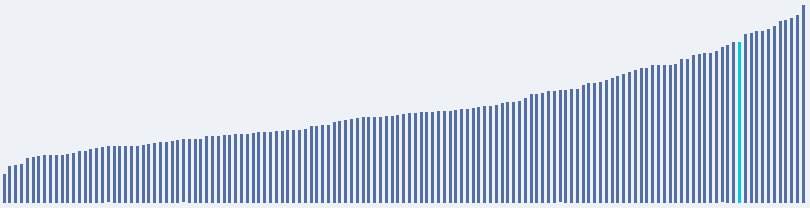
Global Innovation Index 2026



Japan ranking in the Global Innovation Index 2026

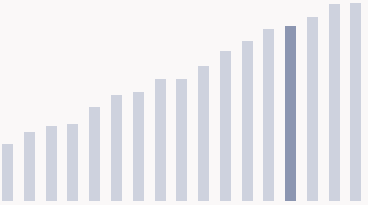
Japan ranks 12th among the 139 economies featured in the GII 2026.

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.



Japan ranks 11th among the 54 High-income group economies.

Japan ranks 4th among the 17 economies in South East Asia, East Asia, and Oceania.



Japan GII Ranking (2020-2026)

The table shows the rankings of Japan over the past seven 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 Japan in the GII 2026 is between ranks 12 and 13.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	16th	12th	18th
2021	13th	11th	14th
2022	13th	11th	12th
2023	13th	11th	14th
2024	13th	12th	14th
2025	12th	12th	14th
2026	12th	11th	13th

Japan performs worse in innovation outputs than innovation inputs in 2026.

This year **Japan ranks 11th in innovation inputs.** This position is higher than last year.

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

World's Top 100 Innovation Clusters

Japan has 3 clusters in the world's top innovation clusters of the Global Innovation Index.

Global Innovation Index 2026



> Global Innovation Tracker

The Global Innovation Tracker 2026 shows what is the current state of innovation in Japan, how rapidly is technology being embraced and what are the resulting societal impacts.

For Japan, 6 indicators have improved in the short-term and 3 indicators have worsened.

Science and innovation investment

	Scientific publications	R&D investments	Venture capital deal numbers	International patent filings
Short term	▲ 3.1 % 2024 - 2025	▲ 5.4 % 2023 - 2024	▼ -4.4 % 2024 - 2025	▼ -1 % 2024 - 2025
Long term (annual growth)	▲ 2 % 2015 - 2025	▲ 1.2 % 2014 - 2024	▲ 0.6 % 2020 - 2025	▲ 0.8 % 2015 - 2025

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	0% 2023 - 2024	▲ 4.3% 2022 - 2023	0% 2022 - 2023	▲ 3.5% 2023 - 2024	▲ 16.1% 2024 - 2025
Long term (annual growth)	▲ 0.1% 2014 - 2024	▲ 2.7% 2013 - 2023	n/a	▲ 4.3% 2014 - 2024	▲ 18.7% 2015 - 2025
Penetration	99.2 per 100 inhabitants in 2024	38.6 per 100 inhabitants in 2023	96.6 per 100 inhabitants in 2023	n/a	1 per 100 cars in 2025

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	▲ 1.6 % 2024 - 2025	0 % 2023 - 2024	+ 1.9 °C 2025
Long term (annual growth)	▲ 0.7 % 2015 - 2025	▲ 0.1 % 2014 - 2024	+ 0.8 °C 2015
Level	102,617.5 USD in 2025	84 years in 2024	n/a

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 countries. from 1951–1980. Figures are rounded.

