

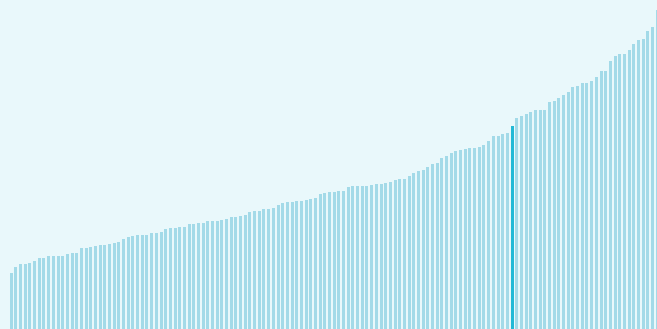
Global Innovation Index 2025



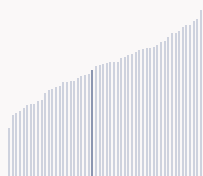
Czech Republic ranking in the Global Innovation Index 2025

Czech Republic ranks **32nd** among the 139 economies featured in the GII 2025.

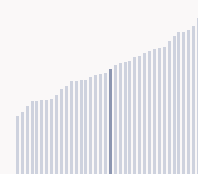
The Global Innovation Index (GI) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GI aims to capture the multi-dimensional facets of innovation.



Czech Republic ranks 31st among the 54 High-income group economies.



Czech Republic ranks 20th among the 39 economies in Europe.



➤ Czech Republic GII Ranking (2020-2025)

The table shows the rankings of Czech Republic over the past six 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 Czech Republic in the GII 2025 is between ranks 27 and 32.

Year	GI Position	Innovation Inputs	Innovation Outputs
2020	24th	28th	17th
2021	24th	30th	15th
2022	30th	33rd	27th
2023	31st	34th	27th
2024	30th	32nd	24th
2025	32nd	33rd	30th

Czech Republic performs better in innovation outputs than innovation inputs in 2025.

This year Czech Republic ranks 33rd in innovation inputs. This position is lower than last year.

Czech Republic ranks 30th in innovation outputs. This position is lower than last year.

Czech Republic has no clusters in the world's top innovation clusters of the Global Innovation Index.

Global Innovation Index 2025



> Global Innovation Tracker

The Global Innovation Tracker 2025 shows what is the current state of innovation in Czech Republic, how rapidly is technology being embraced and what are the resulting societal impacts.



For Czech Republic, 7 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	▲ 1.9 % 2023 - 2024	▼ -3.1 % 2022 - 2023	▲ 12.5 % 2023 - 2024	▼ -17.3 % 2023 - 2024
Long term (annual growth)	▲ 2.9 % 2014 - 2024	▲ 2.1 % 2013 - 2023	0 % 2020 - 2024	▼ -2.4 % 2014 - 2024

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	▲ 0.1% 2023 - 2024	▲ 1.8% 2022 - 2023	0% 2022 - 2023	▲ 4.2% 2022 - 2023	n/a
Long term (annual growth)	▲ 0.1% 2014 - 2024	▲ 3.7% 2013 - 2023	n/a	▲ 12.4% 2013 - 2023	n/a
Penetration	91.4 per 100 inhabitants in 2024	37.9 per 100 inhabitants in 2023	85.4 per 100 inhabitants in 2023	n/a	n/a

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	▲ 1 % 2023 - 2024	▲ 0.8 % 2022 - 2023	+ 3.3 °C 2024
Long term (annual growth)	▲ 1.6 % 2014 - 2024	▲ 0.2 % 2013 - 2023	+ 2.5 °C 2014
Level	105,302.9 USD in 2024	79.8 years in 2023	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 2025



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 Czech Republic performs at expectations for its level of development.

