



KUWAIT

62nd Kuwait ranks 62nd among the 132 economies featured in the GII 2022.

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 2022 is between ranks 62 and 78.

Rankings for Kuwait (2020–2022)

GIIYR	GII	Innovation inputs	Innovation outputs
2020	78	73	79
2021	72	73	73
2022	62	66	66

- Kuwait performs equally in innovation inputs and outputs in 2022.
- This year Kuwait ranks 66th in innovation inputs, higher than both 2021 and 2020.
- As for innovation outputs, Kuwait ranks 66th. This position is higher than both 2021 and 2020.

43rd Kuwait ranks 43rd among the 48 high-income group economies.

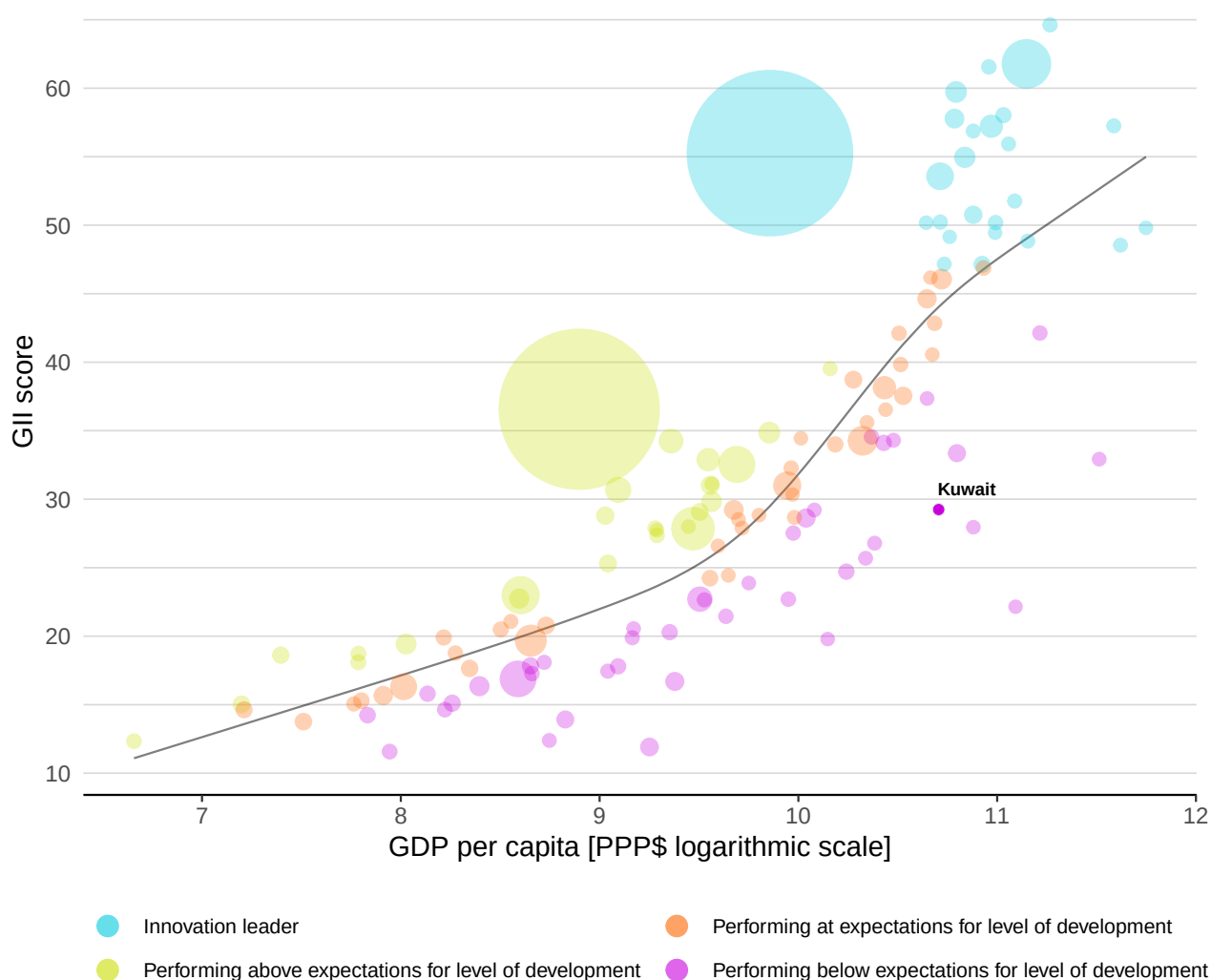
7th Kuwait ranks 7th among the 19 economies in Northern Africa and Western Asia.

