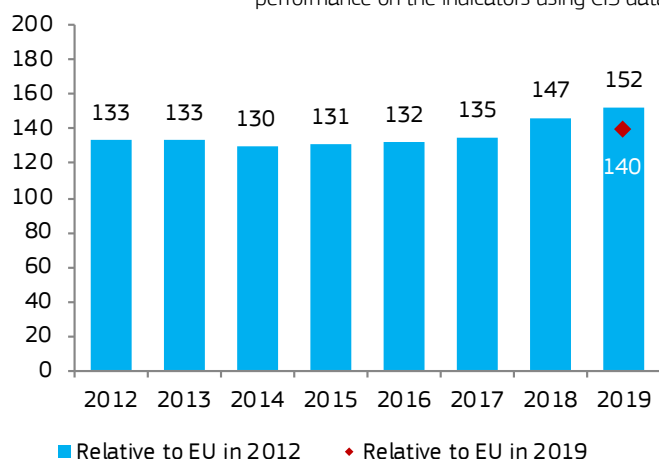




Finland is an Innovation Leader.

Over time, performance has increased relative to that of the EU in 2012. The strong increase in 2018 is almost entirely explained by improved performance on the indicators using CIS data.



Finland	Performance relative to EU	
	Relative to EU 2019 in 2019	2012 in 2019
SUMMARY INNOVATION INDEX	139.8	133.3
Human resources	172.4	183.1
New doctorate graduates	143.5	167.6
Population with tertiary education	114.9	136.4
Lifelong learning	284.5	254.4
Attractive research systems	151.9	126.1
International scientific co-publications	227.8	212.8
Most cited publications	120.5	117.8
Foreign doctorate students	124.4	67.4
Innovation-friendly environment	184.9	159.2
Broadband penetration	169.6	210.0
Opportunity-driven entrepreneurship	202.3	125.1
Finance and support	137.4	155.7
R&D expenditure in the public sector	137.3	156.8
Venture capital expenditures	137.6	153.8
Firm investments	129.9	183.3
R&D expenditure in the business sector	124.7	203.6
Non-R&D innovation expenditures	88.5	88.7
Enterprises providing ICT training	177.8	253.8
Innovators	171.5	111.8
SMEs product/process innovations	177.0	126.1
SMEs marketing/organizational innovations	141.1	95.4
SMEs innovating in-house	195.2	114.9
Linkages	163.1	169.1
Innovative SMEs collaborating with others	247.9	187.0
Public-private co-publications	230.4	259.4
Private co-funding of public R&D exp.	83.1	120.9
Intellectual assets	127.1	116.5
PCT patent applications	149.5	144.4
Trademark applications	126.0	106.9
Design applications	93.8	85.6
Employment impacts	86.7	92.0
Employment in knowledge-intensive activities	133.8	132.4
Employment fast-growing enterprises	48.6	59.4
Sales impacts	90.6	85.3
Medium and high-tech product exports	71.9	61.6
Knowledge-intensive services exports	113.8	87.1
Sales of new-to-market/firm innovations	87.1	108.3

The colours show normalised performance in 2019 relative to that of the EU in 2012: 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.

Innovation-friendly environment, *Human resources* and *Innovators* are the strongest innovation dimensions. Indicator performance on Lifelong learning, Innovative SMEs collaborating with others, Public-private co-publications, and International scientific co-publications is well above the EU average. *Employment impacts*, *Sales impacts* and *Intellectual assets* are the weakest innovation dimensions. Finland's lowest indicator scores are on Employment in fast-growing enterprises of innovative sectors, Medium and high-tech product exports, Private co-funding of public R&D expenditures, and Sales of new-to-market and new-to-firm product innovations.

Structural differences with the EU are shown in the table below. Finland shows the highest positive difference to the EU in Top R&D spending enterprises, Buyer sophistication and Basic-school entrepreneurial education and training, and the biggest negative difference in Enterprise births, Average annual change in GDP and Employment share in manufacturing.

	FI	EU
Performance and structure of the economy		
GDP per capita (PPS)	33,100	29,100
Average annual GDP growth (%)	1.31	1.84
Employment share manufacturing (NACE C) (%)	13.3	16.6
of which High and medium high-tech (%)	36.4	37.5
Employment share services (NACE G-N) (%)	39.9	41.4
of which Knowledge-intensive services (%)	39.5	34.3
Turnover share SMEs (%)	40.2	38.3
Turnover share large enterprises (%)	44.4	43.2
Foreign-controlled enterprises – share of value added (%)	9.5	11.1
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.4	1.1
Total Entrepreneurial Activity (TEA) (%)	6.7	6.7
FDI net inflows (% GDP)	2.2	2.6
Top R&D spending enterprises per 10 million population	64.8	16.2
Buyer sophistication (1 to 7 best)	4.6	3.7
Governance and policy framework		
Ease of starting a business (0 to 100 best)	80.1	76.5
Basic-school entrepreneurial education and training (1 to 5 best)	2.4	1.9
Govt. procurement of advanced technology products (1 to 7 best)	3.9	3.5
Rule of law (-2.5 to 2.5 best)	2.0	1.1
Demography		
Population size (millions)	5.5	446.2
Average annual population growth (%)	0.13	0.14
Population density (inhabitants/km ²)	18.1	108.6

EU targets for 2020

Indicator	2015	Latest	Target ¹
Gross domestic expenditure on R&D (% of GDP)	2.87	2.75	4.00
Tertiary educational attainment (% of population aged 30-34)	45.5	46.6	42.0

¹ Sources are provided in the introduction to the country profiles.

European Semester country report and country specific recommendations:

https://ec.europa.eu/info/publications/2020-european-semester-country-reports_en

<https://rio.jrc.ec.europa.eu/en/country-analysis/Finland>