

Regional Innovation Scoreboard 2019

Piemonte (ITC1)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	26.4	0.217	96	47
Lifelong learning	7.9	0.221	100	71
International scientific co-publications	689	0.468	89	82
Most-cited scientific publications	0.098	0.475	94	88
R&D expenditures public sector	0.38	0.404	85	71
R&D expenditures business sector	1.78	0.691	151	117
Non-R&D innovation expenditures	±	0.584	±	±
Product/process innovations	±	0.618	±	±
Marketing/ org. innovations	±	0.460	±	±
SMEs innovating in-house	±	0.673	±	±
Innovative SMEs collaborating	±	0.166	±	±
Public-private co-publications	19.9	0.285	95	70
PCT patent applications	3.74	0.369	123	86
Trademark applications	4.86	0.342	75	77
Design applications	3.57	0.441	80	90
Employment MHT manuf./KIS services	19.6	0.677	133	135
Sales new-to-market/firm innovations	±	0.716	±	±
Average score	--	0.459	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.388	--	--
RII 2019 (same year)	--	--	102.3	79.8
RII 2019 (cf. to EU 2011)	--	--	--	83.6
Regional Innovation Index 2011	--	0.362	--	--
RII 2011 (same year)	--	--	105.3	78.0
RII - change between 2011 and 2019	--	5.6	--	--

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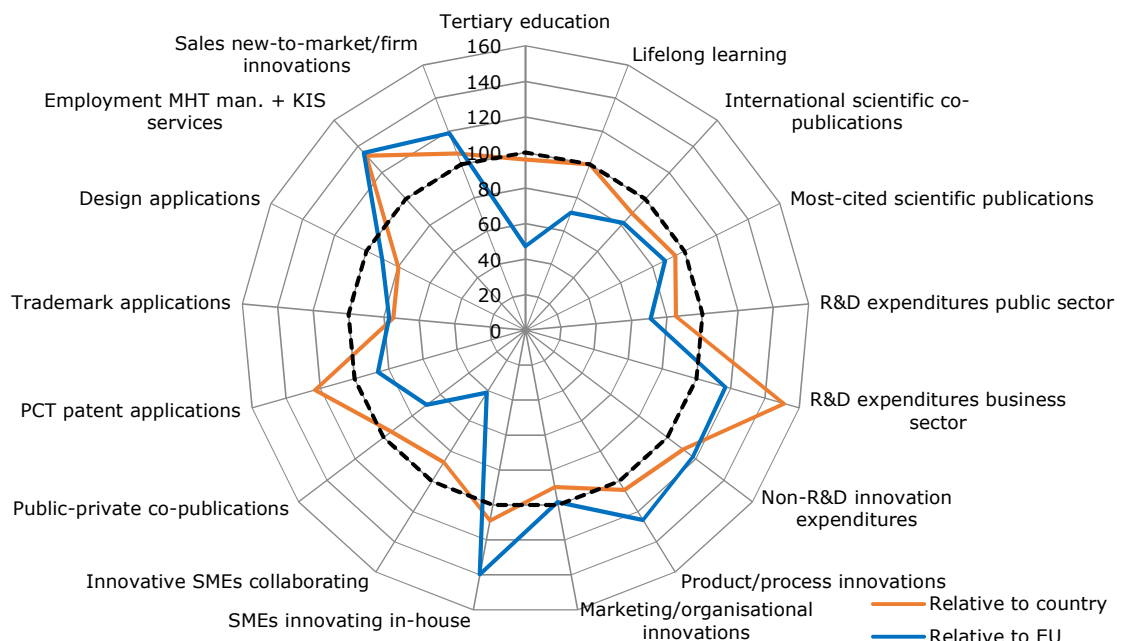
Piemonte (ITC1) is a Moderate + Innovator; innovation performance has increased over time (5.6%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. SMEs innovating in-house) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Manufacturing (above average) and Employment in Public administration (below average).

	ITC1	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.3	3.9	4.6
Manufacturing (C)	23.8	18.4	15.4
Utilities & Construction (D-F)	7.5	7.9	8.2
Services (G-N)	61.5	64.3	64.1
Public administration (O-U)	4.0	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.0	3.7	5.5
GDP per capita (PPS), 2017	30,700	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.15	2.29	2.86
Population density, 2017	174	203	118
Urbanisation, 2018	72.4	79.7	76.0
Population size, 2018 (000s)	4,380	60,480	512,380



Regional Innovation Scoreboard 2019

Valle d'Aosta/Vallée d'Aoste (ITC2)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	25.2	0.196	87	43
Lifelong learning	8.2	0.230	104	74
International scientific co-publications	251	0.283	54	49
Most-cited scientific publications	0.150	0.728	144	135
R&D expenditures public sector	0.11	0.181	38	32
R&D expenditures business sector	0.43	0.316	69	53
Non-R&D innovation expenditures	±	0.374	±	±
Product/process innovations	±	0.369	±	±
Marketing/ org. innovations	±	0.296	±	±
SMEs innovating in-house	±	0.387	±	±
Innovative SMEs collaborating	±	0.136	±	±
Public-private co-publications	0.0	0.000	0	0
PCT patent applications	2.80	0.275	92	64
Trademark applications	2.28	0.156	34	35
Design applications	5.51	0.554	100	113
Employment MHT manuf./KIS services	n/a	n/a	n/a	n/a
Sales new-to-market/firm innovations	±	0.772	±	±
Average score	--	0.328	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.277	--	--
RII 2019 (same year)	--	--	73.1	57.1
RII 2019 (cf. to EU 2011)	--	--	--	59.8
Regional Innovation Index 2011	--	0.265	--	--
RII 2011 (same year)	--	--	77.2	57.2
RII - change between 2011 and 2019	--	2.6	--	--