Global Innovation Index 2026

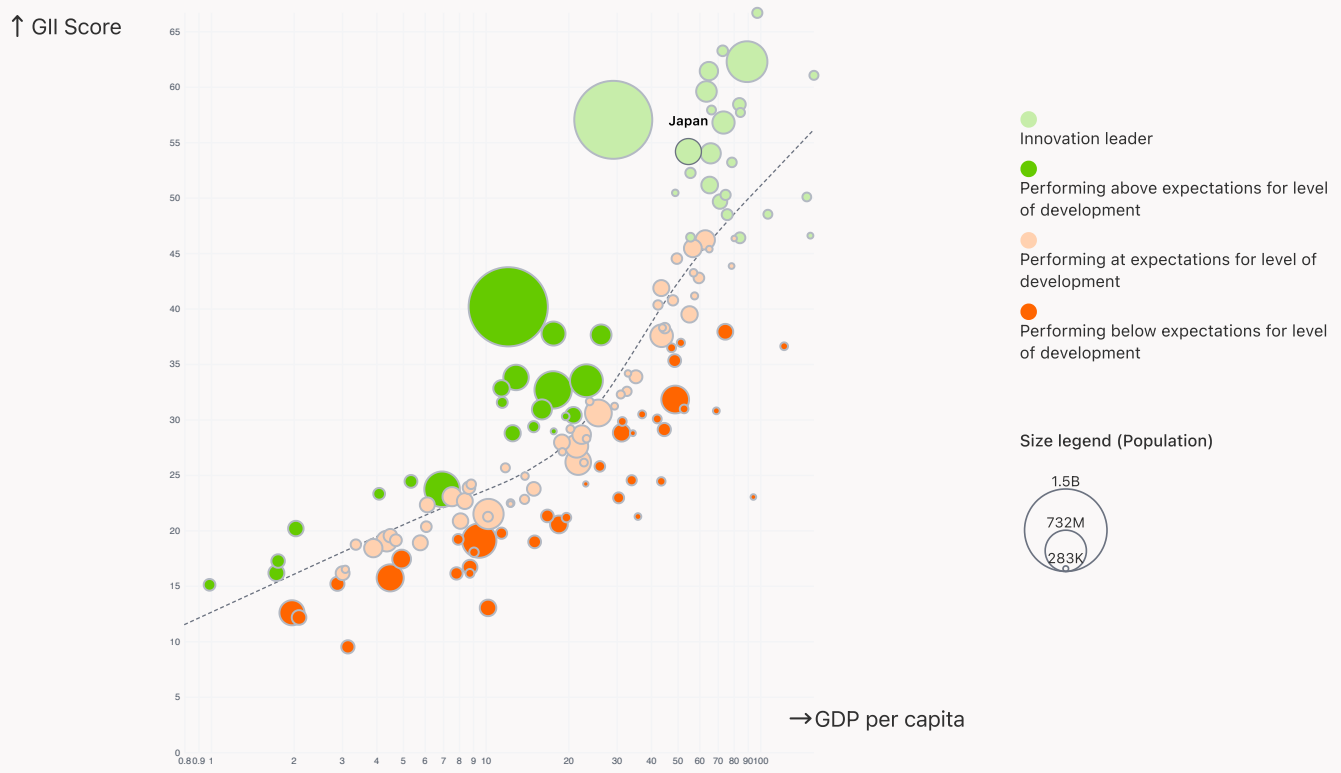


Expected vs. Observed Innovation Performance

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.

Japan is an Innovation leader, ranking in the top 25 of the GII.

> Innovation overperformers relative to their economic development



Global Innovation Index 2026



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.

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

> Relationship between innovation inputs and outputs

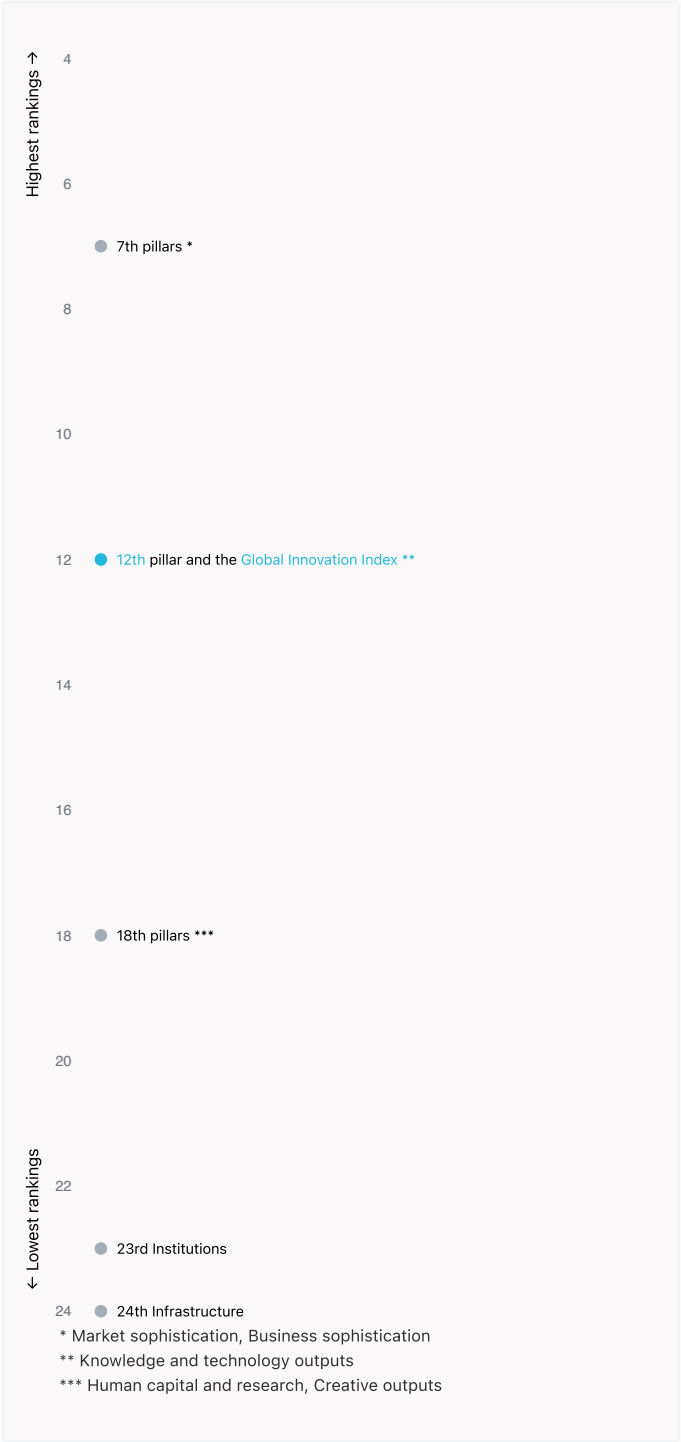


Global Innovation Index 2026



Overview of Japan's rankings in the seven areas of the GII in 2026

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



Highest Rankings

Japan ranks highest in Market sophistication, Business sophistication (7th) and Knowledge and technology outputs (12th).

Lowest Rankings

Japan ranks lowest in Infrastructure (24th), Institutions (23rd) and Human capital and research, Creative outputs (18th).

The full WIPO Intellectual Property Statistics profile for Japan can be found on https://www.wipo.int/edocs/statistics-country-profile/en/jp.pdf

Global Innovation Index 2026



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

High-income economies

Japan performs above the High-income group average in all pillars.

South East Asia, East Asia, and Oceania

Japan performs above the regional average in all pillars.