> Innovation overperformers relative to their economic development



Global Innovation Index 2025



Effectively translating innovation investments into innovation outputs

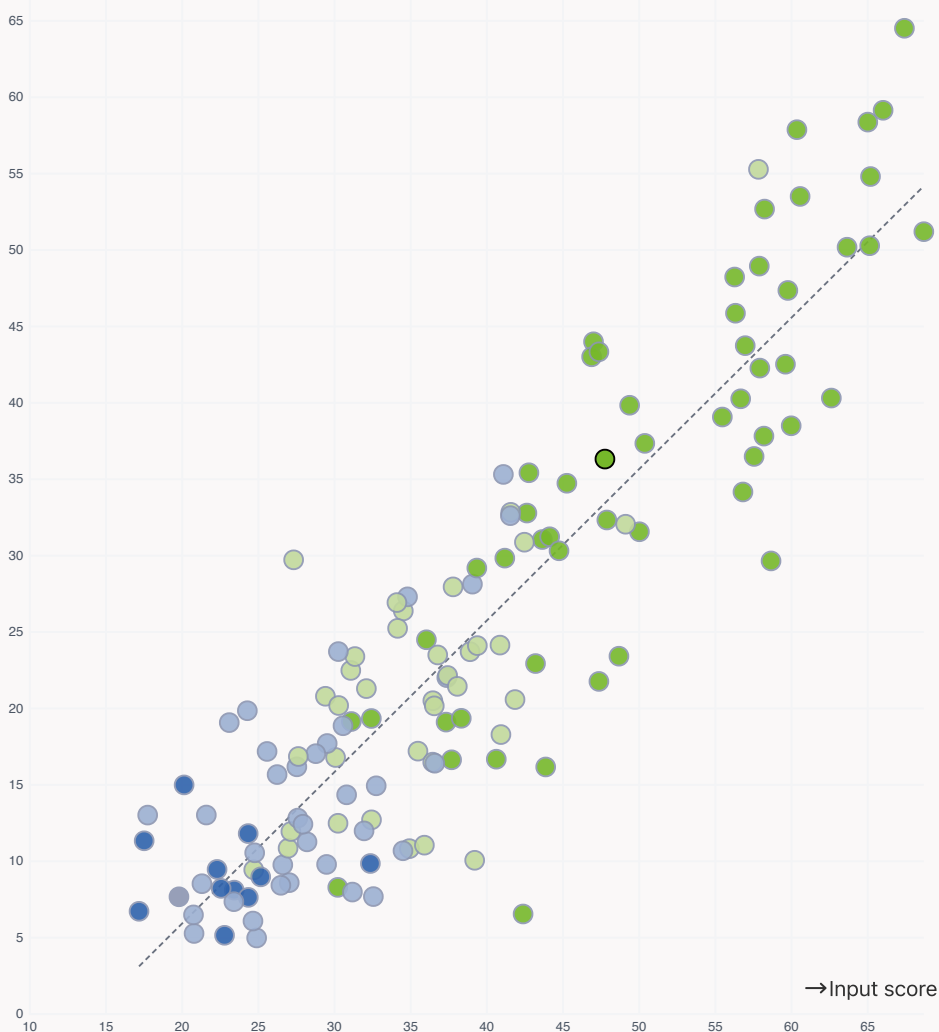
The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.



Czech Republic produces more innovation outputs relative to its level of innovation investments.

