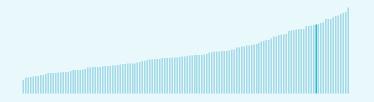


The Global Innovation Index (GII) ranks world economies according to their innovation capabilities.

Consisting of **roughly 80 indicators**, grouped into innovation inputs and outputs, the GII **aims to capture the multi-dimensional facets of innovation**.

Israel ranking in the Global Innovation Index 2023

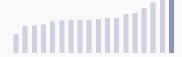
> Israel ranks 14th among the 132 economies featured in the GII 2023.



Israel ranks 13th among the 50 highincome group economies.



Israel ranks 1st
 among the 18
 economies in
 Northern Africa and
 Western Asia.



> Israel GII Ranking (2020-2023)

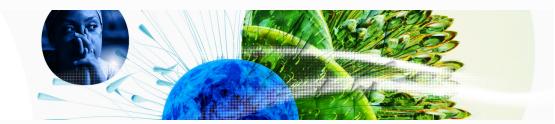
The table shows the rankings of Israel over the past four years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Israel in the GII 2023 is between ranks 12 and 18.

| | GII Position | Innovation Inputs | Innovation Outputs |
|------|--------------|-------------------|--------------------|
| 2020 | 13th | 17th | 13th |
| 2021 | 15th | 18th | 12th |
| 2022 | 16th | 22nd | 16th |
| 2023 | 14th | 21st | 13th |

Israel performs better in innovation outputs than innovation inputs in 2023.

This year Israel ranks 21st in innovation inputs. This position is higher than last year.

Israel ranks 13th in innovation outputs.
This position is higher than last year.



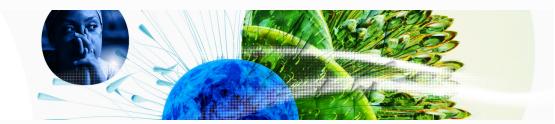
→ Expected vs. observed innovation performance

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.



> Israel is an innovation leader, ranking in the top 25 of the GII.

> Innovation overperformers relative to their economic development ↑ GII Score Innovation leader Performing above expectations for level of development Performing at expectations for level of development Performing below expectations for level of 30 development Size legend (Population) 0 0.8 0.9 1 →GDP per capita, PPP logarithmic scale (thousands of \$)

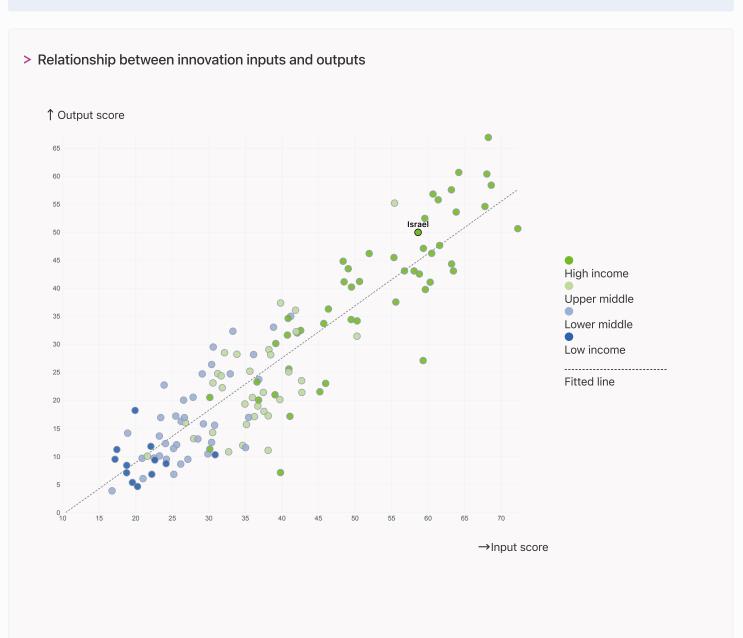


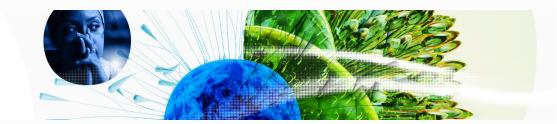
→ Effectively translating innovation investments into innovation outputs

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.



> Israel produces more innovation outputs relative to its level of innovation investments.





→ Overview of Israel's rankings in the seven areas of the GII in 2023

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

5th Knowledge and technology outputs Highest rankings → 6th Business sophistication 11th Market sophistication • 14th Global Innovation Index 20th Human capital and research 33rd Creative outputs 36th Infrastructure ← Lowest rankings 40th Institutions

> Highest rankings



Israel ranks highest in Knowledge and technology outputs (5th), Business sophistication (6th) and Market sophistication (11th).

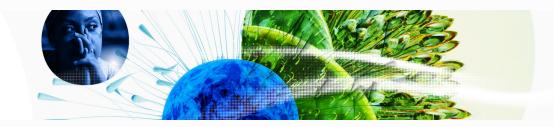
> Lowest rankings



Israel ranks lowest in Institutions (40th), Infrastructure (36th) and Creative outputs (33rd).

The full WIPO Intellectual Property

Statistics profile for Israel can be found on this link.



→ Benchmark of Israel against other country groupings for each of the seven areas of the GII Index

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

> High-Income economies

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

> Northern Africa And Western Asia

Israel performs above the regional average in all the pillars.

Knowledge and technology outputs

Israel | Score: 61.61

Top 10 | Score: 58.96

High income | Score: 38.62

NAWA | Score: 24.01

Creative outputs

Top 10 | 56.09

High income | 40.27

Israel | 38.32

NAWA | 24.51

Business sophistication

Israel | 65.09

Top 10 | 64.39

High income | 46.38

NAWA | 29.44

Market sophistication

Top 10 | 61.93

Israel | 59.00

High income | 46.42

NAWA | 36.12

Human capital and research

Top 10 | 60.28

Israel | 52.45

High income | 46.30

NAWA | 32.72

Infrastructure

Top 10 | 62.83

High income | 55.85

Israel | 54.20

NAWA | 41.60

Institutions

Top 10 | 79.85

High income | 68.16

Israel | 62.55

NAWA | 53.39



→ Innovation strengths and weaknesses in Israel

The table below gives an overview of the indicator strengths and weaknesses of Israel in the GII 2023.



