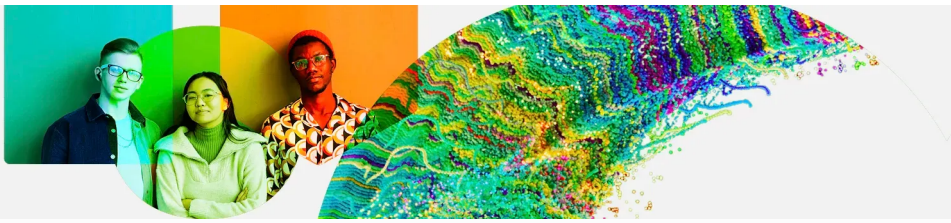
Global Innovation Index 2024



Viet Nam ranking in the Global Innovation Index 2024

Viet Nam ranks 44th 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.

Viet Nam ranks 2nd among the 38 lower-middle-income group economies.

Viet Nam ranks 10th among the 17 economies in South East Asia, East Asia, and Oceania.

Viet Nam GII Ranking (2020-2024)

The table shows the rankings of Viet Nam 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 Viet Nam in the GII 2024 is between ranks 42 and 45.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	42nd	62nd	38th
2021	44th	60th	38th
2022	48th	59th	41st
2023	46th	57th	40th
2024	44th	53rd	36th

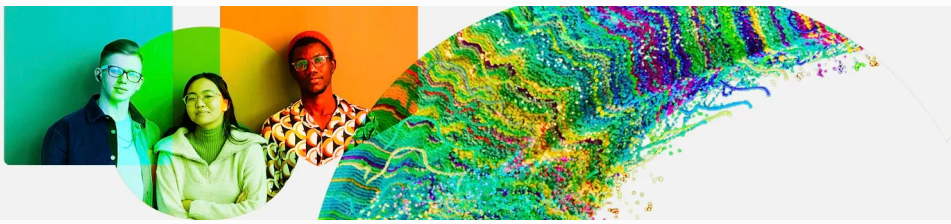
Viet Nam performs better in innovation outputs than innovation inputs in 2024.

This year **Viet Nam ranks 53rd in innovation inputs.** This position is higher than last year.

Viet Nam ranks 36th in innovation outputs. This position is higher than last year.

Viet Nam 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 Viet Nam, how rapidly is technology being embraced and what are the resulting societal impacts.

For Viet Nam, 6 indicators have improved in the short-term and 5 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -5.6% 2022 - 2023	▲ 3.8% 2019 - 2021	▼ -28% 2022 - 2023	▼ -1% 2022 - 2023	▼ -26.9% 2022 - 2023
▲ 14.3% 2013 - 2023	▲ 17.5% 2011 - 2021	▲ 46.3% 2013 - 2023	▲ 43.3% 2013 - 2023	▲ 0.5% 2013 - 2023

Technology adoption

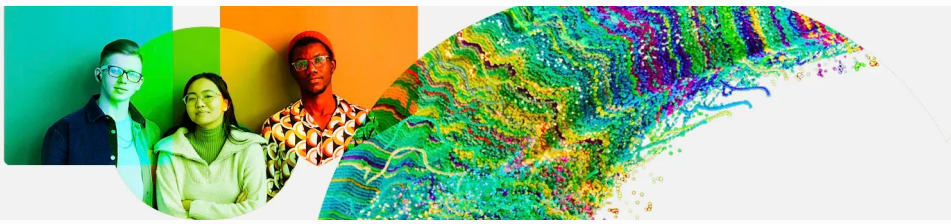
Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
▲ 1% 2021 - 2022	▲ 9.4% 2021 - 2022	n/a	▲ 12.7% 2021 - 2022	n/a
▲ 1.2% 2012 - 2022	▲ 15% 2012 - 2022		▲ 34% 2012 - 2022	n/a
43.7 per 100 inhabitants in 2022	21.7 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 2.3% 2022 - 2023	▲ 1.3% 2021 - 2022	▲ 1.3°C 2023
▲ 5.2% 2013 - 2023	▲ 0.1% 2012 - 2022	n/a
25,951 USD in 2023	74.6 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.

Global Innovation Index 2024

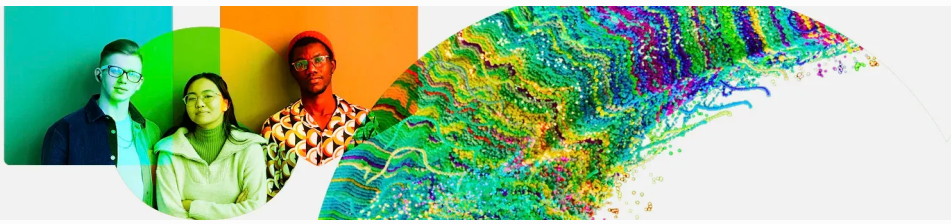


Expected vs. observed innovation performance

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, Viet Nam is performing above expectations for its level of development.