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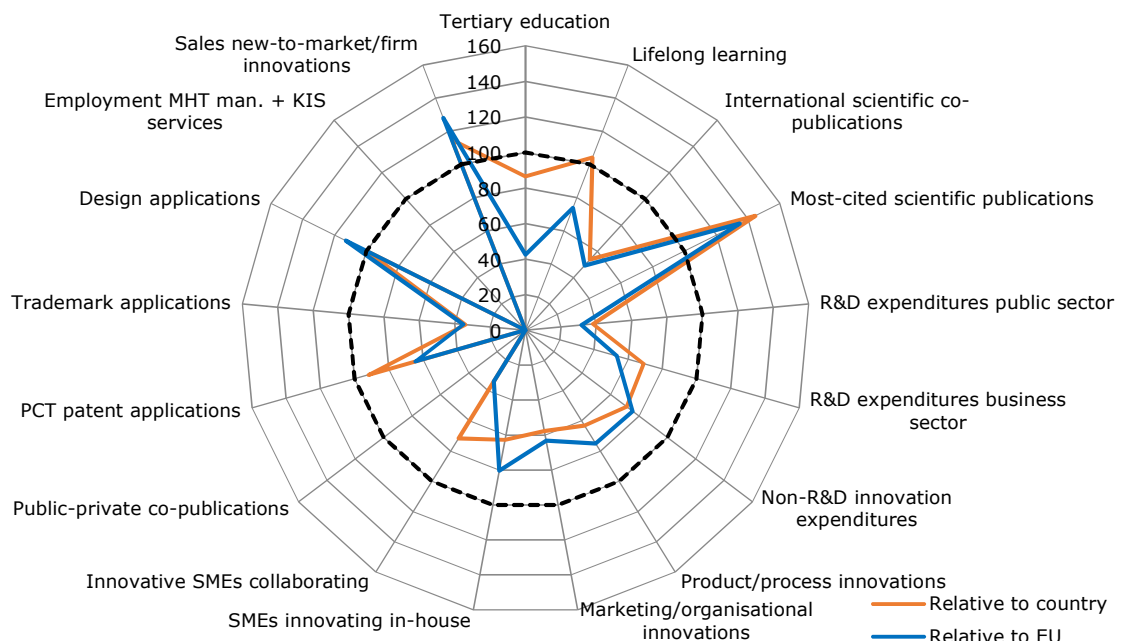
Valle d'Aosta/Vallée d'Aoste (ITC2) is a Moderate - Innovator; innovation performance has increased over time (2.6%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Most-cited scientific publications) and weaknesses (e.g. Public-private co-publications).

The table below shows data highlighting possible structural differences, e.g. Employment in Public administration (above average) and Population density (below average).

	ITC2	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.6	3.9	4.6
Manufacturing (C)	9.5	18.4	15.4
Utilities & Construction (D-F)	11.0	7.9	8.2
Services (G-N)	65.9	64.3	64.1
Public administration (O-U)	10.0	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016			
	3.2	3.7	5.5
GDP per capita (PPS), 2017	35,700	28,900	30,000
GDP per capita growth (PPS), 2013-2017			
	1.08	2.29	2.86
Population density, 2017	39	203	118
Urbanisation, 2018	51.1	79.7	76.0
Population size, 2018 (000s)	130	60,480	512,380



Regional Innovation Scoreboard 2019

Liguria (ITC3)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	23.7	0.169	75	37
Lifelong learning	9.3	0.263	119	84
International scientific co-publications	1147	0.604	115	105
Most-cited scientific publications	0.110	0.535	106	99
R&D expenditures public sector	0.61	0.532	112	93
R&D expenditures business sector	0.93	0.486	106	82
Non-R&D innovation expenditures	±	0.453	±	±
Product/process innovations	±	0.432	±	±
Marketing/ org. innovations	±	0.516	±	±
SMEs innovating in-house	±	0.450	±	±
Innovative SMEs collaborating	±	0.099	±	±
Public-private co-publications	16.6	0.260	87	64
PCT patent applications	2.84	0.279	93	65
Trademark applications	3.17	0.220	48	50
Design applications	0.62	0.171	31	35
Employment MHT manuf./KIS services	15.4	0.505	99	101
Sales new-to-market/firm innovations	±	0.641	±	±
Average score	--	0.389	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.329	--	--
RII 2019 (same year)	--	--	86.7	67.7
RII 2019 (cf. to EU 2011)	--	--	--	70.8
Regional Innovation Index 2011	--	0.288	--	--
RII 2011 (same year)	--	--	83.7	62.0
RII - change between 2011 and 2019	--	8.9	--	--

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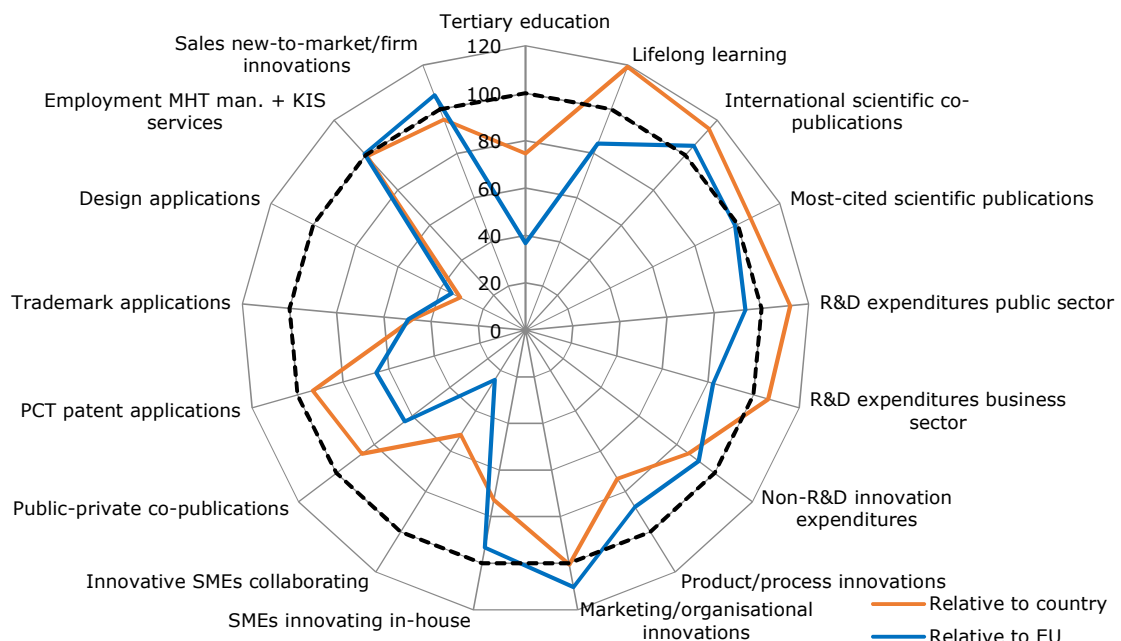
Liguria (ITC3) is a Moderate Innovator; innovation performance has increased over time (8.9%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Marketing/organisational innovations) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Population density (above average) and Employment in Agriculture & Mining (below average).

