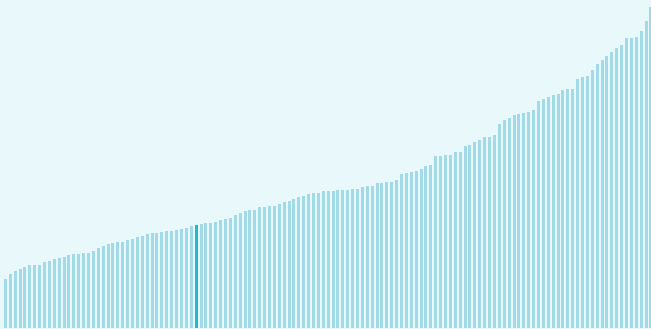




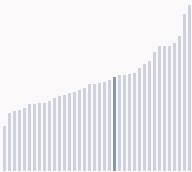
Lebanon ranking in the Global Innovation Index 2024

Lebanon ranks **94th** among the 133 economies featured in the GII 2024.

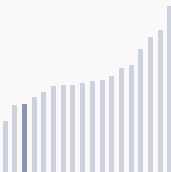
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



Lebanon ranks **16th** among the 38 lower-middle-income group economies.



Lebanon ranks **16th** among the 18 economies in Northern Africa and Western Asia.



> Lebanon GII Ranking (2020-2024)

The table shows the rankings of Lebanon over the past four years. 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 Lebanon in the GII 2024 is between ranks 87 and 99.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	87th	93rd	80th
2021	92nd	94th	97th
2022	n/a	n/a	n/a
2023	92nd	86th	95th
2024	94th	101st	88th

Lebanon performs better in innovation outputs than innovation inputs in 2024.

This year Lebanon ranks **101st** in innovation inputs. This position is lower than last year.

Lebanon ranks **88th** in innovation outputs. This position is higher than last year.

Lebanon has no clusters in the top 100 S&T clusters of the Global Innovation Index.

Global Innovation Index 2024



> Global Innovation Tracker

The Global Innovation Tracker 2024 shows what is the current state of innovation in Lebanon, how rapidly is technology being embraced and what are the resulting societal impacts.



For Lebanon, 5 indicators have improved in the short-term and 3 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▲ 43.4% 2022 - 2023	n/a	▲ 200% 2022 - 2023	▲ 188.9% 2022 - 2023	▼ -75% 2022 - 2023
▲ 13.3% 2013 - 2023	n/a	▼ -10.4% 2013 - 2023	▼ -21.7% 2013 - 2023	▼ -8.8% 2013 - 2023

Technology adoption

Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
0% 2021 - 2022	▲ 1.3% 2020 - 2021	n/a	n/a	n/a
▲ 1.2% 2012 - 2022	▼ -0.3% 2011 - 2021		n/a	n/a
25.7 per 100 inhabitants in 2022	7.7 per 100 inhabitants in 2021	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 2.5% 2022 - 2023	▼ -0.8% 2021 - 2022	▲ 2.1°C 2023
▼ -3.3% 2013 - 2023	▼ -0.5% 2012 - 2022	n/a
51,573 USD in 2023	74.4 years in 2022	

Notes: Not all indicators of the Global Innovation Tracker are used to calculate the Global Innovation Index. Long-term annual growth refers to the compound annual growth rate (CAGR) over the indicated period. For each variable, a one-year growth rate is set for the short run, and ten-year CAGR is set for the long run; time windows might differ when gaps exist in data availability. The end period corresponds to the most recent available observation, which may differ among countries. Temperature change is an exception: it indicates the change in degrees Celsius with respect to the average temperature in the country from 1951–1980. Figures are rounded.