> Innovation overperformers relative to their economic development

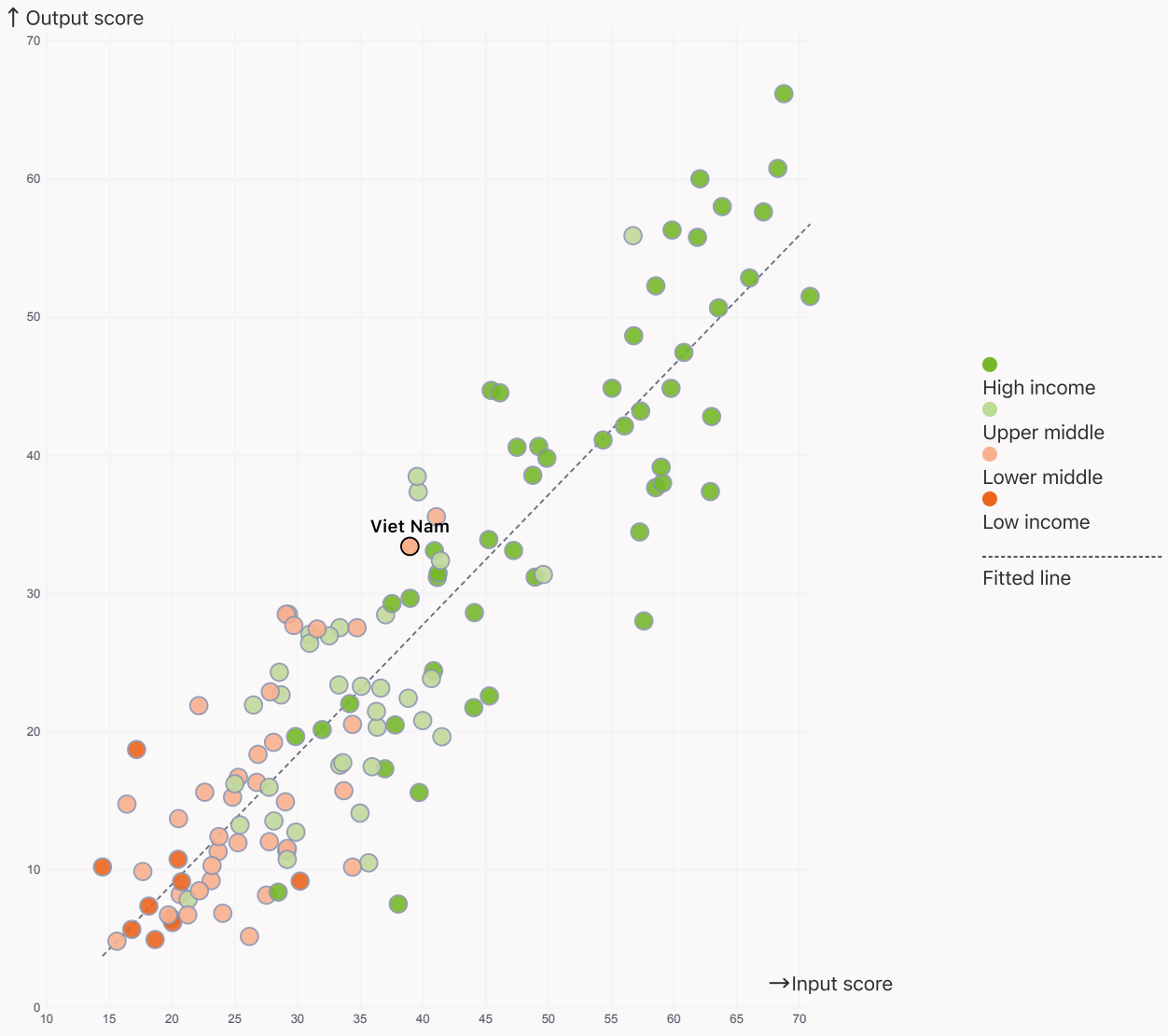


Effectively translating innovation investments into innovation outputs

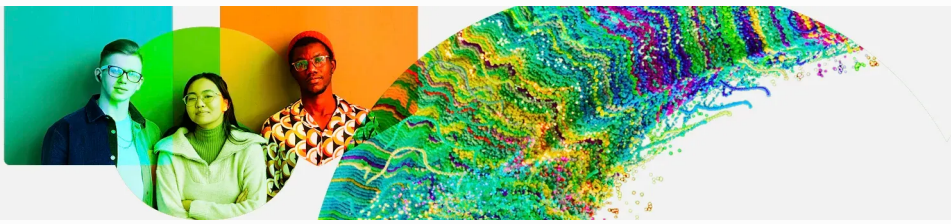
The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

