



European
Commission

European Innovation Scoreboard **2023** Country profile **Bosnia and Herzegovina**



Innovation

European Innovation Scoreboard 2023 – Country profile Bosnia and Herzegovina

European Commission

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Manuscript completed in June 2023.

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European Innovation Scoreboard 2023

Country profile Bosnia and Herzegovina

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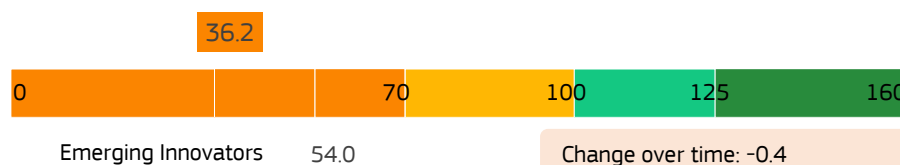
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as part of the European Innovation Scoreboard project
for the European Commission, Directorate-General for Research and Innovation under
Framework Contract N° 2018/RTD/A2/OP/PP-07001-2018 Lot 2 (EDAR)

The European Innovation Scoreboard report and annexes, and the indicators database are available at:

https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en



Bosnia and Herzegovina

	Performance relative to EU in 2023	Performance change 2016-2023	Performance change 2022-2023
SUMMARY INNOVATION INDEX	36.2	-0.4	0.1
Human resources	9.6	1.4	-2.2
Doctorate graduates	16.8	8.0	0.0
Population with tertiary education	9.8	-3.6	-4.2
Lifelong learning	1.0	-3.3	-3.3
Attractive research systems	37.3	20.5	7.0
International scientific co-publications	22.1	21.6	0.0
Most cited publications	39.1	16.4	8.6
Foreign doctorate students	N/A	N/A	N/A
Digitalisation	26.9	9.0	-1.8
Broadband penetration	42.2	17.7	-3.5
People with above basic overall digital skills	6.0	0.0	0.0
Finance and support	19.7	-39.6	2.9
R&D expenditures in the public sector	1.6	-12.9	0.0
Venture capital expenditures	N/A	N/A	N/A
Government support for business R&D	44.0	-72.7	6.6
Firm investments	0.7	0.8	0.0
R&D expenditure in the business sector	2.1	2.3	0.0
Non-R&D Innovation expenditures	0.0	0.0	0.0
Innovation expenditures per employee	0.0	0.0	0.0
Use of information technologies	63.5	1.9	5.6
Enterprises providing ICT training	62.6	1.9	5.7
Employed ICT specialists	N/A	N/A	N/A
Innovators	110.5	0.0	0.0
Product innovators (SMEs)	151.7	0.0	0.0
Business process innovators (SMEs)	74.5	0.0	0.0
Linkages	15.4	11.4	0.0
Innovative SMEs collaborating with others	N/A	N/A	N/A
Public-private co-publications	26.9	19.4	0.0
Job-to-job mobility of HRST	N/A	N/A	N/A
Intellectual assets	7.7	-2.0	2.2
PCT patent applications	14.5	-7.4	7.4
Trademark applications	4.9	3.6	-4.1
Design applications	1.1	0.5	0.5
Employment impacts	78.6	0.0	0.0
Employment in knowledge-intensive activities	N/A	N/A	N/A
Employment in innovative enterprises	71.5	0.0	0.0
Sales impacts	28.6	3.6	-4.4
Medium and high-tech goods exports	18.0	4.5	-3.6
Knowledge-intensive services exports	5.8	5.3	-9.0
Sales of innovative products	67.2	0.0	0.0
Environmental sustainability	89.7	1.0	0.0
Resource productivity	14.5	2.8	0.0
Air emissions by fine particulate matter	N/A	N/A	N/A
Environment-related technologies	190.8	0.0	0.0

The second column shows performance relative to that of the EU in 2023. Colours next to the column show matching colour codes: dark green: above 125% of the performance of the EU in 2023; light green: between 100% and 125%; light orange: between 70% and 100%; dark orange: below 70%. The next columns show performance change over time between 2016 and 2023 and between 2022 and 2023, with scores relative to those of the EU in 2016. Positive (negative) performance changes are shown in green (red).

BOSNIA AND HERZEGOVINA is an **Emerging Innovator** with performance at 36.2% of the EU average. Performance is below the average of the Emerging Innovators. Performance is decreasing and is lower than the rate of increase of the EU (8.5%-points). The country's performance gap to the EU is becoming larger.

