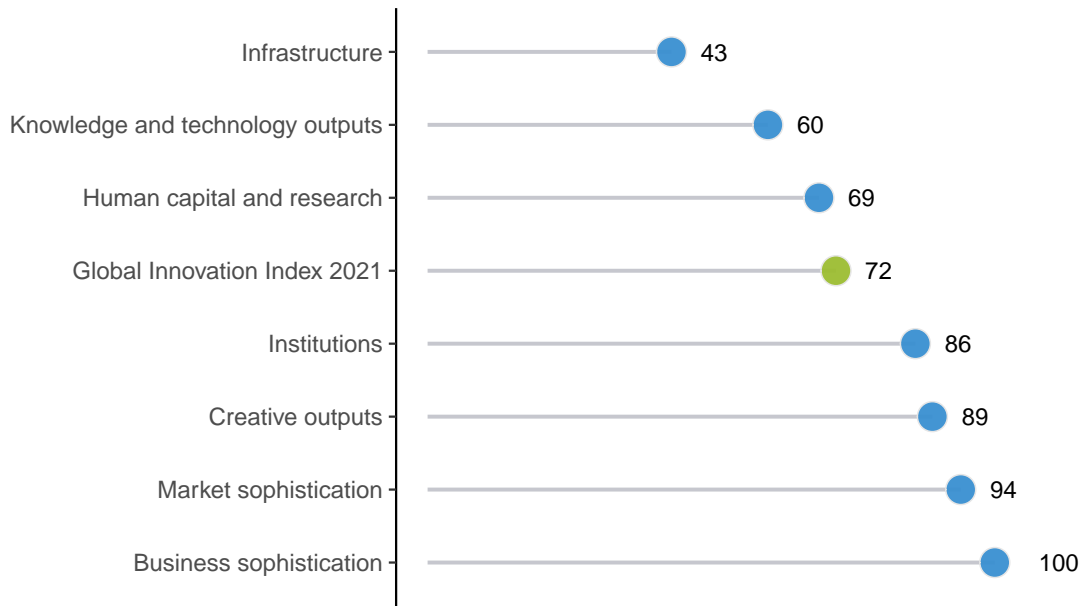
Kuwait performs above the regional average in two pillars, namely: Infrastructure; and, Knowledge and technology outputs.



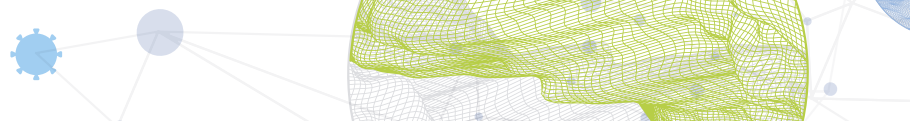
OVERVIEW OF RANKINGS IN THE SEVEN GII 2021 AREAS

Kuwait performs best in Infrastructure and its weakest performance is in Business sophistication.

The seven GII pillar ranks for Kuwait



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 Kuwait in the GII 2021.

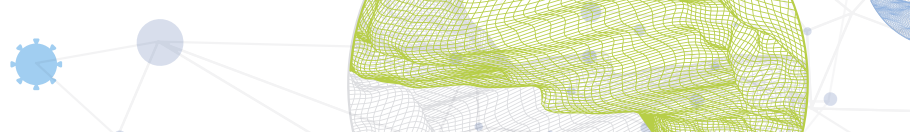
Strengths and weaknesses for Kuwait

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
2.1.5	Pupil-teacher ratio, secondary	4	1.2.3	Cost of redundancy dismissal	116
3.1	Information and communication technologies (ICTs)	31	2.3.2	Gross expenditure on R&D, % GDP	111
3.1.1	ICT access	35	2.3.3	Global corporate R&D investors, top 3, mn US\$	41
3.1.3	Government's online service	31	4.2.4	Venture capital recipients, deals/bn PPP\$ GDP	84
3.1.4	E-participation	18	4.3.2	Domestic industry diversification	105
3.2	General infrastructure	27	5.1.4	GERD financed by business, %	94
3.2.1	Electricity output, GWh/mn pop.	4	5.3	Knowledge absorption	124
4.1.2	Domestic credit to private sector, % GDP	30	5.3.1	Intellectual property payments, % total trade	125
5.2.2	State of cluster development and depth	37	5.3.4	FDI net inflows, % GDP	122
6.2.2	New businesses/th pop. 15–64	27	6.1.1	Patents by origin/bn PPP\$ GDP	116
6.2.3	Software spending, % GDP	26	7.2.4	Printing and other media, % manufacturing	97
6.3	Knowledge diffusion	31			
6.3.4	ICT services exports, % total trade	6			