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

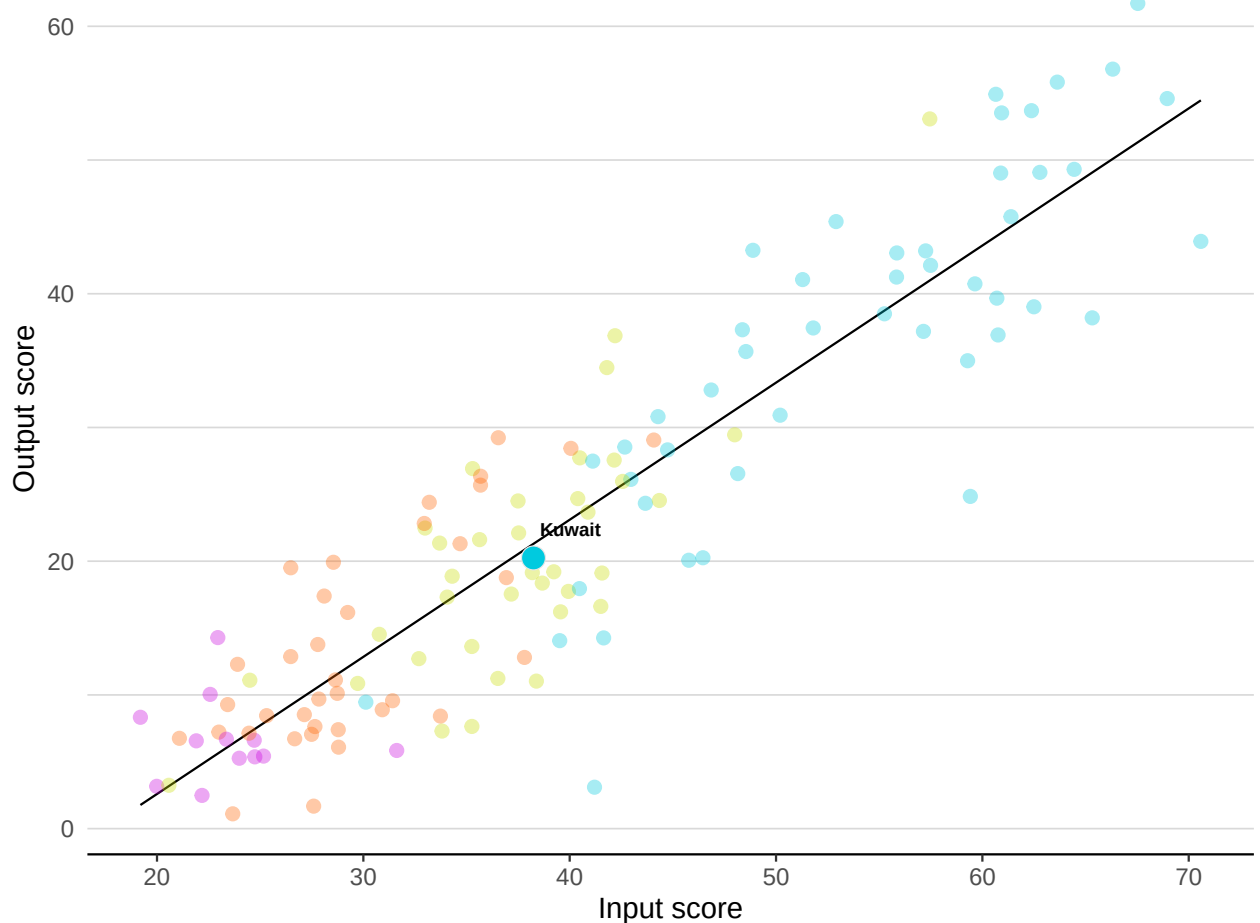


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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



Income ● High income ● Upper middle ● Lower middle ● Low income — Fitted line

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.