> Relationship between innovation inputs and outputs

↑ Output score

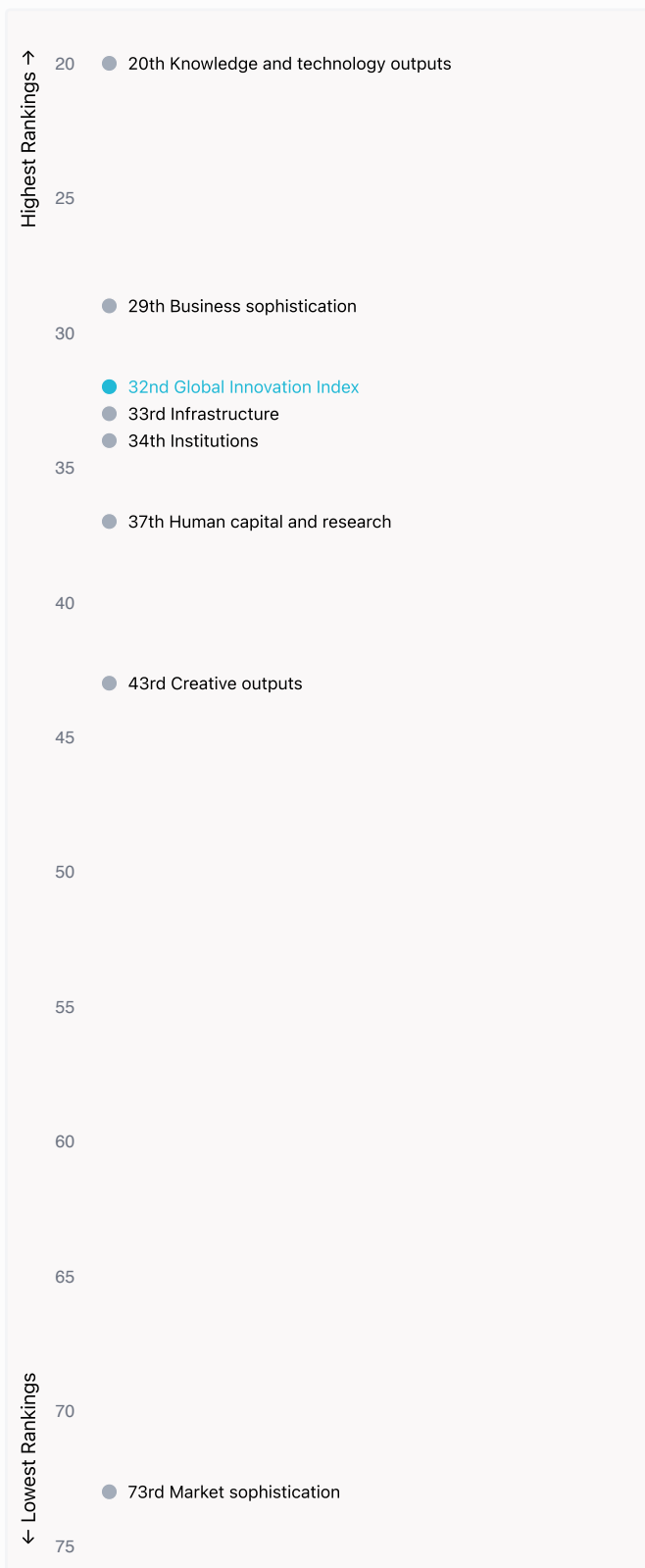


Global Innovation Index 2025



Overview of Czech Republic's rankings in the seven areas of the GII in 2025

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



Highest Rankings

Czech Republic ranks highest in Knowledge and technology outputs (20th) and Business sophistication (29th).



Lowest Rankings

Czech Republic ranks lowest in Market sophistication (73rd), Creative outputs (43rd) and Human capital and research (37th).



The full WIPO Intellectual Property Statistics profile for Czech Republic can be found on <https://www.wipo.int/edocs/statistics-country-profile/en/cz.pdf>

Global Innovation Index 2025



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



High-income economies

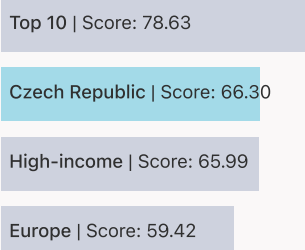
Czech Republic performs above the High-income group average in Institutions, Knowledge and technology outputs.



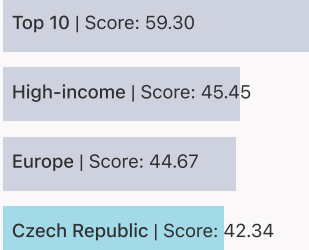
Europe

Czech Republic performs above the regional average in Institutions, Business sophistication, Knowledge and technology outputs.