Institutions

- Top 10 | Score: 78.28
- Japan | Score: 72.22
- High-income | Score: 66.62
- SEAO | Score: 61.03

Human capital and research

- Top 10 | Score: 60.87
- Japan | Score: 54.31
- High-income | Score: 47.25
- SEAO | Score: 41.00

Infrastructure

- Top 10 | Score: 63.75
- Japan | Score: 59.10
- High-income | Score: 57.21
- SEAO | Score: 50.60

Market sophistication

- Top 10 | Score: 63.92
- Japan | Score: 62.23
- SEAO | Score: 48.53
- High-income | Score: 47.93

Business sophistication

- Top 10 | Score: 60.02
- Japan | Score: 58.05
- High-income | Score: 42.52
- SEAO | Score: 38.07

Knowledge and technology outputs

- Top 10 | Score: 55.83
- Japan | Score: 48.34
- High-income | Score: 34.48
- SEAO | Score: 30.87

Creative outputs

- Top 10 | Score: 55.45
- Japan | Score: 45.85
- High-income | Score: 38.33
- SEAO | Score: 33.66

Global Innovation Index 2026



Innovation strengths and weaknesses in Japan

The table below gives an overview of the indicator strengths and weaknesses of Japan in the GII 2026.

Japan's best-ranked innovation strengths are **Public research–industry co-publications, %** (rank 1), **PCT patents by inventor origin/bn PPP$ GDP** (rank 1) and **Production and export complexity** (rank 1).

Strengths

Rank	Code	Indicator name
1	5.2.1	Public research–industry co-publications, %
1	6.1.2	PCT patents by inventor origin/bn PPP$ GDP
1	6.3.1	Intellectual property receipts, % total trade
1	6.3.2	Production and export complexity
2	1.1.2	Government effectiveness*
3	2.1.4	PISA scales in reading, maths and science
3	2.3.2	Gross expenditure on R&D, % GDP
3	4.1.2	Domestic credit to private sector, % GDP
3	5.1.4	GERD performed by business, % GDP
3	5.1.5	GERD financed by business, %
3	5.2.5	Patent families/bn PPP$ GDP
3	6.1.1	Patents by origin/bn PPP$ GDP

Weaknesses

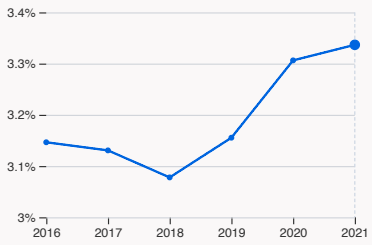
Rank	Code	Indicator name
55	2.2.3	Tertiary inbound mobility, %
58	1.3.2	Entrepreneurship policies and culture†
65	7.2.1	Cultural and creative services exports, % total trade
70	5.1.1	Knowledge-intensive employment, %
82	2.2.2	Graduates in science and engineering, %
85	6.3.4	ICT services exports, % total trade
86	6.2.1	Labor productivity growth, %
96	2.1.1	Expenditure on education, % GDP
112	5.3.4	FDI net inflows, % GDP
137	5.1.3	Youth demographic dividend, %

Global Innovation Index 2026



Japan's innovation system

Innovation inputs in Japan



2.1.1 Expenditure on education

was equal to 3.34 % GDP in 2021, up by 0.03 percentage points from the year prior – and equivalent to an indicator rank of 96.



2.2.2 Graduates in science and engineering

was equal to 20.13 % of total graduates in 2023, up by 0.5 percentage points from the year prior – and equivalent to an indicator rank of 82.



2.3.1 Researchers

was equal to 5682.03 FTE per million population in 2024, up by 1.05% from the year prior – and equivalent to an indicator rank of 17.



2.3.2 Gross expenditure on R&D

was equal to 3.62 % GDP in 2024, up by 0.18 percentage points from the year prior – and equivalent to an indicator rank of 3.



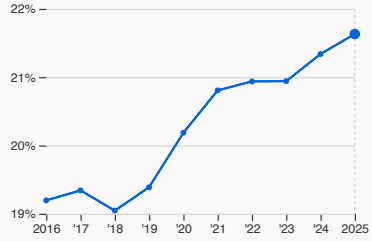
2.3.4 QS university ranking

was equal to an average score of 79.37 for the top three universities in 2025, up by 7.36% from the year prior – and equivalent to an indicator rank of 11.



4.3.2 Domestic industry diversification

was equal to an index score of 0.111 in 2023, up by 4.49% from the year prior – and equivalent to an indicator rank of 37.



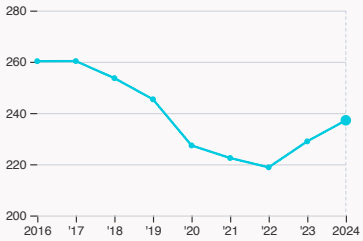
5.1.1 Knowledge-intensive employment

was equal to 21.63 % in 2025, up by 0.29 percentage points from the year prior – and equivalent to an indicator rank of 70.

Global Innovation Index 2026

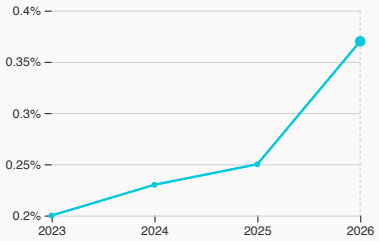


Innovation outputs in Japan



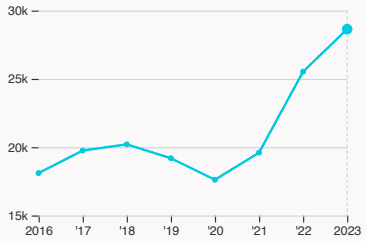
6.1.1 Patents by origin

was equal to 237.17 thousand patents in 2024, up by 3.59% from the year prior – and equivalent to an indicator rank of 3.



