OMAN

79th Oman ranks 79th 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 Oman 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 Oman in the GII 2022 is between ranks 77 and 84.

Rankings for Oman (2020–2022)

GIIYR	GII	Innovation inputs	Innovation outputs
2020	84	68	109
2021	76	67	90
2022	79	62	87

- Oman performs better in innovation inputs than innovation outputs in 2022.
- This year Oman ranks 62nd in innovation inputs, higher than both 2021 and 2020.
- As for innovation outputs, Oman ranks 87th. This position is higher than both 2021 and 2020.

46th Oman ranks 46th among the 48 high-income group economies.

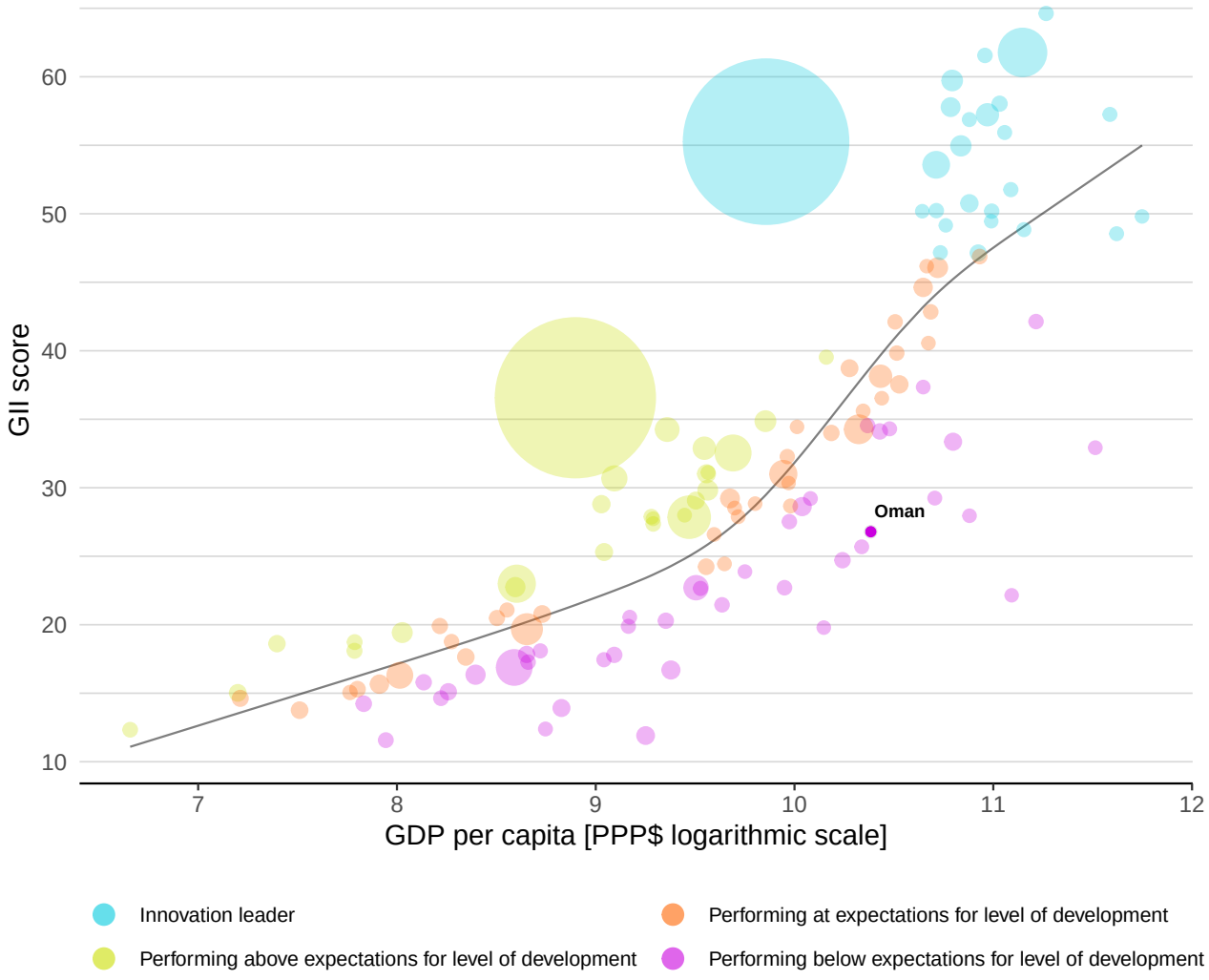
13th Oman ranks 13th among the 19 economies in Northern Africa and Western Asia.