	ITC3	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.8	3.9	4.6
Manufacturing (C)	10.6	18.4	15.4
Utilities & Construction (D-F)	9.2	7.9	8.2
Services (G-N)	72.0	64.3	64.1
Public administration (O-U)	6.5	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	3.2	3.7	5.5
GDP per capita (PPS), 2017	32,000	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.49	2.29	2.86
Population density, 2017	289	203	118
Urbanisation, 2018	90.9	79.7	76.0
Population size, 2018 (000s)	1,560	60,480	512,380



Regional Innovation Scoreboard 2019

Lombardia (ITC4)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	33.7	0.348	154	76
Lifelong learning	8.7	0.245	111	79
International scientific co-publications	900	0.535	102	93
Most-cited scientific publications	0.117	0.567	112	105
R&D expenditures public sector	0.27	0.328	69	57
R&D expenditures business sector	0.96	0.495	108	84
Non-R&D innovation expenditures	±	0.481	±	±
Product/process innovations	±	0.636	±	±
Marketing/ org. innovations	±	0.573	±	±
SMEs innovating in-house	±	0.670	±	±
Innovative SMEs collaborating	±	0.235	±	±
Public-private co-publications	43.5	0.421	140	103
PCT patent applications	3.54	0.350	117	82
Trademark applications	8.24	0.584	128	132
Design applications	6.09	0.583	106	119
Employment MHT manuf./KIS services	21.1	0.738	145	147
Sales new-to-market/firm innovations	±	0.682	±	±
Average score	--	0.498	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.421	--	--
RII 2019 (same year)	--	--	111.0	86.6
RII 2019 (cf. to EU 2011)	--	--	--	90.7
Regional Innovation Index 2011	--	0.384	--	--
RII 2011 (same year)	--	--	111.7	82.7
RII - change between 2011 and 2019	--	8.0	--	--

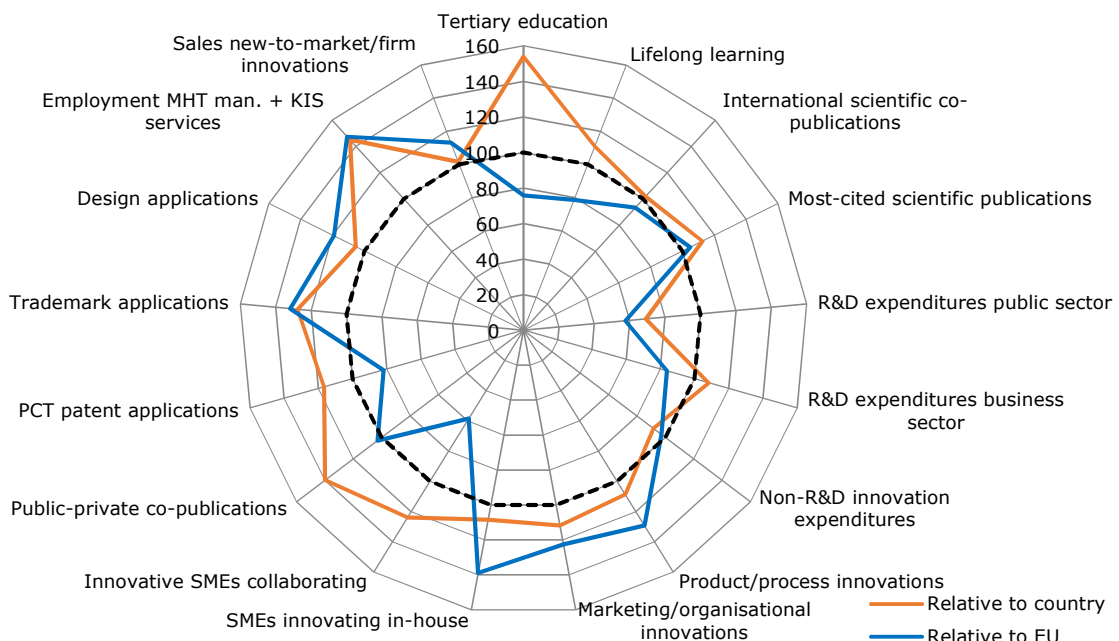
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Lombardia (ITC4) is a Moderate + Innovator; innovation performance has increased over time (8%). The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Employment MHT man. + KIS services) and weaknesses (e.g. R&D expenditures public sector).

The table below shows data highlighting possible structural differences, e.g. Population density (above average) and Employment in Agriculture & Mining (below average).

	ITC4	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.6	3.9	4.6
Manufacturing (C)	24.6	18.4	15.4
Utilities & Construction (D-F)	7.3	7.9	8.2
Services (G-N)	63.8	64.3	64.1
Public administration (O-U)	2.7	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.7	3.7	5.5
GDP per capita (PPS), 2017	38,500	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.78	2.29	2.86
Population density, 2017	435	203	118
Urbanisation, 2018	90.3	79.7	76.0
Population size, 2018 (000s)	10,040	60,480	512,380



Regional Innovation Scoreboard 2019

Provincia Autonoma Bolzano/Bozen (ITH1)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	24.6	0.185	82	40
Lifelong learning	10.1	0.288	130	92
International scientific co-publications	601	0.437	83	76
Most-cited scientific publications	0.130	0.633	126	117
R&D expenditures public sector	0.14	0.214	45	38
R&D expenditures business sector	0.44	0.320	70	54
Non-R&D innovation expenditures	±	0.564	±	±
Product/process innovations	±	0.540	±	±
Marketing/ org. innovations	±	0.526	±	±
SMEs innovating in-house	±	0.512	±	±
Innovative SMEs collaborating	±	0.146	±	±
Public-private co-publications	8.8	0.189	63	46
PCT patent applications	2.11	0.195	65	46
Trademark applications	8.96	0.636	139	144
Design applications	3.10	0.410	74	84
Employment MHT manuf./KIS services	8.7	0.231	45	46
Sales new-to-market/firm innovations	±	0.628	±	±
Average score	--	0.391	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.331	--	--
RII 2019 (same year)	--	--	87.2	68.0
RII 2019 (cf. to EU 2011)	--	--	--	71.2
Regional Innovation Index 2011	--	0.316	--	--
RII 2011 (same year)	--	--	92.1	68.2
RII - change between 2011 and 2019	--	3.1	--	--

