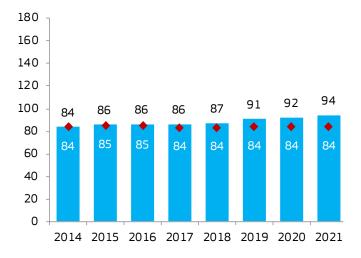


Czechia is a Moderate Innovator.

Over time, performance relative to the EU has remained the same.



■ Relative to EU in base year • Relative to EU in same year

Structural differences with the EU are shown in the table below including, compared to the EIS 2020, new information on different types of (innovating) enterprises (Innovation profiles) and environmental indicators.

	CZ	EU
Performance and structure of the economy		
GDP per capita (PPS)	28,400	30.800
Average annual GDP growth (%)	n/a	
Employment share Manufacturing (NACE C) (%)	27.3	16.5
of which High and Medium high-tech (%)	41.9	37.9
Employment share Services (NACE G-N) (%)	35.8	41.2
of which Knowledge-intensive services (%)	35.8	35.1
Turnover share SMEs (%)	38.1	36.5
Turnover share large enterprises (%)	44.7	45.7
Foreign-controlled enterprises – share of value added (%)	23.1	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.5	1.0
Total Entrepreneurial Activity (TEA) (%)	7.3	6.7
FDI net inflows (% GDP)	4.6	2.0
Top R&D spending enterprises per 10 million population	1.3	16.2
Buyer sophistication (1 to 7 best)	3.0	3.7
Innovation profiles		
In-house product innovators with market novelties	13.2	10.7
In-house product innovators without market novelties	9.8	12.3
In-house business process innovators	12.6	11.0
Innovators that do not develop innovations themselves	8.6	11.6
Innovation active non-innovators	2.6	3.3
Non-innovators with potential to innovate	17.3	19.9
Non-innovators without disposition to innovate	35.9	31.3
Governance and policy framework		
Ease of starting a business (0 to 100 best)	76.4	76.5
Basic school entrepreneurial education and training	n/a	2.0
Govt. procurement of advanced tech. products	3.1	3.5
Rule of law (-2.5 to 2.5 best)	1.1	1.1
Climate change indicators		
Circular material use rate	8.1	
Greenhouse gas emissions intensity of energy consumption	77.6	
Eco-Innovation Index	96.0	100.0
Demography	107	4467
Population size	10.7	
Average annual population growth (%)	0.4	0.1
Population density	137.7	108.8

Czechia's strengths are in *Use of information technologies, Sales impacts* and *Environmental sustainability*. The top-3 indicators include Enterprises providing ICT training, Exports of medium and high-tech goods, and Air emissions by fine particulate matter.

The recent increase in innovation performance between 2020 and 2021 is due to strong performance increases in several indicators using innovation survey data, Broadband penetration, and Venture capital. Czechia has an above average share of In-house product innovators with market novelties and is showing close to average scores on the Climate change related indicators.

	Relative to	Relativ	e to EU
Czechia	EU 2021 in	2014 in	
	2021		2021
SUMMARY INNOVATION INDEX	83.9	83.7	94.4
Human resources	81.9	80.7	86.8
Doctorate graduates	113.0	88.5	100.0
Population with tertiary education	56.4	50.4	72.7
Lifelong learning	72.7	101.1	80.0
Attractive research systems	74.2	56.9	83.5
International scientific co-publications	94.3	82.7	123.6
Most cited publications	43.9	34.1	43.2
Foreign doctorate students	98.3	71.6	116.8
Digitalisation	79.4	91.7	109.8
Broadband penetration	80.8	89.4	122.5
People with above basic overall digital skills	77.3	94.4	94.4
Finance and support	69.5	92.3	82.8
R&D expenditures in the public sector	101.8	112.3	98.2
Venture capital expenditures	22.3	13.7	37.5
Government support for business R&D	80.7	120.1	93.4
Firm investments	73.2	71.8	88.4
R&D expenditure in the business sector	81.6	71.7	90.6
Non-R&D Innovation expenditures	109.6	96.7	124.6
Innovation expenditures per employee	56.0	52.1	73.9
Use of information technologies	117.3	111.6	135.6
Enterprises providing ICT training	133.3	113.3	133.3
Employed ICT specialists			
Innovators	103.6 89.7	109.5 94.2	138.1 122.7
			117.5
Product innovators (SMEs)	83.3	106.7	
Business process innovators (SMEs)	95.6	83.2 89.5	127.3
Linkages	79.5		107.1
Innovative SMEs collaborating with others	94.9	137.6	139.0
Public-private co-publications	113.4	98.0	127.1
Job-to-job mobility of HRST Intellectual assets	48.2 59.7	48.7 57.9	69.2 51.7
			
PCT patent applications Trademark applications	79.5	20.1	20.8 83.4
	<mark></mark>	77.4 72.2	47.8
Design applications	69.8 88.7	72.2 84.2	90.3
Employment impacts	} <mark></mark>	93.3	
Employment in knowledge-intensive activities	90.2		98.7
Employment in innovative enterprises	87.4	77.8 92.5	84.4 99.6
Sales impacts	97.8		
Medium and high tech goods exports	127.1	124.4	139.4
Knowledge-intensive services exports Sales of innovative products	54.5	48.9	57.7
Environmental sustainability	111.8	102.3	97.2
	95.9	93.5	99.9
Resource productivity	75.5	62.1	111.8
Air emissions by fine particulate matter	114.7	106.3	121.9
Environment-related technologies	85.9	95.7	64.5

The colours show normalised performance in 2021 relative to that of the EU in 2021: dark green: above 125%; light green: between 100% and 125%; yellow: between 70% and 100%; orange: below 70%. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.