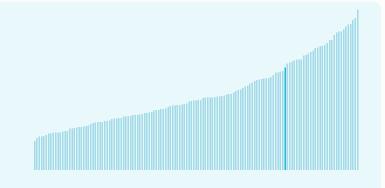


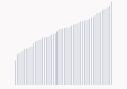
Czech Republic ranking in the Global Innovation Index 2025

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

The Global Innovation Index (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.



Czech Republic ranks 31st among the 54 Highincome 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	GII 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 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	Conne	ectivity	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
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.

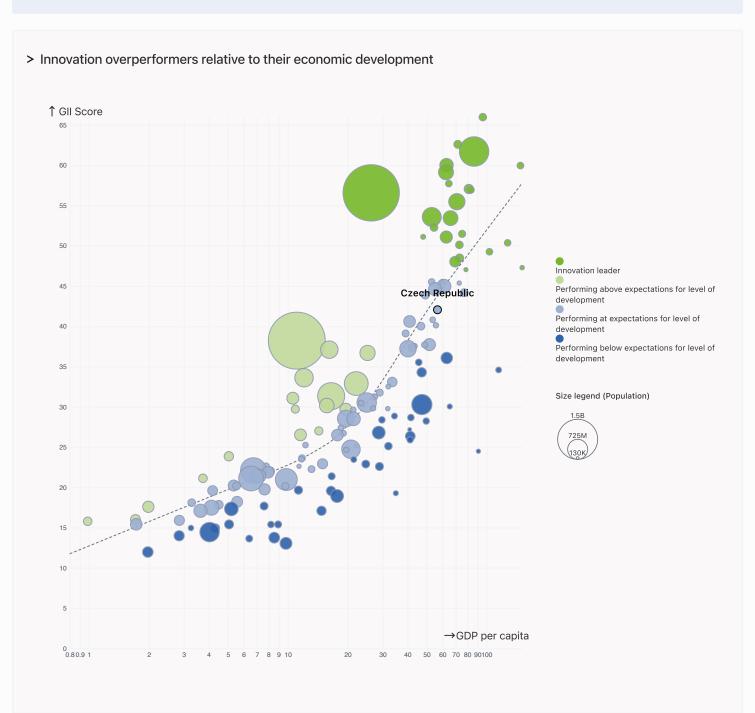


Expected vs. Observed Innovation Performance

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.



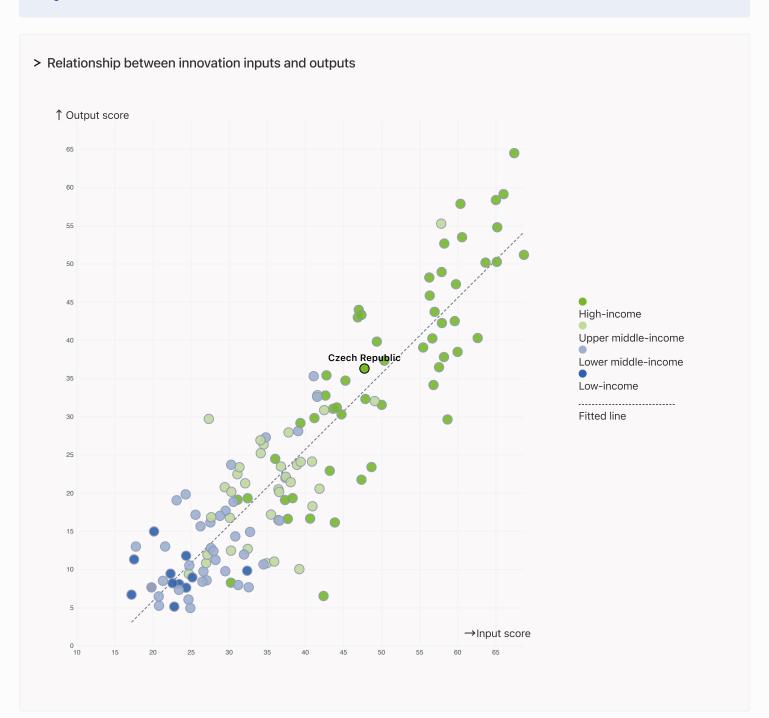


Effectively translating innovation investments into innovation outputs

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.