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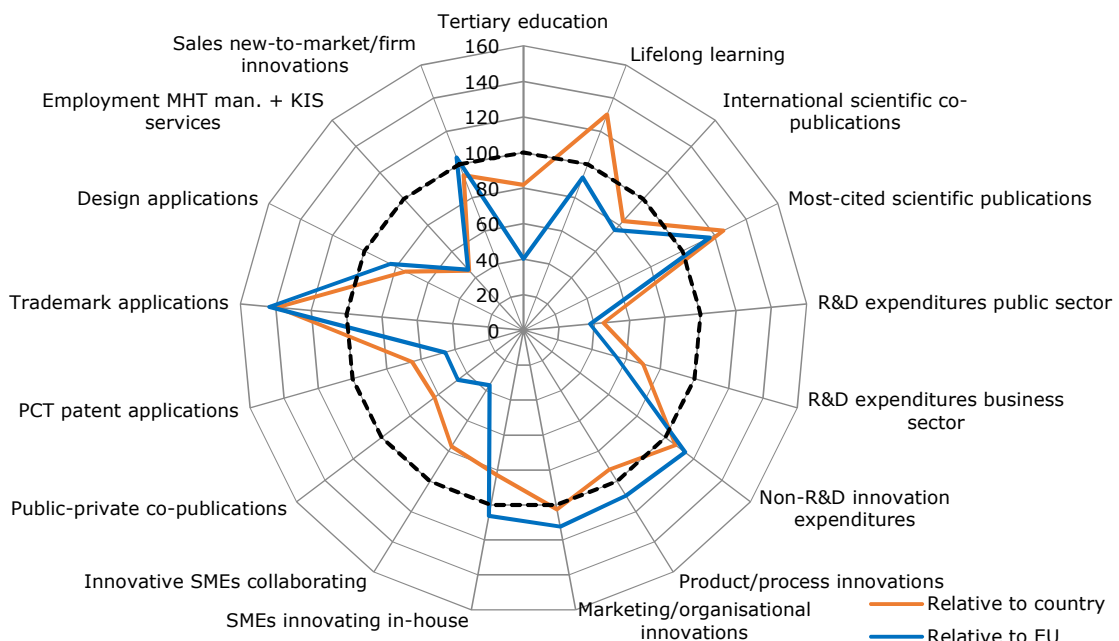
Provincia Autonoma Bolzano/Bozen (ITH1) is a Moderate Innovator; innovation performance has increased over time (3.1%).

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The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Trademark applications) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and GDP per capita growth (below average).

	ITH1	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	6.3	3.9	4.6
Manufacturing (C)	12.7	18.4	15.4
Utilities & Construction (D-F)	8.8	7.9	8.2
Services (G-N)	66.3	64.3	64.1
Public administration (O-U)	5.9	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.3	3.7	5.5
GDP per capita (PPS), 2017	42,900	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.58	2.29	2.86
Population density, 2017	71	203	118
Urbanisation, 2018	56.3	79.7	76.0
Population size, 2018 (000s)	530	60,480	512,380



Regional Innovation Scoreboard 2019

Provincia Autonoma Trento (ITH2)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	33.6	0.347	153	75
Lifelong learning	11.4	0.327	148	105
International scientific co-publications	2285	0.852	162	149
Most-cited scientific publications	0.129	0.628	125	116
R&D expenditures public sector	0.94	0.680	143	119
R&D expenditures business sector	0.59	0.378	83	64
Non-R&D innovation expenditures	±	0.599	±	±
Product/process innovations	±	0.566	±	±
Marketing/ org. innovations	±	0.506	±	±
SMEs innovating in-house	±	0.580	±	±
Innovative SMEs collaborating	±	0.131	±	±
Public-private co-publications	14.2	0.241	80	59
PCT patent applications	2.70	0.264	88	62
Trademark applications	5.85	0.413	90	93
Design applications	4.42	0.494	89	101
Employment MHT manuf./KIS services	12.1	0.370	73	74
Sales new-to-market/firm innovations	±	0.655	±	±
Average score	--	0.472	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.399	--	--
RII 2019 (same year)	--	--	105.2	82.1
RII 2019 (cf. to EU 2011)	--	--	--	86.0
Regional Innovation Index 2011	--	0.348	--	--
RII 2011 (same year)	--	--	101.3	75.0
RII - change between 2011 and 2019	--	11.0	--	--

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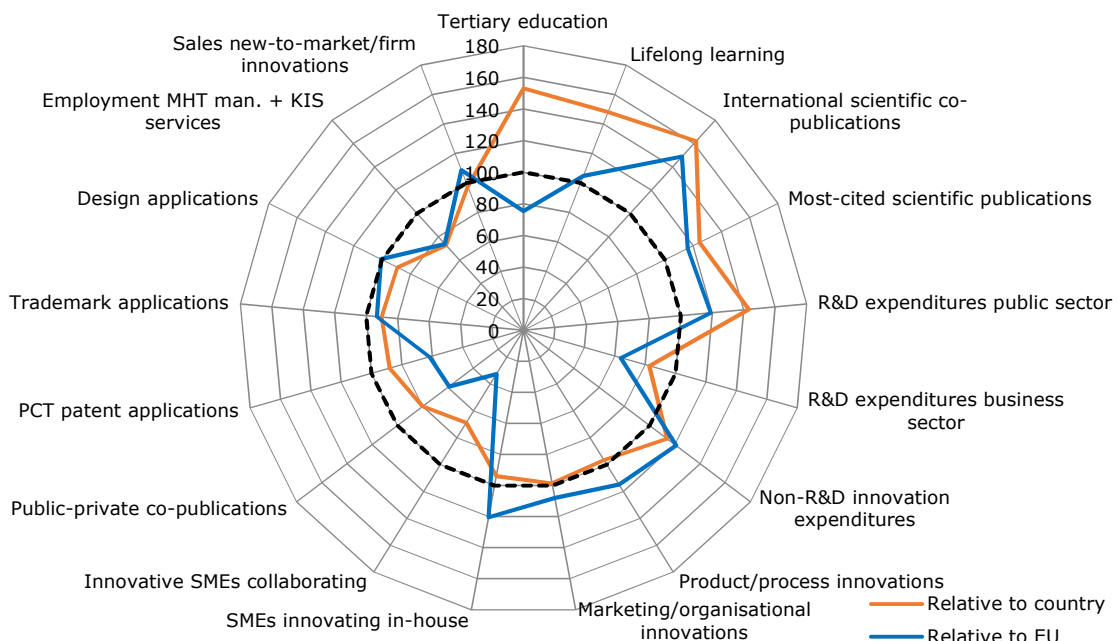
Provincia Autonoma Trento (ITH2) is a Moderate + Innovator; innovation performance has increased over time (11%).

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The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. International scientific co-publications) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. GDP per capita (above average) and GDP per capita growth (below average).

	ITH2	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	4.5	3.9	4.6
Manufacturing (C)	16.0	18.4	15.4
Utilities & Construction (D-F)	8.8	7.9	8.2
Services (G-N)	64.8	64.3	64.1
Public administration (O-U)	5.9	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.0	3.7	5.5
GDP per capita (PPS), 2017	36,600	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.64	2.29	2.86
Population density, 2017	88	203	118
Urbanisation, 2018	59.7	79.7	76.0
Population size, 2018 (000s)	540	60,480	512,380