Viet Nam produces more innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

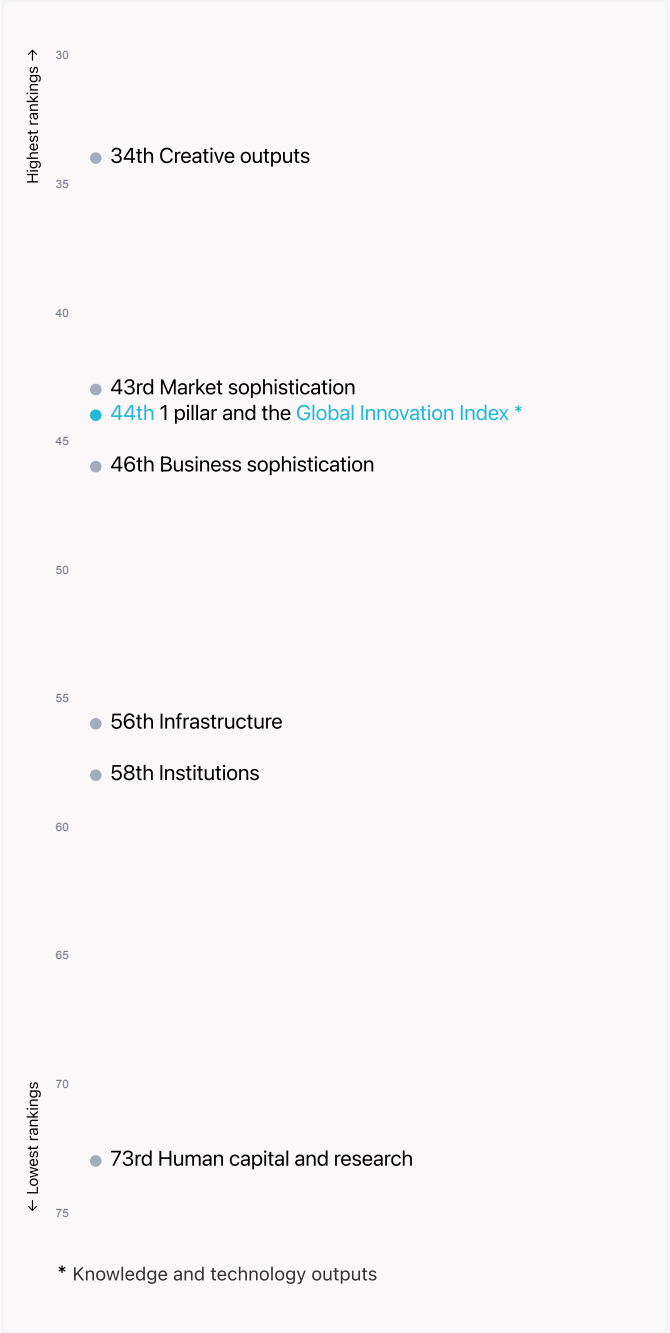


Global Innovation Index 2024



Overview of Viet Nam'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 Viet Nam are those that rank above the GII (shown in blue) and the weakest are those that rank below.



Highest rankings

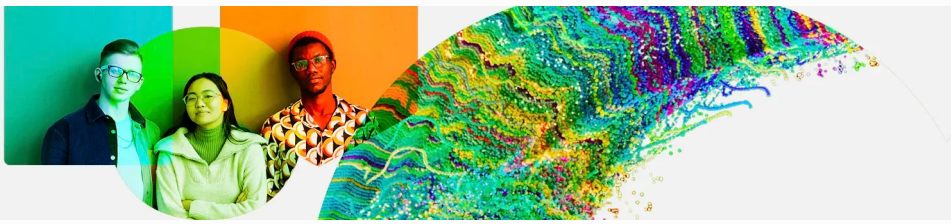
Viet Nam ranks highest in Creative outputs (34th), Market sophistication (43rd) and Knowledge and technology outputs (44th).

Lowest rankings

Viet Nam ranks lowest in Human capital and research (73rd), Institutions (58th) and Infrastructure (56th).

The full WIPO Intellectual Property Statistics profile for Viet Nam can be found on this link.

Global Innovation Index 2024



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

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

Lower-Middle-Income economies

Viet Nam performs above the lower-middle-income group average in all pillars.

South East Asia, East Asia, And Oceania

Viet Nam performs above the regional average in Creative outputs.