6.2.2 Unicorn valuation

was equal to 0.37 % GDP in 2026, up by 0.12 percentage points from the year prior – and equivalent to an indicator rank of 49.



6.2.4 High-tech manufacturing

was equal to 28641.15 high-tech manufacturing output in trillion USD in 2023, up by 12.19% from the year prior – and equivalent to an indicator rank of 8.



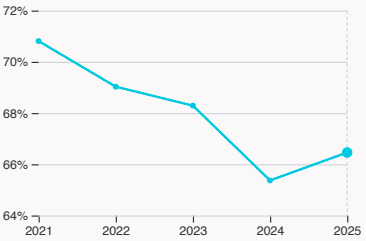
6.3.2 Production and export complexity

was equal to a score of 1.69 in 2024, down by 8.65% from the year prior – and equivalent to an indicator rank of 1.



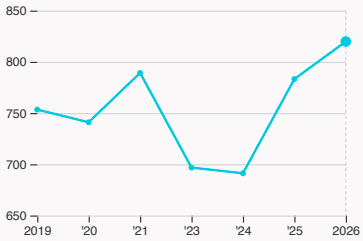
6.3.3 High-tech exports

was equal to 105.07 billion USD in 2024, down by 0.24% from the year prior – and equivalent to an indicator rank of 17.



7.1.1 Intangible asset intensity, top 15

was equal to 66.46 % for the top 15 companies in 2025, up by 1.09 percentage points from the year prior – and equivalent to an indicator rank of 22.



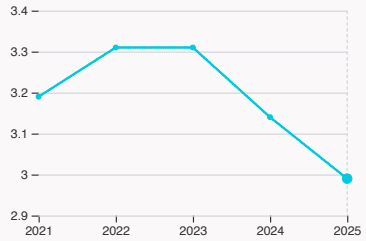
7.1.3 Global brand value, top 5,000

was equal to 819.83 billion USD for the brands in the top 5,000 in 2026, up by 4.68% from the year prior – and equivalent to an indicator rank of 4.



7.2.2 National feature films

was equal to 685 films in 2024, up by 1.33% from the year prior – and equivalent to an indicator rank of 16.



7.3.3 Mobile app creation

was equal to 2.99 billion global downloads of mobile apps in 2025, down by 4.78% from the year prior – and equivalent to an indicator rank of 41.



Japan's innovation top performers

Disclaimer: This section contains only the top performers per country. For the complete list, please visit the GII Innovation Ecosystems and Data Explorer website.

2.3.3 Global corporate R&D investors from Japan

Rank	Firm	Industry	R&D [mn EUR]	R&D Growth [%]	R&D Intensity [%]
26	TOYOTA MOTOR	Automobiles & Parts	8,135	10.32	2.76
32	HONDA MOTOR	Automobiles & Parts	7,424	23.99	5.58
49	NIPPON TELEGRAPH & TELEPHONE	ICT services	5,029	-1.60	5.98
51	SONY	Others	4,647	-0.7	5.85

Source: WIPO, based on European Commission's Joint Research Centre (https://iri.jrc.ec.europa.eu/scoreboard/2025-eu-industrial-rd-investment-scoreboard) and Orbis database (https://www.moodys.com/web/en/us/capabilities/company-reference-data/orbis.html).
Note: Data is based on the 2025 EU Industrial R&D Investment Scoreboard from the European Commission's Joint Research Centre, which ranks the top 2,000 firms by R&D investment annually. For countries not represented in the Scoreboard, companies from Orbis with R&D expenditure above USD 50 million were identified and used to complement the dataset.

2.3.4 QS university ranking of Japan's top universities

Rank	University	Score
36	THE UNIVERSITY OF TOKYO	85.80
57	KYOTO UNIVERSITY	80.20
85	TOKYO INSTITUTE OF TECHNOLOGY (TOKYO TECH)	72.10

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

5.2.3 University industry and international engagement, top 5 universities

Rank	University	Score
1	TOHOKU UNIVERSITY	79.60
2	THE UNIVERSITY OF TOKYO	75.40
3	KYUSHU UNIVERSITY	74.15

Source: Times Higher Education (THE), World University Rankings 2026 (https://www.timeshighereducation.com/world-university-rankings/2026/world-ranking).
Note: Rank corresponds to within economy ranks. The score is calculated as the average of the International Outlook score (encompassing international staff, students, and co-authorship) and the industry score (reflecting industry income and patent citations). The 2026 ranking corresponds to data from the academic year that ended in 2023.



5.3.5 Greenfield R&D and high-tech FDI announcements in Japan

Rank	Company	Industry	Description
1	Micron Technology	Semiconductors	US-based Micron Technology, a provider of semiconductor solutions, has announced plans to invest JPY 1.5 trillion to establish a new storage chip production facility at its Hiroshima site, Japan. The facility will focus on manufacturing high-bandwidth memory chips for artificial intelligence technologies. Production is expected to begin in 2028.
2	Alibaba Cloud Computing	Communications	Alibaba Cloud Computing, which develops cloud computing service platforms and operates as a subsidiary of China-based Alibaba Group, has announced plans to open a new data center in Japan in 2026. The opening will form part of plans to enhance infrastructure coverage and stay ahead of growing global demand for artificial intelligence and cloud services.
3	Colt Data Centre Services	Communications	Colt Data Centre Services, a data center solutions provider and subsidiary of Luxembourg-based Colt Group, has established a joint venture with Hong Kong-based real estate firm ESR to develop a 130 MW hyperscale data center site in Mino, Japan. The 140,000 m² data center will serve the domestic market. Construction is expected to begin in 2027 and is expected to open in late 2029.