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

> Innovation overperformers relative to their economic development





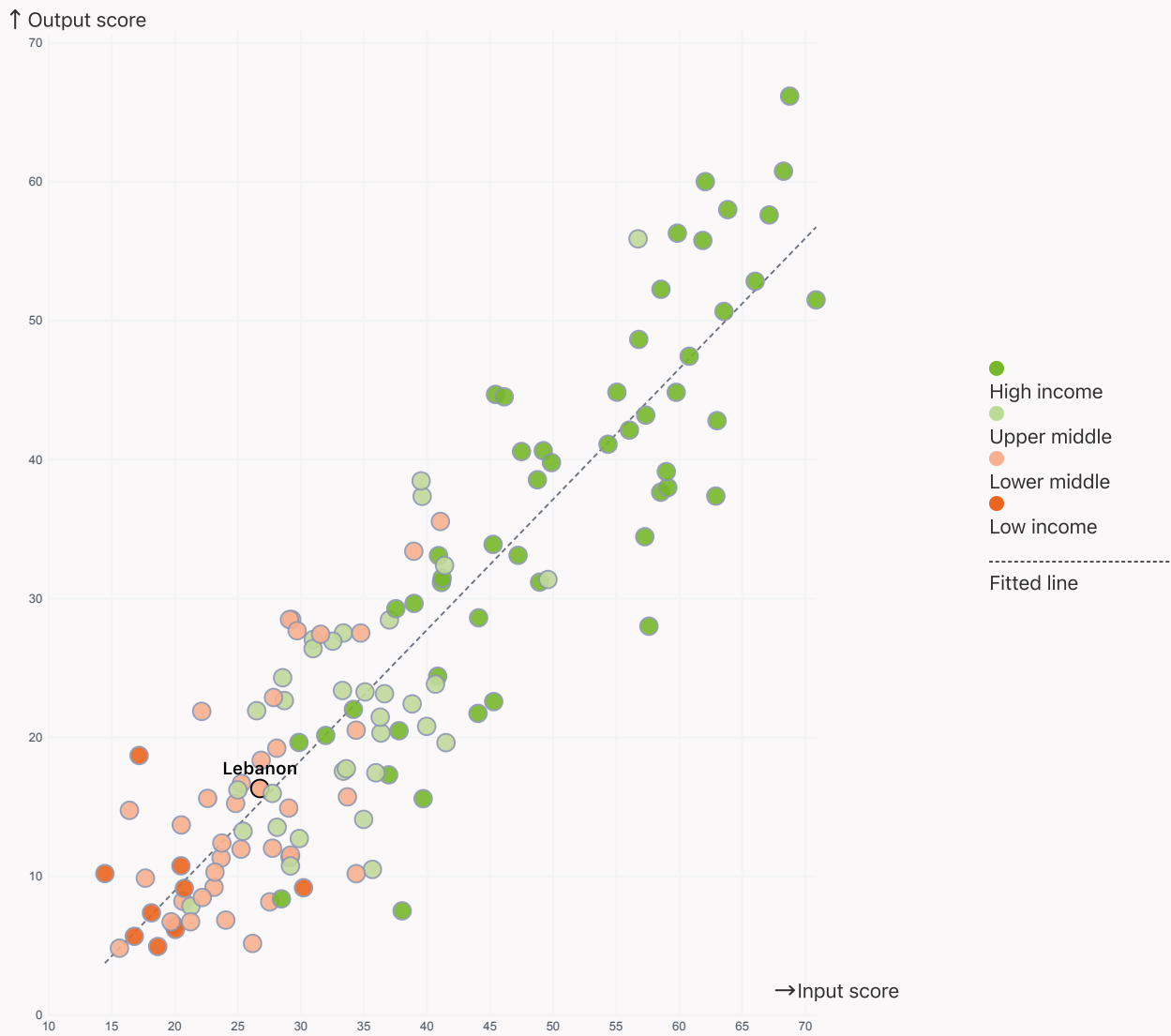
Effectively translating innovation investments into innovation outputs

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.