Institutions

- Top 10 | Score: 80.81
- SEAO | Score: 59.26
- Viet Nam | Score: 50.49
- Lower middle income | Score: 34.0

Human capital and research

- Top 10 | Score: 61.30
- SEAO | Score: 39.09
- Viet Nam | Score: 29.32
- Lower middle income | Score: 22.1

Infrastructure

- Top 10 | Score: 58.57
- SEAO | Score: 45.67
- Viet Nam | Score: 44.89
- Lower middle income | Score: 29.8

Market sophistication

- Top 10 | Score: 62.12
- SEAO | Score: 45.28
- Viet Nam | Score: 39.01
- Lower middle income | Score: 25.9

Business sophistication

- Top 10 | Score: 63.64
- SEAO | Score: 39.01
- Viet Nam | Score: 31.38
- Lower middle income | Score: 20.8

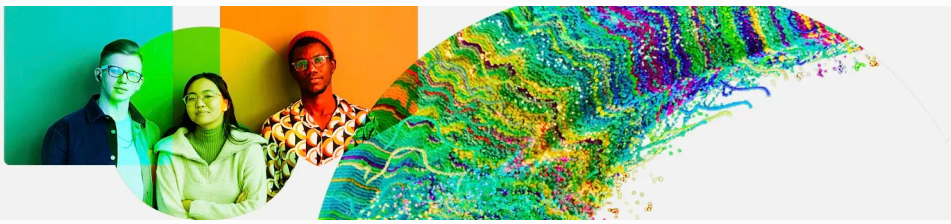
Knowledge and technology outputs

- Top 10 | Score: 57.29
- SEAO | Score: 29.72
- Viet Nam | Score: 28.51
- Lower middle income | Score: 15.6

Creative outputs

- Top 10 | Score: 56.54
- Viet Nam | Score: 38.18
- SEAO | Score: 33.06
- Lower middle income | Score: 15.7

Global Innovation Index 2024



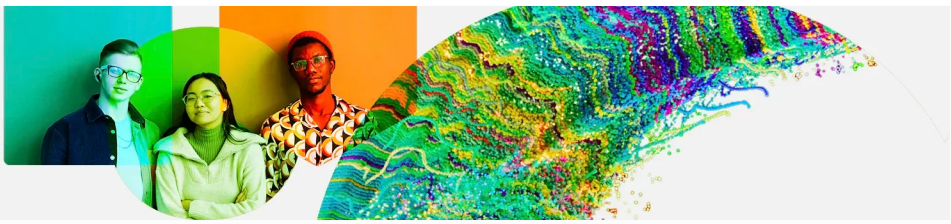
Innovation strengths and weaknesses in Viet Nam

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

Viet Nam's main innovation strengths are **Creative goods exports, % total trade** (rank 1), **High-tech imports, % total trade** (rank 1) and **High-tech exports, % total trade** (rank 1).

Strengths			Weaknesses		
Rank	Code	Indicator name	Rank	Code	Indicator name
1	7.2.4	Creative goods exports, % total trade	129	5.3.3	ICT services imports, % total trade
1	5.3.2	High-tech imports, % total trade	109	5.1.1	Knowledge-intensive employment, %
1	6.3.3	High-tech exports, % total trade	106	2.1.1	Expenditure on education, % GDP
3	6.2.1	Labor productivity growth, %	105	6.3.1	Intellectual property receipts, % total trade
7	7.3.3	Mobile app creation/bn PPP$ GDP	105	2.2.3	Tertiary inbound mobility, %
9	5.1.4	GERD financed by business, %	102	2.1.5	Pupil–teacher ratio, secondary
14	3.2.3	Gross capital formation, % GDP	97	5.1.2	Firms offering formal training, %
15	4.1.2	Domestic credit to private sector, % GDP	91	6.1.2	PCT patents by origin/bn PPP$ GDP
22	7.1.3	Global brand value, top 5,000, % GDP	76	7.2.2	National feature films/mn pop. 15–69
24	5.2.3	State of cluster development[†]	56	4.1.3	Loans from microfinance institutions, % GDP

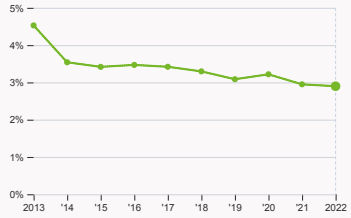
Global Innovation Index 2024



Viet Nam's innovation system

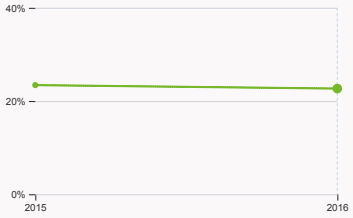
As far as practicable, the plots below present unscaled indicator data.

Innovation inputs in Viet Nam



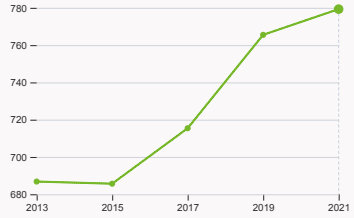
2.1.1 **Expenditure on education**

was equal to 2.9 % GDP in 2022, down by 0.05 percentage points from the year prior – and equivalent to an indicator rank of 106.



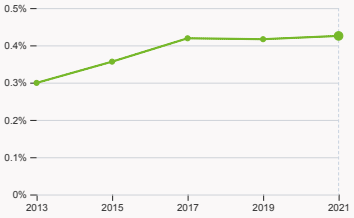
2.2.2 **Graduates in science and engineering**

was equal to 22.68 % of total graduates in 2016, down by 0.74 percentage points from the year prior – and equivalent to an indicator rank of 63.