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$	GII 2020 rank
73	73	High	NAWA	4.3	203.8	41,735	78

	Score/Value	Rank		Score/Value	Rank
 Institutions	57.7	86	 Business sophistication	18.7	100
1.1 Political environment	54.9	78	5.1 Knowledge workers	17.4	[105]
1.1.1 Political and operational stability*	62.5	89	5.1.1 Knowledge-intensive employment, %	22.7	70
1.1.2 Government effectiveness*	51.1	73	5.1.2 Firms offering formal training, %	n/a	n/a
1.2 Regulatory environment	54.5	97	5.1.3 GERD performed by business, % GDP	n/a	n/a
1.2.1 Regulatory quality*	45.2	67	5.1.4 GERD financed by business, %	1.0	94
1.2.2 Rule of law*	52.4	53	5.1.5 Females employed w/advanced degrees, %	n/a	n/a
1.2.3 Cost of redundancy dismissal	28.1	116	5.2 Innovation linkages	25.1	45
1.3 Business environment	63.8	90	5.2.1 University-industry R&D collaboration†	42.2	69
1.3.1 Ease of starting a business*	88.4	67	5.2.2 State of cluster development and depth†	54.9	37
1.3.2 Ease of resolving insolvency*	39.2	101	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	45
			5.2.5 Patent families/bn PPP\$ GDP	0.0	93
 Human capital and research	31.4	[69]	5.3 Knowledge absorption	13.7	124
2.1 Education	52.9	[57]	5.3.1 Intellectual property payments, % total trade	0.0	125
2.1.1 Expenditure on education, % GDP	n/a	n/a	5.3.2 High-tech imports, % total trade	5.5	105
2.1.2 Government funding/pupil, secondary, % GDP/cap	17.3	64	5.3.3 ICT services imports, % total trade	0.6	96
2.1.3 School life expectancy, years	14.7	59	5.3.4 FDI net inflows, % GDP	0.2	122
2.1.4 PISA scales in reading, maths and science	n/a	n/a	5.3.5 Research talent, % in businesses	n/a	n/a
2.1.5 Pupil-teacher ratio, secondary	7.6	4	 Knowledge and technology outputs	22.1	60
2.2 Tertiary education	38.4	[47]	6.1 Knowledge creation	5.8	108
2.2.1 Tertiary enrolment, % gross	55.3	54	6.1.1 Patents by origin/bn PPP\$ GDP	0.1	116
2.2.2 Graduates in science and engineering, %	n/a	n/a	6.1.2 PCT patents by origin/bn PPP\$ GDP	0.1	72
2.2.3 Tertiary inbound mobility, %	n/a	n/a	6.1.3 Utility models by origin/bn PPP\$ GDP	n/a	n/a
2.3 Research and development (R&D)	2.8	89	6.1.4 Scientific and technical articles/bn PPP\$ GDP	6.9	103
2.3.1 Researchers, FTE/mn pop.	513.9	67	6.1.5 Citable documents H-index	9.1	82
2.3.2 Gross expenditure on R&D, % GDP	0.1	111	6.2 Knowledge impact	29.0	67
2.3.3 Global corporate R&D investors, top 3, mn US\$	0.0	41	6.2.1 Labor productivity growth, %	-1.1	86
2.3.4 QS university ranking, top 3*	4.4	71	6.2.2 New businesses/th pop. 15-64	5.9	27
			6.2.3 Software spending, % GDP	0.4	26
 Infrastructure	49.6	43	6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	2.7	79
3.1 Information and communication technologies (ICTs)	80.4	31	6.2.5 High-tech manufacturing, %	23.9	53
3.1.1 ICT access*	79.3	35	6.3 Knowledge diffusion	31.4	31
3.1.2 ICT use*	67.6	53	6.3.1 Intellectual property receipts, % total trade	n/a	n/a
3.1.3 Government's online service*	84.1	31	6.3.2 Production and export complexity	27.6	99
3.1.4 E-participation*	90.5	18	6.3.3 High-tech exports, % total trade	0.3	103
3.2 General infrastructure	41.4	27	6.3.4 ICT services exports, % total trade	7.4	6
3.2.1 Electricity output, GWh/mn pop.	17,912.3	4	 Creative outputs	18.0	89
3.2.2 Logistics performance*	37.8	62	7.1 Intangible assets	26.8	80
3.2.3 Gross capital formation, % GDP	25.1	46	7.1.1 Trademarks by origin/bn PPP\$ GDP	16.6	98
3.3 Ecological sustainability	26.9	74	7.1.2 Global brand value, top 5,000, % GDP	53.3	34
3.3.1 GDP/unit of energy use	8.4	87	7.1.3 Industrial designs by origin/bn PPP\$ GDP	n/a	n/a
3.3.2 Environmental performance*	53.6	45	7.1.4 ICTs and organizational model creation†	50.9	79
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	1.2	64	7.2 Creative goods and services	4.7	107
			7.2.1 Cultural and creative services exports, % total trade	n/a	n/a
 Market sophistication	41.4	94	7.2.2 National feature films/mn pop. 15-69	1.9	70
4.1 Credit	40.7	66	7.2.3 Entertainment and media market/th pop. 15-69	10.6	36
4.1.1 Ease of getting credit*	45.0	101	7.2.4 Printing and other media, % manufacturing	0.3	97
4.1.2 Domestic credit to private sector, % GDP	89.3	30	7.2.5 Creative goods exports, % total trade	0.1	88
4.1.3 Microfinance gross loans, % GDP	n/a	n/a	7.3 Online creativity	13.6	78
4.2 Investment	26.2	78	7.3.1 Generic top-level domains (TLDs)/th pop. 15-69	7.6	44
4.2.1 Ease of protecting minority investors*	66.0	50	7.3.2 Country-code TLDs/th pop. 15-69	0.3	105
4.2.2 Market capitalization, % GDP	n/a	n/a	7.3.3 Wikipedia edits/mn pop. 15-69	46.3	72
4.2.3 Venture capital investors, deals/bn PPP\$ GDP	0.0	41	7.3.4 Mobile app creation/bn PPP\$ GDP	0.8	74
4.2.4 Venture capital recipients, deals/bn PPP\$ GDP	0.0	84			
4.3 Trade, diversification, and market scale	57.4	104			
4.3.1 Applied tariff rate, weighted avg., %	4.5	80			
4.3.2 Domestic industry diversification	53.6	105			
4.3.3 Domestic market scale, bn PPP\$	203.8	64			