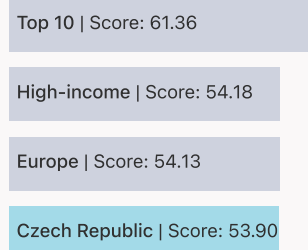
Institutions



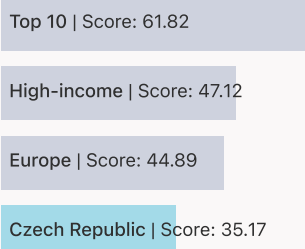
Human capital and research



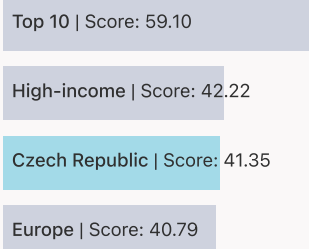
Infrastructure



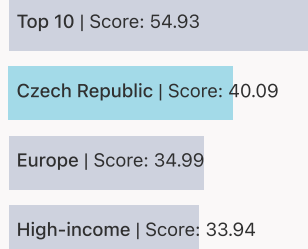
Market sophistication



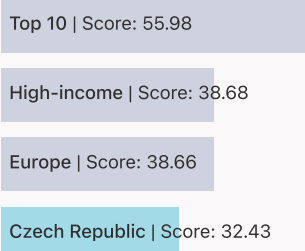
Business sophistication



Knowledge and technology outputs



Creative outputs



Global Innovation Index 2025



Innovation strengths and weaknesses in Czech Republic

The table below gives an overview of the indicator strengths and weaknesses of Czech Republic in the GII 2025.



Czech Republic's best-ranked innovation strengths are **Creative goods exports, % total trade** (rank 1), **Production and export complexity** (rank 6) and **High-tech manufacturing, %** (rank 6).

Strengths

Rank	Code	Indicator name
1	7.2.4	Creative goods exports, % total trade
6	6.3.2	Production and export complexity
6	6.2.4	High-tech manufacturing, %
6	6.3.3	High-tech exports, % total trade
6	6.1.3	Utility models by origin/bn PPP\$ GDP
7	5.3.2	High-tech imports, % total trade
7	6.3.5	ISO 9001 quality/bn PPP\$ GDP
13	3.3.3	ISO 14001 environment/bn PPP\$ GDP
13	2.2.3	Tertiary inbound mobility, %
16	7.3.2	GitHub commits/mn pop. 15–69

Weaknesses

Rank	Code	Indicator name
135	7.1.2	Trademarks by origin/bn PPP\$ GDP
115	5.1.3	Youth demographic dividend, %
91	6.2.1	Labor productivity growth, %
76	3.1.3	Government's online service*
73	4.2.1	Market capitalization, % GDP
70	4.1.2	Domestic credit to private sector, % GDP
70	3.3.1	GDP/unit of energy use
68	1.3.1	Policy stability for doing business [†]
52	5.1.5	GERD financed by business, %
44	2.3.3	Global corporate R&D investors, top 3, mn USD

Global Innovation Index 2025



Czech Republic's innovation system

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

› Innovation inputs in Czech Republic



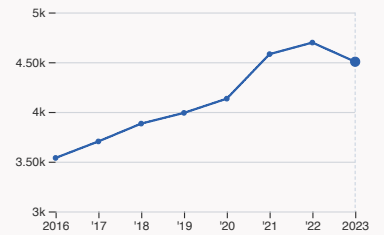
2.1.1 Expenditure on education

was equal to 4.74 % GDP in 2022, down by 0.06 percentage points from the year prior – and equivalent to an indicator rank of 50.



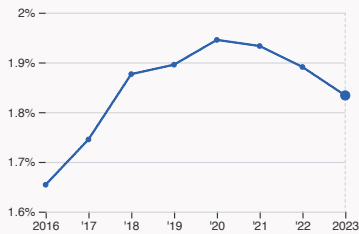
2.2.2 Graduates in science and engineering

was equal to 24.9 % of total graduates in 2022, down by 0.57 percentage points from the year prior – and equivalent to an indicator rank of 44.



2.3.1 Researchers

was equal to 4504.73 FTE per million population in 2023, down by 4.1% from the year prior – and equivalent to an indicator rank of 27.