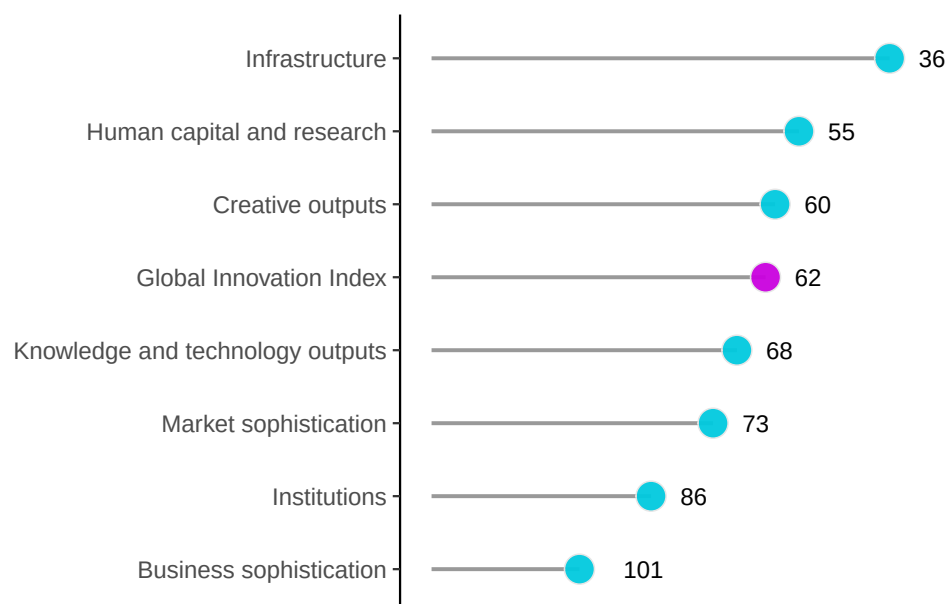
Northern Africa and Western Asia

Kuwait performs above the regional average in three pillars, namely: Human capital and research; Infrastructure; and, Creative outputs.

OVERVIEW OF RANKINGS IN THE SEVEN GII 2022 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 1.

The full WIPO Intellectual Property Statistics profile for Kuwait can be found at:

https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=KW.

INNOVATION STRENGTHS AND WEAKNESSES

The table below gives an overview of the indicator strengths and weaknesses of Kuwait in the GII 2022.

Strengths and weaknesses for Kuwait

Strengths			Weaknesses		
Code	Indicator name	Rank	Code	Indicator name	Rank
2.1.1	Expenditure on education, % GDP	11	2.3.3	Global corporate R&D investors, top 3, mn USD	38
2.1.5	Pupil-teacher ratio, secondary	5	3.3.1	GDP/unit of energy use	123
3.1.1	ICT access	8	4.3.2	Domestic industry diversification	102
3.1.4	E-participation	18	5.1.4	GERD financed by business, %	94
3.2.1	Electricity output, GWh/mn pop.	4	5.2.3	GERD financed by abroad, % GDP	97
3.2.3	Gross capital formation, % GDP	29	5.3.3	ICT services imports, % total trade	122
4.2.1	Market capitalization, % GDP	17	5.3.4	FDI net inflows, % GDP	121
6.2.3	Software spending, % GDP	26	6.1.1	Patents by origin/bn PPP\$ GDP	118
6.3.4	ICT services exports, % total trade	6	6.2.1	Labor productivity growth, %	113
7.1.3	Global brand value, top 5,000, % GDP	22	7.2.4	Printing and other media, % manufacturing	91