Source: FT Locations, fDi Markets.

6.2.2 Top Unicorn Companies in Japan

Rank	Unicorn Company	Industry	Location	Valuation, bn USD
1	Gourica Marketing	Information Technology	Tokyo	2.54
2	Preferred Networks	Industrials	Tokyo	2.00
3	SmartNews	Media & Entertainment	Tokyo	2.00

Source: CBInsights, Tracker - The Complete list of Unicorns Companies; Africa: The Big Deal; and PitchBook Data, Inc.
Note: The list is based on unicorns as of January 2026, covering nearly 2000 companies worldwide. For African countries, the dataset is supplemented with data from Africa: The Big Deal. PitchBook data is also used as a complementary source to enrich coverage.

7.1.1 Top 15 intangible-asset intensive companies in Japan

Rank	Firm	Intensity, %
1	SONY GROUP CORPORATION	72.83
2	HITACHI, LTD.	88.67
3	SOFTBANK GROUP CORP.	43.58

Source: Brand Finance (https://brandirectory.com/reports/global-intangible-finance-tracker-gift/2025).
Note: Brand Finance only provides within economy ranks.



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

Rank	Brand	Industry	Brand Value, mn USD
1	Toyota	Automobiles	62,704.6
2	NTT Group	Telecoms	41,876.3
3	Mitsubishi Group	Diversified	36,435.5

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

GII 2026 SPECIAL THEME

Deep science entrepreneurship in Japan

The GII 2026 special theme examines deep science entrepreneurship — startups and spinouts built on scientific and engineering breakthroughs in fields such as advanced materials, energy, genomics, quantum technologies and synthetic biology, which take far longer and far more capital to reach the market than digital ventures do. Drawing on the Dealroom–WIPO Deep Science Startup Tracker, the tables below identify this economy's most valuable venture capital-backed deep science firms and, separately, those that originated in university or public research.

Top deep science startups in Japan

Rank	Company	Industry	City	Founded	VC funding raised, mn USD	Valuation, bn USD
1	PowerX	Transportation	Tokyo	2021	107.1	1.62
2	Spiber	Advanced materials and manufacturing	Tsuruoka-Shi	2007	790.8	1.20
3	Astroscale	Space	Tokyo	2013	429.7	1.10

Source: Dealroom–WIPO Deep Science Startup Tracker (https://www.wipo.int/en/web/global-innovation-index/2026/deep-science-innovation).

Top deep science spinouts originated in Japan

Rank	Spinout	Industry	Current Headquarters Location	Founded	VC funding raised, mn USD	Valuation, bn USD
1	PaXini Tech	Robotics and autonomous systems	Shenzhen	2021	200.0	1.38
2	Spiber	Advanced materials and manufacturing	Tsuruoka-Shi	2007	790.8	1.20
3	Astroscale	Space	Tokyo	2013	429.7	1.10

Source: Dealroom–WIPO Deep Science Startup Tracker (https://www.wipo.int/en/web/global-innovation-index/2026/deep-science-innovation).

GII 2026 rank

Japan

12

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
13	11	High	South East Asia, East Asia, and Oceania	123.1	6,758.2	54,815.3

	Score / Value	Rank	
Institutions	**72.2**	**23**	
1.1 Institutional environment	**91**	**4**	
1.1.1 Operational stability for businesses*	86.8	13	
1.1.2 Government effectiveness*	95.2	2	●◆
1.2 Regulatory environment	**84**	**16**	
1.2.1 Regulatory quality*	80.1	20	
1.2.2 Rule of law*	87.9	13	
1.3 Business environment	**41.6**	**74**	◇
1.3.1 Policy stability for doing business†	54.6	55	◇
1.3.2 Entrepreneurship policies and culture†	28.6	58	○◇
Human capital and research	**54.3**	**18**	
2.1 Education	**66.5**	**20**	
2.1.1 Expenditure on education, % GDP	3.3	96	○◇
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	15.4	48	◇
2.1.4 PISA scales in reading, maths and science	532.7	3	●◆
2.1.5 Pupil–teacher ratio, secondary	10.5	40	
2.2 Tertiary education	**28.8**	**82**	◇
2.2.1 Tertiary enrolment, % gross	64.5	51	
2.2.2 Graduates in science and engineering, %	20.1	82	○◇
2.2.3 Tertiary inbound mobility, %	4.7	55	○
2.3 Research and development (R&D)	**67.6**	**7**	
2.3.1 Researchers, FTE/mn pop.	5,682	17	
2.3.2 Gross expenditure on R&D, % GDP	3.6	3	●
2.3.3 Global corporate R&D investors, top 3, mn USD	81.6	7	
2.3.4 QS university ranking, top 3*	80.3	11	
Infrastructure	**59.1**	**24**	
3.1 Information and communication technologies (ICTs)	**93.6**	**14**	
3.1.1 ICT access*	96.7	40	
3.1.2 ICT use*	91	24	
3.1.3 Government online service*	93.1	9	
3.2 General infrastructure	**60.4**	**19**	
3.2.1 Electricity output, GWh/mn pop.	7,840.4	24	
3.2.2 Aviation import dwell time	1.8	33	◇
3.2.3 Logistics performance*	81.8	13	
3.2.4 Gross capital formation, % GDP	26.2	41	
3.3 Ecological sustainability	**23.3**	**48**	
3.3.1 GDP/unit of energy use	15.1	48	
3.3.2 Low-carbon energy use, %	13.5	63	
3.3.3 ISO 14001 environment/bn PPP$ GDP	3.5	29	
Market sophistication	**62.2**	**7**	
4.1 Credit	**69.6**	**6**	
4.1.1 Finance for startups and scaleups†	55.5	37	◇
4.1.2 Domestic credit to private sector, % GDP	194.6	3	●◆
4.1.3 Loans from microfinance institutions, % GDP	n/a	n/a	
4.2 Investment	**28.6**	**20**	
4.2.1 Market capitalization, % GDP	143	8	
4.2.2 Venture capital (VC) received, deal count/bn PPP$ GDP	0.2	35	◇
4.2.3 Late-stage VC deal count, % global VC	1.2	6	
4.2.4 VC investors, deal count/bn PPP$ GDP	0.3	35	◇
4.3 Trade, diversification and market scale	**88.5**	**7**	
4.3.1 Applied tariff rate, weighted avg., %	1.3	19	
4.3.2 Domestic industry diversification	92	37	
4.3.3 Domestic market scale, bn PPP$	6,758.2	5	◆