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

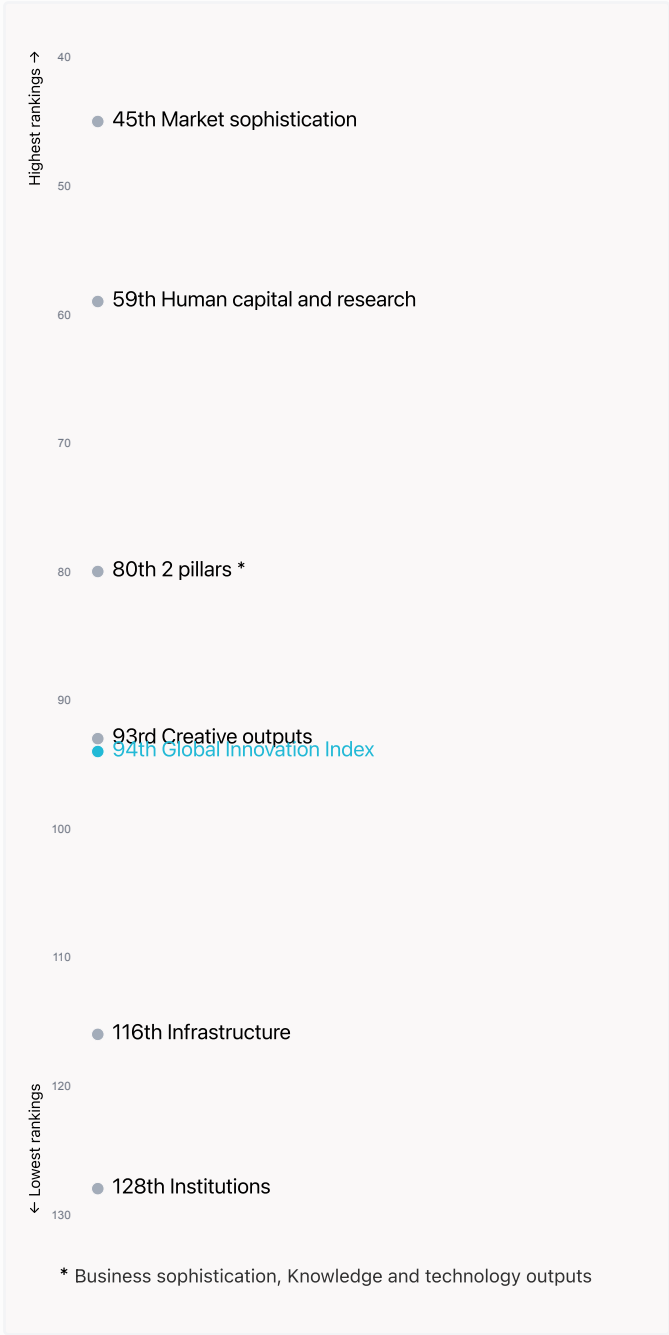
> Relationship between innovation inputs and outputs





Overview of Lebanon's rankings in the seven areas of the GII in 2024

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Lebanon are those that rank above the GII (shown in blue) and the weakest are those that rank below.



Highest rankings

Lebanon ranks highest in Market sophistication (45th), Human capital and research (59th) and Business sophistication, Knowledge and technology outputs (80th).

Lowest rankings

Lebanon ranks lowest in Institutions (128th), Infrastructure (116th) and Creative outputs (93rd).

The full WIPO Intellectual Property
🔗 Statistics profile for Lebanon can be
found on [this link](#).



Benchmark of Lebanon against other economy groupings for each of the seven areas of the GII Index

The charts shows the relative position of Lebanon (blue bar) against other economy groupings (grey bars), for each of the seven areas of the GII Index.



Lower-Middle-Income economies

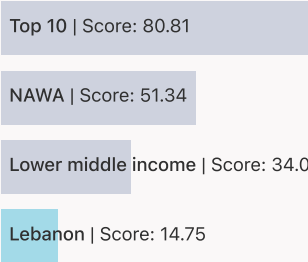
Lebanon performs above the lower-middle-income group average in Human capital and research, Market sophistication, Business sophistication, Knowledge and technology outputs.



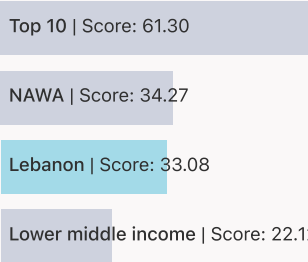
Northern Africa And Western Asia

Lebanon performs above the regional average in Market sophistication.