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

The positive relationship between innovation and development

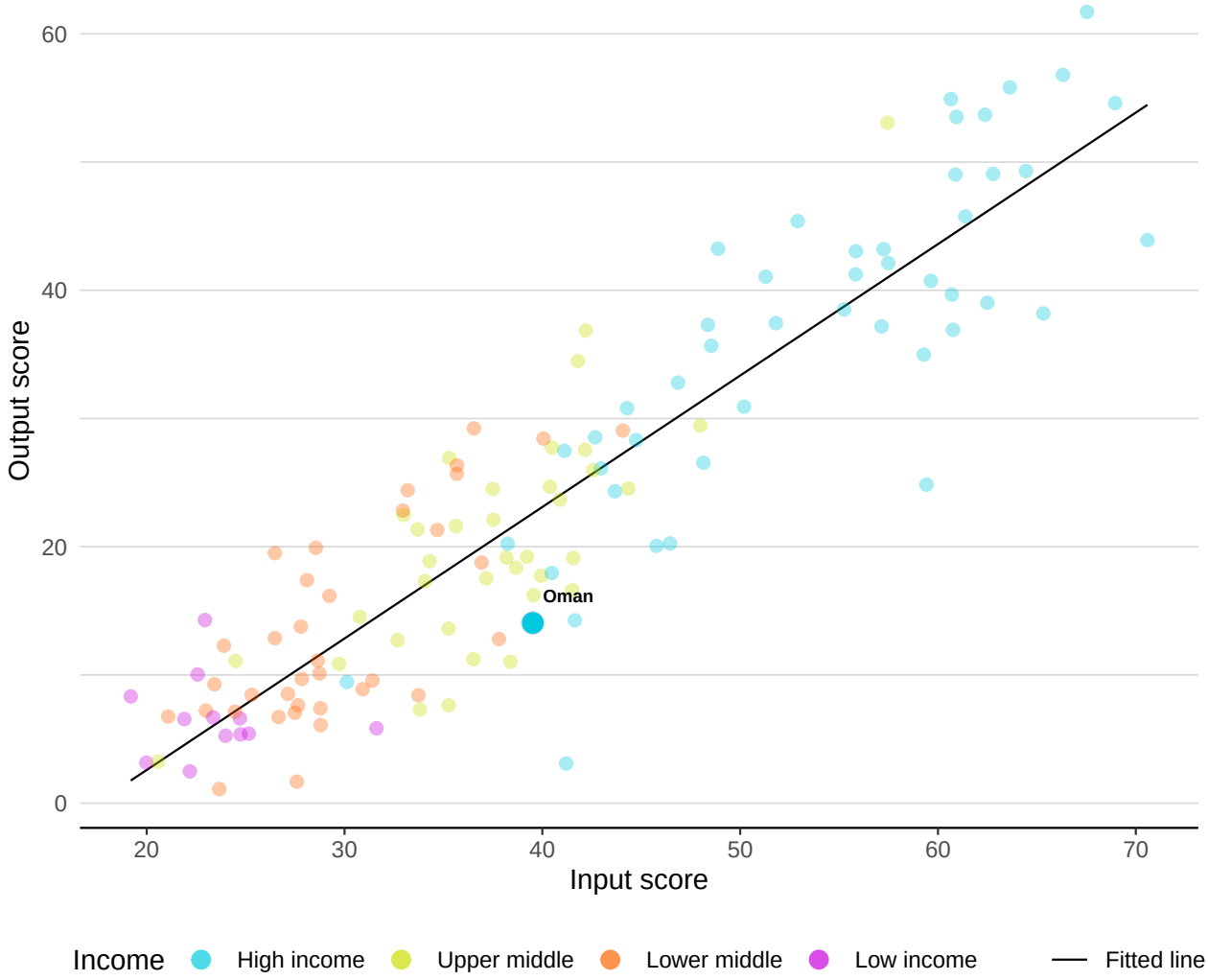


EFFECTIVELY TRANSLATING INNOVATION INVESTMENTS INTO INNOVATION OUTPUTS

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.