Regional Innovation Scoreboard 2019

Veneto (ITH3)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	27.6	0.239	106	52
Lifelong learning	9.1	0.257	116	83
International scientific co-publications	837	0.516	98	90
Most-cited scientific publications	0.100	0.487	97	90
R&D expenditures public sector	0.37	0.397	84	70
R&D expenditures business sector	0.90	0.478	105	81
Non-R&D innovation expenditures	±	0.569	±	±
Product/process innovations	±	0.648	±	±
Marketing/ org. innovations	±	0.539	±	±
SMEs innovating in-house	±	0.656	±	±
Innovative SMEs collaborating	±	0.161	±	±
Public-private co-publications	15.0	0.247	82	61
PCT patent applications	3.75	0.370	123	87
Trademark applications	9.47	0.673	147	152
Design applications	12.87	0.858	155	175
Employment MHT manuf./KIS services	15.9	0.526	103	105
Sales new-to-market/firm innovations	±	0.683	±	±
Average score	--	0.488	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.413	--	--
RII 2019 (same year)	--	--	108.8	84.9
RII 2019 (cf. to EU 2011)	--	--	--	88.9
Regional Innovation Index 2011	--	0.377	--	--
RII 2011 (same year)	--	--	109.7	81.2
RII - change between 2011 and 2019	--	7.7	--	--

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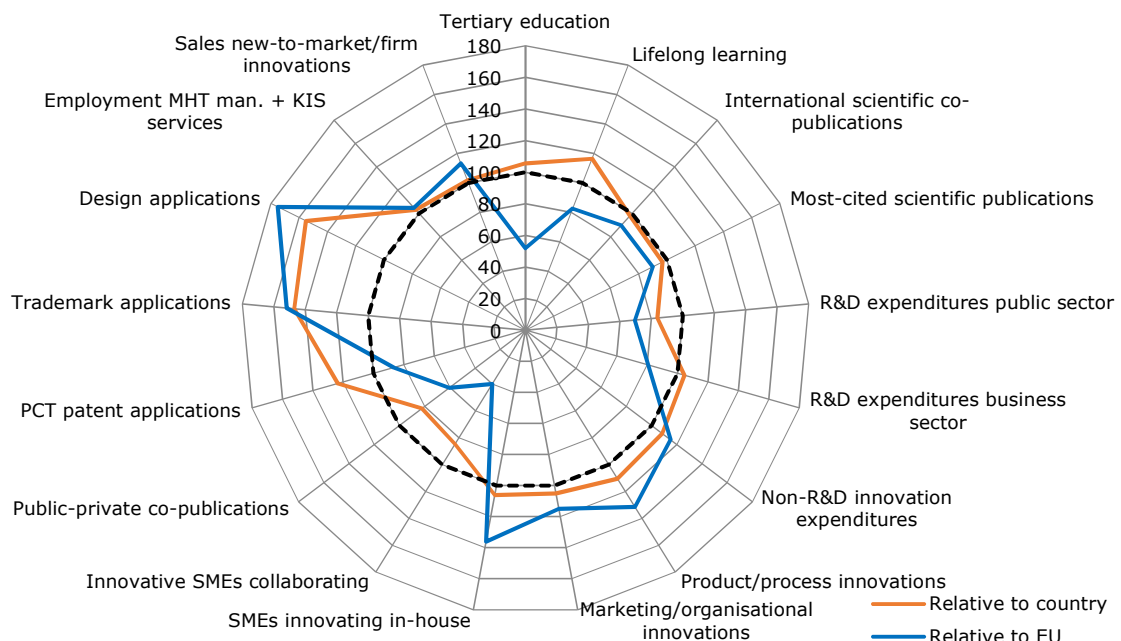
Veneto (ITH3) is a Moderate + Innovator; innovation performance has increased over time (7.7%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Design applications) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Manufacturing (above average) and Employment in Public administration (below average).

	ITH3	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.2	3.9	4.6
Manufacturing (C)	26.8	18.4	15.4
Utilities & Construction (D-F)	7.6	7.9	8.2
Services (G-N)	58.8	64.3	64.1
Public administration (O-U)	3.6	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.1	3.7	5.5
GDP per capita (PPS), 2017	33,500	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.97	2.29	2.86
Population density, 2017	283	203	118
Urbanisation, 2018	83.8	79.7	76.0
Population size, 2018 (000s)	4,910	60,480	512,380



Regional Innovation Scoreboard 2019

Friuli-Venezia Giulia (ITH4)

	Data	Norm alised score	Relative to	
			IT	EU
Tertiary education	28.7	0.259	114	56
Lifelong learning	10.5	0.300	136	96
International scientific co-publications	1920	0.781	149	136
Most-cited scientific publications	0.106	0.515	102	95
R&D expenditures public sector	0.71	0.580	122	102
R&D expenditures business sector	0.85	0.463	101	78
Non-R&D innovation expenditures	±	0.764	±	±
Product/process innovations	±	0.661	±	±
Marketing/ org. innovations	±	0.553	±	±
SMEs innovating in-house	±	0.693	±	±
Innovative SMEs collaborating	±	0.248	±	±
Public-private co-publications	37.8	0.392	130	96
PCT patent applications	4.46	0.432	144	101
Trademark applications	6.07	0.428	94	97
Design applications	11.00	0.792	143	162
Employment MHT manuf./KIS services	15.7	0.517	102	103
Sales new-to-market/firm innovations	±	0.679	±	±
Average score	--	0.533	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.450	--	--
RII 2019 (same year)	--	--	118.7	92.6
RII 2019 (cf. to EU 2011)	--	--	--	97.0
Regional Innovation Index 2011	--	0.414	--	--
RII 2011 (same year)	--	--	120.6	89.3
RII - change between 2011 and 2019	--	7.7	--	--

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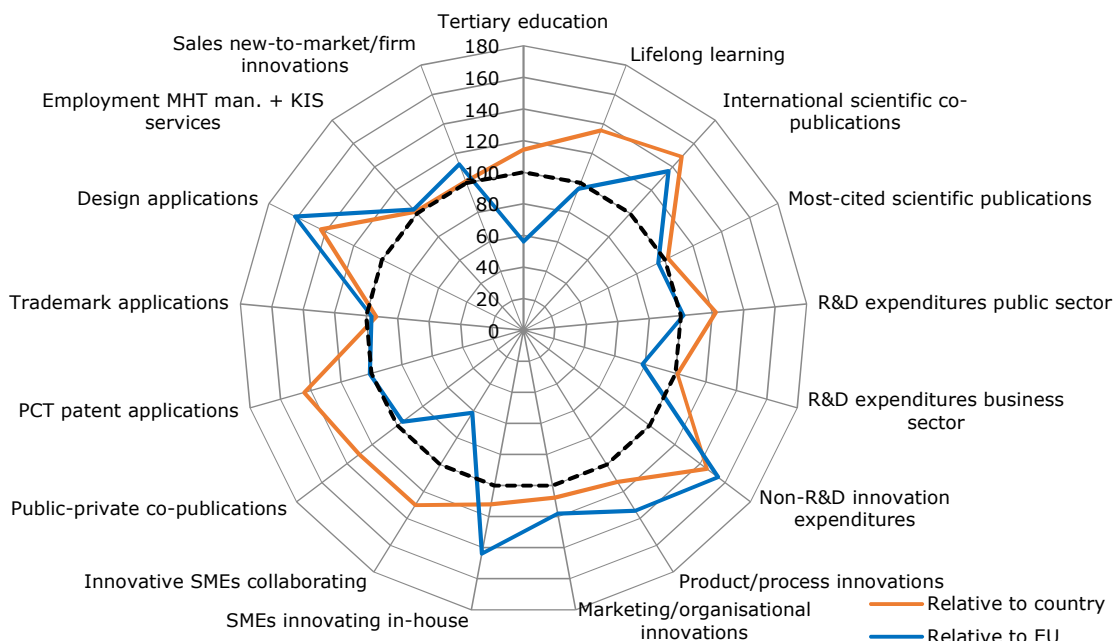
Friuli-Venezia Giulia (ITH4) is a Strong - Innovator; innovation performance has increased over time (7.7%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Design applications) and weaknesses (e.g. Tertiary education).