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.

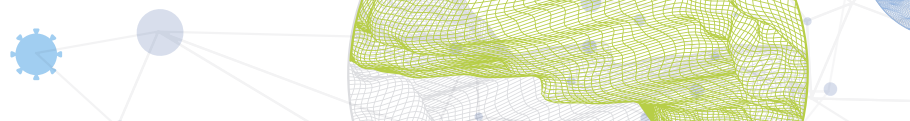


DATA AVAILABILITY

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

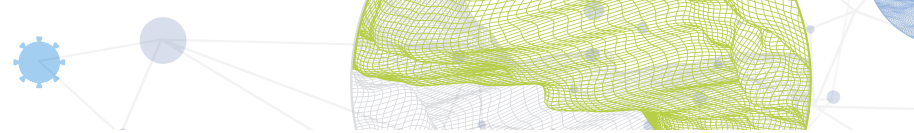
Missing data for Kuwait

Code	Indicator name	Economy year	Model year	Source
2.1.1	Expenditure on education, % GDP	n/a	2017	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD Programme for International Student Assessment (PISA)
2.2.2	Graduates in science and engineering, %	n/a	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.2.3	Tertiary inbound mobility, %	n/a	2018	UNESCO Institute for Statistics
4.1.3	Microfinance gross loans, % GDP	n/a	2018	Microfinance Information Exchange
4.2.2	Market capitalization, % GDP	n/a	2019	World Federation of Exchanges
5.1.2	Firms offering formal training, %	n/a	2019	World Bank
5.1.3	GERD performed by business, % GDP	n/a	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.1.5	Females employed w/advanced degrees, %	n/a	2019	International Labour Organization
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
6.3.1	Intellectual property receipts, % total trade	n/a	2019	World Trade Organization
7.1.3	Industrial designs by origin/bn PPP\$ GDP	n/a	2019	World Intellectual Property Organization
7.2.1	Cultural and creative services exports, % total trade	n/a	2019	World Trade Organization