2.3.2 Gross expenditure on R&D

was equal to 1.83 % GDP in 2023, down by 0.06 percentage points from the year prior – and equivalent to an indicator rank of 21.



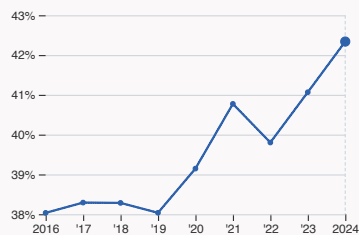
2.3.4 QS university ranking

was equal to an average score of 32.83 for the top three universities in 2024, up by 6.25% from the year prior – and equivalent to an indicator rank of 41.



4.3.2 Domestic industry diversification

was equal to an index score of 0.105 in 2022, down by 2.64% from the year prior – and equivalent to an indicator rank of 30.



5.1.1 Knowledge-intensive employment

was equal to 42.34 % of total workforce in 2024, up by 1.27 percentage points from the year prior – and equivalent to an indicator rank of 27.

Global Innovation Index 2025

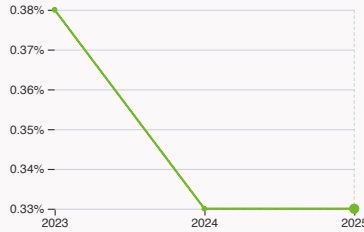


> Innovation outputs in Czech Republic



6.1.1 Patents by origin

was equal to 706 patents in 2023, down by 2.62% from the year prior – and equivalent to an indicator rank of 48.



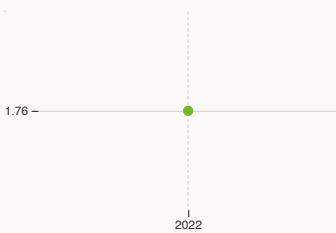
6.2.2 Unicorn valuation

was equal to 0.33 % GDP in 2025 with no change from the year prior – and equivalent to an indicator rank of 46.



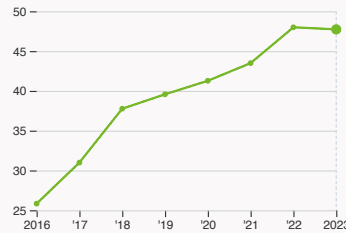
6.2.4 High-tech manufacturing

was equal to 136.69 high-tech manufacturing output in billion USD in 2022, up by 6.79% from the year prior – and equivalent to an indicator rank of 6.



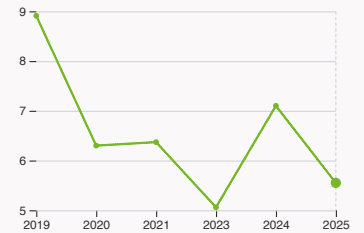
6.3.2 Production and export complexity

was equal to a score of 1.76 in 2022 – and equivalent to an indicator rank of 6.



6.3.3 High-tech exports

was equal to 47.73 billion USD in 2023, down by 0.54% from the year prior – and equivalent to an indicator rank of 6.



7.1.3 Global brand value, top 5,000

was equal to 5.55 billion USD in 2025, down by 21.83% from the year prior – and equivalent to an indicator rank of 52.



7.2.2 National feature films

was equal to 58 films in 2023, down by 29.27% from the year prior – and equivalent to an indicator rank of 23.



7.3.3 Mobile app creation

was equal to 454.22 million global downloads of mobile apps in 2024, down by 3.7% from the year prior – and equivalent to an indicator rank of 26.

Global Innovation Index 2025



Czech Republic's innovation top performers

Data not available for 2.3.3 Global corporate R&D investors and 7.1.1 Top 15 intangible-asset intensive companies.

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

2.3.4 QS university ranking of Czech Republic's top universities

Rank	University	Score
246	CHARLES UNIVERSITY	41.00
408	MASARYK UNIVERSITY	29.10
420	CZECH TECHNICAL UNIVERSITY IN PRAGUE	28.40

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2024>).