The table below shows data highlighting possible structural differences, e.g. Employment in Manufacturing (above average) and Employment in Agriculture & Mining (below average).

	ITH4	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.1	3.9	4.6
Manufacturing (C)	23.2	18.4	15.4
Utilities & Construction (D-F)	6.9	7.9	8.2
Services (G-N)	59.4	64.3	64.1
Public administration (O-U)	7.4	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.1	3.7	5.5
GDP per capita (PPS), 2017	31,400	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.45	2.29	2.86
Population density, 2017	161	203	118
Urbanisation, 2018	69.6	79.7	76.0
Population size, 2018 (000s)	1,220	60,480	512,380



Regional Innovation Scoreboard 2019

Emilia-Romagna (ITH5)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	29.9	0.280	124	61
Lifelong learning	10.0	0.285	129	91
International scientific co-publications	1162	0.608	116	106
Most-cited scientific publications	0.097	0.472	94	87
R&D expenditures public sector	0.47	0.458	96	80
R&D expenditures business sector	1.49	0.628	137	106
Non-R&D innovation expenditures	±	0.507	±	±
Product/process innovations	±	0.683	±	±
Marketing/ org. innovations	±	0.521	±	±
SMEs innovating in-house	±	0.740	±	±
Innovative SMEs collaborating	±	0.144	±	±
Public-private co-publications	30.3	0.351	117	86
PCT patent applications	4.79	0.460	154	108
Trademark applications	8.09	0.573	125	129
Design applications	9.31	0.727	131	148
Employment MHT manuf./KIS services	17.6	0.595	117	119
Sales new-to-market/firm innovations	±	0.680	±	±
Average score	--	0.513	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.433	--	--
RII 2019 (same year)	--	--	114.2	89.1
RII 2019 (cf. to EU 2011)	--	--	--	93.3
Regional Innovation Index 2011	--	0.382	--	--
RII 2011 (same year)	--	--	111.1	82.2
RII - change between 2011 and 2019	--	11.1	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

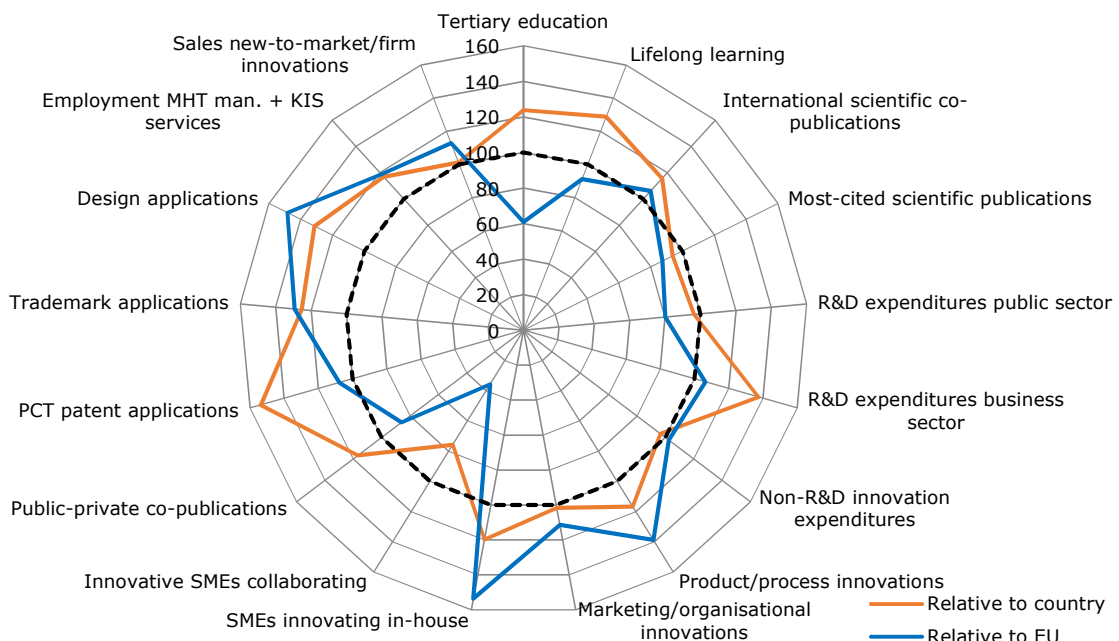
Emilia-Romagna (ITH5) is a Moderate + Innovator; innovation performance has increased over time (11.1%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. SMEs innovating in-house) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Manufacturing (above average) and Employment in Public administration (below average).

	ITH5	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.6	3.9	4.6
Manufacturing (C)	25.1	18.4	15.4
Utilities & Construction (D-F)	6.8	7.9	8.2
Services (G-N)	60.9	64.3	64.1
Public administration (O-U)	3.6	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.1	3.7	5.5
GDP per capita (PPS), 2017	35,800	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.61	2.29	2.86
Population density, 2017	201	203	118
Urbanisation, 2018	77.2	79.7	76.0
Population size, 2018 (000s)	4,450	60,480	512,380



Regional Innovation Scoreboard 2019

Toscana (IT11)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	28.3	0.251	111	55
Lifelong learning	9.0	0.254	115	82
International scientific co-publications	1325	0.649	123	113
Most-cited scientific publications	0.105	0.510	101	94
R&D expenditures public sector	0.59	0.522	110	91
R&D expenditures business sector	0.71	0.419	92	71
Non-R&D innovation expenditures	±	0.495	±	±
Product/process innovations	±	0.526	±	±
Marketing/ org. innovations	±	0.441	±	±
SMEs innovating in-house	±	0.564	±	±
Innovative SMEs collaborating	±	0.256	±	±
Public-private co-publications	35.2	0.379	126	93
PCT patent applications	3.90	0.383	128	90
Trademark applications	6.69	0.473	103	107
Design applications	4.75	0.512	93	105
Employment MHT manuf./KIS services	13.1	0.411	81	82
Sales new-to-market/firm innovations	±	0.686	±	±
Average score	--	0.455	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.384	--	--
RII 2019 (same year)	--	--	101.3	79.1
RII 2019 (cf. to EU 2011)	--	--	--	82.8
Regional Innovation Index 2011	--	0.333	--	--
RII 2011 (same year)	--	--	96.9	71.8
RII - change between 2011 and 2019	--	11.1	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