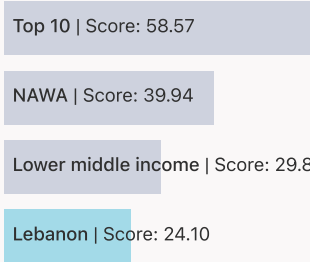
Institutions



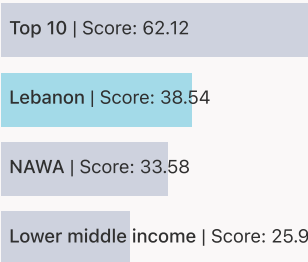
Human capital and research



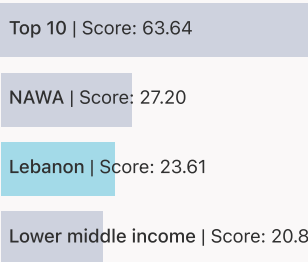
Infrastructure



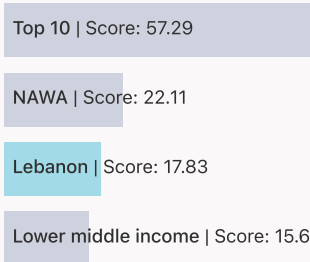
Market sophistication



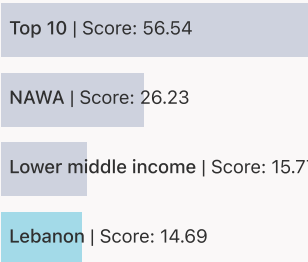
Business sophistication



Knowledge and technology outputs



Creative outputs





Innovation strengths and weaknesses in Lebanon

The table below gives an overview of the indicator strengths and weaknesses of Lebanon in the GII 2024.

Lebanon’s main innovation strengths are **Finance for startups and scaleups[†]** (rank 12), **Tertiary inbound mobility, %** (rank 14) and **National feature films/mn pop. 15–69** (rank 16).

Strengths

Rank	Code	Indicator name
12	4.1.1	Finance for startups and scaleups [†]
14	2.2.3	Tertiary inbound mobility, %
16	7.2.2	National feature films/mn pop. 15–69
20	7.2.1	Cultural and creative services exports, % total trade
20	4.1.2	Domestic credit to private sector, % GDP
20	6.1.4	Scientific and technical articles/bn PPP\$ GDP
25	4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP
28	2.2.2	Graduates in science and engineering, %
37	5.3.4	FDI net inflows, % GDP

Weaknesses

Rank	Code	Indicator name
133	1.1.1	Operational stability for businesses*
132	1.1.2	Government effectiveness*
132	6.2.1	Labor productivity growth, %
132	5.2.1	Public Research–Industry co-publications, %
127	1.3.1	Policy stability for doing business [†]
125	2.1.1	Expenditure on education, % GDP
75	7.1.3	Global brand value, top 5,000, % GDP
60	7.2.3	Entertainment and media market/th pop. 15–69
49	6.2.2	Unicorn valuation, % GDP
41	2.3.3	Global corporate R&D investors, top 3, mn USD



Lebanon's innovation system

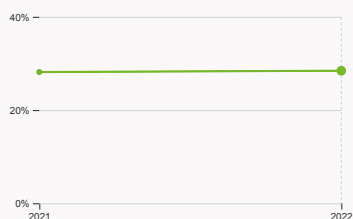
As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in Lebanon



2.1.1 Expenditure on education

was equal to 1.67 % GDP in 2020, down by 0.93 percentage points from the year prior – and equivalent to an indicator rank of 125.



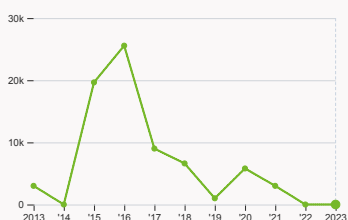
2.2.2 Graduates in science and engineering

was equal to 28.44 % of total graduates in 2022, up by 0.29 percentage points from the year prior – and equivalent to an indicator rank of 28.



2.3.4 QS university ranking

was equal to an average score of 27 for the top three universities in 2023, down by 3.91% from the year prior – and equivalent to an indicator rank of 46.



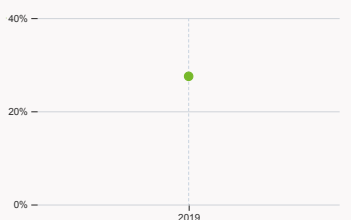
4.2.4 VC received, value

was equal to 0 USD in 2023 with no change from the year prior – and equivalent to an indicator rank of 88.