	Score / Value	Rank	
Business sophistication	**58.1**	**7**	
5.1 Knowledge workers	**55.1**	**18**	
5.1.1 Knowledge-intensive employment, %	21.6	70	○◇
5.1.2 Females employed w/advanced degrees, %	22.9	27	
5.1.3 Youth demographic dividend, %	20.7	137	○◇
5.1.4 GERD performed by business, % GDP	2.9	3	●◆
5.1.5 GERD financed by business, %	77.5	3	●◆
5.2 Innovation linkages	**69.6**	**6**	
5.2.1 Public research–industry co-publications, %	9	1	●◆
5.2.2 University–industry R&D collaboration†	56.6	33	
5.2.3 University industry & international engagement, top 5*	70	26	
5.2.4 State of cluster development†	56	46	◇
5.2.5 Patent families/bn PPP$ GDP	10.8	3	●◆
5.3 Knowledge absorption	**49.5**	**10**	
5.3.1 Intellectual property payments, % total trade	3	8	
5.3.2 High-tech imports, % total trade	15.5	15	
5.3.3 ICT services imports, % total trade	3.1	20	
5.3.4 FDI net inflows, % GDP	0.7	112	○
5.3.5 Greenfield R&D & high-tech FDI	1	61	◇
5.3.6 Research talent, % in businesses	74.8	5	◆
Knowledge and technology outputs	**48.3**	**12**	
6.1 Knowledge creation	**58**	**6**	
6.1.1 Patents by origin/bn PPP$ GDP	36.3	3	●◆
6.1.2 PCT patents by inventor origin/bn PPP$ GDP	6.4	1	●◆
6.1.3 Utility models by origin/bn PPP$ GDP	0.4	34	
6.1.4 Scientific and technical articles/bn PPP$ GDP	14.3	62	◇
6.1.5 Citable documents H-index	65	11	
6.2 Knowledge impact	**34.4**	**33**	
6.2.1 Labor productivity growth, %	1	86	○
6.2.2 Unicorn valuation, % GDP	0.4	49	◇
6.2.3 Software spending, % GDP	0.3	39	
6.2.4 High-tech manufacturing, %	54.6	8	
6.3 Knowledge diffusion	**52.7**	**11**	
6.3.1 Intellectual property receipts, % total trade	5.2	1	●◆
6.3.2 Production and export complexity	100	1	●◆
6.3.3 High-tech exports, % total trade	11.2	17	
6.3.4 ICT services exports, % total trade	1.2	85	○
6.3.5 ISO 9001 quality/bn PPP$ GDP	6.4	41	
Creative outputs	**45.9**	**18**	
7.1 Intangible assets	**58.1**	**9**	
7.1.1 Intangible asset intensity, top 15, %	66.5	22	
7.1.2 Trademarks by origin/bn PPP$ GDP	36.8	54	
7.1.3 Global brand value, top 5,000, % GDP	18.4	4	◆
7.1.4 Industrial designs by origin/bn PPP$ GDP	3.2	21	
7.2 Creative goods and services	**30.9**	**31**	
7.2.1 Cultural and creative services exports, % total trade	0.4	65	○
7.2.2 National feature films/mn pop. 15–69	8.6	16	
7.2.3 Entertainment and media market/th pop. 15–69	47	13	
7.2.4 Creative goods exports, % total trade	1.6	31	
7.3 Online creativity	**36.2**	**39**	◇
7.3.1 Top-level domains (TLDs)/th pop. 15–69	10.5	41	◇
7.3.2 GitHub commits/mn pop. 15–69	27	35	◇
7.3.3 Mobile app creation/bn PPP$ GDP	71.2	41	

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. Square brackets [ ] indicate that 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. Examine the underlying data further via the GII Innovation Ecosystems & Data Explorer at https://www.wipo.int/gii-ranking/en.



Data Availability

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

Japan has missing data for two indicators and outdated data for seven indicators.