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
66	66	High	NAWA	4.3	211.3	44,609
		Score/Value	Rank			
 Institutions		51.0	86			
1.1	Political environment	54.1	84			
1.1.1	Political and operational stability*	61.8	87			
1.1.2	Government effectiveness*	46.3	80			
1.2	Regulatory environment	56.8	90			
1.2.1	Regulatory quality*	52.1	58			
1.2.2	Rule of law*	54.7	48			
1.2.3	Cost of redundancy dismissal	28.1	117			
1.3	Business environment	42.2	81			
1.3.1	Policies for doing business†	51.7	58			
1.3.2	Entrepreneurship policies and culture*	32.7	50			
 Human capital and research		34.9	55			
2.1	Education	60.8	35			
2.1.1	Expenditure on education, % GDP	6.6	11			
2.1.2	Government funding/pupil, secondary, % GDP/cap	17.3	68			
2.1.3	School life expectancy, years	14.7	57			
2.1.4	PISA scales in reading, maths and science	n/a	n/a			
2.1.5	Pupil-teacher ratio, secondary	7.6	5			
2.2	Tertiary education	39.5	[37]			
2.2.1	Tertiary enrolment, % gross	61.1	49			
2.2.2	Graduates in science and engineering, %	n/a	n/a			
2.2.3	Tertiary inbound mobility, %	n/a	n/a			
2.3	Research and development (R&D)	4.5	73			
2.3.1	Researchers, FTE/mn pop.	513.9	67			
2.3.2	Gross expenditure on R&D, % GDP	0.2	91			
2.3.3	Global corporate R&D investors, top 3, mn USD	0.0	38			
2.3.4	QS university ranking, top 3*	8.9	64			
 Infrastructure		54.0	36			
3.1	Information and communication technologies (ICTs)	86.5	21			
3.1.1	ICT access*	96.0	8			
3.1.2	ICT use*	75.5	38			
3.1.3	Government's online service*	84.1	31			
3.1.4	E-participation*	90.5	18			
3.2	General infrastructure	55.4	15			
3.2.1	Electricity output, GWh/mn pop.	17,833.7	4			
3.2.2	Logistics performance*	37.7	62			
3.2.3	Gross capital formation, % GDP	28.4	29			
3.3	Ecological sustainability	20.0	92			
3.3.1	GDP/unit of energy use	4.9	123			
3.3.2	Environmental performance*	42.4	63			
3.3.3	ISO 14001 environmental certificates/bn PPP\$ GDP	1.4	62			
 Market sophistication		30.7	73			
4.1	Credit	36.6	35			
4.1.1	Finance for startups and scaleups*	39.5	42			
4.1.2	Domestic credit to private sector, % GDP	90.9	33			
4.1.3	Loans from microfinance institutions, % GDP	n/a	n/a			
4.2	Investment	11.4	51			
4.2.1	Market capitalization, % GDP	93.4	17			
4.2.2	Venture capital investors, deals/bn PPP\$ GDP	0.1	42			
4.2.3	Venture capital recipients, deals/bn PPP\$ GDP	0.0	89			
4.2.4	Venture capital received, value, % GDP	0.0	69			
4.3	Trade, diversification, and market scale	44.0	94			
4.3.1	Applied tariff rate, weighted avg., %	3.0	73			
4.3.2	Domestic industry diversification	47.0	102			
4.3.3	Domestic market scale, bn PPP\$	211.3	66			
 Business sophistication		20.7	[101]			
5.1	Knowledge workers	17.2	[108]			
5.1.1	Knowledge-intensive employment, %	22.7	66			
5.1.2	Firms offering formal training, %	n/a	n/a			
5.1.3	GERD performed by business, % GDP	n/a	n/a			
5.1.4	GERD financed by business, %	1.0	94			
5.1.5	Females employed w/advanced degrees, %	n/a	n/a			
5.2	Innovation linkages	21.6	74			
5.2.1	University-industry R&D collaboration†	40.9	77			
5.2.2	State of cluster development and depth†	54.4	39			
5.2.3	GERD financed by abroad, % GDP	0.0	97			
5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	0.0	44			
5.2.5	Patent families/bn PPP\$ GDP	0.0	72			
5.3	Knowledge absorption	23.3	[97]			
5.3.1	Intellectual property payments, % total trade	n/a	n/a			
5.3.2	High-tech imports, % total trade	7.3	88			
5.3.3	ICT services imports, % total trade	0.3	122			
5.3.4	FDI net inflows, % GDP	-0.1	121			
5.3.5	Research talent, % in businesses	n/a	n/a			
 Knowledge and technology outputs		20.1	68			
6.1	Knowledge creation	5.4	105			
6.1.1	Patents by origin/bn PPP\$ GDP	0.1	118			
6.1.2	PCT patents by origin/bn PPP\$ GDP	0.0	84			
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	n/a			
6.1.4	Scientific and technical articles/bn PPP\$ GDP	8.8	96			
6.1.5	Citable documents H-index	8.8	81			
6.2	Knowledge impact	21.3	85			
6.2.1	Labor productivity growth, %	-2.4	113			
6.2.2	New businesses/th pop. 15-64	3.3	41			
6.2.3	Software spending, % GDP	0.4	26			
6.2.4	ISO 9001 quality certificates/bn PPP\$ GDP	3.0	75			
6.2.5	High-tech manufacturing, %	20.9	63			
6.3	Knowledge diffusion	33.6	46			
6.3.1	Intellectual property receipts, % total trade	n/a	n/a			
6.3.2	Production and export complexity	23.6	94			
6.3.3	High-tech exports, % total trade	0.3	97			
6.3.4	ICT services exports, % total trade	9.9	6			
 Creative outputs		20.4	60			
7.1	Intangible assets	37.1	44			
7.1.1	Intangible asset intensity, top 15, %	46.1	56			
7.1.2	Trademarks by origin/bn PPP\$ GDP	16.4	97			
7.1.3	Global brand value, top 5,000, % GDP	93.3	22			
7.1.4	Industrial designs by origin/bn PPP\$ GDP	n/a	n/a			
7.2	Creative goods and services	4.8	[102]			
7.2.1	Cultural and creative services exports, % total trade	n/a	n/a			
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	6.8	40			
7.2.4	Printing and other media, % manufacturing	0.4	91			
7.2.5	Creative goods exports, % total trade	0.1	100			
7.3	Online creativity	2.6	79			
7.3.1	Generic top-level domains (TLDs)/th pop. 15-69	7.7	44			
7.3.2	Country-code TLDs/th pop. 15-69	0.3	104			
7.3.3	GitHub commit pushes received/mn pop. 15-69	1.2	100			
7.3.4	Mobile app creation/bn PPP\$ GDP	1.2	76			