4.3.2 Domestic industry diversification

was equal to an index score of 0.19 in 2020, up by 9.57% from the year prior – and equivalent to an indicator rank of 75.



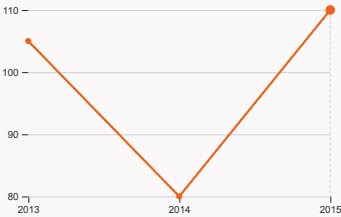
5.1.1 Knowledge-intensive employment

was equal to 27.5 % in 2019 – and equivalent to an indicator rank of 52.

Global Innovation Index 2024

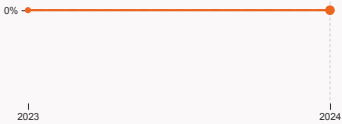


> Innovation outputs in Lebanon



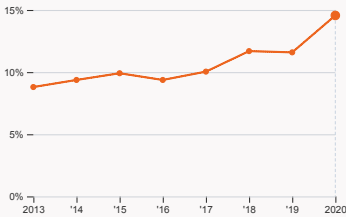
6.1.1 Patents by origin

was equal to 110 patents in 2015, up by 37.5% from the year prior – and equivalent to an indicator rank of 55.



6.2.2 Unicorn valuation

was equal to 0 % GDP in 2024 with no change from the year prior – and equivalent to an indicator rank of 49.



6.2.4 High-tech manufacturing

was equal to 14.56 % of total manufacturing output in 2020, up by 2.97 percentage points from the year prior – and equivalent to an indicator rank of 76.



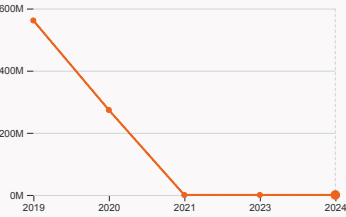
6.3.2 Production and export complexity

was equal to a score of 0.34 in 2021, up by 61.9% from the year prior – and equivalent to an indicator rank of 48.



6.3.3 High-tech exports

was equal to 384.19 million USD in 2022, up by 452.95% from the year prior – and equivalent to an indicator rank of 59.



7.1.3 Global brand value

was equal to 0 million USD for the brands in the top 5,000 in 2024 with no change from the year prior – and equivalent to an indicator rank of 75.



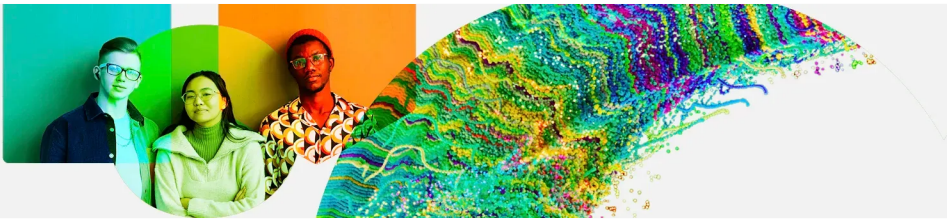
7.2.2 National feature films

was equal to 25 films in 2022, up by 56.25% from the year prior – and equivalent to an indicator rank of 16.



7.3.3 Mobile app creation

was equal to 42.73 million global downloads of mobile apps in 2023, up by 42.96% from the year prior – and equivalent to an indicator rank of 47.



Lebanon's innovation top performers

2.3.4 QS university ranking of Lebanon’s top universities

Rank	University	Score
226	AMERICAN UNIVERSITY OF BEIRUT (AUB)	41.90
577	LEBANESE UNIVERSITY	20.50
631-640	SAINT JOSEPH UNIVERSITY OF BEIRUT (USJ)	18.60

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2023>).
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 Top 15 intangible-asset intensive companies in Lebanon

Rank	Firm	Intensity, %
1	THE LEBANESE COMPANY FOR THE DEVELOPMENT AND RECONSTRUCTION OF BEIRUT CENTRAL DI	85.45
2	BANK OF BEIRUT S.A.L.	16.63
3	BANK AUDI SAL	--

Source: Brand Finance (<https://brandirectory.com/reports/gift-2022>).
Note: Brand Finance only provides within economy ranks.