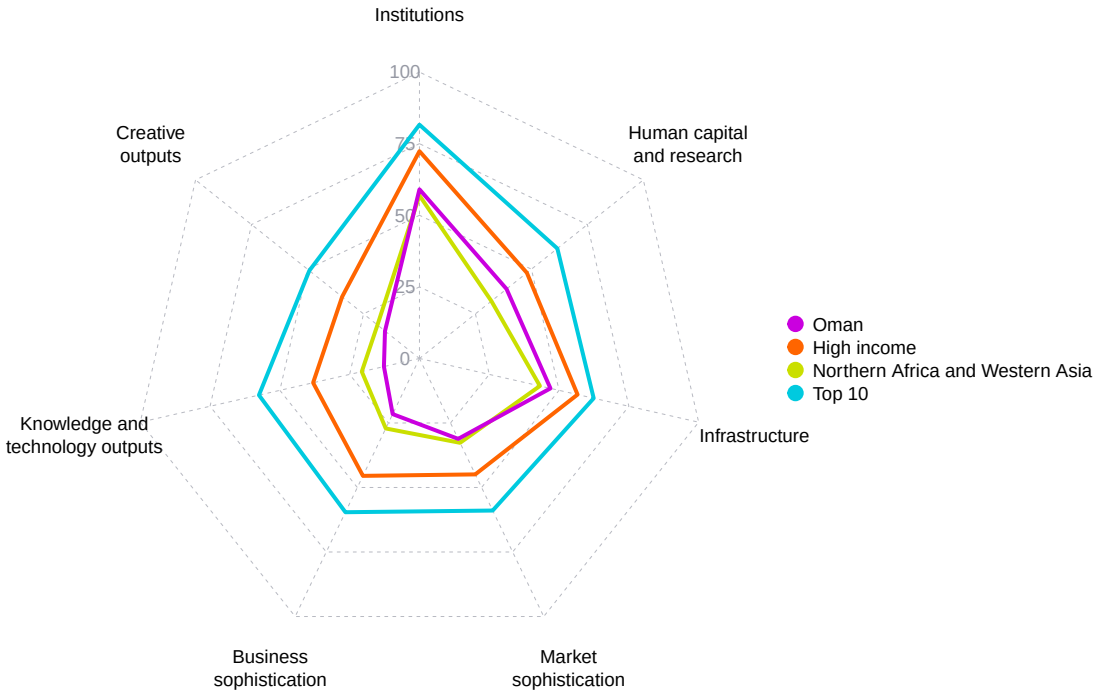
Oman produces less innovation outputs relative to its level of innovation investments.

Innovation input to output performance



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

The seven GII pillar scores for Oman



High-income group economies

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

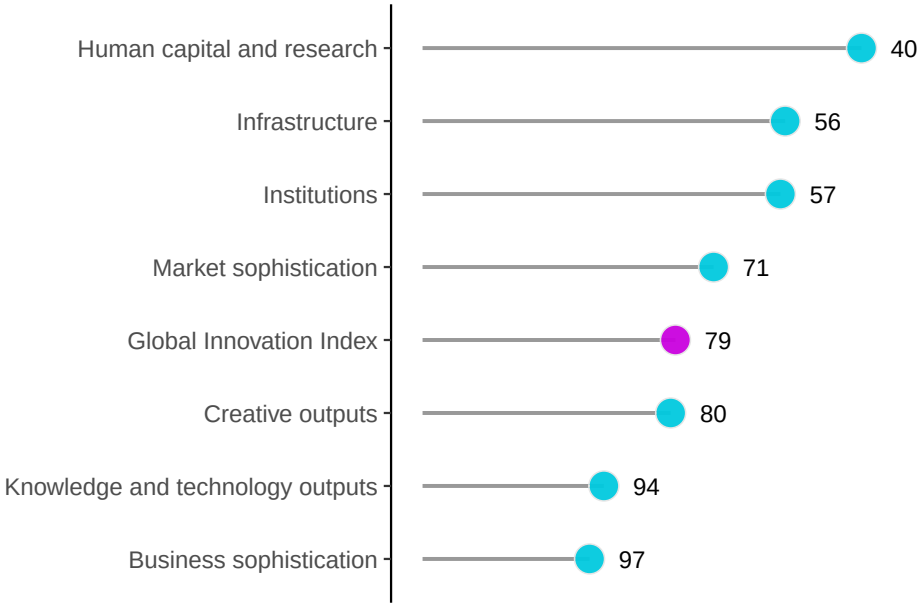
Northern Africa and Western Asia

Oman performs above the regional average in three pillars, namely: Institutions; Human capital and research; and, Infrastructure.

OVERVIEW OF RANKINGS IN THE SEVEN GII 2022 AREAS

Oman performs best in Human capital and research and its weakest performance is in Business sophistication.

The seven GII pillar ranks for Oman



Note: The highest possible ranking in each pillar is 1.

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

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

INNOVATION STRENGTHS AND WEAKNESSES

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

Strengths and weaknesses for Oman

Strengths			Weaknesses		
Code	**Indicator name**	**Rank**	**Code**	**Indicator name**	**Rank**
1.3.1	Policies for doing business	19	2.3.3	Global corporate R&D investors, top 3, mn USD	38
2.1.1	Expenditure on education, % GDP	29	3.3.1	GDP/unit of energy use	111
2.1.2	Government funding/pupil, secondary, % GDP/cap	3	4.2.3	Venture capital recipients, deals/bn PPP$ GDP	91
2.2.2	Graduates in science and engineering, %	1	5.1.5	Females employed w/advanced degrees, %	118
3.1.1	ICT access	15	5.2.3	GERD financed by abroad, % GDP	86
3.1.3	Government's online service	24	5.3.2	High-tech imports, % total trade	115
3.2.1	Electricity output, GWh/mn pop.	23	5.3.5	Research talent, % in businesses	83
5.2.2	State of cluster development and depth	21	6.2.1	Labor productivity growth, %	112
5.3.4	FDI net inflows, % GDP	19	7.1.4	Industrial designs by origin/bn PPP$ GDP	111
7.3.4	Mobile app creation/bn PPP$ GDP	16	7.2.4	Printing and other media, % manufacturing	85