> Israel's main innovation strengths are GERD financed by abroad, % GDP (rank 1), GERD performed by business, % GDP (rank 1) and ICT services exports, % total trade (rank 1).

Strengths Weaknesses

trade

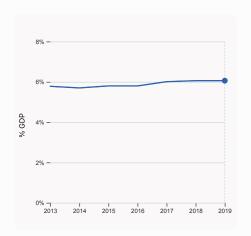
| Rank | Code | Indicator name | Rank | Code | Indicator name |
|------|-------|---|------|-------|--|
| 1 | 5.2.3 | GERD financed by abroad, % GDP | 114 | 1.2.3 | Cost of redundancy dismissal |
| 1 | 5.1.3 | GERD performed by business, % GDP | 107 | 7.1.2 | Trademarks by origin/bn PPP\$ GDP |
| 1 | 6.3.4 | ICT services exports, % total trade | 71 | 2.1.5 | Pupil-teacher ratio, secondary |
| 1 | 6.1.2 | PCT patents by origin/bn PPP\$ GDP | 68 | 6.2.3 | Software spending, % GDP |
| 1 | 2.3.2 | Gross expenditure on R&D, % GDP | 61 | 1.1.1 | Operational stability for businesses |
| 1 | 6.2.2 | Unicorn valuation, % GDP | 61 | 2.2.3 | Tertiary inbound mobility, % |
| 1 | 5.2.1 | University-industry R&D collaboration | 58 | 4.3.1 | Applied tariff rate, weighted avg., % |
| 1 | 4.2.4 | VC received, value, % GDP | 58 | 3.1.1 | ICT access |
| 1 | 4.2.3 | VC recipients, deals/bn PPP\$ GDP | 56 | 2.1.2 | Government funding/pupil, secondary, % GDP/cap |
| 3 | 7.3.4 | Mobile app creation/bn PPP\$ GDP | 39 | 2.1.4 | PISA scales in reading, maths and science |
| 3 | 5.2.4 | Joint venture/strategic alliance deals/bn PPP\$ GDP | | | |
| 5 | 721 | Cultural and creative services exports, % total | | | |

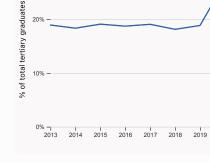


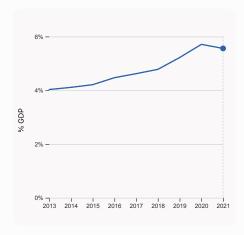
→ Israel's innovation system

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

> Innovation inputs in Israel







2.1.1 Expenditure on education, % GDP

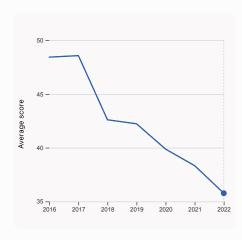
was equal to 6.06% GDP in 2019, with no change from the year prior – and equivalent to an indicator rank of 17.

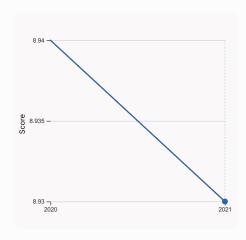
2.2.2 Graduates in science and engineering, %

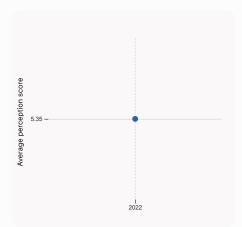
was equal to 26.92% of total tertiary graduates in 2020, up by 8.07 percentage points from the year prior – and equivalent to an indicator rank of 34.



was equal to 5.56% GDP in 2021, down by 0.15 percentage points from the year prior – and equivalent to an indicator rank of 1.







2.3.4 QS university ranking, top 3

was equal to an average score of 35.77 for the top 3 universities in 2022, down by 6.68% from the year prior – and equivalent to an indicator rank of 36.

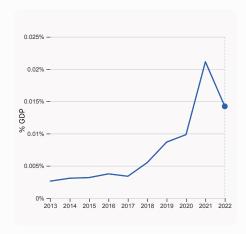
3.1.1 ICT access

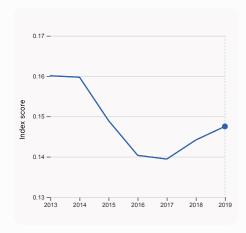
was equal to a score of 8.93 in 2021, down by 0.11% from the year prior – and equivalent to an indicator rank of 58.

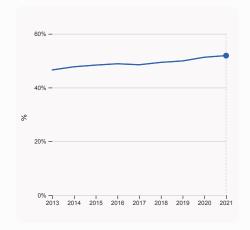
4.1.1 Finance for startups and scaleups

was equal to an average perception score of 5.35 in 2022, equivalent to an indicator rank of 22.









4.2.4 VC received, value, % GDP

was equal to 0.01422% GDP in 2022, down by 0.0069 percentage points from the year prior – and equivalent to an indicator rank of 1.

4.3.2 Domestic industry diversification

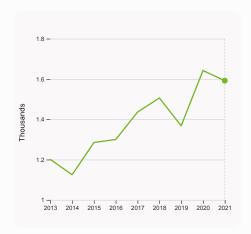
was equal to an index score of 0.148 in 2019, up by 2.33% from the year prior – and equivalent to an indicator rank of 46.

5.1.1 Knowledge-intensive employment, % was equal to 51.89% in 2021, up by 0.6 percentage points from the year prior – and

equivalent to an indicator rank of 7.

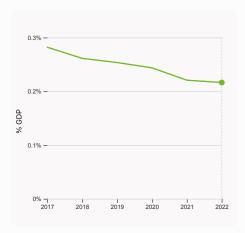


> Innovation outputs in Israel



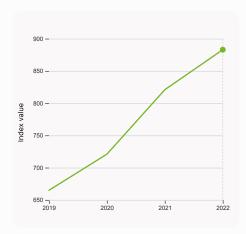
6.1.1 Patents by origin

was equal to 1.59 Thousands in 2021, down by 3.045% from the year prior – and equivalent to an indicator rank of 22.



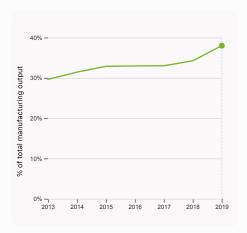
6.2.3 Software spending, % GDP

was equal to 0.216% GDP in 2022, down by 0.0043 percentage points from the year prior – and equivalent to an indicator rank of 68.



