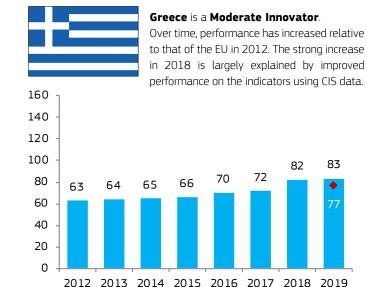
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• Relative to EU in 2019



Relative to EU in 2012

		Perforn	Performance	
Greece	<b>Relative to</b>	relative to EU 2012 in		
	EU 2019 in 2019			
		2012	2019	
SUMMARY INNOVATION INDEX	76.7	62.8	83.5	
Human resources	80.5	64.7	92.7	
New doctorate graduates	72.0	46.9	79.3	
Population with tertiary education	121.4	123.1	154.5	
Lifelong learning	37.1	21.1	40.0	
Attractive research systems	68.3	64.1	78.0	
International scientific co-publications	85.8	83.9	126.0	
Most cited publications	91.2	81.3	91.3	
Foreign doctorate students	6.7	10.6	7.8	
Innovation-friendly environment	44.1	31.7	76.7	
Broadband penetration	34.8	20.0	80.0	
Opportunity-driven entrepreneurship	54.7	39.6	74.5	
Finance and support	53.3	31.4	61.5	
R&D expenditure in the public sector	75.7	45.0	74.3	
Venture capital expenditures	27.6	8.6	39.9	
Firm investments	65.7	73.9	85.4	
R&D expenditure in the business sector	37.8	15.8	43.3	
Non-R&D innovation expenditures	103.7	142.3	145.4	
Enterprises providing ICT training	55.6	76.9	76.9	
Innovators	146.5	93.4	131.0	
SMEs product/process innovations	139.8	83.8	139.3	
SMEs marketing/organizational innovations	147.3	116.5	120.9	
SMEs innovating in-house	153.2	78.6	133.4	
Linkages	125.9	86.3	129.7	
Innovative SMEs collaborating with others	264.3	137.3	262.4	
Public-private co-publications	45.4	34.8	51.4	
Private co-funding of public R&D exp.	84.8	78.2	85.5	
Intellectual assets	41.9	23.1	39.1	
PCT patent applications	39.9	31.1	37.0	
Trademark applications	67.8	26.7	72.2	
Design applications	18.7	9.3	15.7	
Employment impacts	53.2	100.1	57.4	
Employment in knowledge-intensive activities	80.0	77.0	86.5	
Employment fast-growing enterprises	31.5	118.7	33.9	
Sales impacts	67.9	51.5	67.6	
Medium and high-tech product exports	10.1	0.0	11.2	
Knowledge-intensive services exports	70.6	79.5	72.9	
Sales of new-to-market/firm innovations	145.4	76.8	121.4	

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.

Innovators and Linkages are the strongest innovation dimensions where Greece performs above the EU average. Greece performs particularly well on Innovative SMEs collaborating with others, SMEs innovating inhouse, SMEs with marketing or /organizational innovations and Sales of new-to-market and new-to-firm innovations. Intellectual assets, Innovation-friendly environment, and Employment impacts are the weakest innovation dimensions. Greece's lowest indicator scores are for Foreign doctorate students, Medium and high-tech product exports, Design applications, and Venture capital expenditures.

Structural differences with the EU are shown in the table below. Greece shows the highest positive difference to the EU in Enterprise births, Employment share in services and Average annual change in GDP, and the biggest negative difference in Top R&D spending enterprises, Value-added share foreign-controlled enterprises and Employment share high and medium high-tech manufacturing.

	EL	EU
Performance and structure of the economy		
GDP per capita (PPS)	20,400	29,100
Average annual GDP growth (%)	1.91	1.84
Employment share manufacturing (NACE C) (%)	9.5	16.6
of which High and medium high-tech (%)	14.4	37.5
Employment share services (NACE G-N) (%)	46.1	41.4
of which Knowledge-intensive services (%)	28.4	34.3
Turnover share SMEs (%)	n/a	38.3
Turnover share large enterprises (%)	n/a	43.2
Foreign-controlled enterprises – share of value added (%)	4.1	11.1
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	2.3	1.1
Total Entrepreneurial Activity (TEA) (%)	6.5	6.7
FDI net inflows (% GDP)	1.6	2.6
Top R&D spending enterprises per 10 million population	3.4	16.2
Buyer sophistication (1 to 7 best)	3.3	3.7
Governance and policy framework		
Ease of starting a business (0 to 100 best)	67.6	76.5
Basic-school entrepreneurial education and training (1 to 5 best)	1.8	1.9
Govt. procurement of advanced technology products (1 to 7 best)	2.6	3.5
Rule of law (-2.5 to 2.5 best)	0.1	1.1
Demography		
Population size (millions)	10.7	446.2
Average annual population growth (%)	-0.20	0.14
Population density (inhabitants/km²)	82.4	108.6

## EU targets for 2020

Indicator	2015	Latest	${\bf Target}^1$
Gross domestic expenditure on R&D (% of GDP)	0.96	1.18	1.20
Tertiary educational attainment (% of population	40.4	43.6	32.0
aged 30-34)			

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-countryreports\_en

https://rio.jrc.ec.europa.eu/en/country-analysis/Greece