GII 2022 rank

Oman

79

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
87	62	High	NAWA	5.2	147.8	32,327

		Score/ Value	Rank	
Institutions		**59.0**	**57**	◇
1.1	**Political environment**	62.7	55	◇
1.1.1	Political and operational stability*	72.7	46	
1.1.2	Government effectiveness*	52.8	61	◇
1.2	**Regulatory environment**	59.3	80	◇
1.2.1	Regulatory quality*	56.4	50	◇
1.2.2	Rule of law*	62.2	40	
1.2.3	Cost of redundancy dismissal	n/a	n/a	
1.3	**Business environment**	55.1	46	
1.3.1	Policies for doing business† ◴	70.3	19 ●	
1.3.2	Entrepreneurship policies and culture*	39.9	39	
Human capital and research		**38.9**	**40**	
2.1	**Education**	66.2	10 ●	
2.1.1	Expenditure on education, % GDP ◴	5.4	29 ●	
2.1.2	Government funding/pupil, secondary, % GDP/cap	37.6	3 ● ◆	
2.1.3	School life expectancy, years	14.6	60	◇
2.1.4	PISA scales in reading, maths and science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	11.3	42	
2.2	**Tertiary education**	45.4	23 ●	
2.2.1	Tertiary enrolment, % gross	45.5	70	◇
2.2.2	Graduates in science and engineering, %	39.0	1 ● ◆	
2.2.3	Tertiary inbound mobility, %	2.9	69	
2.3	**Research and development (R&D)**	5.1	71	◇
2.3.1	Researchers, FTE/mn pop.	334.9	80	◇
2.3.2	Gross expenditure on R&D, % GDP	0.4	71	◇
2.3.3	Global corporate R&D investors, top 3, mn USD	0.0	38 ○	◇
2.3.4	QS university ranking, top 3*	10.1	62	◇
Infrastructure		**46.9**	**56**	◇
3.1	**Information and communication technologies (ICTs)**	83.1	33	
3.1.1	ICT access*	94.2	15 ●	
3.1.2	ICT use*	69.5	57	◇
3.1.3	Government's online service*	85.3	24 ●	
3.1.4	E-participation*	83.3	38	
3.2	**General infrastructure**	39.1	40	
3.2.1	Electricity output, GWh/mn pop. ◴	7,698.8	23 ●	
3.2.2	Logistics performance*	53.5	41	
3.2.3	Gross capital formation, % GDP	20.5	90	
3.3	**Ecological sustainability**	18.5	100	◇
3.3.1	GDP/unit of energy use	6.1	111 ○	◇
3.3.2	Environmental performance*	30.7	104	◇
3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	1.9	51	
Market sophistication		**31.2**	**71**	
4.1	**Credit**	30.4	55	
4.1.1	Finance for startups and scaleups*	37.2	45	◇
4.1.2	Domestic credit to private sector, % GDP ◴	65.1	53	
4.1.3	Loans from microfinance institutions, % GDP	n/a	n/a	
4.2	**Investment**	3.9	88	◇
4.2.1	Market capitalization, % GDP	20.7	59	
4.2.2	Venture capital investors, deals/bn PPP$ GDP	0.0	45	
4.2.3	Venture capital recipients, deals/bn PPP$ GDP	0.0	91 ○	
4.2.4	Venture capital received, value, % GDP	0.0	86	
4.3	**Trade, diversification, and market scale**	59.2	57	
4.3.1	Applied tariff rate, weighted avg., %	1.7	54	
4.3.2	Domestic industry diversification ◴	85.5	60	
4.3.3	Domestic market scale, bn PPP$	147.8	76	