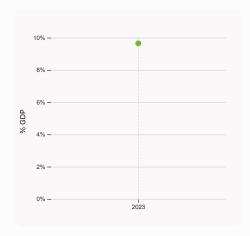
6.1.5 Citable documents H-index

was equal to an index value of 883 in 2022, up by 7.55% from the year prior – and equivalent to an indicator rank of 16.



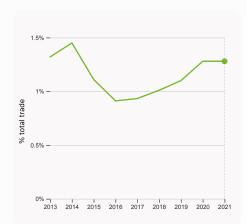
6.2.4 High-tech manufacturing, %

was equal to 37.99% of total manufacturing output in 2019, up by 3.74 percentage points from the year prior – and equivalent to an indicator rank of 29.



6.2.2 Unicorn valuation, % GDP

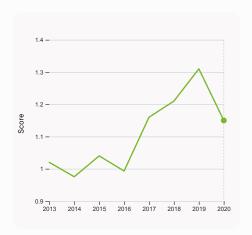
was equal to 9.65 % GDP in 2023 – and equivalent to an indicator rank of 1.



6.3.1 Intellectual property receipts, % total trade

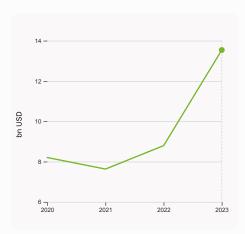
was equal to 1.28% total trade in 2021, up by with no change from the year prior – and equivalent to an indicator rank of 19.





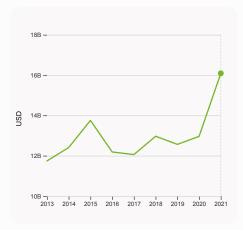
6.3.2 Production and export complexity

was equal to a score of 1.15 in 2020, down by 12.21% from the year prior – and equivalent to an indicator rank of 21.



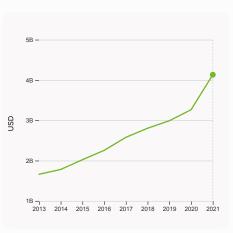
7.1.3 Global brand value, top 5,000

was equal to 13.539 bn USD in 2023, up by 53.96% from the year prior – and equivalent to an indicator rank of 44.



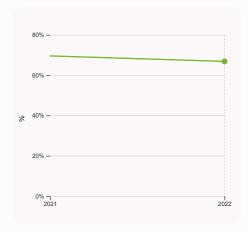
6.3.3 High-tech exports

was equal to 16,090,256,000 USD in 2021, up by 24.15% from the year prior – and equivalent to an indicator rank of 12.



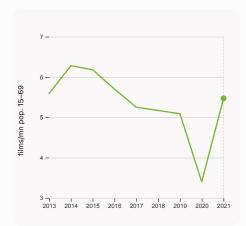
7.2.1 Cultural and creative services exports

was equal to 4,131,294,000 USD in 2021, up by 26.6% from the year prior – and equivalent to an indicator rank of 5.



7.1.1 Intangible asset intensity, top 15, %

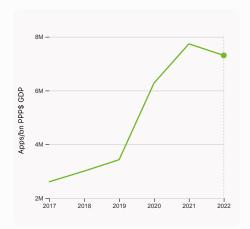
was equal to 66.81% in 2022, down by 2.72 percentage points from the year prior – and equivalent to an indicator rank of 25.



7.2.2 National feature films/mn pop. 15-69

was equal to 5.47 films/mn pop. 15–69 in 2021, up by 60.88% from the year prior – and equivalent to an indicator rank of 21.





7.3.4 Mobile app creation/bn PPP\$ GDP

was equal to 7,308,703.21 Apps/bn PPP\$ GDP in 2022, down by 5.56% from the year prior – and equivalent to an indicator rank of 3.



→ Israel's innovation top performers

> 2.3.3 Global corporate R&D investors from Israel

| Rank | Firm | Industry | | R&D Growth | R&D Intensity |
|------|--------------------------------|---------------------------------|----------|------------|---------------|
| | | | [mn EUR] | [%] | [%] |
| 229 | TEVA PHARMACEUTICAL INDUSTRIES | Pharmaceuticals & Biotechnology | 854 | -3 | 6 |
| 300 | MARIS-TECH | Technology Hardware & Equipment | 623 | -10 | 34 |
| 471 | WIX.COM | Software & Computer Services | 377 | 33 | 34 |
| 512 | ELBIT SYSTEMS | Aerospace & Defence | 349 | 10 | 7 |

Source: European Commission's Joint Research Centre (https://iri.jrc.ec.europa.eu/scoreboard/2022-eu-industrial-rd-investment-scoreboard). Note: European Commission's Joint Research Centre ranks the top 2,500 firms by R&D investment annually.

> 2.3.4 QS university ranking of Israel's top universities

| Rank | University | Score |
|------|---|-------|
| 222 | HEBREW UNIVERSITY OF JERUSALEM | 41.50 |
| 260 | TEL AVIV UNIVERSITY | 37.90 |
| 408 | TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY | 27.90 |

 $Source: QS\ Quacquarelli\ Symonds\ Ltd\ (https://www.topuniversities.com/university-rankings/world-university-rankings/2023).$

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".

> 6.2.2 Top Unicorn Companies in Israel

| Rank | Unicorn Company | Industry | City | Valuation, bn USD |
|------|--------------------|-----------------------------|----------|----------------------|
| 1 | WIZ | Cybersecurity | Tel Aviv | 10 |
| 2 | STARKWARE | Cybersecurity | Netanya | 8 |
| 3 | MOON ACTIVE | Mobile & telecommunications | Tel Aviv | 5 |

Source: CBInsights, Tracker – The Complete List of Unicorn Companies: https://www.cbinsights.com/research-unicorn-companies



> 7.1.1 Top 15 intangible-asset intensive companies in Israel

| Rank | Firm | Intensity, % |
|------|---------------------------------------|--------------|
| 1 | TEVA PHARMACEUTICAL INDUSTRIES LTD | 87.19 |
| 2 | CHECK POINT SOFTWARE TECHNOLOGIES LTD | 65.79 |
| 3 | SOLAREDGE TECHNOLOGIES INC | 84.05 |

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

> 7.1.3 Top 5,000 companies in Israel with highest global brand value

| Rank | Brand | Industry | Brand Value, mn USD |
|------|----------------------|----------|---------------------|
| 1 | BANK LEUMI | Banking | 1,738.7 |
| 2 | BANK HAPOALIM | Banking | 1,675.6 |
| 3 | MIZRAHI-TEFAHOT BANK | Banking | 1,156.2 |

Source: Brand Finance (https://brandirectory.com). Note: Rank corresponds to within economy ranks.