Lebanon

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NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question, ● that the economy's data is outdated. Square brackets [] indicate the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level; n/a represents missing values; a dash - indicates an indicator which is not relevant to this economy and thus not considered for DMC thresholds.



Data availability

The following tables list indicators that are either missing or outdated for Lebanon.



Lebanon has missing data for fourteen indicators and outdated data for twenty eight indicators.

Missing data for Lebanon

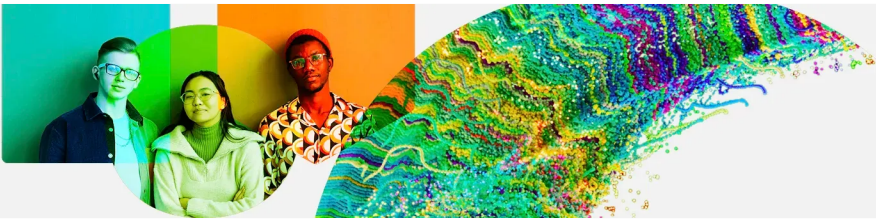
Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2020	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	n/a	2022	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.2	Logistics performance*	n/a	2023	World Bank, Logistics Performance Index 2023 (https://lpi.worldbank.org/); and World Bank 2023, Connecting to Compete 2023: Trade Logistics in the Global Economy The Logistics Performance Index and its Indicators.
3.2.3	Gross capital formation, % GDP	n/a	2023	International Monetary Fund
4.1.3	Loans from microfinance institutions, % GDP	n/a	2022	International Monetary Fund, Financial Access Survey (FAS)
5.1.3	GERD performed by business, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.1.2	PCT patents by origin/bn PPP\$ GDP	n/a	2023	World Intellectual Property Organization; International Monetary Fund
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund
7.1.1	Intangible asset intensity, top 15, %	n/a	2023	Brand Finance
7.1.4	Industrial designs by origin/bn PPP\$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund



Outdated data for Lebanon

Code	Indicator name	Economy Year	Model Year	Source
1.3.1	Policy stability for doing business [†]	2021	2023	World Economic Forum, Executive Opinion Survey (EOS)
1.3.2	Entrepreneurship policies and culture [†]	2018	2023	Global Entrepreneurship Monitor
2.1.1	Expenditure on education, % GDP	2020	2022	UNESCO Institute for Statistics
2.1.4	PISA scales in reading, maths and science	2018	2022	OECD, PISA
2.1.5	Pupil–teacher ratio, secondary	2016	2022	UNESCO Institute for Statistics
3.1.1	ICT access*	2021	2022	World Intellectual Property Organization; International Telecommunication Union ITU DataHub (accessed May 1st, 2024)
3.2.1	Electricity output, GWh/mn pop.	2021	2022	International Energy Agency
4.1.1	Finance for startups and scaleups [†]	2018	2023	Global Entrepreneurship Monitor
4.1.2	Domestic credit to private sector, % GDP	2017	2022	International Monetary Fund; World Bank and OECD GDP estimates.
4.2.1	Market capitalization, % GDP	2021	2022	World Federation of Exchanges; World Bank
4.2.2	Venture capital (VC) investors, deals/bn PPP\$ GDP	2022	2023	LSEG Data & Analytics; International Monetary Fund
4.2.3	VC recipients, deals/bn PPP\$ GDP	2022	2023	LSEG Data & Analytics; International Monetary Fund
4.2.4	VC received, value, % GDP	2022	2023	LSEG Data & Analytics; International Monetary Fund
4.3.2	Domestic industry diversification	2020	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4
4.3.3	Domestic market scale, bn PPP\$	2022	2023	International Monetary Fund
5.1.1	Knowledge-intensive employment, %	2019	2022	International Labour Organization
5.1.2	Firms offering formal training, %	2019	2023	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	2019	2023	International Labour Organization
5.2.2	University–industry R&D collaboration [†]	2021	2023	World Economic Forum, Executive Opinion Survey (EOS)
5.2.3	State of cluster development [†]	2021	2023	World Economic Forum, Executive Opinion Survey (EOS)
5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	2022	2023	LSEG Data & Analytics; International Monetary Fund
5.3.4	FDI net inflows, % GDP	2021	2022	International Monetary Fund; World Bank; and OECD;
6.1.1	Patents by origin/bn PPP\$ GDP	2015	2022	World Intellectual Property Organization; International Monetary Fund