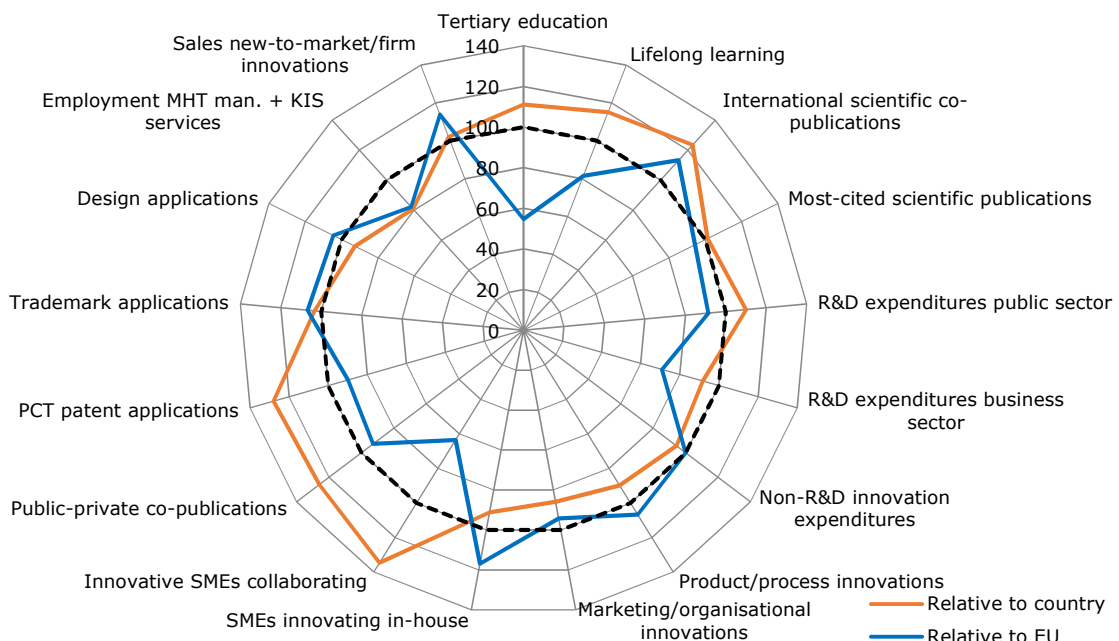
Toscana (IT11) is a Moderate + Innovator; innovation performance has increased over time (11.1%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. SMEs innovating in-house) and weaknesses (e.g. Tertiary education).

The table below shows data highlighting possible structural differences, e.g. GDP per capita (above average) and Employment in Agriculture & Mining (below average).

	IT11	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.2	3.9	4.6
Manufacturing (C)	18.6	18.4	15.4
Utilities & Construction (D-F)	8.3	7.9	8.2
Services (G-N)	64.8	64.3	64.1
Public administration (O-U)	5.1	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	3.4	3.7	5.5
GDP per capita (PPS), 2017	30,900	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.22	2.29	2.86
Population density, 2017	164	203	118
Urbanisation, 2018	76.5	79.7	76.0
Population size, 2018 (000s)	3,740	60,480	512,380



Regional Innovation Scoreboard 2019

Umbria (ITI2)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	29.7	0.277	122	60
Lifelong learning	9.0	0.254	115	82
International scientific co-publications	1095	0.590	112	103
Most-cited scientific publications	0.120	0.583	116	108
R&D expenditures public sector	0.68	0.566	119	99
R&D expenditures business sector	0.36	0.285	62	48
Non-R&D innovation expenditures	±	0.620	±	±
Product/process innovations	±	0.581	±	±
Marketing/ org. innovations	±	0.471	±	±
SMEs innovating in-house	±	0.596	±	±
Innovative SMEs collaborating	±	0.126	±	±
Public-private co-publications	15.5	0.251	84	62
PCT patent applications	2.28	0.216	72	51
Trademark applications	4.23	0.296	65	67
Design applications	17.35	1.000	181	204
Employment MHT manuf./KIS services	13.2	0.415	82	83
Sales new-to-market/firm innovations	±	0.650	±	±
Average score	--	0.457	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.386	--	--
RII 2019 (same year)	--	--	101.9	79.5
RII 2019 (cf. to EU 2011)	--	--	--	83.3
Regional Innovation Index 2011	--	0.329	--	--
RII 2011 (same year)	--	--	95.7	70.9
RII - change between 2011 and 2019	--	12.4	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

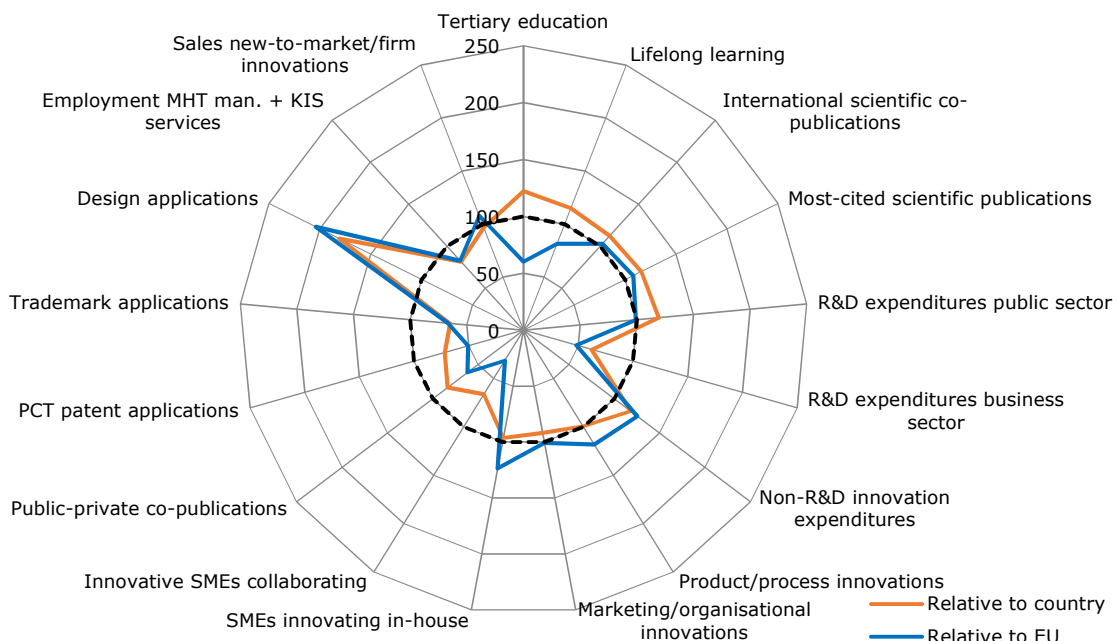
Umbria (ITI2) is a Moderate + Innovator; innovation performance has increased over time (12.4%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Design applications) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Manufacturing (above average) and GDP per capita growth (below average).