4.3.3 Domestic market scale, bn PPP\$



GII 2023 rank

| Institutions Score Value Review Sco | Output rank 13 | Input rank 21 Income High | Regi NAV | | Population (mn) 9.0 | GDP, PPP\$ (bn) 496.8 | GDP per cap | |
|---|------------------------|--|--------------------|---------|----------------------------|-----------------------------------|---------------|---------|
| 1.1 Institutional environment | | | Score / Value | e Rank | | | Score / Value | Rank |
| 1.1 1.2 | | | 62.6 | 40 ◊ | Business sophist | tication | 65.1 | 6 |
| 1.2 Covermment effectiveness* 7.2 2 2 1 1 1 1 1 1 1 | 1.1 Institutional en | vironment | 63.6 | 36 ♦ | 5.1 Knowledge workers | ; | 64.9 | 14 |
| 1.2 Regulatory cultimary | 1.1.1 Operational sta | bility for businesses* | 54.9 | 61 ○ ◊ | 5.1.1 Knowledge-intensiv | re employment, % | © 51.9 | 7 |
| 1.2.1 Regulatory cuality* 67.3 2 8 | 1.1.2 Government ef | fectiveness* | 72.4 | 23 | 5.1.2 Firms offering form | al training, % | 18.6 | 84 |
| 1.2.3 Cost or deundancy dismissis | 1.2 Regulatory env | ironment | 65.9 | 57 ♦ | 5.1.3 GERD performed by | y business, % GDP | 5.1 | 1 • |
| 1.2.3 Cost of redundancy dismissal 2.74 114 0.75 0.5 2.1 Innovation linkages 3.1 | 1.2.1 Regulatory qua | llity* | 73.5 | 26 | 5.1.4 GERD financed by I | ousiness, % | 40.0 | 43 ♦ |
| 1.3 In plicies for doing pusiness* 59.0 39 0 0 0 1 0 0 | 1.2.2 Rule of law* | | 67.3 | 29 ♦ | 5.1.5 Females employed | w/advanced degrees, % | 24.2 | 21 |
| 13.1 Policies for doing business* 59.9 59 5.2 State of cluster development* 59.2 3 | 1.2.3 Cost of redund | lancy dismissal | 27.4 | 114 ○ ◊ | 5.2 Innovation linkages | • | 89.6 | 1 |
| Late Interpreneurs in policies and culture* 52.2 2 but the previous of the property | 1.3 Business enviro | onment | 58.1 | 38 | 5.2.1 University-industry | R&D collaboration [†] | 100.0 | 1 • |
| Human capital and research 52.5 20 5.2 | 1.3.1 Policies for doi | ng business [†] | 59.9 | 39 ♦ | 5.2.2 State of cluster dev | velopment [†] | 56.2 | 37 ♦ |
| Selection | 1.3.2 Entrepreneursh | nip policies and culture [†] | 56.2 | 26 | 5.2.3 GERD financed by | abroad, % GDP | 2.9 | 1 • |
| 2.1 Education | | | 50.5 | 0.0 | 5.2.4 Joint venture/strate | egic alliance deals/bn PPP\$ GDP | 0.3 | 3 ● |
| 2.12 Government funding/pupil, secondary, % GDP 6.61 77 5.3.1 Intellectual property payments, % total trade 1.9.2 34 2.1.2 Government funding/pupil, secondary, % GDP/cap 16.1 35 5.3.2 High-retemiports, % total trade 1.9.2 34 2.1.3 School life expectancy, years 16.1 35 5.3.2 High-retemiports, % total trade 1.9.2 32 2.1.4 Pips, scales in reading, maths and science 466.2 39 ○ 5.3.4 Fib) reteminors, % GDP 4.6.8 2.7.2 2.2. Teritary enducation 33.2 57 2.2. Teritary enducation 34 51 52 2.2. Zendautes in science and engineering, % 26.9 34 4.1 51 52 2.2. Zendautes in science and engineering, % 26.9 34 4.1 51 52 52 53 58 58 58 58 58 58 58 | Human capit | tal and research | 52.5 | 20 | 5.2.5 Patent families/bn | PPP\$ GDP | 4.9 | 7 |
| 2.1.6 powerment funding/pupil, secondary, % GDP/cap 99.6 8 6 0 5.2.2 High-tech imports, % total trade 1.2.2 34 2.1.3 School life expectancy, years 16.1 35 5.3.3 ICT services imports, % total trade 2.2 2.8 2.1.5 Pupil-teacher ratio, secondary 14.1 71 0 5.3.5 Research tallent, % in businesses 74 78 78 78 78 78 78 78 | 2.1 Education | | 57.3 | 48 ♦ | 5.3 Knowledge absorpt | tion | 40.8 | 42 ♦ |
| 2.1.2 Government funding/pugli, secondary, % CDP/cap 1.3 School life expectancy, years 2.1.3 Exhos life expectancy, years 3.1.4 PSA scales in reading, maths and science 465.2 39 ○ | | education, % GDP | | | 5.3.1 Intellectual propert | y payments, % total trade | 0.9 | 41 |
| 2.13 chool life expectancy, years and scalence 465. 2 | · · | • | 19.6 | 56 〇 | 5.3.2 High-tech imports, | % total trade | 10.2 | 34 |
| 2.1.4 PLSA scales in reading, maths and science 465.2 39 ○ ○ 5.3.4 FDI net linflows, % GDP 4.8 23 + 21.5 Pupil-teacher ratio, secondary 1.4 71 ○ ○ 5.3.5 Research talent, % in businesses 0.6 1.7 2.2 Tertiary education 33.2 5.7 Y Knowledge and technology outputs 61.6 5 2.2.1 Tertiary evolument, % gross 61.1 52 Y Knowledge and technology outputs 60.0 10 2.2.2 Forduser is science and engineering, % 3.4 61.0 ○ 6.1.1 Patents by origin/hip PPPS GDP 3.6 22 2.3 Research Rab, FTE/m pop. 1/a 6.1.3 Utility models by origin/hip PPPS GDP 1/a 1/a 2.3.2 Gross expenditure on R&D, % GDP 5.6 1 6.1.4 6.1.3 Utility models by origin/hip PPPS GDP 1/a 1/a 2.3.2 Gross expenditure on R&D, % GDP 5.6 1 6.1.5 Citable documents H-index 4.6 5.4 2.3.4 QS university ranking, top 3* 8.2 3 6.2 Knowledge impact 9.2 1.6 2.3.1 Information and communication technologies (ICTs) 8.2 3 6.2 Knowledge impact 9.2 1.2 3.1.2 (TT seet | | =:: : : : : : : : : : : : : : : : : : : | | 35 | 5.3.3 ICT services impor | ts, % total trade | 2.2 | 28 |
| 2.1 Fundamental performance* 2.2 Terriary education 3.3 | | | | | 5.3.4 FDI net inflows, % | GDP | 4.8 | 23 |
| 2.2 Tretriary education 2.2.1 Tretriary enrolment, % gross 2.2.2 Graduates in science and engineering, % 2.2.5 Tretriary inbound mobility, % 3.4 61 ○ 61. Nowledge creation 2.2.2 Stretriary inbound mobility, % 3.4 61 ○ 61. Nowledge creation 3.5 61. Faterits by origin/hip PPPS GDP 3.6 1.1 Patents by origin/hip PPPS GDP 3.6 1.1 Patents by origin/hip PPPS GDP 3.7 Streen, and development (R&D) 3.8 seasor-had development (R&D) 3.8 seasor-had development (R&D) 3.8 seasor-had by origin/hip PPPS GDP 3.8 Streen, FTE/mip nop. 3.2 Gross expenditure on R&D, % GDP 3.1 Information and communication technologies (ICTs) 3.4 Su Sinuserity ranking, top 3** 3.4 Su Sinuserity ranking, top 3** 3.5 Information and communication technologies (ICTs) 3.1 Information and communication technologies (ICTs) 3.1.1 Information and communication technologies (ICTs) 3.1.1 Information and communication technologies (ICTs) 3.1.2 ICT access* 3.1.2 ICT access* 3.1.3 So streen, and a streen and a streen and a streen, and a streen and a | | | | 71 ○ ◊ | 5.3.5 Research talent, % | in businesses | n/a | n/a |