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/global_innovation_index/en/2022. 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 Kuwait.

Missing data for Kuwait

Code	Indicator name	Economy year	Model year	Source
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD, PISA
2.2.2	Graduates in science and engineering, %	n/a	2020	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	n/a	2019	UNESCO Institute for Statistics
4.1.3	Loans from microfinance institutions, % GDP	n/a	2020	International Monetary Fund, Financial Access Survey (FAS)
5.1.2	Firms offering formal training, %	n/a	2019	World Bank Enterprise Surveys
5.1.3	GERD performed by business, % GDP	n/a	2020	UNESCO Institute for Statistics
5.1.5	Females employed w/advanced degrees, %	n/a	2021	International Labour Organization
5.3.1	Intellectual property payments, % total trade	n/a	2020	World Trade Organization and United Nations Conference on Trade and Development
5.3.5	Research talent, % in businesses	n/a	2020	UNESCO Institute for Statistics
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2020	World Intellectual Property Organization
6.3.1	Intellectual property receipts, % total trade	n/a	2020	World Trade Organization and United Nations Conference on Trade and Development
7.1.4	Industrial designs by origin/bn PPP\$ GDP	n/a	2020	World Intellectual Property Organization
7.2.1	Cultural and creative services exports, % total trade	n/a	2020	World Trade Organization and United Nations Conference on Trade and Development
7.2.2	National feature films/mn pop. 15–69	n/a	2019	OMDIA

Outdated data for Kuwait

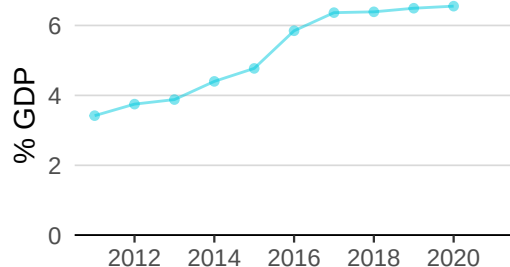
Code	Indicator name	Economy year	Model year	Source
1.3.2	Entrepreneurship policies and culture	2020	2021	Global Entrepreneurship Monitor
2.1.2	Government funding/pupil, secondary, % GDP/cap	2014	2018	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2015	2019	UNESCO Institute for Statistics
2.1.5	Pupil-teacher ratio, secondary	2015	2019	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2018	2020	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2019	2020	International Energy Agency
4.1.1	Finance for startups and scaleups	2020	2021	Global Entrepreneurship Monitor