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	BRNO UNIVERSITY OF TECHNOLOGY	66.50
2	CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE (CZU)	63.70
3	CHARLES UNIVERSITY	63.45

Source: Times Higher Education (THE), World University Rankings 2025.

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 2025 ranking corresponds to data from the academic year that ended in 2022.

6.2.2 Top Unicorn Companies in Czech Republic

Rank	Unicorn Company	Industry	City	Valuation, bn USD
1	ROHLIK GROUP	Consumer & Retail	Prague	1

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

Global Innovation Index 2025



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

Rank	Brand	Industry	Brand Value, mn USD
1	SKODA	Automobiles	2,278.4
2	CEZ	Utilities	1,277
3	KOMERCNI BANKA	Banking	1,005.4

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

Czech Republic

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
30	33	High	Europe	10.7	619.9	56,686.2
Score / Value Rank				Score / Value Rank		
Institutions				66.3	34	
1.1 Institutional environment				73.9	24	
1.1.1 Operational stability for businesses*				77.3	28	
1.1.2 Government effectiveness*				70.4	27	
1.2 Regulatory environment				78.4	23	
1.2.1 Regulatory quality*				76.8	21	
1.2.2 Rule of law*				80	25	
1.3 Business environment				46.6	[65]	
1.3.1 Policy stability for doing business*				46.6	68	○
1.3.2 Entrepreneurship policies and culture†				n/a	n/a	
Human capital and research				42.3	37	
2.1 Education				57.5	49	
2.1.1 Expenditure on education, % GDP				4.7	50	●
2.1.2 Government funding/pupil, secondary, % GDP/cap				26.7	13	
2.1.3 School life expectancy, years				16.8	25	●
2.1.4 PISA scales in reading, maths and science				491.1	15	
2.1.5 Pupil-teacher ratio, secondary				n/a	n/a	
2.2 Tertiary education				43	26	
2.2.1 Tertiary enrolment, % gross				70.8	45	●
2.2.2 Graduates in science and engineering, %				24.9	44	
2.2.3 Tertiary inbound mobility, %				15.8	13	●
2.3 Research and development (R&D)				26.4	38	
2.3.1 Researchers, FTE/mn pop.				4,504.7	27	
2.3.2 Gross expenditure on R&D, % GDP				1.8	21	
2.3.3 Global corporate R&D investors, top 3, mn USD				0	44	○◇
2.3.4 QS university ranking, top 3*				33.6	41	
Infrastructure				53.9	33	
3.1 Information and communication technologies (ICTs)				80.5	55	
3.1.1 ICT access*				95.2	43	
3.1.2 ICT use*				82.2	47	
3.1.3 Government's online service*				64	76	○◇
3.2 General infrastructure				44.9	33	
3.2.1 Electricity output, GWh/mn pop.				7,113	25	
3.2.2 Logistics performance*				54.5	42	
3.2.3 Gross capital formation, % GDP				28.4	30	◆
3.3 Ecological sustainability				36.4	28	
3.3.1 GDP/unit of energy use				10.7	70	○
3.3.2 Low-carbon energy use, %				25.7	48	
3.3.3 ISO 14001 environment/bn PPP\$ GDP				6.7	13	●◆
Market sophistication				35.2	73	◇
4.1 Credit				16.6	[99]	
4.1.1 Finance for startups and scaleups†				n/a	n/a	
4.1.2 Domestic credit to private sector, % GDP				48	70	○
4.1.3 Loans from microfinance institutions, % GDP				n/a	n/a	
4.2 Investment				8.1	52	
4.2.1 Market capitalization, % GDP				11	73	○◇
4.2.2 Venture capital (VC) received, deal count/bn PPP\$ GDP				0.1	44	
4.2.3 Late-stage VC deal count, % global VC				0.05	45	