| 2.11 retriary enrolment, % groses 61.1 52 | | | 33.2 | 57 | A to the second | | 21.0 | _ |
| 2.2.2 Graduates in science and engineering, % 26, 8 d 6,1 Knowledge creation 60.0 for partiary inbound mobility, % 3.4 s 10 | | | | | Knowledge and t | echnology outputs | 61.6 | 5 |
| 2.31 Retriary inbound mbility, % 2.36 Research and development (R&D) 3.6 6.5 8.5 6.1.1 Patents by origin/bn PPPS GDP 3.6 8.5 8. | | | 26.9 | 34 | 6.1 Knowledge creation | 1 | 60.0 | 10 |
| 2.31 Research and development (R8D) 66.9 8 | | | | 61 ○ ◊ | _ | | | |
| 2.3.1 Researchers, FTE/m pop. n/a n/a n/a 6.1.3 Utility models by origin/bn PPP\$ GDP n/a n/a< | | | | 8 | | | | |
| 2.3.3 Grose expenditure on R&D, % GDP 2.3.3 Global corporate R&D investors, top 3, mn US\$ 8.4.4 al. 1 | | | n/a | n/a | | | n/a | n/a |
| 2.3.3 Global corporate R&D investors, top 3, mn US\$ 6.4 | · · | | • | - | • | - · | | |
| 2.3.4 QS university ranking, top 3* 36.2 36 | | | | | | | | |
| \$\char\char\char\char\char\char\char\char | • | | | | | | | 5 |
| Section Sec | | | | | | growth, % | | |
| 3.1 Information and communication technologies (ICTs) 3.1.1 ICT access* 84.1 | nfrastructur | re | 54.2 | 36 ♦ | | = : | 9.6 | 1 • |
| 3.1.1 ICT access* 3.1.2 ICT use* 3.1.3 Government's online service* 3.1.4 E-participation* 3.1.4 E-participation* 3.1.5 General infrastructure 3.1.6 General infrastructure 3.1.7 General infrastructure 3.1.8 Government's output, GWh/m pop. 3.1.8 Government's output, GWh/m pop. 3.1.9 General infrastructure 3.1.1 General infrastructure 3.1.2 Logistics performance* 3.1.2 Logistics performance* 3.1.3 Gross capital formation, % GDP 3.1.4 General infrastructure 3.1.5 Governmence* 3.1.5 Governmence* 3.1.6 Governmence* 3.1.7 Governmence* 3.1.8 Governmence* 3.1.9 Governmence* 3.1.1 ICT understructure 3.1.1 Governmence* 3.1.1 ICT understructure 3.1.2 Logistics performance* 3.1.2 Logistics performance* 3.1.2 Logistics performance* 3.1.3 Gross capital formation, % GDP 3.1.3 Gross capital formation, % GDP 3.1.4 Governmence* 3.1.5 Government in general infrastructure 3.1.5 Government in general infrastructure 3.1.5 Government in general infrastructure 3.1.6 Government in general infrastructure 3.1.7 Intrangible assets 3.1.8 Government in general infrastructure 3.1.9 Government in general infrastructure 3.1.1 Intrangible asset intensity, top 15, % 3.1 Government in general intensity, top 15, % 3.1 Government in general intensity, top 15, % 3.1 Global brand value, top 5,000 3.1 Intrangible asset intensity, top 15, % 3.1 Global brand value, top 5,000 3.1 Industrial designs by origin/lon PPP\$ GDP 3.2 Industrial designs by origin/lon PPP\$ GDP 3.3 Industrial designs by origin/lon PPP\$ GDP 3.4 Industrial designs by origin/lon PPP\$ GDP 3.5 Industrial designs by origin/lon PPP\$ GDP 3.6 Industrial designs by origin/lon PPP\$ GDP 3.7 Intrangible asset intensity, top 15, 69 3.7 Intrangible asset intensity, top 15, 69 3.7 | 3.1 Information and | d communication technologies (ICTs) | 82.6 | 30 | | | 0.2 | 68 ○ ◊ |
| 3.1.2 ICT use* 89.5 23 6.3 Knowledge diffusion 66.4 2 2 2 2 2 2 2 2 2 | | | | | · - | | 38.0 | 29 |
| 3.1.3 Government's online service* 3.1.4 E-participation* 7.09 3.7 6.3.2 Production and export complexity 7.65 2.1 3.2 General infrastructure 3.2.1 Electricity output, CWh/mn pop. 7.896.6 2.1 6.3.3 High-tech exports, % total trade 3.2.1 Electricity output, CWh/mn pop. 7.896.6 2.1 6.3.4 ICT services exports, % total trade 3.2.2 Logistics performance* 68.2 3.2.3 Gross capital formation, % GDP 68.1 3.3 Gross capital formation, % GDP 68.1 3.3 Ecological sustainability 3.6.1 3.9 3.3 Ecological sustainability 3.6.1 3.9 3.1 GDP/unit of energy use 7.0 3.2 Environmental performance* 49.7 40 7.1 Intangible assets 3.3 ISO 14001 environment/bn PPP\$ GDP 7.1 Intangible asset intensity, top 15, % 6.6.8 25 3.3 ISO 14001 environment/bn PPP\$ GDP 7.1.3 Global brand value, top 5,000 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Creative services exports, % total trade 7.1.1 Intangible asset intensity, top 15, % 6.6.8 25 4.1.1 Finance for startups and scaleups† 6.6.8 7.1.2 Trademarks by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.4 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1.5 Industrial designs by origin/bn PPP\$ GDP 7.1. | | | | | | | 66.4 | 2 |
| 3.1.4 E-participation* 70.9 37 6.3.2 Production and export complexity 76.5 21 3.2 General infrastructure 43.9 27 6.3.3 High-tech exports, % total trade 12.3 12 3.2.1 Electricity output, GWh/mn pop. 7,896.6 21 6.3.4 ICT services exports, % total trade 12.3 12 3.2.2 Logistics performance* 68.2 25 | | online service* | | | 6.3.1 Intellectual propert | y receipts, % total trade | 1.2 | 19 |
| 3.2 General infrastructure 3.2.1 Electricity output, GWh/mn pop. 3.2.2 Logistics performance* 3.2.2 Logistics performance* 3.2.2 Logistics performance* 3.2.3 Gross capital formation, % GDP 3.3.1 GDP/unit of energy use 3.3.1 GDP/unit of energy use 3.3.2 Environmental performance* 3.3.2 Environmental performance* 3.3.3 ISO 14001 environment/bn PPP\$ GDP 3.3.4 Industrial designs by origin/bn PPP\$ GDP 3.3.5 Industrial designs by origin/bn PPP\$ GDP 3.3.5 Industrial designs by origin/bn PPP\$ GDP 3.3.6 Industrial designs by origin/bn PPP\$ GDP 3.3.7 Industrial designs by origin/bn PPP | | | | | 6.3.2 Production and exp | port complexity | 76.5 | 21 |