Code	Indicator name	Economy year	Model year	Source
4.1.2	Domestic credit to private sector, % GDP	2018	2020	International Monetary Fund
5.1.1	Knowledge-intensive employment, %	2016	2021	International Labour Organization
5.1.4	GERD financed by business, %	2014	2019	UNESCO Institute for Statistics
5.2.3	GERD financed by abroad, % GDP	2014	2019	UNESCO Institute for Statistics
6.1.1	Patents by origin/bn PPP\$ GDP	2018	2020	World Intellectual Property Organization
7.1.2	Trademarks by origin/bn PPP\$ GDP	2018	2020	World Intellectual Property Organization

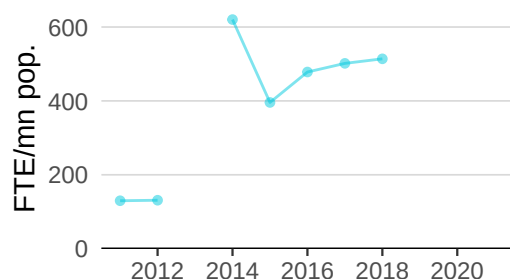
KUWAIT'S INNOVATION SYSTEM

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

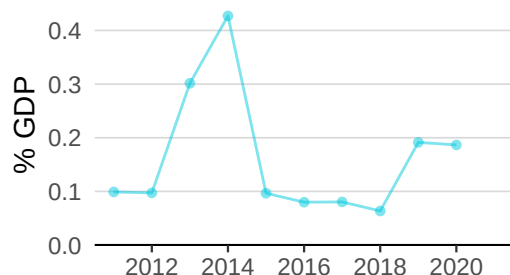
Innovation inputs



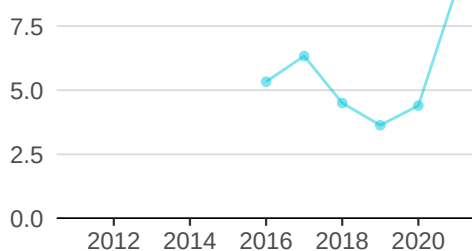
2.1.1 Expenditure on education was equal to 6.6% GDP in 2020—up by 1 percentage point from the year prior—and equivalent to an indicator rank of 11.



2.3.1 Researchers was equal to 513.9 FTE/mn pop. in 2018—up by 2 percentage points from the year prior—and equivalent to an indicator rank of 67.



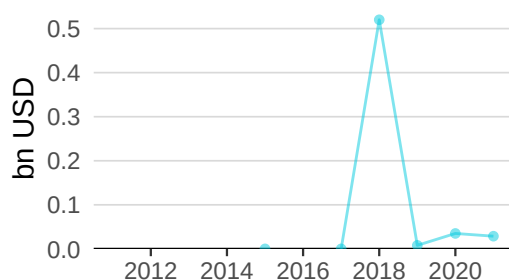
2.3.2 Gross expenditure on R&D was equal to 0.2% GDP in 2020—down by 3 percentage points from the year prior—and equivalent to an indicator rank of 91.



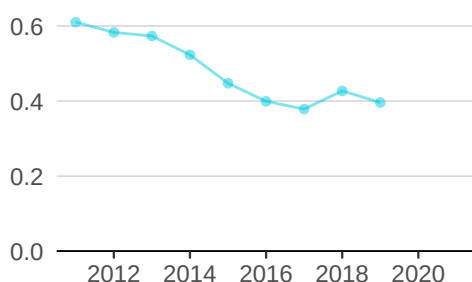
2.3.4 QS university ranking was equal to 8.9 in 2021—up by 103 percentage points from the year prior—and equivalent to an indicator rank of 64.



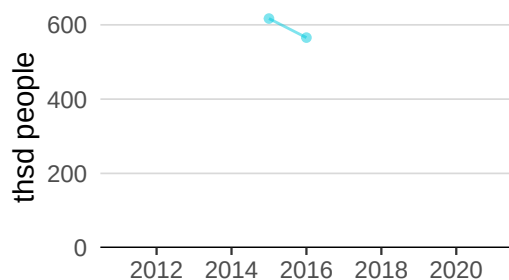
3.1.1 ICT access was equal to 9.6 in 2020 and equivalent to an indicator rank of 8.



4.2.4 Venture capital received was equal to 0.0 bn USD in 2021—down by 18 percentage points from the year prior—and equivalent to an indicator rank of 69.



