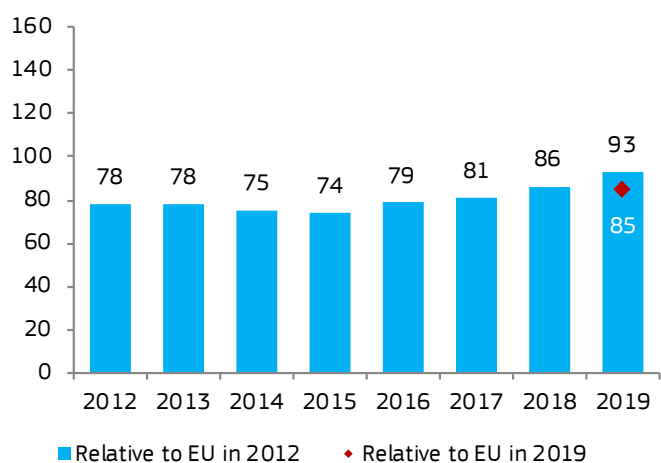




Spain is a Moderate Innovator.

Over time, performance has increased relative to that of the EU in 2012, with a temporary decline in 2014 and 2015.



Spain	Relative to EU 2019 in 2019	Performance relative to EU 2012 in 2012	Performance relative to EU 2012 in 2019
SUMMARY INNOVATION INDEX	85.1	78.1	92.6
Human resources	154.5	111.1	177.9
New doctorate graduates	208.1	86.4	229.2
Population with tertiary education	145.5	146.3	185.1
Lifelong learning	99.0	102.2	106.7
Attractive research systems	92.1	105.0	105.2
International scientific co-publications	91.7	88.7	134.7
Most cited publications	87.6	91.9	87.7
Foreign doctorate students	100.8	146.8	116.2
Innovation-friendly environment	113.4	69.7	197.3
Broadband penetration	169.6	100.0	390.0
Opportunity-driven entrepreneurship	49.7	49.3	67.7
Finance and support	78.3	85.4	90.4
R&D expenditure in the public sector	66.4	83.5	65.2
Venture capital expenditures	91.8	88.7	132.8
Firm investments	64.4	67.4	83.6
R&D expenditure in the business sector	47.0	53.9	53.9
Non-R&D innovation expenditures	52.5	67.2	73.6
Enterprises providing ICT training	94.4	84.6	130.8
Innovators	45.8	51.7	40.9
SMEs product/process innovations	40.7	67.5	40.6
SMEs marketing/organizational innovations	67.2	57.1	55.1
SMEs innovating in-house	30.4	30.8	26.5
Linkages	66.0	76.2	67.9
Innovative SMEs collaborating with others	64.4	56.3	63.9
Public-private co-publications	56.8	56.6	64.2
Private co-funding of public R&D exp.	71.2	95.9	71.8
Intellectual assets	75.1	77.5	70.1
PCT patent applications	61.3	65.5	56.9
Trademark applications	106.2	104.8	113.0
Design applications	64.7	72.4	54.3
Employment impacts	106.5	66.7	114.8
Employment in knowledge-intensive activities	81.3	82.4	87.8
Employment fast-growing enterprises	126.8	54.0	136.6
Sales impacts	84.4	80.8	84.0
Medium and high-tech product exports	71.8	73.0	79.6
Knowledge-intensive services exports	29.1	30.4	30.0
Sales of new-to-market/firm innovations	172.7	141.1	144.3

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.

Human resources, Innovation-friendly environment and Employment impacts are the strongest innovation dimensions. Spain scores high on New doctorate graduates, Sales of new-to-market and new-to-firm product innovations, Broadband penetration, and Population with tertiary education. Innovators, Firm investments and Linkages are the weakest innovation dimensions. Low-scoring indicators include Exports of knowledge-intensive services, SMEs innovating in-house, SMEs with product or process innovations, and R&D expenditures in the business sector.

Structural differences with the EU are shown in the table below. Spain 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, Employment share in manufacturing and Value-added share foreign-controlled enterprises.

	ES	EU
Performance and structure of the economy		
GDP per capita (PPS)	27,500	29,100
Average annual GDP growth (%)	2.15	1.84
Employment share manufacturing (NACE C) (%)	12.6	16.6
of which High and medium high-tech (%)	31.9	37.5
Employment share services (NACE G-N) (%)	49.3	41.4
of which Knowledge-intensive services (%)	31.3	34.3
Turnover share SMEs (%)	39.2	38.3
Turnover share large enterprises (%)	37.9	43.2
Foreign-controlled enterprises – share of value added (%)	9.2	11.1
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	1.4	1.1
Total Entrepreneurial Activity (TEA) (%)	6.2	6.7
FDI net inflows (% GDP)	3.0	2.6
Top R&D spending enterprises per 10 million population	4.4	16.2
Buyer sophistication (1 to 7 best)	3.5	3.7
Governance and policy framework		
Ease of starting a business (0 to 100 best)	77.8	76.5
Basic-school entrepreneurial education and training (1 to 5 best)	2.0	1.9
Govt. procurement of advanced technology products (1 to 7 best)	3.2	3.5
Rule of law (-2.5 to 2.5 best)	1.0	1.1
Demography		
Population size (millions)	46.7	446.2
Average annual population growth (%)	0.44	0.14
Population density (inhabitants/km ²)	92.8	108.6

EU targets for 2020

Indicator	2015	Latest	Target ¹
Gross domestic expenditure on R&D (% of GDP)	1.22	1.24	2.00
Tertiary educational attainment (% of population aged 30-34)	40.9	44.4	44.0

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/Spain>