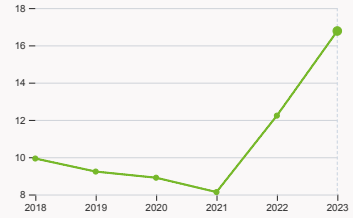
2.3.1 **Researchers**

was equal to 779.31 FTE per million population in 2021, up by 1.8% from the year prior – and equivalent to an indicator rank of 59.



2.3.2 **Gross expenditure on R&D**

was equal to 0.43 % GDP in 2021, up by 0.009 percentage points from the year prior – and equivalent to an indicator rank of 63.



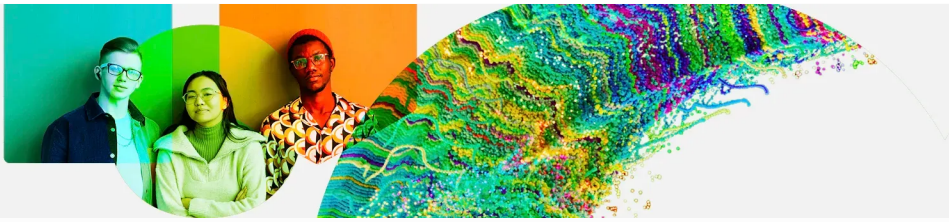
2.3.4 **QS university ranking**

was equal to an average score of 16.77 for the top three universities in 2023, up by 37.12% from the year prior – and equivalent to an indicator rank of 55.

4.2.4 **VC received, value**

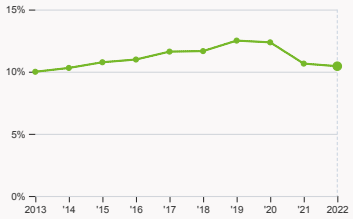
was equal to 311.87 thousand USD in 2023, down by 0.95% from the year prior – and equivalent to an indicator rank of 48.

Global Innovation Index 2024



4.3.2 Domestic industry diversification

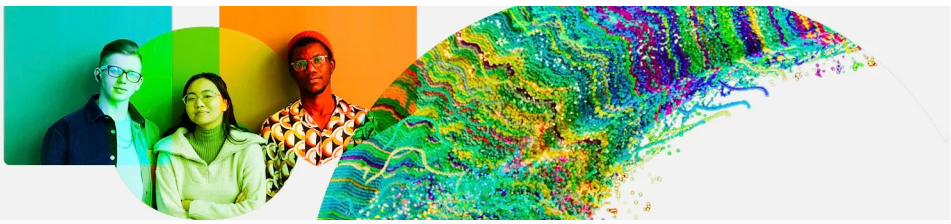
was equal to an index score of 0.09 in 2021, down by 3.42% from the year prior – and equivalent to an indicator rank of 23.



5.1.1 Knowledge-intensive employment

was equal to 10.44 % in 2022, down by 0.21 percentage points from the year prior – and equivalent to an indicator rank of 109.

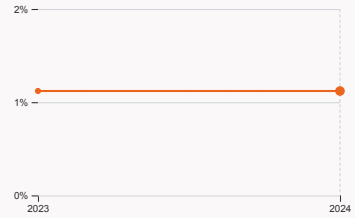
Global Innovation Index 2024



Innovation outputs in Viet Nam

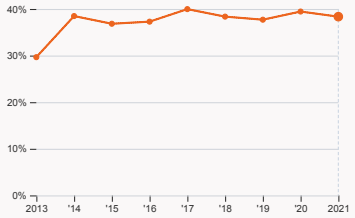
6.1.1 Patents by origin

was equal to 895 patents in 2022, down by 16.04% from the year prior – and equivalent to an indicator rank of 68.



6.2.2 Unicorn valuation

was equal to 1.12 % GDP in 2024 with no change from the year prior – and equivalent to an indicator rank of 31.

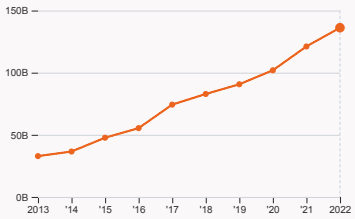


6.2.4 High-tech manufacturing

was equal to 38.35 % of total manufacturing output in 2021, down by 1.1 percentage points from the year prior – and equivalent to an indicator rank of 28.

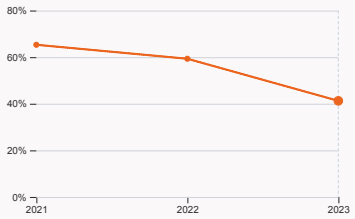
6.3.2 Production and export complexity

was equal to a score of 0.04 in 2021 with no change from the year prior – and equivalent to an indicator rank of 61.