Relative strengths

Environment-related technologies
Product innovators
Business process innovators
Employment in innovative enterprises
Sales of innovative products

Relative weaknesses

Non-R&D Innovation expenditures
Innovation expenditures per employee
Lifelong learning
Design applications
R&D expenditures in the public sector

Strong increases since 2016

International scientific co-publications
Public-private co-publications
Broadband penetration

Strong decreases since 2016

Government support for business R&D
R&D expenditures in the public sector
PCT patent applications

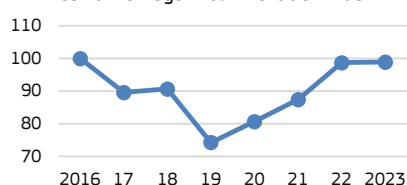
Strong increases since 2022

Most cited publications
PCT patent applications
Government support for business R&D

Strong decreases since 2022

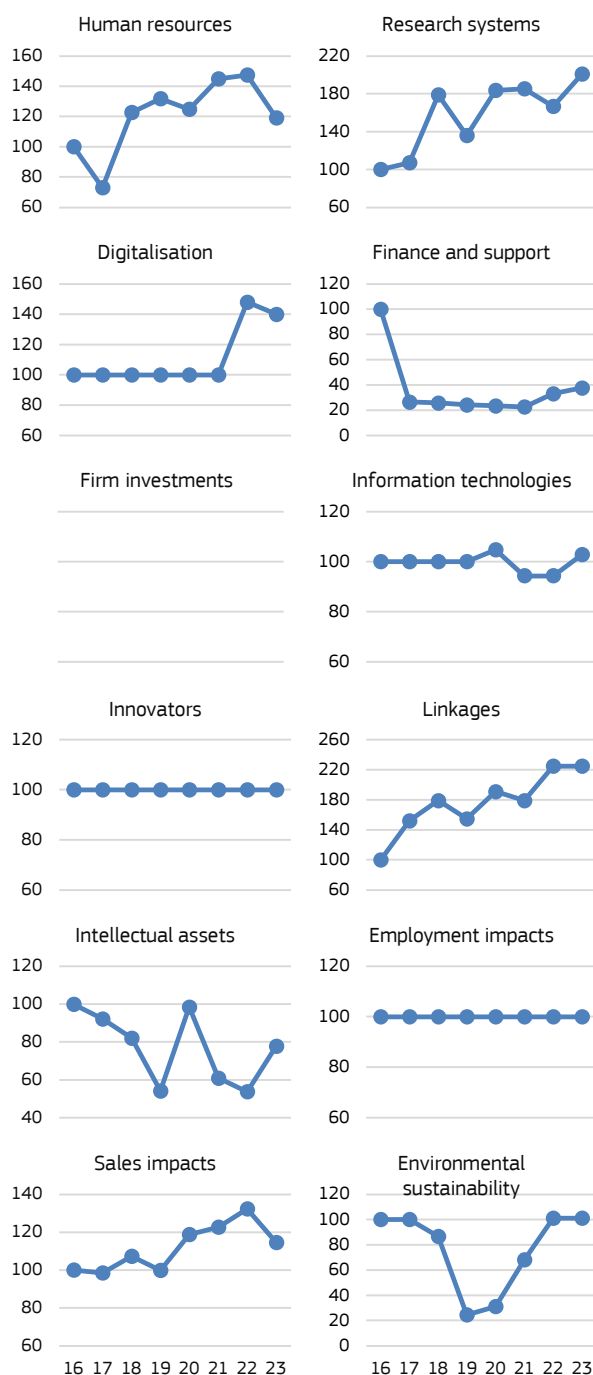
Knowledge-intensive services exports
Population with tertiary education
Trademark applications

Bosnia Herzegovina: Innovation index



The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance decreased between 2016 and 2019, followed by relatively strong improvements between 2020 and 2022 and almost no change 2023, leading to an overall 1% decrease between 2016 and 2023.

The graphs below show the evolution of innovation performance in the different **innovation dimensions** against the performance of the country in 2016. Performance increased most strongly for Research systems, Digitalisation and Linkages. Performance declined for Finance and support and Intellectual assets.