Outdated data for Kuwait

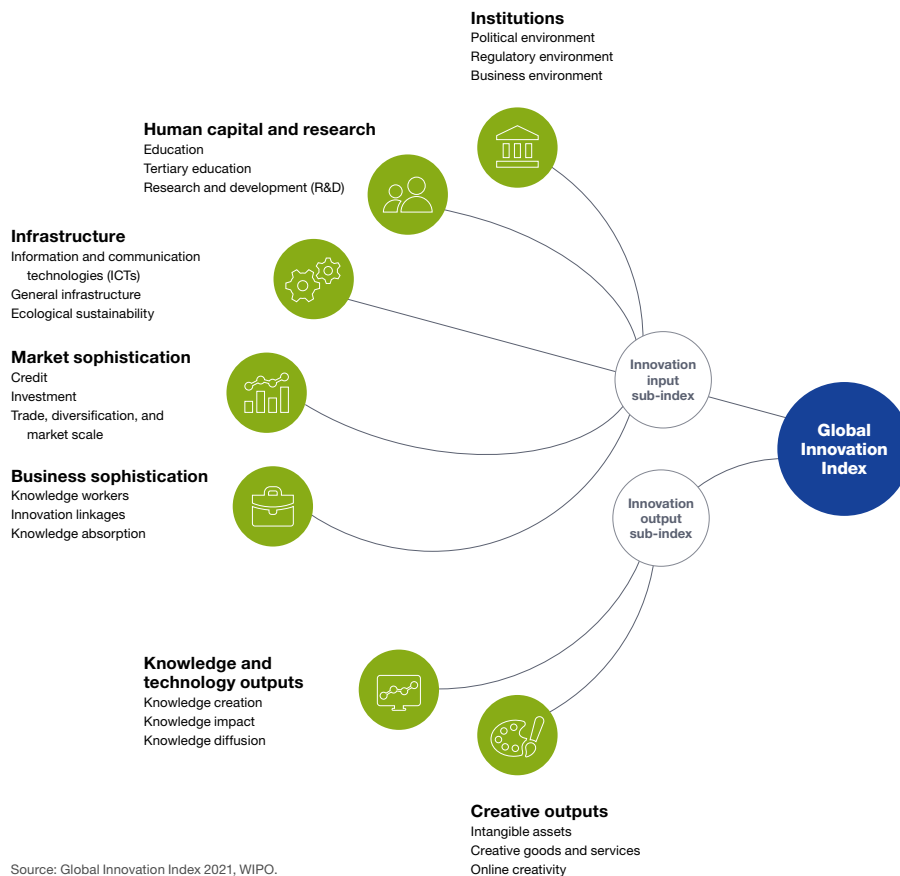
Code	Indicator name	Economy year	Model year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	2014	2017	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2015	2018	UNESCO Institute for Statistics
2.1.5	Pupil-teacher ratio, secondary	2015	2019	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2018	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
2.3.2	Gross expenditure on R&D, % GDP	2018	2019	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
4.1.2	Domestic credit to private sector, % GDP	2018	2019	International Monetary Fund
5.1.1	Knowledge-intensive employment, %	2016	2019	International Labour Organization
5.1.4	GERD financed by business, %	2014	2018	UNESCO Institute for Statistics; Eurostat; OECD - Main Science and Technology Indicators
5.3.1	Intellectual property payments, % total trade	2014	2019	World Trade Organization
6.1.1	Patents by origin/bn PPP\$ GDP	2018	2019	World Intellectual Property Organization
7.1.1	Trademarks by origin/bn PPP\$ GDP	2018	2019	World Intellectual Property Organization



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.