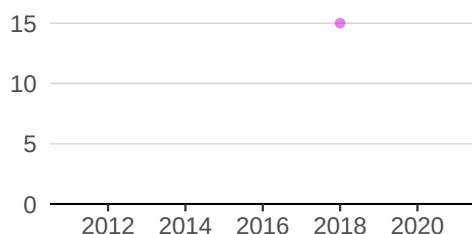
4.3.2 Domestic industry diversification was equal to 0.4 in 2019—down by 7 percentage points from the year prior—and equivalent to an indicator rank of 102.



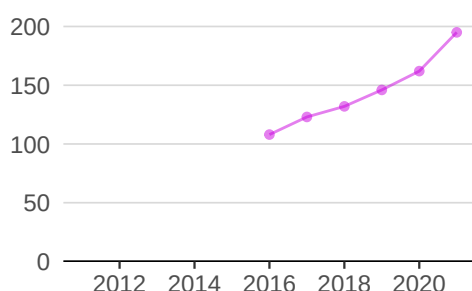
5.1.1 Knowledge-intensive employment was equal to 565.6 thsd people in 2016—down by 8 percentage points from the year prior—and equivalent to an indicator rank of 66.

Innovation outputs

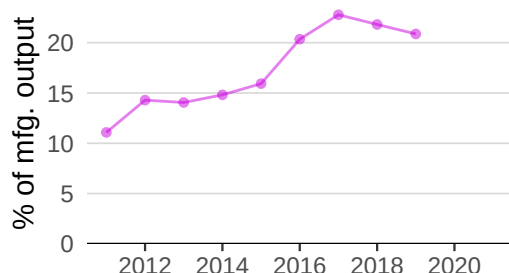
6.1.1 Patents by origin was equal to 15.0 in 2018 and equivalent to an indicator rank of 118.



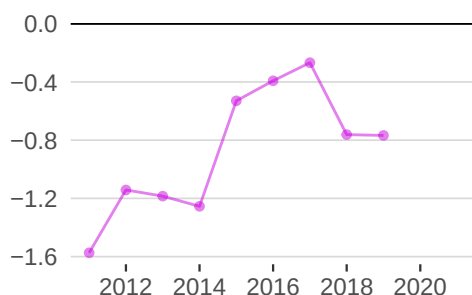
6.1.5 Citable documents H-index was equal to 195.0 in 2021—up by 20 percentage points from the year prior—and equivalent to an indicator rank of 81.

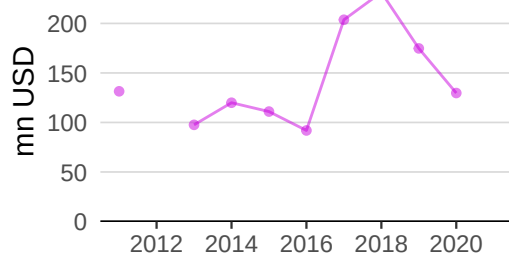


6.2.5 High-tech manufacturing was equal to 20.9% of mfg. output in 2019—down by 4 percentage points from the year prior—and equivalent to an indicator rank of 63.

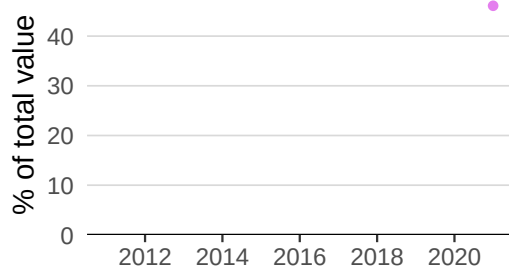


6.3.2 Production and export complexity was equal to -0.8 in 2019—down by 1 percentage point from the year prior—and equivalent to an indicator rank of 94.





6.3.3 High-tech exports was equal to 129.7 mn USD in 2020—down by 26 percentage points from the year prior—and equivalent to an indicator rank of 97.



7.1.1 Intangible asset intensity was equal to 46.1% of total value in 2021 and equivalent to an indicator rank of 56.



7.1.3 Global brand value was equal to 12.3 bn USD in 2021—up by 113 percentage points from the year prior—and equivalent to an indicator rank of 22.

