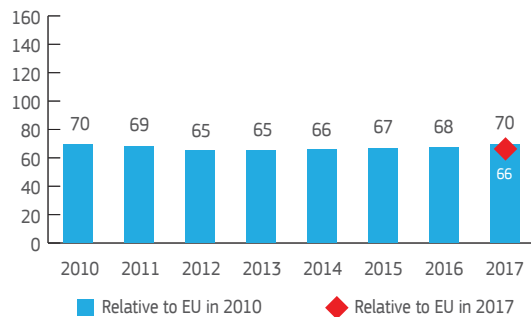




**Hungary** is a **Moderate Innovator**. Over time, performance has declined relative to that of the EU in 2010



Employment and Sales impacts are the strongest innovation dimensions. Innovators and Intellectual assets are the weakest innovation dimensions.

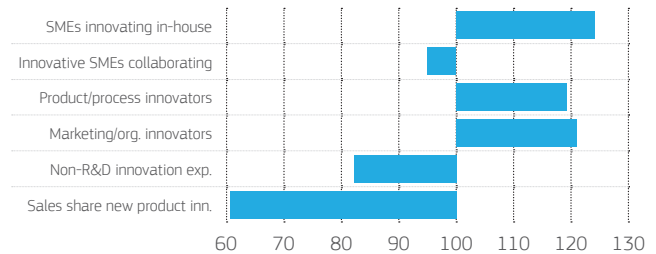
Hungary	Performance relative to EU 2010 in		Relative to EU 2017 in
	2010	2017	
<b>SUMMARY INNOVATION INDEX</b>	<b>69.7</b>	<b>69.6</b>	<b>65.7</b>
<b>Human resources</b>	<b>59.2</b>	<b>54.6</b>	<b>45.7</b>
New doctorate graduates	53.8	62.4	44.8
Population with tertiary education	61.9	47.8	42.1
Lifelong learning	62.5	53.1	52.0
<b>Attractive research systems</b>	<b>52.0</b>	<b>66.4</b>	<b>58.4</b>
International scientific co-publications	87.8	141.6	87.0
Most cited publications	59.2	60.5	58.3
Foreign doctorate students	29.3	48.9	44.2
<b>Innovation-friendly environment</b>	<b>85.0</b>	<b>117.9</b>	<b>88.1</b>
Broadband penetration	100.0	177.8	100.0
Opportunity-driven entrepreneurship	76.1	82.4	76.5
<b>Finance and support</b>	<b>45.8</b>	<b>50.0</b>	<b>46.4</b>
R&D expenditure in the public sector	55.7	23.9	24.8
Venture capital expenditures	33.1	83.4	68.4
<b>Firm investments</b>	<b>72.2</b>	<b>87.5</b>	<b>78.3</b>
R&D expenditure in the business sector	52.8	73.8	66.3
Non-R&D innovation expenditures	106.1	107.1	98.0
Enterprises providing ICT training	64.3	85.7	75.0
<b>Innovators</b>	<b>25.0</b>	<b>15.1</b>	<b>17.6</b>
SMEs product/process innovations	21.2	13.7	16.7
SMEs marketing/organisational innovations	34.0	16.0	19.4
SMEs innovating in-house	19.5	15.5	16.6
<b>Linkages</b>	<b>85.8</b>	<b>70.2</b>	<b>69.5</b>
Innovative SMEs collaborating with others	59.7	50.0	49.8
Public-private co-publications	82.4	85.8	85.0
Private co-funding of public R&D exp.	116.0	73.5	72.5
<b>Intellectual assets</b>	<b>35.0</b>	<b>39.5</b>	<b>39.2</b>
PCT patent applications	36.6	36.4	38.0
Trademark applications	51.0	62.5	55.3
Design applications	21.3	25.1	26.0
<b>Employment impacts</b>	<b>125.7</b>	<b>124.9</b>	<b>124.3</b>
Employment in knowledge-intensive activities	85.7	76.6	69.4
Employment fast-growing enterprises	154.2	159.4	170.4
<b>Sales impacts</b>	<b>113.4</b>	<b>99.0</b>	<b>95.1</b>
Medium and high tech product exports	147.8	139.6	131.8
Knowledge-intensive services exports	63.1	63.6	60.7
Sales of new-to-market/firm innovations	131.4	92.1	91.2

Dark green: normalised performance above 120% of EU; light green: normalised performance between 90% and 120% of EU; yellow: normalised performance between 50% and 90% of EU; orange: normalised performance below 50% of EU. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

Data in red show a decline in performance compared to 2010.

**Provisional CIS 2016 data** show improved performance for three indicators and reduced performance for three indicators

Provisional CIS 2016 vs CIS 2014 (=100)



**Structural differences** with the EU are shown in the table below. The employment share in manufacturing and the value added share of foreign-controlled enterprises are well above the EU average. GDP per capita is well below the EU average.

	HU	EU
<b>Performance and structure of the economy</b>		
GDP per capita (PPS)	19,400	28,600
Average annual GDP growth (%)	3.1	2.2
Employment share Manufacturing (NACE C) (%)	21.6	15.5
of which High and Medium high-tech (%)	42.7	37.2
Employment share Services (NACE G-N) (%)	36.5	41.6
of which Knowledge-intensive services (%)	29.7	35.0
Turnover share SMEs (%)	37.6	38.0
Turnover share large enterprises (%)	43.5	44.4
Foreign-controlled enterprises – share of value added (%)	30.3	12.5
<b>Business and entrepreneurship</b>		
Enterprise births (10+ employees) (%)	2.1	1.5
Total Entrepreneurial Activity (TEA) (%)	7.9	6.6
FDI net inflows (% GDP)	19.8	3.6
Top R&D spending enterprises per 10 mln population	1.0	19.7
Buyer sophistication (1 to 7 best)	3.0	3.7
<b>Governance and policy framework</b>		
Ease of starting a business (0 to 100 best)	72.7	76.9
Basic-school entrepren. education and training (1 to 5 best)	1.5	1.9
Govt. procurement of advanced tech products (1 to 7 best)	2.9	3.5
Rule of law (-2.5 to 2.5 best)	0.5	1.2
<b>Demography</b>		
Population size (millions)	9.8	510.1
Average annual population growth (%)	-0.3	0.3
Population density (inhabitants/km <sup>2</sup> )	106.5	117.1

#### EU targets for 2020

Indicator	2013	Latest	Target <sup>1</sup>
Gross domestic expenditure on R&D (% of GDP)	1.39	1.21	1.80
Tertiary educational attainment (% of population aged 30-34)	32.3	32.3	34.0

<sup>1</sup> Sources are provided in the introduction to the country profiles.

#### RIO country report:

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

#### European Semester country report:

<https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-hungary-en.pdf>