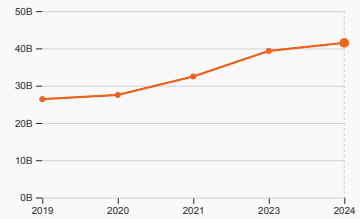
6.3.3 High-tech exports

was equal to 136.17 billion USD in 2022, up by 12.46% from the year prior – and equivalent to an indicator rank of 1.



7.1.1 Intangible asset intensity

was equal to 41.24 % for the top 15 companies in 2023, down by 18.07 percentage points from the year prior – and equivalent to an indicator rank of 57.

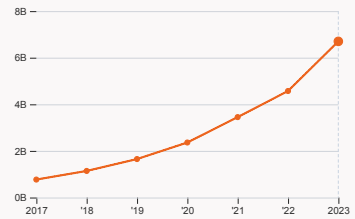


7.1.3 Global brand value

was equal to 41.48 billion USD for the brands in the top 5,000 in 2024, up by 5.49% from the year prior – and equivalent to an indicator rank of 22.

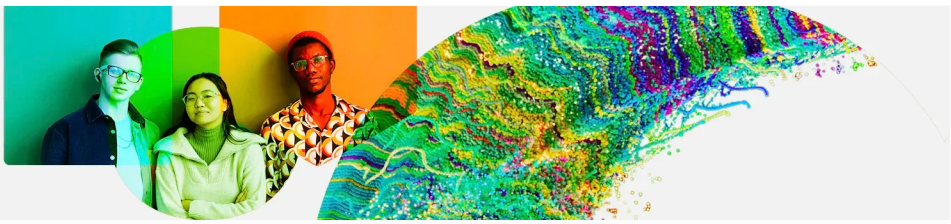
7.2.2 National feature films

was equal to 36 films in 2022, up by 89.47% from the year prior – and equivalent to an indicator rank of 76.



7.3.3 Mobile app creation

was equal to 6.7 billion global downloads of mobile apps in 2023, up by 46.61% from the year prior – and equivalent to an indicator rank of 7.



Viet Nam's innovation top performers

2.3.4 QS university ranking of Viet Nam's top universities

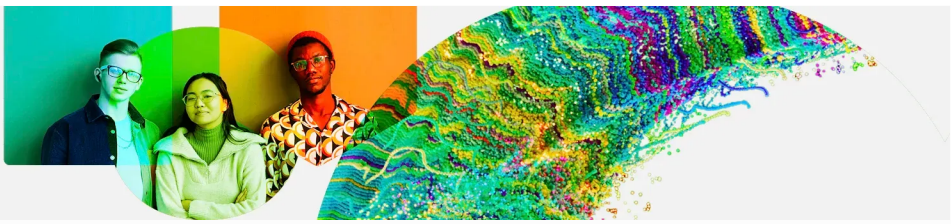
Rank	University	Score
514	DUY TAN UNIVERSITY	22.70
721-730	TON DUC THANG UNIVERSITY	16.20
951-1000	VIETNAM NATIONAL UNIVERSITY HO CHI MINH (VNU-HCM)	11.40

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 Viet Nam

Rank	Unicorn Company	Industry	City	Valuation, bn USD
1	SKY MAVIS	Media & Entertainment	Ho Chi Minh City	3
2	MOMO	Financial Services	Ho Chi Minh City	2

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 Viet Nam

Rank	Firm	Intensity, %
1	JOINT STOCK COMMERCIAL BANK FOR FOREIGN TRADE OF VIETNAM	63.58
2	VIETNAM DAIRY PRODUCTS JOINT STOCK COMPANY	74.78
3	JOINT STOCK COMMERCIAL BANK FOR INVESTMENT AND DEVELOPMENT OF VIETNAM	44.61

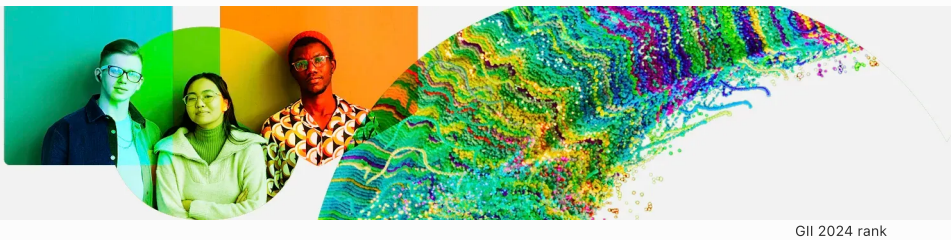
Source: Brand Finance (https://brandirectory.com/reports/gift-2022).
Note: Brand Finance only provides within economy ranks.