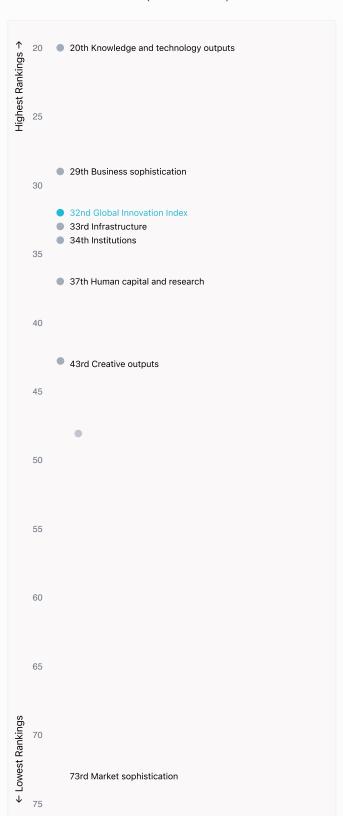
Czech Republic produces more innovation outputs relative to its level of innovation investments.





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



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

Top 10 | Score: 59.30

Europe | Score: 44.67

Europe | Score: 40.79

High-income | Score: 45.45

The charts shows the relative position of Czech Republic (blue bar) against other economy groupings (grey bars)



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.

Infrastructure

Institutions Human capital and research Top 10 | Score: 78.63 Czech Republic | Score: 66.30 High-income | Score: 65.99 Europe | Score: 59.42 Market sophistication Top 10 | Score: 61.82 High-income | Score: 47.12 Europe | Score: 44.89 Czech Republic | Score: 35.17 Creative outputs Top 10 | Score: 55.98 High-income | Score: 38.68

Czech Republic | Score: 42.34 Business sophistication Top 10 | Score: 59.10 High-income | Score: 42.22 Czech Republic | Score: 41.35

Top 10 | Score: 61.36 High-income | Score: 54.18 Europe | Score: 54.13 Czech Republic | Score: 53.90 Knowledge and technology outputs Top 10 | Score: 54.93 Czech Republic | Score: 40.09 Europe | Score: 34.99 High-income | Score: 33.94

Europe | Score: 38.66 Czech Republic | Score: 32.43



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 Weaknesses

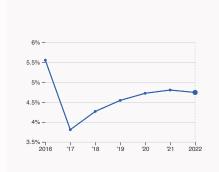
Rank	Code	Indicator name	Rank	Code	Indicator name
1	7.2.4	Creative goods exports, % total trade	135	7.1.2	Trademarks by origin/bn PPP\$ GDP
6	6.3.2	Production and export complexity	115	5.1.3	Youth demographic dividend, %
6	6.2.4	High-tech manufacturing	91	6.2.1	Labor productivity growth, %
6	6.3.3	High-tech exports, % total trade	76	3.1.3	Government's online service*
6	6.1.3	Utility models by origin/bn PPP\$ GDP	73	4.2.1	Market capitalization, % GDP
7	5.3.2	High-tech imports, % total trade	70	4.1.2	Domestic credit to private sector, % GDP
7	6.3.5	ISO 9001 quality/bn PPP\$ GDP	70	3.3.1	GDP/unit of energy use
13	3.3.3	ISO 14001 environment/bn PPP\$ GDP	68	1.3.1	Policy stability for doing business [†]
13	2.2.3	Tertiary inbound mobility, %	52	5.1.5	GERD financed by business, %
16	7.3.2	GitHub commits/mn pop. 15–69	44	2.3.3	Global corporate R&D investors, top 3, mn USD



Czech Republic's innovation system

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

> Innovation inputs in Czech Republic



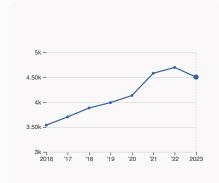
2.1.1 Expenditure on education

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.



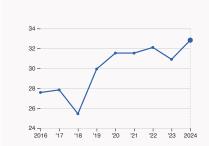
2.3.1 Researchers

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.



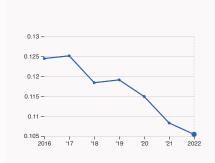
2.3.2 Gross expenditure on R&D

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.