		Score/ Value	Rank	
Business sophistication		**21.6**	**97**	◇
5.1	**Knowledge workers**	18.6	103	◇
5.1.1	Knowledge-intensive employment, % ◴	21.4	73	◇
5.1.2	Firms offering formal training, %	n/a	n/a	
5.1.3	GERD performed by business, % GDP ◴	0.1	65	◇
5.1.4	GERD financed by business, % ◴	31.8	56	
5.1.5	Females employed w/advanced degrees, % ◴	0.9	118 ○	◇
5.2	**Innovation linkages**	26.2	50	◇
5.2.1	University-industry R&D collaboration† ◴	51.5	39	
5.2.2	State of cluster development and depth† ◴	62.5	21 ●	
5.2.3	GERD financed by abroad, % GDP ◴	0.0	86 ○	◇
5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	0.1	31	
5.2.5	Patent families/bn PPP$ GDP	0.0	95	◇
5.3	**Knowledge absorption**	19.8	113 ○	◇
5.3.1	Intellectual property payments, % total trade	n/a	n/a	
5.3.2	High-tech imports, % total trade ◴	5.5	115 ○	
5.3.3	ICT services imports, % total trade ◴	0.6	104	◇
5.3.4	FDI net inflows, % GDP	5.1	19 ●	
5.3.5	Research talent, % in businesses ◴	0.3	83 ○	◇
Knowledge and technology outputs		**12.7**	**94**	◇
6.1	**Knowledge creation**	7.1	91	◇
6.1.1	Patents by origin/bn PPP$ GDP ◴	0.2	96	
6.1.2	PCT patents by origin/bn PPP$ GDP	0.1	68	◇
6.1.3	Utility models by origin/bn PPP$ GDP	n/a	n/a	
6.1.4	Scientific and technical articles/bn PPP$ GDP	12.6	75	◇
6.1.5	Citable documents H-index	7.6	84	◇
6.2	**Knowledge impact**	14.3	110	◇
6.2.1	Labor productivity growth, %	–2.3	112 ○	◇
6.2.2	New businesses/th pop. 15–64	1.5	70	
6.2.3	Software spending, % GDP	0.1	99	◇
6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	4.7	59	
6.2.5	High-tech manufacturing, % ◴	17.0	70	◇
6.3	**Knowledge diffusion**	16.9	83	◇
6.3.1	Intellectual property receipts, % total trade	n/a	n/a	
6.3.2	Production and export complexity	31.2	82	◇
6.3.3	High-tech exports, % total trade ◴	0.8	80	◇
6.3.4	ICT services exports, % total trade ◴	0.6	95	
Creative outputs		**15.4**	**80**	◇
7.1	**Intangible assets**	25.2	67	
7.1.1	Intangible asset intensity, top 15, %	32.2	66	
7.1.2	Trademarks by origin/bn PPP$ GDP	56.9	42	
7.1.3	Global brand value, top 5,000, % GDP	8.5	60	◇
7.1.4	Industrial designs by origin/bn PPP$ GDP	0.1	111 ○	◇
7.2	**Creative goods and services**	6.0	[96]	
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	3.4	49	◇
7.2.4	Printing and other media, % manufacturing ◴	0.5	85 ○	◇
7.2.5	Creative goods exports, % total trade ◴	0.4	66	
7.3	**Online creativity**	5.2	62	◇
7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	1.6	86	◇
7.3.2	Country-code TLDs/th pop. 15–69	0.3	106	◇
7.3.3	GitHub commit pushes received/mn pop. 15–69	0.8	107	◇
7.3.4	Mobile app creation/bn PPP$ GDP	18.1	16 ●	

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 Oman.

Missing data for Oman

Code	Indicator name	Economy year	Model year	Source
1.2.3	Cost of redundancy dismissal	n/a	2020	World Bank, Employing Workers Project
2.1.4	PISA scales in reading, maths and science	n/a	2018	OECD, PISA
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
5.3.1	Intellectual property payments, % total trade	n/a	2020	World Trade Organization and United Nations Conference on Trade and Development
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
7.2.1	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 Oman

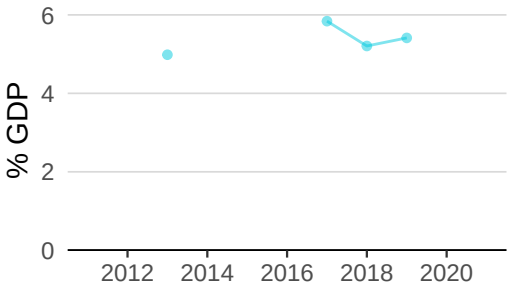
Code	Indicator name	Economy year	Model year	Source
1.3.1	Policies for doing business	2020	2021	World Economic Forum, Executive Opinion Survey (EOS)
2.1.1	Expenditure on education, % GDP	2019	2020	UNESCO Institute for Statistics
3.2.1	Electricity output, GWh/mn pop.	2019	2020	International Energy Agency
4.1.2	Domestic credit to private sector, % GDP	2019	2020	International Monetary Fund
4.3.2	Domestic industry diversification	2018	2019	United Nations Industrial Development Organization
5.1.1	Knowledge-intensive employment, %	2020	2021	International Labour Organization
5.1.3	GERD performed by business, % GDP	2018	2020	UNESCO Institute for Statistics
5.1.4	GERD financed by business, %	2018	2019	UNESCO Institute for Statistics
5.1.5	Females employed w/advanced degrees, %	2018	2021	International Labour Organization
5.2.1	University-industry R&D collaboration	2020	2021	World Economic Forum, Executive Opinion Survey (EOS)
5.2.2	State of cluster development and depth	2020	2021	World Economic Forum, Executive Opinion Survey (EOS)