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

Rank	Brand	Industry	Brand Value, mn USD
1	VIETTEL	Telecoms	8,923.4
2	VINAMILK	Food	2,648.3
3	VNPT	Telecoms	2,622.3

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

Global Innovation Index 2024



Viet Nam

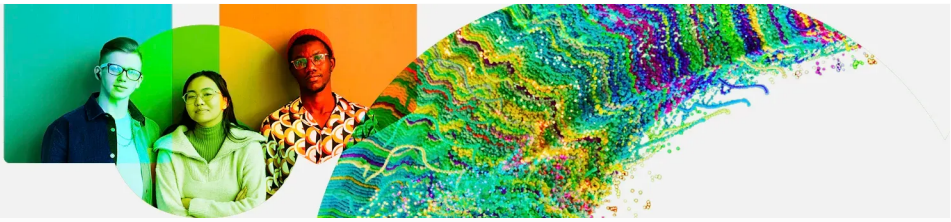
GII 2024 rank **44**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP$ (bn)	GDP per capita, PPP$
36	53	Lower middle	SEAO	100.4	1,434.2	14,285.1

	Score / Value	Rank	
Institutions	**50.5**	**58**	◆
1.1 Institutional environment	**59.3**	**52**	◆
1.1.1 Operational stability for businesses*	70	40	◆
1.1.2 Government effectiveness*	48.6	57	◆
1.2 Regulatory environment	**34.9**	**86**	
1.2.1 Regulatory quality*	30.5	95	
1.2.2 Rule of law*	39.3	72	◆
1.3 Business environment	**57.3**	**38**	
1.3.1 Policy stability for doing business†	59.8	42	◆
1.3.2 Entrepreneurship policies and culture†	54.7	21	
Human capital and research	**29.3**	**73**	
2.1 Education	**45.3**	**[79]**	
2.1.1 Expenditure on education, % GDP	2.9	106	○
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3 School life expectancy, years	n/a	n/a	
2.1.4 PISA scales in reading, maths and science	467.9	36	◆
2.1.5 Pupil–teacher ratio, secondary	21.1	102	○
2.2 Tertiary education	**23.5**	**88**	
2.2.1 Tertiary enrolment, % gross	42.2	78	
2.2.2 Graduates in science and engineering, %	22.7	63	
2.2.3 Tertiary inbound mobility, %	0.3	105	○
2.3 Research and development (R&D)	**19.2**	**45**	◆
2.3.1 Researchers, FTE/mn pop.	779.3	59	
2.3.2 Gross expenditure on R&D, % GDP	0.4	63	
2.3.3 Global corporate R&D investors, top 3, mn USD	45.2	36	◆
2.3.4 QS university ranking, top 3*	17	55	
Infrastructure	**44.9**	**56**	◆
3.1 Information and communication technologies (ICTs)	**70.6**	**72**	◆
3.1.1 ICT access*	87.6	75	◆
3.1.2 ICT use*	81.3	48	◆
3.1.3 Government's online service*	61.1	75	
3.1.4 E-participation*	52.3	71	◆
3.2 General infrastructure	**41.1**	**34**	
3.2.1 Electricity output, GWh/mn pop.	2,600	70	◆
3.2.2 Logistics performance*	54.5	42	◆
3.2.3 Gross capital formation, % GDP	33.1	14	●◆
3.3 Ecological sustainability	**23**	**55**	
3.3.1 GDP/unit of energy use	10.2	68	
3.3.2 Low-carbon energy use, %	26.8	46	
3.3.3 ISO 14001 environment/bn PPP$ GDP	2.1	49	◆
Market sophistication	**39**	**43**	◆
4.1 Credit	**31.7**	**53**	
4.1.1 Finance for startups and scaleups†	47.9	46	
4.1.2 Domestic credit to private sector, % GDP	126.4	15	●◆
4.1.3 Loans from microfinance institutions, % GDP	0.09	56	○
4.2 Investment	**14.4**	**50**	
4.2.1 Market capitalization, % GDP	57.1	33	
4.2.2 Venture capital (VC) investors, deals/bn PPP$ GDP	0.08	50	
4.2.3 VC recipients, deals/bn PPP$ GDP	0.07	44	
4.2.4 VC received, value, % GDP	0.001	48	
4.3 Trade, diversification and market scale	**70.9**	**19**	●◆
4.3.1 Applied tariff rate, weighted avg., %	1.2	48	◆
4.3.2 Domestic industry diversification	93.7	23	◆
4.3.3 Domestic market scale, bn PPP$	1,434.2	25	