Global Innovation Index 2024



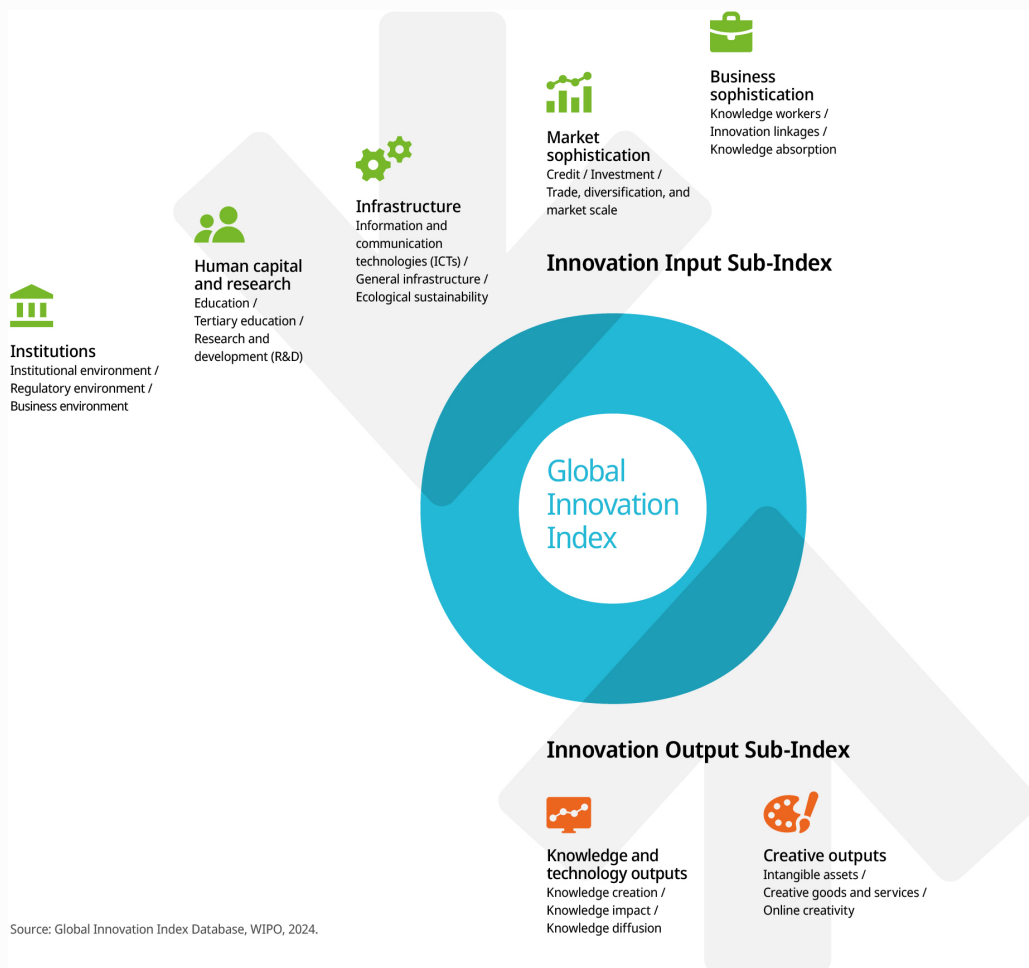
Code	Indicator name	Economy Year	Model Year	Source
6.1.4	Scientific and technical articles/bn PPP\$ GDP	2022	2023	Clarivate; International Monetary Fund
6.2.4	High-tech manufacturing, %	2020	2021	United Nations Industrial Development Organization
7.1.2	Trademarks by origin/bn PPP\$ GDP	2015	2022	World Intellectual Property Organization; International Monetary Fund
7.2.3	Entertainment and media market/th pop. 15–69	2022	2023	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund
7.3.3	Mobile app creation/bn PPP\$ GDP	2022	2023	data.ia (a Sensor Tower Company); International Monetary Fund

Global Innovation Index 2024



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.