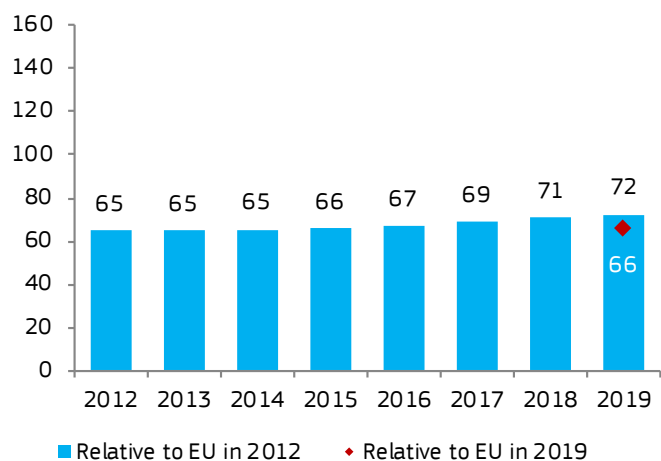




### Hungary is a Moderate Innovator.

Over time, performance has increased relative to that of the EU in 2012. Particularly since 2017.



Hungary	Performance relative to EU		
	Relative to EU 2019 in 2019	2012 in 2019	
<b>SUMMARY INNOVATION INDEX</b>	<b>66.4</b>	<b>64.8</b>	<b>72.3</b>
<b>Human resources</b>	<b>44.7</b>	<b>55.2</b>	<b>51.5</b>
New doctorate graduates	38.3	31.8	42.2
Population with tertiary education	44.8	68.6	57.0
Lifelong learning	52.6	68.9	56.7
<b>Attractive research systems</b>	<b>58.4</b>	<b>45.5</b>	<b>66.8</b>
International scientific co-publications	52.6	55.6	77.3
Most cited publications	48.8	43.0	48.9
Foreign doctorate students	82.5	41.9	95.1
<b>Innovation-friendly environment</b>	<b>83.1</b>	<b>63.6</b>	<b>144.5</b>
Broadband penetration	91.3	90.0	210.0
Opportunity-driven entrepreneurship	73.7	45.9	100.4
<b>Finance and support</b>	<b>46.2</b>	<b>43.6</b>	<b>53.4</b>
R&D expenditure in the public sector	32.8	45.0	32.2
Venture capital expenditures	61.6	41.1	89.0
<b>Firm investments</b>	<b>82.1</b>	<b>64.6</b>	<b>106.6</b>
R&D expenditure in the business sector	79.5	57.1	91.1
Non-R&D innovation expenditures	105.0	69.4	147.2
Enterprises providing ICT training	61.1	69.2	84.6
<b>Innovators</b>	<b>34.0</b>	<b>25.8</b>	<b>30.4</b>
SMEs product/process innovations	40.0	27.4	39.8
SMEs marketing/organizational innovations	30.8	38.6	25.2
SMEs innovating in-house	30.6	11.1	26.7
<b>Linkages</b>	<b>58.9</b>	<b>83.6</b>	<b>60.7</b>
Innovative SMEs collaborating with others	57.4	67.0	57.0
Public-private co-publications	68.0	58.9	76.9
Private co-funding of public R&D exp.	55.5	103.6	56.0
<b>Intellectual assets</b>	<b>47.6</b>	<b>43.5</b>	<b>44.5</b>
PCT patent applications	56.9	61.3	52.8
Trademark applications	54.6	46.2	58.2
Design applications	26.3	16.7	22.1
<b>Employment impacts</b>	<b>139.2</b>	<b>139.8</b>	<b>150.2</b>
Employment in knowledge-intensive activities	76.3	98.6	82.4
Employment fast-growing enterprises	190.2	172.9	204.8
<b>Sales impacts</b>	<b>85.1</b>	<b>98.3</b>	<b>84.7</b>
Medium and high-tech product exports	132.9	137.4	147.3
Knowledge-intensive services exports	61.8	62.5	63.8
Sales of new-to-market/firm innovations	48.2	94.0	40.3

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.

Employment impacts, Sales impacts and Innovation-friendly environment are the strongest innovation dimensions. Performance is highest for Employment in fast-growing enterprises of innovative sectors, Medium and high-tech product exports, Non-R&D innovation expenditures, and Broadband penetration. Innovators, Human resources and Finance and support are the weakest innovation dimensions. Hungary's lowest indicator scores are on Design applications, SMEs innovating in-house, SMEs with marketing or organizational innovations, and R&D expenditures in the public sector.

**Structural differences** with the EU are shown in the table below. Hungary shows the highest positive difference to the EU in Average annual change in GDP, Value-added share foreign-controlled enterprises and Enterprise births, and the biggest negative difference in Top R&D spending enterprises, FDI net inflows and GDP per capita.

	HU	EU
<b>Performance and structure of the economy</b>		
GDP per capita (PPS)	20,800	29,100
Average annual GDP growth (%)	5.00	1.84
Employment share manufacturing (NACE C) (%)	22.2	16.6
of which High and medium high-tech (%)	43.9	37.5
Employment share services (NACE G-N) (%)	35.7	41.4
of which Knowledge-intensive services (%)	29.5	34.3
Turnover share SMEs (%)	38.1	38.3
Turnover share large enterprises (%)	42.4	43.2
Foreign-controlled enterprises – share of value added (%)	24.1	11.1
<b>Business and entrepreneurship</b>		
Enterprise births (10+ employees) (%)	1.8	1.1
Total Entrepreneurial Activity (TEA) (%)	7.9	6.7
FDI net inflows (% GDP)	1.6	2.6
Top R&D spending enterprises per 10 million population	1.0	16.2
Buyer sophistication (1 to 7 best)	3.2	3.7
<b>Governance and policy framework</b>		
Ease of starting a business (0 to 100 best)	73.1	76.5
Basic-school entrepreneurial education and training (1 to 5 best)	1.5	1.9
Govt procurement of advanced technology products (1 to 7 best)	2.8	3.5
Rule of law (-2.5 to 2.5 best)	0.5	1.1
<b>Demography</b>		
Population size (millions)	9.8	446.2
Average annual population growth (%)	-0.13	0.14
Population density (inhabitants/km <sup>2</sup> )	107.3	108.6

### EU targets for 2020

Indicator	2015	Latest	Target <sup>1</sup>
Gross domestic expenditure on R&D (% of GDP)	1.35	1.53	1.80
Tertiary educational attainment (% of population aged 30-34)	34.3	33.9	34.0

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

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