4.2.4 VC investors, deal count/bn PPP\$ GDP				0.3	35	
4.2.5 VC investor co-participation/bn PPP\$ GDP				0.1	38	
4.3 Trade, diversification and market scale				80.9	25	
4.3.1 Applied tariff rate, weighted avg., %				1.3	24	
4.3.2 Domestic industry diversification				92	30	
4.3.3 Domestic market scale, bn PPP\$				619.9	45	
Business sophistication				41.4	29	
5.1 Knowledge workers				40.2	54	
5.1.1 Knowledge-intensive employment, %				42.3	27	
5.1.2 Females employed w/advanced degrees, %				14.7	53	◇
5.1.3 Youth demographic dividend, %				25.6	115	○
5.1.4 GERD performed by business, % GDP				1.2	19	
5.1.5 GERD financed by business, %				37.6	52	○
5.2 Innovation linkages				38.8	31	
5.2.1 Public research-industry co-publications, %				2.2	37	
5.2.2 University-industry R&D collaboration†				54.7	32	
5.2.3 University industry & international engagement, top 5*				50.1	34	
5.2.4 State of cluster development†				58.5	45	
5.2.5 Patent families/bn PPP\$ GDP				0.4	35	
5.3 Knowledge absorption				45	13	
5.3.1 Intellectual property payments, % total trade				0.8	50	
5.3.2 High-tech imports, % total trade				21	7	●◆
5.3.3 ICT services imports, % total trade				1.9	43	
5.3.4 FDI net inflows, % GDP				3.3	54	
5.3.5 Research talent, % in businesses				54.5	20	
Knowledge and technology outputs				40.1	20	
6.1 Knowledge creation				32.3	29	
6.1.1 Patents by origin/bn PPP\$ GDP				1.2	48	
6.1.2 PCT patents by inventor origin/bn PPP\$ GDP				0.4	35	
6.1.3 Utility models by origin/bn PPP\$ GDP				1.6	6	●◆
6.1.4 Scientific and technical articles/bn PPP\$ GDP				23.3	27	
6.1.5 Citable documents H-index				30.8	32	
6.2 Knowledge impact				36.1	29	
6.2.1 Labor productivity growth, %				0.3	91	○
6.2.2 Unicorn valuation, % GDP				0.3	46	
6.2.3 Software spending, % GDP				0.3	43	
6.2.4 High-tech manufacturing, %				56.3	6	●◆
6.3 Knowledge diffusion				51.9	7	◆
6.3.1 Intellectual property receipts, % total trade				0.4	33	
6.3.2 Production and export complexity				88.3	6	●◆
6.3.3 High-tech exports, % total trade				20.9	6	●◆
6.3.4 ICT services exports, % total trade				3.1	44	
6.3.5 ISO 9001 quality/bn PPP\$ GDP				18	7	●◆
Creative outputs				32.4	43	
7.1 Intangible assets				12.5	93	◇
7.1.1 Intangible asset intensity, top 15, %				n/a	n/a	
7.1.2 Trademarks by origin/bn PPP\$ GDP				0	135	○◇
7.1.3 Global brand value, top 5,000, % GDP				1.5	52	
7.1.4 Industrial designs by origin/bn PPP\$ GDP				1.7	42	
7.2 Creative goods and services				44.9	11	◆
7.2.1 Cultural and creative services exports, % total trade				0.9	38	
7.2.2 National feature films/mn pop. 15-69				7.7	23	
7.2.3 Entertainment and media market/th pop. 15-69				25.3	25	
7.2.4 Creative goods exports, % total trade				8.2	1	●◆
7.3 Online creativity				59.8	23	
7.3.1 Top-level domains (TLDs)/th pop. 15-69				43.2	21	
7.3.2 GitHub commits/mn pop. 15-69				62.7	16	●
7.3.3 Mobile app creation/bn PPP\$ GDP				73.6	26	

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

Global Innovation Index 2025



Data Availability

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



Czech Republic has missing data for five indicators and outdated data for four indicators.