Missing data for Japan

Code	Indicator name	Economy year	Model year*	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2022	UNESCO Institute for Statistics
4.1.3	Loans from microfinance institutions, % GDP	n/a	2024	International Monetary Fund, Financial Access Survey (FAS)

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Outdated data for Japan

Code	Indicator name	Economy year	Model year*	Source
2.1.1	Expenditure on education, % GDP	2021	2023	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2023	2024	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	2023	2024	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2023	2024	UNESCO Institute for Statistics
2.2.2	Graduates in science and engineering, %	2023	2024	UNESCO Institute for Statistics; Eurostat; OECD
2.2.3	Tertiary inbound mobility, %	2023	2024	UNESCO Institute for Statistics
5.1.2	Females employed w/advanced degrees, %	2020	2025	International Labour Organization

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

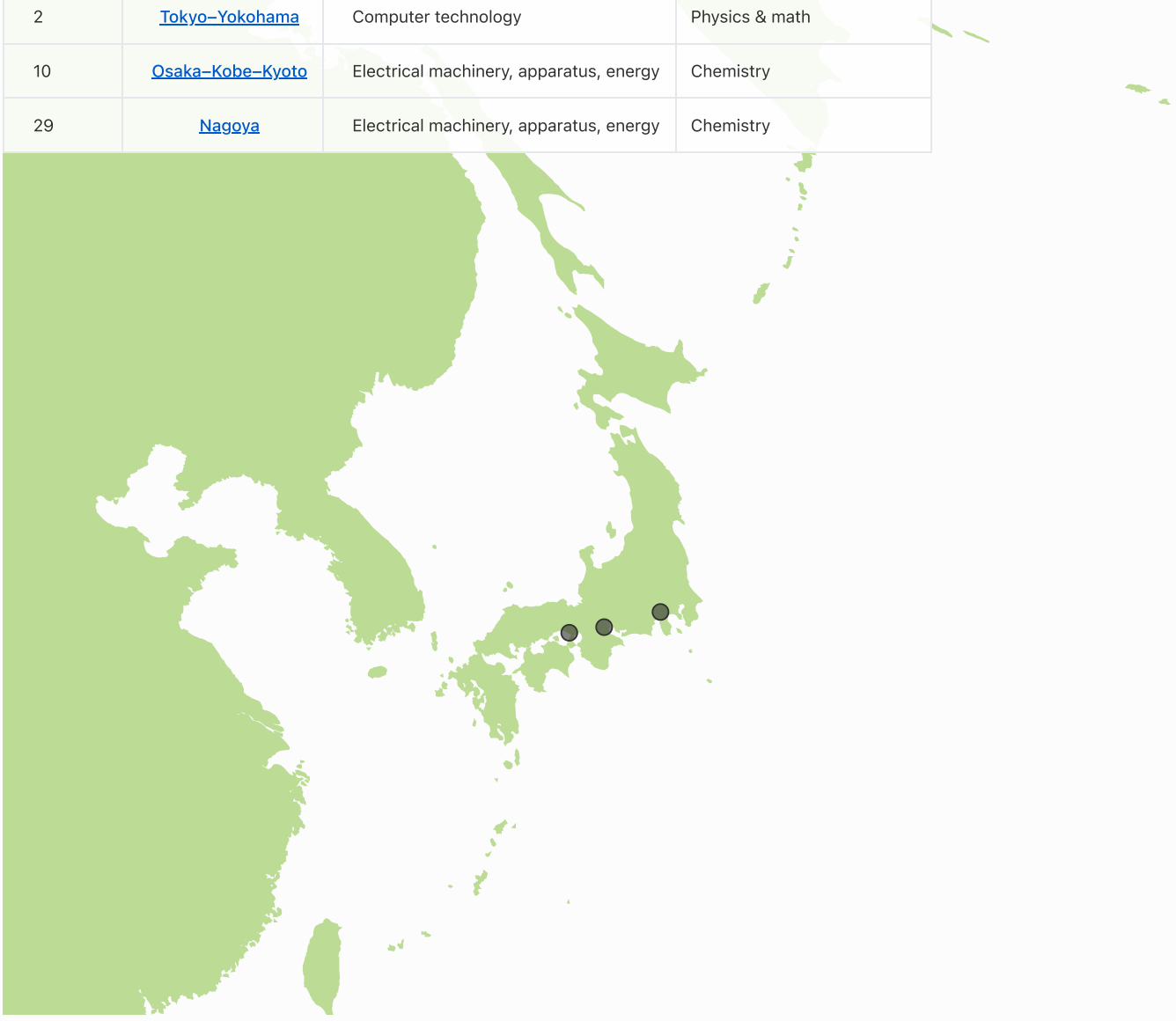


Top innovation clusters in Japan

Japan has 3 clusters in the world's top innovation clusters of the Global Innovation Index

The table and map below give an overview of the top innovation clusters in Japan.