| 3.2.1 Electricity output, GWh/mn pop. 3.2.2 Logistics performance* 68.2 25 | | | | | 6.3.3 High-tech exports, | % total trade | 12.3 | 12 |
| 3.2.2 Logistics performance* 68.2 25 ♦ 6.3.5 ISO 9001 quality/bn PPP\$ GDP 20.5 12 3.2.3 Gross capital formation, % GDP 3.3.6 Ecological sustainability 3.3.1 GDP/unit of energy use 3.3.2 Environmental performance* 49.7 46 ♦ 7.1.1 Intangible assets intensity, top 15, % 3.3.3 ISO 14001 environment/bn PPP\$ GDP 40.7 146 ♦ 7.1.2 Trademarks by origin/bn PPP\$ GDP 41.0 Trademarks sophistication 59.0 11 41.1 Finance for startups and scaleups† 41.1 Finance for startups and scaleups† 41.2 Domestic credit to private sector, % GDP 41.3 Loans from microfinance institutions, % GDP 41.4 Intendit 42.1 Market capitalization, % GDP 42.1 Market capitalization, % GDP 42.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 43.3 Online creativity 42.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 43.1 Applied tariff rate, weighted avg., % 43.1 Applied tariff rate, weighted avg., % 43.1 Applied tariff rate, weighted avg., % 46.8 25 ♦ 6.3.5 ISO 9001 quality/bn PPP\$ GDP 47.1 At have available asset intensity, top 15, % 47.1 Intangible asset intensity, top 15, % 47.1.1 Intangible asset intensity, top 15, % 47.1.2 Trademarks by origin/bn PPP\$ GDP 11.6 107 | 3.2.1 Electricity outr | out, GWh/mn pop. | 7,896.6 | 21 | 6.3.4 ICT services expor | ts, % total trade | 19.2 | 1 • |
| 3.2.3 Gross capital formation, % GDP 3.3.1 Ecological sustainability 3.3.1 GDP/unit of energy use 3.3.2 Environmental performance* 49.7 46 ◇ 7.1.1 Intangible asset intensity, top 15, % 3.3.3 ISO 14001 environment/bn PPP\$ GDP 40.7 46 ◇ 7.1.1 Intangible asset intensity, top 15, % 40.7 7.1.2 Trademarks by origin/bn PPP\$ GDP 41.6 107 ○ ◇ 42.1 Intangible asset intensity, top 15, % 41.1 Finance for startups and scaleups* 45.7 33 47.2 Creative goods and services 41.1 Finance for startups and scaleups* 41.2 Domestic credit to private sector, % GDP 41.3 Loans from microfinance institutions, % GDP 41.3 Loans from microfinance institutions, % GDP 42.1 Market capitalization, % GDP 42.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 57.4 31 58.0 7.2 Creative goods and services exports, % total trade 58.3 5 7.2.4 Creative goods exports, % total trade 59.0 21 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 57.4 31 7.3 Online creativity 50.9 24 4.2.3 VC recipients, deals/bn PPP\$ GDP 57.3 Global brand value, top 5,000 5.5 21 5.0 1.2 1.4 Industrial designs by origin/bn PPP\$ GDP 5.5 21 5.0 1.2 1.3 Investive services exports, % total trade 5.2 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 | | | | 25 ♦ | 6.3.5 ISO 9001 quality/br | n PPP\$ GDP | 20.5 | 12 |
| 3.3 Ecological sustainability 3.1 GDP/unit of energy use 3.3.1 GDP/unit of energy use 3.3.2 Environmental performance* 49.7 46 | | | 26.1 | 44 | A 0 | | 00.0 | |
| 3.3.2 Environmental performance* 49.7 46 ◇ 7.1.1 Intangible asset intensity, top 15, % 66.8 25 3.3.3 ISO 14001 environment/bn PPP\$ GDP 2.0 46 7.1.2 Trademarks by origin/bn PPP\$ GDP 11.6 107 ○ ◇ 11 7.1.3 Global brand value, top 5,000 7.1.4 Industrial designs by origin/bn PPP\$ GDP 11.4 54 4.1 Credit 45.7 33 7.2 Creative goods and services 38.5 13 4.1.1 Finance for startups and scaleups | | | 36.1 | 39 | Creative outputs | | 38.3 | 33 ♦ |
| 3.3.3 ISO 14001 environment/bn PPP\$ GDP 2.0 46 7.1.2 Trademarks by origin/bn PPP\$ GDP 11.6 107 ○ ○ 11.1 All Market sophistication 59.0 11 7.1.3 Global brand value, top 5,000 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.4 54 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.4 54 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.4 54 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.5 4 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.6 54 7.1.2 Trademarks by origin/bn PPP\$ GDP 1.7 54 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.8 54 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.9 54 7.1.4 Industrial designs by origin/bn PPP\$ GDP 1.0 54 7.1.4 Industrial designs | 3.3.1 GDP/unit of en | ergy use | 17.0 | 16 | 7.1 Intangible assets | | 31.9 | 65 ♦ |
| Market sophistication 59.0 11 7.1.3 Global brand value, top 5,000 2.4 44 ♦ 1.4 Credit 4.1 Credit 45.7 33 7.2 Creative goods and services 38.5 13 4.1.1 Finance for startups and scaleups | 3.3.2 Environmental | performance* | | | | ensity, top 15, % | | |
| ## Annual Properties of the Sophistication ## April 10 | 3.3.3 ISO 14001 env | ironment/bn PPP\$ GDP | 2.0 | 46 | 7.1.2 Trademarks by orig | in/bn PPP\$ GDP | 11.6 | 107 ○ ◊ |
| 4.1 Credit 4.1 Credit 4.1.1 Finance for startups and scaleups† 4.1.2 Domestic credit to private sector, % GDP 4.1.3 Loans from microfinance institutions, % GDP 4.1.4 Investment 4.2.1 Market capitalization, % GDP 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 4.2.3 VC recipients, deals/bn PPP\$ GDP 4.3 Trade, diversification, and market scale 4.3.1 Applied tariff rate, weighted avg., % 4.5.7 33 4.5 7.2 Creative goods and services exports, % total trade 3.2 5 4.7 7.2.1 Cultural and creative services exports, % total trade 3.2 5 4.7 7.2.2 National feature films/mn pop. 15-69 4.7 7.2.3 Entertainment and media market/th pop. 15-69 3.7 7 4.1 4.2 Creative goods exports, % total trade 4.2 7.3 Online creativity 5.0 9 4.4 7.3 Online creativity 5.0 9 4.4 7.3 Online creativity 5.0 9 4.5 7.3 Country-code TLDs/th pop. 15-69 4.5 7.3 GitHub commits/mn pop. 15-69 4.6 7.3 Trade, diversification, and market scale 6.7 7.3 Mobile app creation/bn PPP\$ GDP 8.7 8.7 6 8.3 1 42 7.3 Mobile app creation/bn PPP\$ GDP 8.7 1 6 8.7 1 42 7.3 Mobile app creation/bn PPP\$ GDP 8.7 1 6 8.7 1 42 7.3 Mobile app creation/bn PPP\$ GDP 8.7 1 6 8.7 1 42 7.3 Mobile app creation/bn PPP\$ GDP | | and the second s | | | 7.1.3 Global brand value, | top 5,000 | 2.4 | 44 💠 |