Code	Indicator name	Economy year	Model year	Source
5.2.3	GERD financed by abroad, % GDP	2018	2019	UNESCO Institute for Statistics
5.3.2	High-tech imports, % total trade	2018	2020	United Nations Comtrade Database
5.3.3	ICT services imports, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
5.3.5	Research talent, % in businesses	2018	2020	UNESCO Institute for Statistics
6.1.1	Patents by origin/bn PPP$ GDP	2019	2020	World Intellectual Property Organization
6.2.5	High-tech manufacturing, %	2017	2019	United Nations Industrial Development Organization
6.3.3	High-tech exports, % total trade	2018	2020	United Nations Comtrade Database
6.3.4	ICT services exports, % total trade	2019	2020	World Trade Organization and United Nations Conference on Trade and Development
7.2.4	Printing and other media, % manufacturing	2018	2019	United Nations Industrial Development Organization
7.2.5	Creative goods exports, % total trade	2018	2020	United Nations Comtrade Database

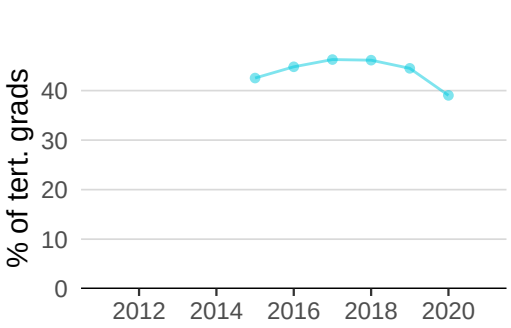
OMAN'S INNOVATION SYSTEM

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

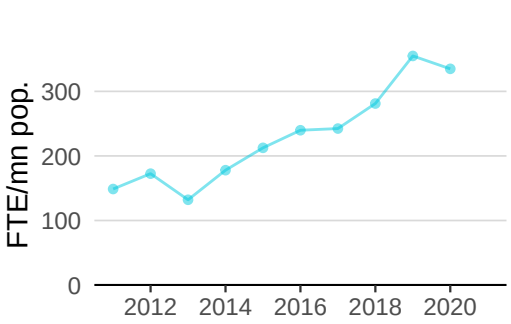
Innovation inputs



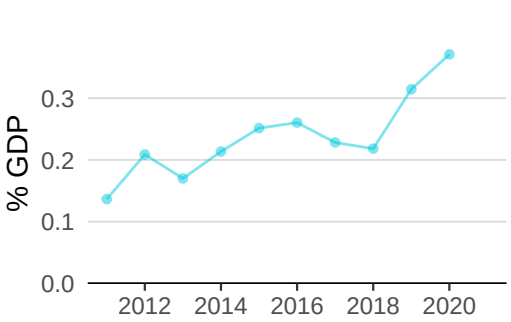
2.1.1 Expenditure on education was equal to 5.4% GDP in 2019–up by 4 percentage points from the year prior–and equivalent to an indicator rank of 29.



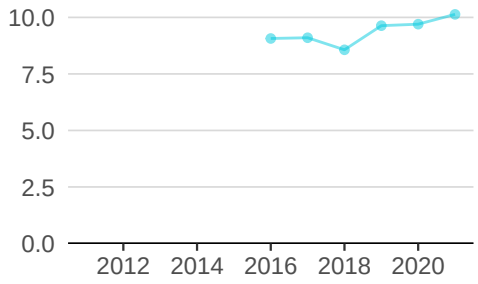
2.2.2 Graduates in science and engineering was equal to 39.0% of tert. grads in 2020–down by 12 percentage points from the year prior–and equivalent to an indicator rank of 1.



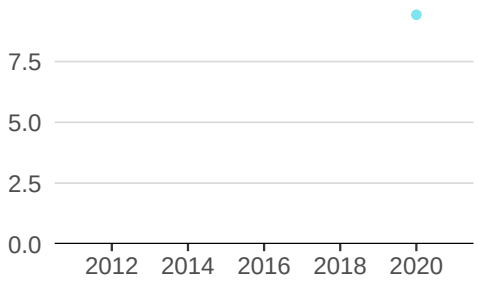
2.3.1 Researchers was equal to 334.9 FTE/mn pop. in 2020–down by 6 percentage points from the year prior–and equivalent to an indicator rank of 80.



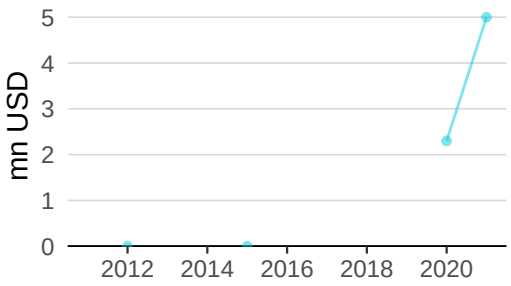
2.3.2 Gross expenditure on R&D was equal to 0.4% GDP in 2020–up by 18 percentage points from the year prior–and equivalent to an indicator rank of 71.