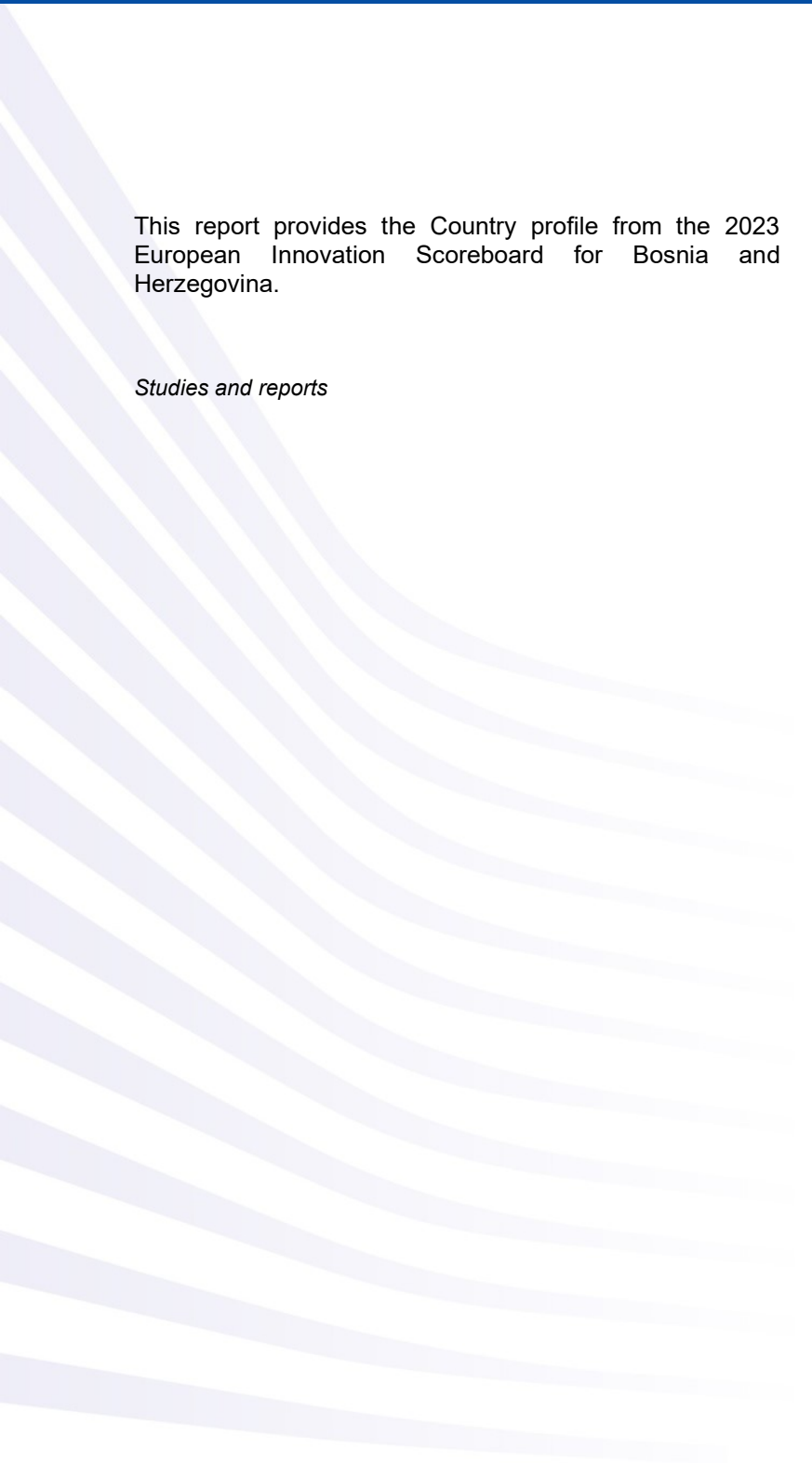



Performance is measured relative to that of the country in 2016 (=100). There are no results for Firm investments.

Structural differences with the EU are shown below:

- Bosnia and Herzegovina has lower per capita income, but a faster growing economy. Manufacturing takes up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- FDI net inflows add positively to the innovation climate, Entrepreneurial Activity, Top R&D spenders, and Buyer sophistication add negatively.
- Information on Innovation profiles is not available.
- Government procurement is below the EU average as driver of research and innovation.
- Information on Climate change related indicators is not available.

	BA	EU
Performance and structure of the economy		
GDP per capita (PPS)	11,260	32,600
Average annual GDP growth (%)	6.8	4.4
Employment share Manufacturing (NACE C) (%)	17.6	16.4
of which High and Medium high-tech (%)	n/a	38.0
Employment share Services (NACE G-N) (%)	29.4	41.1
of which Knowledge-intensive services (%)	n/a	35.8
Turnover share SMEs (%)	49.3	34.1
Turnover share large enterprises (%)	30.3	49.6
Foreign-controlled enterprises – share of value added (%)	10.1	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	n/a	1.0
Total Entrepreneurial Activity (TEA) (%)	4.0	6.8
FDI net inflows (% GDP)	2.4	2.1
Top R&D spending enterprises per 10 mln. population	0.0	20.3
Buyer sophistication (1 to 7 best)	2.5	3.7
Innovation profiles		
In-house product innovators with market novelties	n/a	12.2
In-house product innovators without market novelties	n/a	12.8
In-house business process innovators	n/a	16.5
Innovators that do not develop innovations themselves	n/a	6.5
Innovation active non-innovators	n/a	4.1
Non-innovators with potential to innovate	n/a	17.2
Non-innovators without disposition to innovate	n/a	30.7
Governance and policy framework		
Corruption Perceptions Index (0 to 100 best)	34.7	64.0
Basic school entrepreneurial education and training	n/a	3.3
Govt. procurement of advanced tech. products	1.9	3.5
Rule of law (-2.5 to 2.5 best)	-0.3	1.0
Climate change indicators		
Circular material use rate	n/a	11.8
Greenhouse gas emissions intensity of energy consumption	n/a	82.8
Eco-Innovation Index	n/a	100.0
Demography		
Population size	3.3	447.1
Average annual population growth (%)	-1.3	-0.1
Population density	65.6	108.8



This report provides the Country profile from the 2023 European Innovation Scoreboard for Bosnia and Herzegovina.

Studies and reports