Missing data for Czech Republic

Code	Indicator name	Economy year	Model year*	Source
1.3.2	Entrepreneurship policies and culture ⁺	n/a	2024	Global Entrepreneurship Monitor
2.1.5	Pupil–teacher ratio, secondary	n/a	2023	UNESCO Institute for Statistics
4.1.1	Finance for startups and scaleups ⁺	n/a	2024	Global Entrepreneurship Monitor
4.1.3	Loans from microfinance institutions, % GDP	n/a	2023	International Monetary Fund, Financial Access Survey (FAS)
7.1.1	Intangible asset intensity, top 15, %	n/a	2024	Brand Finance

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

Outdated data for Czech Republic

Code	Indicator name	Economy year	Model year*	Source
2.1.1	Expenditure on education, % GDP	2022	2023	UNESCO Institute for Statistics
2.1.3	School life expectancy, years	2022	2023	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2022	2023	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	2022	2023	UNESCO Institute for Statistics

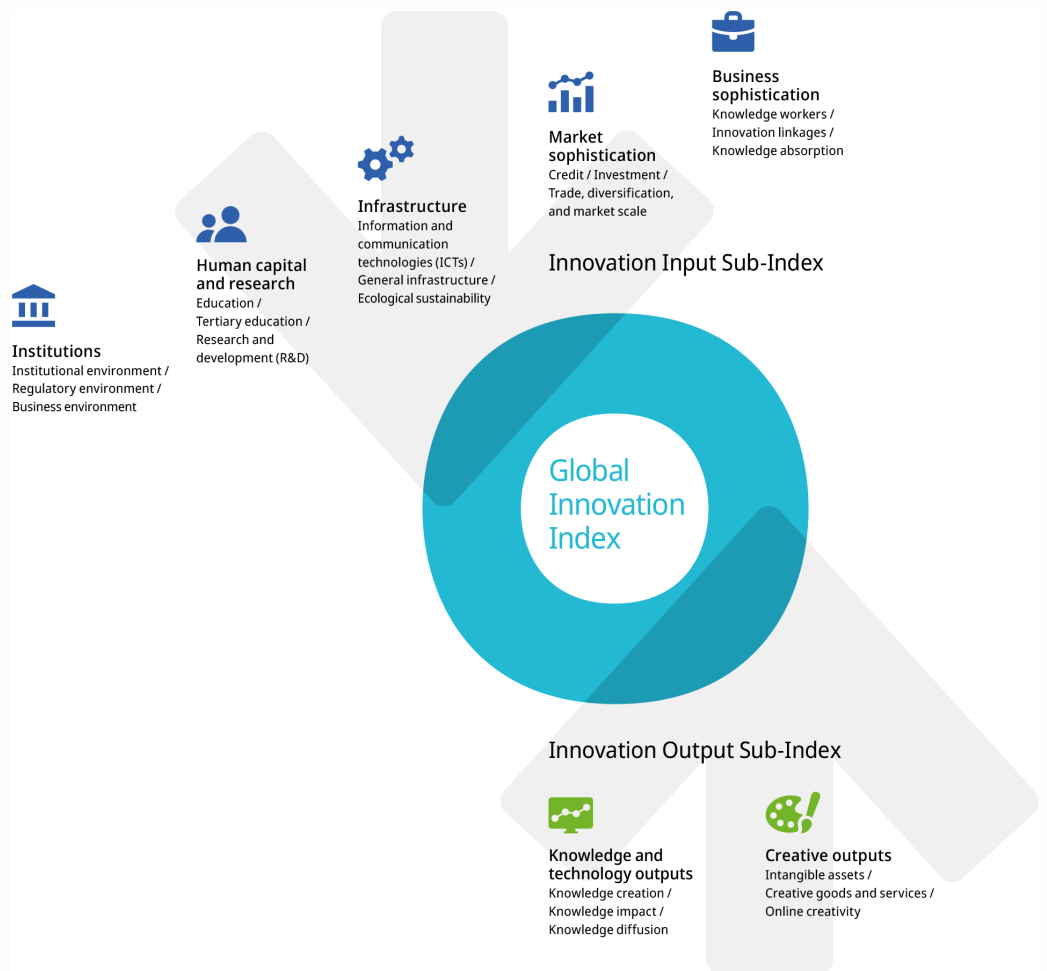
*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Global Innovation Index 2025



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.