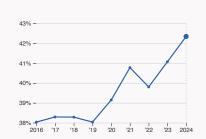
2.3.4 QS university ranking

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 0.11 in 2022, down by 2.64% from the year prior – and equivalent to an indicator rank of 30.

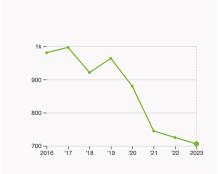


5.1.1 Knowledge-intensive employment

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

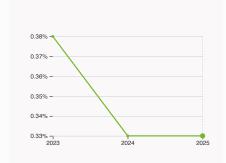


> Innovation outputs in Czech Republic



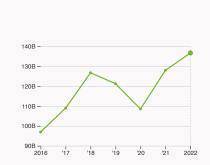
6.1.1 Patents by origin

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



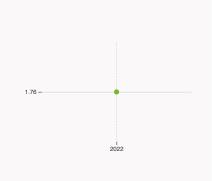
6.2.2 Unicorn valuation

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



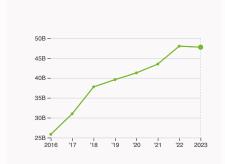
6.2.4 High-tech manufacturing

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.



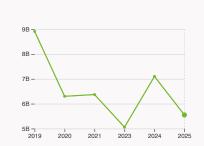
6.3.2 Production and export complexity

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



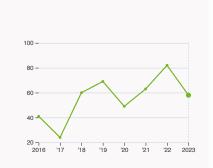
6.3.3 High-tech exports

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.



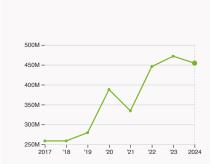
7.1.3 Global brand value, top 5,000

was equal to 5.55 billion USD for the brands in the top 5,000 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.



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	Rank Unicorn Company Ind		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.



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.