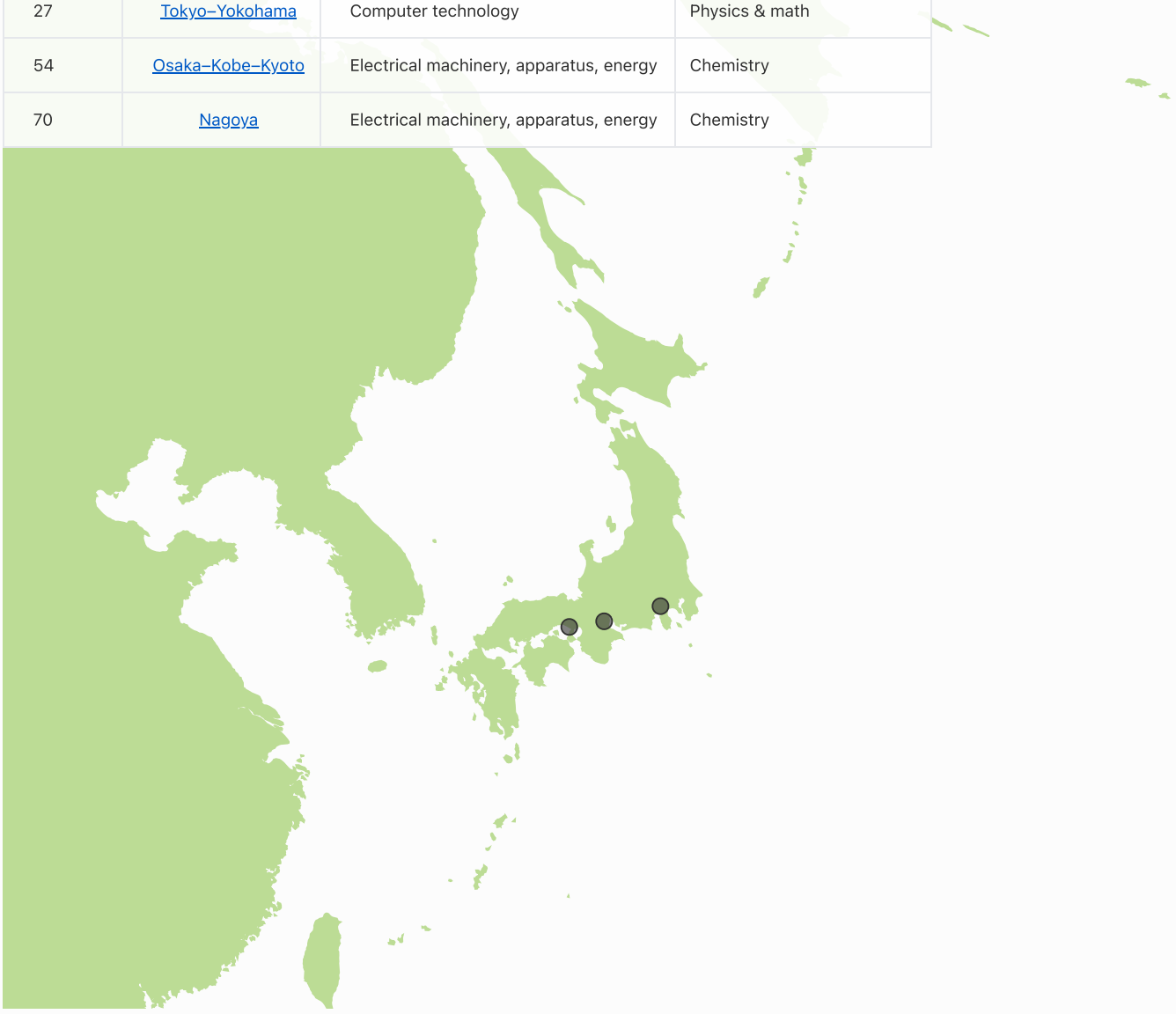
Rank	Cluster name	Top patent field	Top academic subject
2	Tokyo–Yokohama	Computer technology	Physics & math
10	Osaka–Kobe–Kyoto	Electrical machinery, apparatus, energy	Chemistry
29	Nagoya	Electrical machinery, apparatus, energy	Chemistry





The table and map below give an overview by intensity of the top innovation clusters in Japan.

Rank	Cluster name	Top patent field	Top academic subject
27	Tokyo–Yokohama	Computer technology	Physics & math
54	Osaka–Kobe–Kyoto	Electrical machinery, apparatus, energy	Chemistry
70	Nagoya	Electrical machinery, apparatus, energy	Chemistry

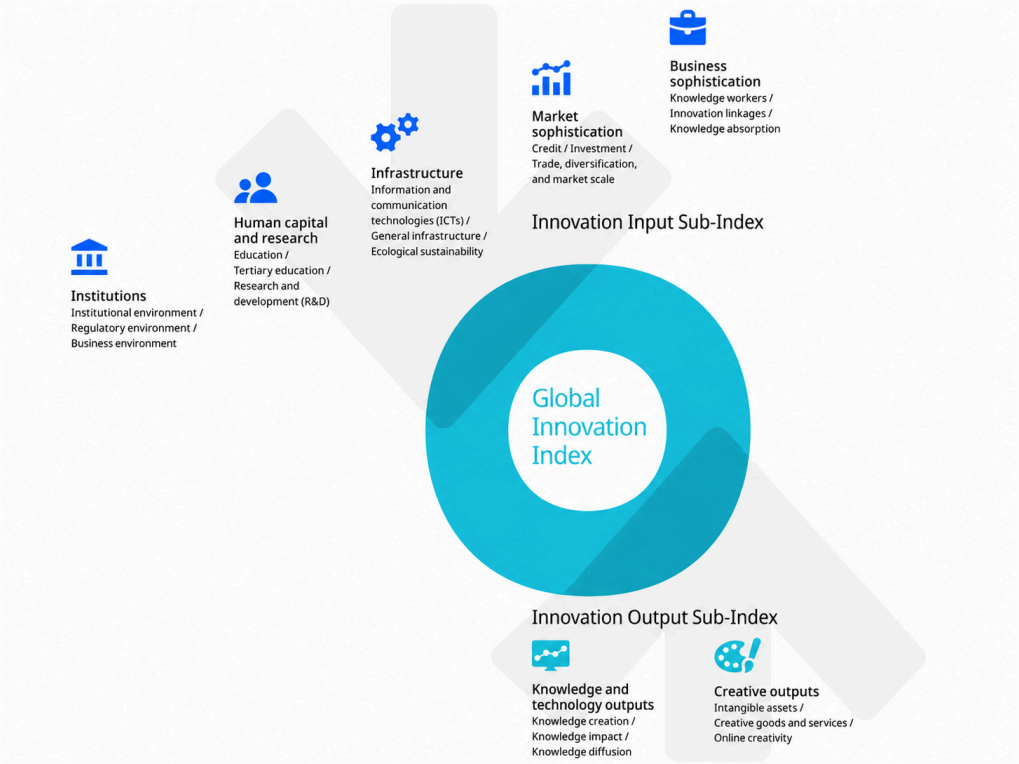


Global Innovation Index 2026



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 140 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.