| 4.1.1 Finance for startups and scaleups ↑ 66.8 22 7.2.1 Cultural and creative services exports, % total trade 4.1.2 Domestic credit to private sector, % GDP 67.6 54 ◇ 7.2.2 National feature films/mn pop. 15-69 5.5 21 4.3.1 Loans from microfinance institutions, % GDP n/a n/a 7.2.3 Entertainment and media market/th pop. 15-69 37.7 21 4.2 Investment 68.3 5 7.2.4 Creative goods exports, % total trade 1.5 37 4.2.1 Market capitalization, % GDP 57.4 31 7.3 Online creativity 50.9 24 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 0.9 8 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 23.4 28 ◇ 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.0 1 | <u>ш</u> Market sophi | stication | 59.0 | 11 | 7.1.4 Industrial designs b | y origin/bn PPP\$ GDP | 1.4 | 54 |
| 4.1.1 Finance for startups and scaleups† 66.8 22 7.2.1 Cultural and creative services exports, % total trade 3.2 5 ● 4.1.2 Domestic credit to private sector, % GDP 67.6 54 ◇ 7.2.2 National feature films/mn pop. 15-69 5.5 21 4.1.3 Loans from microfinance institutions, % GDP n/a n/a 7.2.3 Entertainment and media market/th pop. 15-69 37.7 21 4.2 Investment 68.3 5 7.2.4 Creative goods exports, % total trade 1.5 37 4.2.1 Market capitalization, % GDP 57.4 31 7.3 Online creativity 50.9 24 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 0.9 8 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 23.4 28 ◇ 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.0 1 • 7.3.2 Country-code TLDs/th pop. 15-69 14.5 33 ◇ 4.2.4 VC received, value, % GDP 0.0 1 • 7.3.3 GitHub commits/mn pop. 15-69 78.7 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 ● 4.3.1 Applied tariff rate, weighted avg., % | 4.1 Credit | | 45.7 | 33 | 7.2 Creative goods and | services | 38.5 | 13 |
| 4.1.2 Domestic credit to private sector, % GDP 67.6 54 | 4.1.1 Finance for sta | rtups and scaleups [†] | | | 7.2.1 Cultural and creativ | e services exports, % total trade | 3.2 | 5 • |
| 4.1.3 Loans from microfinance institutions, % GDP n/a n/a 7.2.3 Entertainment and media market/th pop. 15-69 37.7 21 4.2 Investment 68.3 5 7.2.4 Creative goods exports, % total trade 1.5 37 4.2.1 Market capitalization, % GDP 57.4 31 7.3 Online creativity 50.9 24 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 0.9 8 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 23.4 28 ♦ 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.7 1 7.3.2 Country-code TLDs/th pop. 15-69 14.5 33 ♦ 4.2.4 VC received, value, % GDP 0.0 1 7.3.3 GitHub commits/mn pop. 15-69 7.3.4 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 4.3.1 Applied tariff rate, weighted avg., % 1.9 58.0 58.0 | | | | | | | | 21 |
| 4.2 Investment 68.3 5 7.2.4 Creative goods exports, % total trade 1.5 37 4.2.1 Market capitalization, % GDP 57.4 31 7.3 Online creativity 50.9 24 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 0.9 8 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 23.4 28 ◇ 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.7 1 ● 7.3.2 Country-code TLDs/th pop. 15-69 14.5 33 ◇ 4.2.4 VC received, value, % GDP 0.0 1 ● 7.3.3 GitHub commits/mn pop. 15-69 78.7 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 4.3.1 Applied tariff rate, weighted avg., % 1.9 58.0 3 3 3 3 | | | | | | | 37.7 | 21 |
| 4.2.1 Market capitalization, % GDP 57.4 31 7.3 Online creativity 50.9 24 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 0.9 8 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 23.4 28 ◇ 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.7 1 ● 7.3.2 Country-code TLDs/th pop. 15-69 14.5 33 ◇ 4.2.4 VC received, value, % GDP 0.0 1 ● 7.3.3 GitHub commits/mn pop. 15-69 78.7 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 ● 4.3.1 Applied tariff rate, weighted avg., % 1.9 58 ○ 58 ○ 6 6 6 6 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 9 | | , | | | | | | 37 |
| 4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP 0.9 8 7.3.1 Generic top-level domains (TLDs)/th pop. 15-69 23.4 28 ♦ 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.7 1 • 7.3.2 Country-code TLDs/th pop. 15-69 14.5 33 ♦ 4.2.4 VC received, value, % GDP 0.0 1 • 7.3.3 GitHub commits/mn pop. 15-69 78.7 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 4.3.1 Applied tariff rate, weighted avg., % 1.9 58 ○ 58 ○ | | ization, % GDP | | | | | | |
| 4.2.3 VC recipients, deals/bn PPP\$ GDP 0.7 1 ● 7.3.2 Country-code TLDs/th pop. 15-69 14.5 33 ♦ 4.2.4 VC received, value, % GDP 0.0 1 ● 7.3.3 GitHub commits/mn pop. 15-69 78.7 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 ● 4.3.1 Applied tariff rate, weighted avg., % ● 1.9 58 ○ | | | | | 7.3.1 Generic top-level de | omains (TLDs)/th pop. 15-69 | | 28 ♦ |
| 4.2.4 VC received, value, % GDP 0.0 1 • 7.3.3 GitHub commits/mn pop. 15-69 78.7 6 4.3 Trade, diversification, and market scale 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 • 4.3.1 Applied tariff rate, weighted avg., % • 1.9 58 0 | • | | | | | | | |
| 4.3 Trade, diversification, and market scale 4.3.1 Applied tariff rate, weighted avg., % 63.1 42 7.3.4 Mobile app creation/bn PPP\$ GDP 87.2 3 ● 4.3.1 Applied tariff rate, weighted avg., % | | | | | • | | | |
| 4.3.1 Applied tariff rate, weighted avg., % • 1.9 58 O | | · | | | | | | |
| | | | | | | | | |
| | | | 90.6 | | | | | |