KUWAIT'S INNOVATION TOP PERFORMERS

2.3.3 Global corporate R&D investors

Firm	Industry	R&D	R&D Growth	R&D Intensity	Rank
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No observations

Source: European Commission's Joint Research Centre (<https://iri.jrc.ec.europa.eu/scoreboard/2021-eu-industrial-rd-investment-scoreboard>).

2.3.4 QS university ranking

University	Score	Rank
AMERICAN UNIVERSITY OF THE MIDDLE EAST	15.3	751-800=
GULF UNIVERSITY FOR SCIENCE AND TECHNOLOGY	11.5	801-100

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2022>).

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 Intangible asset intensity, top 15

Firm	Rank
KUWAIT FINANCE HOUSE	1
MOBILE TELECOMMUNICATIONS	2
NATIONAL BANK OF KUWAIT	3

Source: Brand Finance (<https://brandirectory.com/reports/gift-2021>).

Note: Brand Finance only provides within economy ranks.

7.1.3 Global brand value, top 5,000

Brand	Industry	Rank
KPC	Oil & Gas	1
ZAIN	Telecoms	2
KOC	Oil & Gas	3

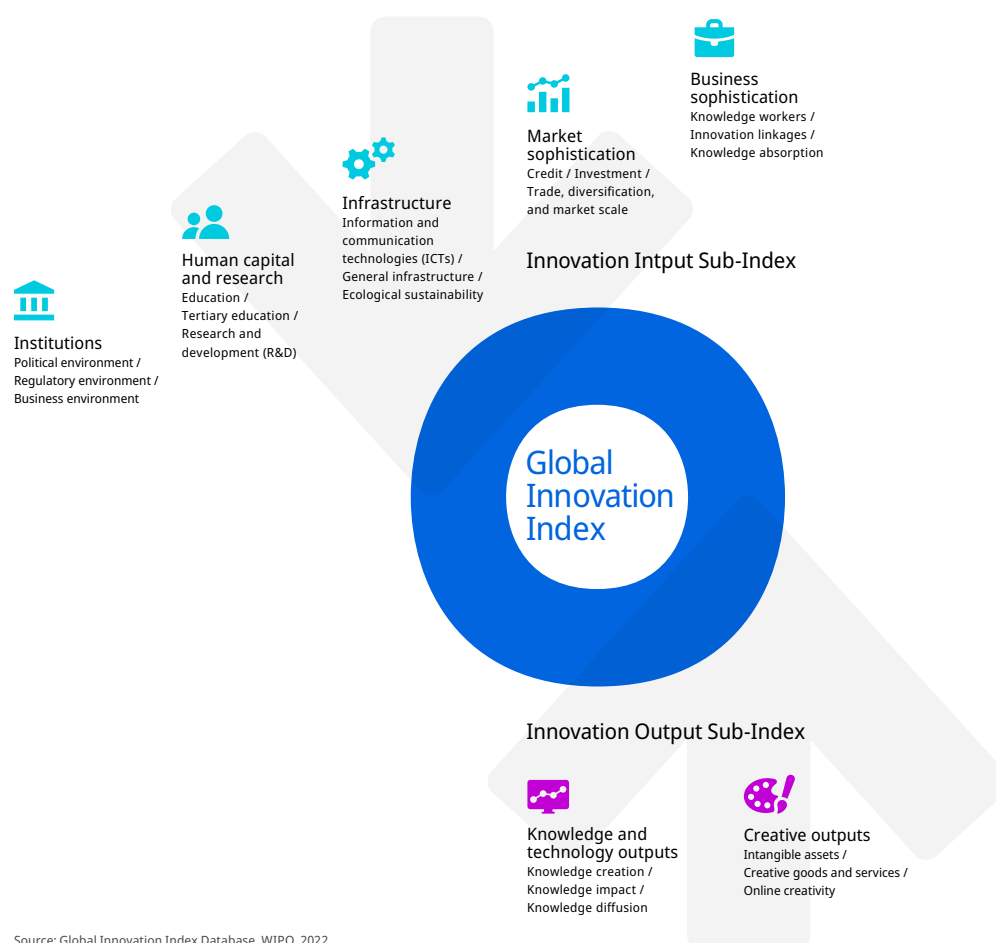
Source: Brand Finance (<https://brandirectory.com>).

Note: Rank corresponds to within economy ranks.

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.