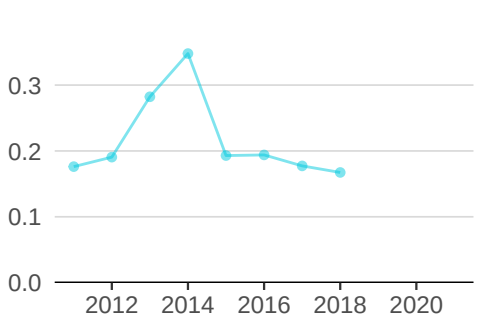
2.3.4 QS university ranking was equal to 10.1 in 2021–up by 4 percentage points from the year prior–and equivalent to an indicator rank of 62.



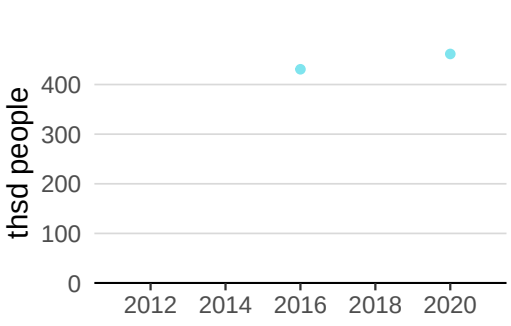
3.1.1 ICT access was equal to 9.4 in 2020 and equivalent to an indicator rank of 15.



4.2.4 Venture capital received was equal to 5.0 mn USD in 2021–up by 117 percentage points from the year prior–and equivalent to an indicator rank of 86.

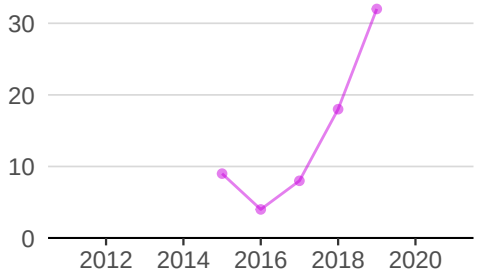


4.3.2 Domestic industry diversification was equal to 0.2 in 2018–down by 6 percentage points from the year prior–and equivalent to an indicator rank of 60.

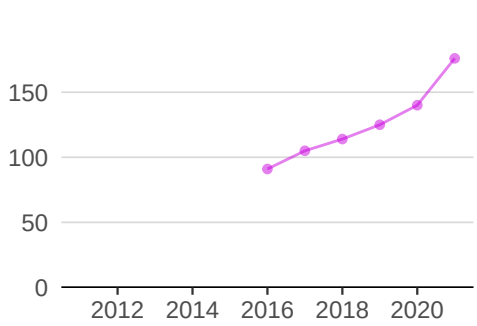


5.1.1 Knowledge-intensive employment was equal to 461.6 thsd people in 2020 and equivalent to an indicator rank of 73.

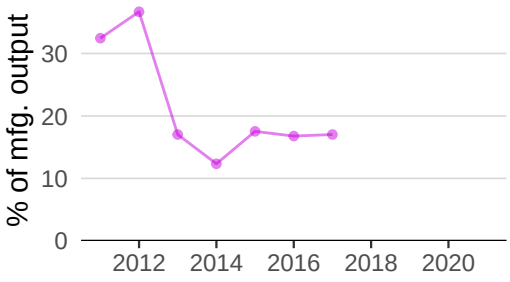
Innovation outputs



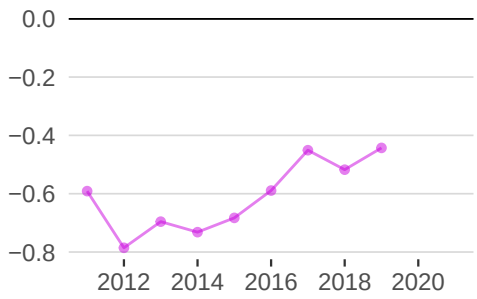
6.1.1 Patents by origin was equal to 32.0 in 2019–up by 78 percentage points from the year prior–and equivalent to an indicator rank of 96.



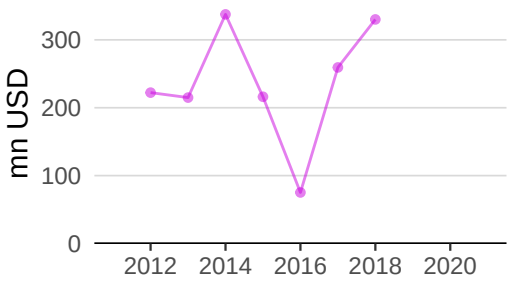
6.1.5 Citable documents H-index was equal to 176.0 in 2021–up by 26 percentage points from the year prior–and equivalent to an indicator rank of 84.



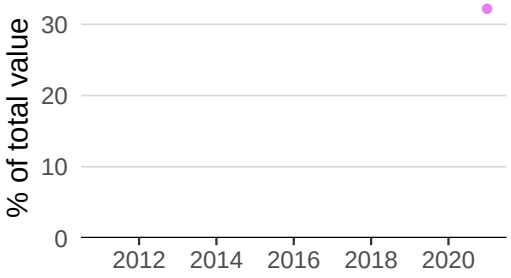
6.2.5 High-tech manufacturing was equal to 17.0% of mfg. output in 2017–up by 1 percentage point from the year prior–and equivalent to an indicator rank of 70.