32

Czech Republic

Output rank 30	Input rank 33	Income High	_	egior urope	-	Population (mn) 10.7	GDP, PPP\$ (bn) 619.9	GDP per ca	apita, 86.2	
			Score / Value	Ranl	k			Score / Value I	Rank	
 Institutions			66.3	34		Business sophistication	n	41.4	29	
1.1 Institutional env	ironment		73.9	24		5.1 Knowledge workers		40.2	54	
1.1.1 Operational stab			77.3	28		5.1.1 Knowledge-intensive e	employment, %	42.3	27	
1.1.2 Government eff	-		70.4	27		5.1.2 Females employed w/a	advanced degrees, %	14.7	53	\Diamond
1.2 Regulatory envi	ronment		78.4	23		5.1.3 Youth demographic di	vidend, %	25.6	115	0
1.2.1 Regulatory qual	ity*		76.8	21		5.1.4 GERD performed by b	usiness, % GDP	1.2	19	
1.2.2 Rule of law*			80	25		5.1.5 GERD financed by bus	siness, %	37.6	52	0
1.3 Business enviro	nment		46.6	[65]]	5.2 Innovation linkages		38.8	31	
1.3.1 Policy stability f	or doing business†		46.6	68	0	5.2.1 Public research-indus	try co-publications, %	2.2	37	
1.3.2 Entrepreneursh	ip policies and culture ⁺		n/a	n/a		5.2.2 University-industry Re	&D collaboration [†]	54.7	32	
2. Human capital a	and research		42.3	37		5.2.3 University industry &	international engagement, top 5*	50.1	34	
2.1 Education			57.5			5.2.4 State of cluster develo	opment [†]	58.5	45	
2.1.1 Expenditure on	education % GDP		9 4.7			5.2.5 Patent families/bn PPF	P\$ GDP	0.4	35	
· ·	nding/pupil, secondary, % GD	P/can	26.7	13		5.3 Knowledge absorption		45	13	
2.1.3 School life expe		г/сар	1 16.8			5.3.1 Intellectual property p	ayments, % total trade	0.8	50	
	reading, maths and science		491.1			5.3.2 High-tech imports, %	total trade	21	7	•
2.1.5 Pupil-teacher r				n/a		5.3.3 ICT services imports,		1.9	43	
2.2 Tertiary educat			43	26		5.3.4 FDI net inflows, % GD			54	
2.2.1 Tertiary enrolm			• 70.8			5.3.5 Research talent, % in	businesses	54.5	20	
	cience and engineering, %		24.9	44		Knowledge and techno	logy outputs	40.1	20	
2.2.3 Tertiary inboun			S 15.8	13	•	6.1 Knowledge creation		32.3	29	
2.3 Research and d	evelopment (R&D)		26.4	38		6.1.1 Patents by origin/bn Pl	PP\$ GDP	1.2	48	
2.3.1 Researchers, F	TE/mn pop.		4,504.7	27		6.1.2 PCT patents by invent	or origin/bn PPP\$ GDP	0.4	35	
2.3.2 Gross expendit	ure on R&D, % GDP		1.8	21		6.1.3 Utility models by origin	n/bn PPP\$ GDP	1.6	6	•
2.3.3 Global corpora	te R&D investors, top 3, mn U	JSD	0	44	0 \$	6.1.4 Scientific and technical	al articles/bn PPP\$ GDP	23.3	27	
2.3.4 QS university ra	anking, top 3*		33.6	41		6.1.5 Citable documents H-	index	30.8	32	
‡ Infrastructure			53.9	33		6.2 Knowledge impact		36.1	29	
	aammuniaatian taabnalasi	oo (ICTo)				6.2.1 Labor productivity gro	owth, %	0.3	91	0
3.1.1 ICT access*	communication technologi	es (ICTS)	80.5 95.2			6.2.2 Unicorn valuation, % (GDP	0.3	46	
3.1.2 ICT use*			82.2			6.2.3 Software spending, %	GDP	0.3	43	
3.1.3 Government's o	nnline service*		64	76	0 \$	6.2.4 High-tech manufactur	ring	56.3	6	•
3.2 General infrastr			44.9		0 0	6.3 Knowledge diffusion		51.9		
3.2.1 Electricity outp			7,113			6.3.1 Intellectual property re		0.4	33	
3.2.2 Logistics perfo			54.5			6.3.2 Production and expor			6	•
3.2.3 Gross capital fo			28.4			6.3.3 High-tech exports, %		20.9	6	•
3.3 Ecological susta	ainability		36.4	28		6.3.4 ICT services exports,			44	
3.3.1 GDP/unit of ene	ergy use		10.7	70	0	6.3.5 ISO 9001 quality/bn P	PP\$ GDP	18	7	
3.3.2 Low-carbon en	ergy use, %		25.7	48		Creative outputs		32.4	43	
3.3.3 ISO 14001 envi	ronment/bn PPP\$ GDP		6.7	13	•	7.1 Intangible assets		12.5	93	\Diamond
Market sophistic	ation		35.2	73	\Diamond	7.1.1 Intangible asset intens	ity, top 15, %	n/a	n/a	
4.1 Credit					, ř	7.1.2 Trademarks by origin/k	on PPP\$ GDP	0	135	0 \$
4.1.1 Finance for star	tune and coalounet		16.6	n/a	J	7.1.3 Global brand value, top	p 5,000, % GDP	1.5	52	
	t to private sector, % GDP		48	70	0	7.1.4 Industrial designs by o	origin/bn PPP\$ GDP	1.7	42	
	rofinance institutions, % GDP)		n/a		7.2 Creative goods and se	rvices	44.9	11	
4.2 Investment	normanios monations, 70 obr		8.1				ervices exports, % total trade	0.9	38	
4.2.1 Market capitaliz	zation. % GDP		11	73	0 \$	7.2.2 National feature films/		7.7	23	
	(VC) received, deal count/bn	PPP\$ GDP	0.1	44	- V	7.2.3 Entertainment and me			25	
	deal count, % global VC	•	0.05			7.2.4 Creative goods export	s, % total trade	8.2	1	•
_	leal count/bn PPP\$ GDP		0.3			7.3 Online creativity	D-\/\db 1E 00	59.8		
	-participation/bn PPP\$ GDP		0.1	38		7.3.1 Top-level domains (TL		43.2		
	cation and market scale		80.9			7.3.2 GitHub commits/mn p		62.7	16	•
4.3.1 Applied tariff ra				24		7.3.3 Mobile app creation/b	11 PPP\$ GDP	73.6	26	
4.3.2 Domestic indus	stry diversification		92	30						
4.3.3 Domestic mark	et scale, bn PPP\$		619.9	45						



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

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



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.