	Score / Value	Rank	
Business sophistication	**31.4**	**46**	◆
5.1 Knowledge workers	**26.4**	**84**	
5.1.1 Knowledge-intensive employment, %	10.4	109	○
5.1.2 Firms offering formal training, %	8.7	97	○◇
5.1.3 GERD performed by business, % GDP	0.4	46	◆
5.1.4 GERD financed by business, %	64.1	9	●◆
5.1.5 Females employed w/advanced degrees, %	7.5	88	
5.2 Innovation linkages	**32.2**	**41**	◆
5.2.1 Public Research-Industry co-publications, %	1.5	66	
5.2.2 University-industry R&D collaboration†	63.8	32	◆
5.2.3 State of cluster development†	76.2	24	●◆
5.2.4 Joint venture/strategic alliance deals/bn PPP$ GDP	0.01	84	
5.2.5 Patent families/bn PPP$ GDP	0.06	67	
5.3 Knowledge absorption	**35.6**	**39**	◆
5.3.1 Intellectual property payments, % total trade	0.4	80	
5.3.2 High-tech imports, % total trade	29.4	1	●◆
5.3.3 ICT services imports, % total trade	0.2	129	○◇
5.3.4 FDI net inflows, % GDP	4.4	30	
5.3.5 Research talent, % in businesses	24.1	52	
Knowledge and technology outputs	**28.5**	**44**	◆
6.1 Knowledge creation	**9.7**	**84**	
6.1.1 Patents by origin/bn PPP$ GDP	0.7	68	
6.1.2 PCT patents by origin/bn PPP$ GDP	0.01	91	○
6.1.3 Utility models by origin/bn PPP$ GDP	0.3	34	
6.1.4 Scientific and technical articles/bn PPP$ GDP	5.9	97	
6.1.5 Citable documents H-index	14.3	58	
6.2 Knowledge impact	**43.3**	**22**	●◆
6.2.1 Labor productivity growth, %	4.7	3	●◆
6.2.2 Unicorn valuation, % GDP	1.1	31	
6.2.3 Software spending, % GDP	0.2	63	
6.2.4 High-tech manufacturing, %	38.3	28	◆
6.3 Knowledge diffusion	**32.5**	**37**	◆
6.3.1 Intellectual property receipts, % total trade	0.003	105	○
6.3.2 Production and export complexity	43.9	61	
6.3.3 High-tech exports, % total trade	36.1	1	●◆
6.3.4 ICT services exports, % total trade	0.6	95	
6.3.5 ISO 9001 quality/bn PPP$ GDP	4.8	62	◆
Creative outputs	**38.2**	**34**	◆
7.1 Intangible assets	**42.6**	**29**	◆
7.1.1 Intangible asset intensity, top 15, %	41.2	57	
7.1.2 Trademarks by origin/bn PPP$ GDP	62.1	24	◆
7.1.3 Global brand value, top 5,000, % GDP	8.8	22	●◆
7.1.4 Industrial designs by origin/bn PPP$ GDP	1.5	44	
7.2 Creative goods and services	**35.8**	**18**	●◆
7.2.1 Cultural and creative services exports, % total trade	0.2	81	
7.2.2 National feature films/mn pop. 15–69	0.5	76	○
7.2.3 Entertainment and media market/th pop. 15–69	n/a	n/a	
7.2.4 Creative goods exports, % total trade	8.8	1	●◆
7.3 Online creativity	**31.7**	**51**	◆
7.3.1 Top-level domains (TLDs)/th pop. 15–69	2.2	76	◆
7.3.2 GitHub commits/mn pop. 15–69	9.9	56	◆
7.3.3 Mobile app creation/bn PPP$ GDP	83.1	7	●◆

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 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 Viet Nam.

Viet Nam has missing data for three indicators and outdated data for twelve indicators.

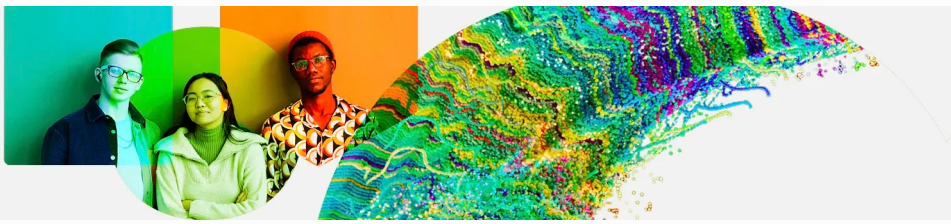
Missing data for Viet Nam

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
7.2.3	Entertainment and media market/th pop. 15–69	n/a	2023	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund

Outdated data for Viet Nam

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture†	2017	2023	Global Entrepreneurship Monitor
2.2.2	Graduates in science and engineering, %	2016	2021	UNESCO Institute for Statistics; Eurostat; OECD
2.3.1	Researchers, FTE/mn pop.	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2021	2022	International Energy Agency
4.1.1	Finance for startups and scaleups†	2017	2023	Global Entrepreneurship Monitor
4.1.3	Loans from microfinance institutions, % GDP	2021	2022	International Monetary Fund, Financial Access Survey (FAS)
4.3.1	Applied tariff rate, weighted avg., %	2021	2022	World Trade Organization
5.1.3	GERD performed by business, % GDP	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	2017	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	Females employed w/advanced degrees, %	2022	2023	International Labour Organization
5.3.5	Research talent, % in businesses	2017	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT

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.

Source: Global Innovation Index Database, WIPO, 2024.

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.