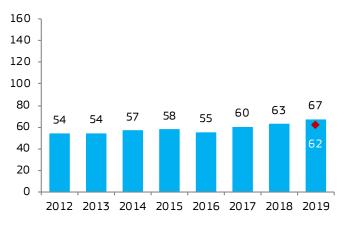


Serbia is a Moderate Innovator.

Over time, performance has increased relative to that of the EU in 2012.



■ Relative to EU in 2012 • Relative to EU in 2019

Innovators, Firm investments, and Innovation-friendly environment are the strongest innovation dimensions. Serbia scores high on Enterprises providing ICT training, SMEs innovating in-house, Non-R&D innovation expenditures, and SMEs with product or process innovations. Intellectual assets, Attractive research systems and Finance and support are the weakest innovation dimensions. Low-scoring indicators include Venture capital expenditures, Design applications, Public-private co-publications, and R&D expenditures in the business sector.

Structural differences with the EU are shown in the table below. Serbia shows the highest positive difference to the EU in FDI net inflows, Average annual change in GDP and Enterprise births, and the biggest negative difference in Top R&D spending enterprises, GDP per capita and Employment share high and medium high-tech manufacturing.

Serbia	Relative to EU 2019 in 2019	Performance relative to EU 2012 in	
		SUMMARY INNOVATION INDEX	61.7
Human resources	61.1	31.5	70.4
New doctorate graduates	82.9	29.3	91.3
Population with tertiary education	61.7	27.3	78.5
Lifelong learning	33.0	38.9	35.6
Attractive research systems	38.9	36.9	44.4
International scientific co-publications	47.6	42.5	69.9
Most cited publications	33.5	37.4	33.5
Foreign doctorate students	39.1	30.9	45.1
Innovation-friendly environment §	69.3	24.1	120.6
Broadband penetration	65.2	30.0	150.0
Opportunity-driven entrepreneurship	N/A	N/A	N/A
Finance and support	39.9	43.5	46.1
R&D expenditure in the public sector	70.1	59.7	68.8
Venture capital expenditures	5.5	16.2	7.9
Firm investments	85.6	68.0	111.2
R&D expenditure in the business sector	23.0	14.2	26.3
Non-R&D innovation expenditures	102.1	72.3	143.2
Enterprises providing ICT training	133.3	130.8	184.6
Innovators	96.4	107.7	86.2
SMEs product/process innovations	98.9	108.1	98.6
SMEs marketing/organizational innovations	84.3	107.4	69.3
SMEs innovating in-house	105.5	107.5	91.9
Linkages	67.6	59.3	69.6
Innovative SMEs collaborating with others	92.3	95.2	91.7
Public-private co-publications	20.9	28.6	23.6
Private co-funding of public R&D exp.	75.5	51.2	76.1
Intellectual assets	8.9	14.2	8.3
PCT patent applications	0.0	27.6	0.0
Trademark applications	24.3	8.6	25.9
Design applications	6.9	0.1	5.7
Employment impacts §	44.7	41.0	48.3
Employment in knowledge-intensive activities	50.0	45.9	54.1
Employment fast-growing enterprises	N/A	N/A	N/A
Sales impacts	67.5	54.8	67.1
Medium and high-tech product exports	50.4	40.5	55.9
Knowledge-intensive services exports	66.4	48.4	68.5
Sales of new-to-market/firm innovations	92.8	76.4	77.5

The colours show normalised performance in 2019 relative to that of the EU in 2019: dark green: above 125%; light green: between 95% and 125%; yellow: between 50% and 95%; orange: below 50%. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

§ Due to missing data, the relative dimension score does not necessarily reflect that of the indicators.

	RS	EU		
Performance and structure of the economy				
GDP per capita (PPS)	11,700	29,100		
Average annual GDP growth (%)	4.31	4.31		
Employment share manufacturing (NACE C) (%)		16.6		
of which High and medium high-tech (%)	22.8	37.5		
Employment share services (NACE G-N) (%)	36.4	41.4		
of which Knowledge-intensive services (%)	37.5	34.3		
Turnover share SMEs (%)	n/a	38.3		
Turnover share large enterprises (%)	n/a	43.2		
Foreign-controlled enterprises – share of value added (%)	n/a	11.1		
Business and entrepreneurship				
Enterprise births (10+ employees) (%)	1.9	1.1		
Total Entrepreneurial Activity (TEA) (%)		6.7		
FDI net inflows (% GDP)	6.8	2.6		
Top R&D spending enterprises per 10 million population	0.0	16.2		
Buyer sophistication (1 to 7 best)	2.5	3.7		
Governance and policy framework				
Ease of starting a business (0 to 100 best)	74.4	76.5		
Basic-school entrepreneurial education and training (1 to 5 best)		1.9		
Govt. procurement of advanced technology products (1 to 7 best)		3.5		
Rule of law (-2.5 to 2.5 best)	-0.2	1.1		
Demography				
Population size (millions)	7.0	446.2		
Average annual population growth (%)		0.14		
Population density (inhabitants/km²)	91.3	108.6		