NOTES: ● indicates a strength; O 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/gii-ranking. Square brackets [] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.

496.8



→ Data availability

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



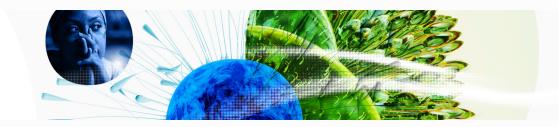
> Israel has missing data for four indicators and outdated data for seven indicators.

> Missing data for Israel

| Code | Indicator name | Economy Year | Model Year | Source |
|-------|---|-----------------|---------------|--|
| 2.3.1 | Researchers, FTE/mn pop. | n/a | 2021 | UNESCO Institute for Statistics; Eurostat; OECD; RICYT |
| 4.1.3 | Loans from microfinance institutions, % GDP | n/a | 2021 | International Monetary Fund, Financial Access Survey (FAS) |
| 5.3.5 | Research talent, % in businesses | n/a | 2021 | UNESCO Institute for Statistics; Eurostat; OECD; RICYT |
| 6.1.3 | Utility models by origin/bn PPP\$ GDP | n/a | 2021 | World Intellectual Property Organization; International Monetary Fund |

> Outdated data for Israel

| Code | Indicator name | Economy Year | Model Year | Source |
|-------|--|-----------------|---------------|---|
| 2.1.1 | Expenditure on education, % GDP | 2019 | 2021 | UNESCO Institute for Statistics |
| 4.3.1 | Applied tariff rate, weighted avg., % | 2017 | 2020 | World Bank |
| 4.3.2 | Domestic industry diversification | 2019 | 2020 | United Nations Industrial Development Organization |
| 5.1.1 | Knowledge-intensive employment, % | 2021 | 2022 | International Labour Organization |
| 5.1.2 | Firms offering formal training, % | 2013 | 2019 | World Bank Enterprise Surveys |
| 5.1.5 | Females employed w/advanced degrees, % | 2021 | 2022 | International Labour Organization |
| 6.2.4 | High-tech manufacturing, % | 2019 | 2020 | United Nations Industrial Development 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.