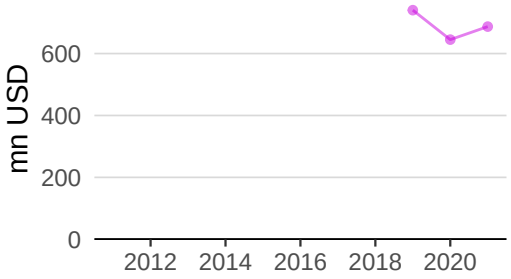
6.3.2 Production and export complexity was equal to -0.4 in 2019–up by 14 percentage points from the year prior–and equivalent to an indicator rank of 82.



6.3.3 High-tech exports was equal to 330.1 mn USD in 2018–up by 27 percentage points from the year prior–and equivalent to an indicator rank of 80.



7.1.1 Intangible asset intensity was equal to 32.2% of total value in 2021 and equivalent to an indicator rank of 66.



7.1.3 Global brand value was equal to 687.1 mn USD in 2021–up by 7 percentage points from the year prior–and equivalent to an indicator rank of 60.

OMAN'S INNOVATION TOP PERFORMERS

2.3.3 Global corporate R&D investors

Firm	Industry	R&D	R&D Growth	R&D Intensity	Rank

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
SULTAN QABOOS UNIVERSITY	30.4	368

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
OMAN TELECOMMUNICATIONS	1
OOREDOO	2
OMINVEST	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

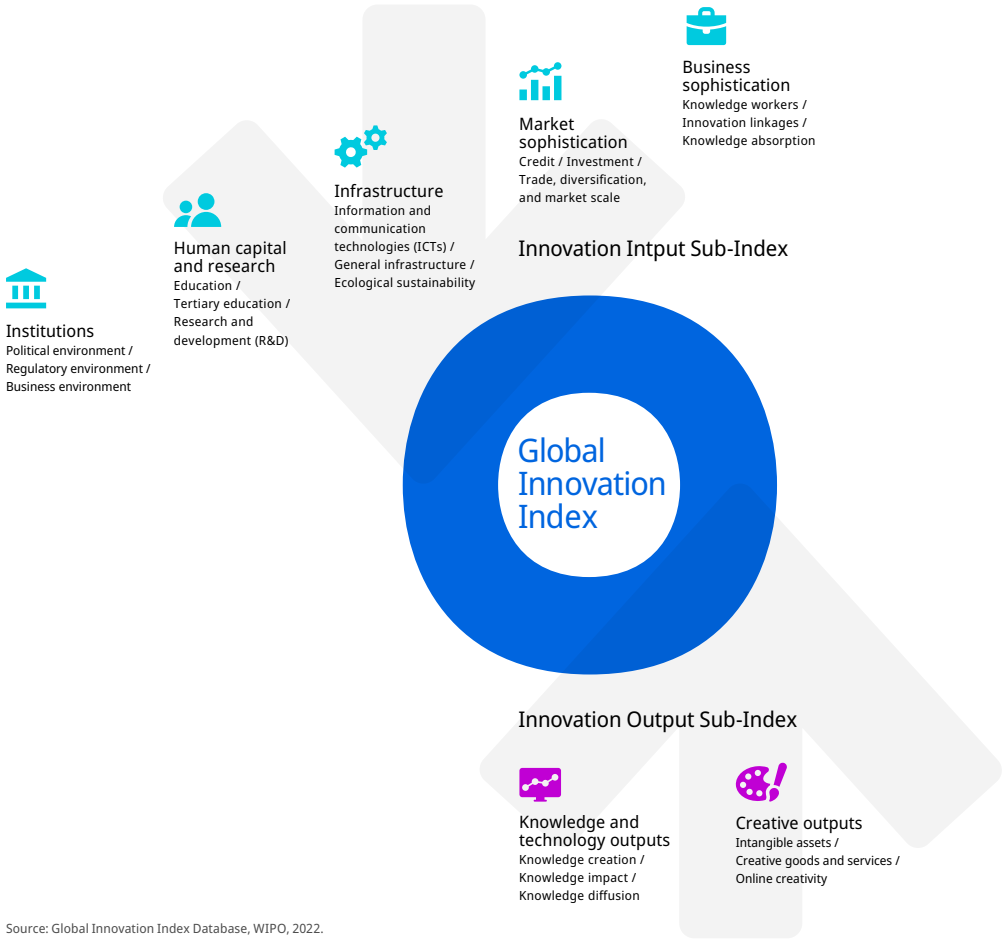
Brand	Industry	Rank
BANK MUSCAT	Banking	1
OMANTEL	Telecoms	2

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.



Source: Global Innovation Index Database, WIPO, 2022.

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.