	ITI2	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.8	3.9	4.6
Manufacturing (C)	18.7	18.4	15.4
Utilities & Construction (D-F)	8.1	7.9	8.2
Services (G-N)	63.8	64.3	64.1
Public administration (O-U)	5.6	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	3.4	3.7	5.5
GDP per capita (PPS), 2017	24,800	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.36	2.29	2.86
Population density, 2017	107	203	118
Urbanisation, 2018	61.8	79.7	76.0
Population size, 2018 (000s)	880	60,480	512,380



Regional Innovation Scoreboard 2019

Marche (ITI3)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	33.0	0.336	148	73
Lifelong learning	7.4	0.206	93	66
International scientific co-publications	610	0.440	84	77
Most-cited scientific publications	0.079	0.386	77	71
R&D expenditures public sector	0.38	0.404	85	71
R&D expenditures business sector	0.64	0.396	87	67
Non-R&D innovation expenditures	±	0.671	±	±
Product/process innovations	±	0.609	±	±
Marketing/ org. innovations	±	0.468	±	±
SMEs innovating in-house	±	0.661	±	±
Innovative SMEs collaborating	±	0.274	±	±
Public-private co-publications	9.0	0.191	64	47
PCT patent applications	2.63	0.256	86	60
Trademark applications	8.28	0.587	128	133
Design applications	14.07	0.898	163	183
Employment MHT manuf./KIS services	14.4	0.464	91	93
Sales new-to-market/firm innovations	±	0.691	±	±
Average score	--	0.467	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.394	--	--
RII 2019 (same year)	--	--	104.0	81.2
RII 2019 (cf. to EU 2011)	--	--	--	85.0
Regional Innovation Index 2011	--	0.335	--	--
RII 2011 (same year)	--	--	97.4	72.1
RII - change between 2011 and 2019	--	12.9	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

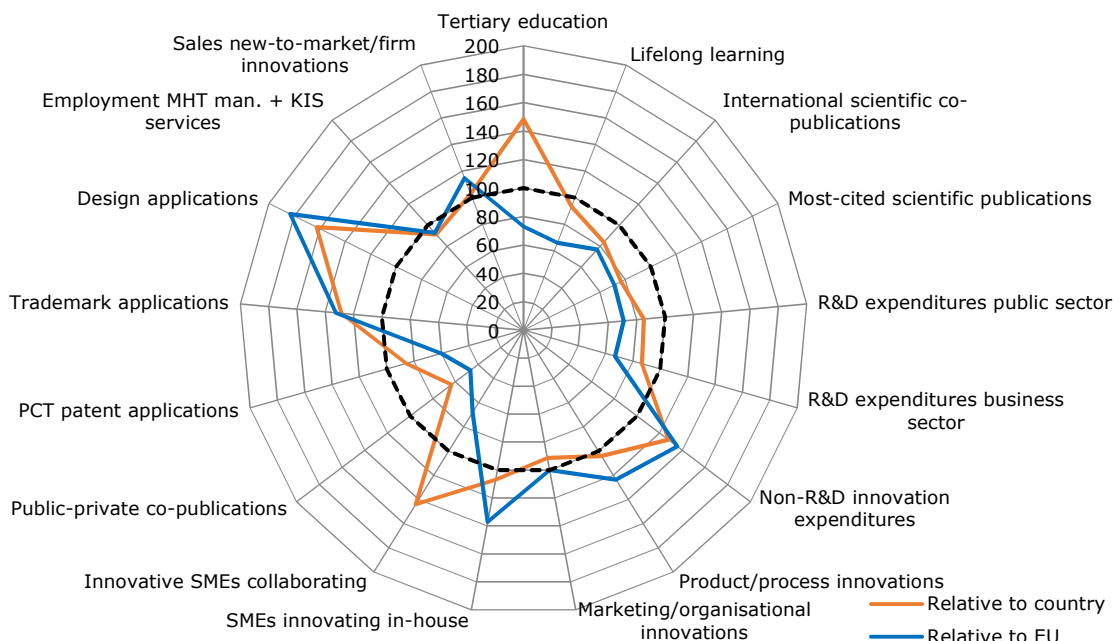
Marche (ITI3) is a Moderate + Innovator; innovation performance has increased over time (12.9%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Design applications) and weaknesses (e.g. Public-private co-publications).

The table below shows data highlighting possible structural differences, e.g. Employment in Manufacturing (above average) and Employment in Agriculture & Mining (below average).

	ITI3	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.4	3.9	4.6
Manufacturing (C)	28.8	18.4	15.4
Utilities & Construction (D-F)	6.8	7.9	8.2
Services (G-N)	57.7	64.3	64.1
Public administration (O-U)	4.2	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016			
GDP per capita (PPS), 2017	27,200	28,900	30,000
GDP per capita growth (PPS), 2013-2017			
Population density, 2017	2.03	2.29	2.86
Urbanisation, 2018	164	203	118
Population size, 2018 (000s)	79.1	79.7	76.0
	1,530	60,480	512,380



Regional Innovation Scoreboard 2019

Lazio (ITI4)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	30.1	0.284	125	62
Lifelong learning	9.0	0.254	115	82
International scientific co-publications	1280	0.638	121	111
Most-cited scientific publications	0.096	0.468	93	86
R&D expenditures public sector	0.98	0.696	147	122
R&D expenditures business sector	0.67	0.406	89	69
Non-R&D innovation expenditures	±	0.408	±	±
Product/process innovations	±	0.529	±	±
Marketing/ org. innovations	±	0.484	±	±
SMEs innovating in-house	±	0.540	±	±
Innovative SMEs collaborating	±	0.196	±	±
Public-private co-publications	29.6	0.347	115	85
PCT patent applications	1.95	0.175	58	41
Trademark applications	5.18	0.364	80	82
Design applications	1.46	0.274	50	56
Employment MHT manuf./KIS services	16.2	0.538	106	107
Sales new-to-market/firm innovations	±	0.664	±	±
Average score	--	0.427	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.361	--	--
RII 2019 (same year)	--	--	95.2	74.3
RII 2019 (cf. to EU 2011)	--	--	--	77.8
Regional Innovation Index 2011	--	0.354	--	--
RII 2011 (same year)	--	--	103.2	76.4
RII - change between 2011 and 2019	--	1.4	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

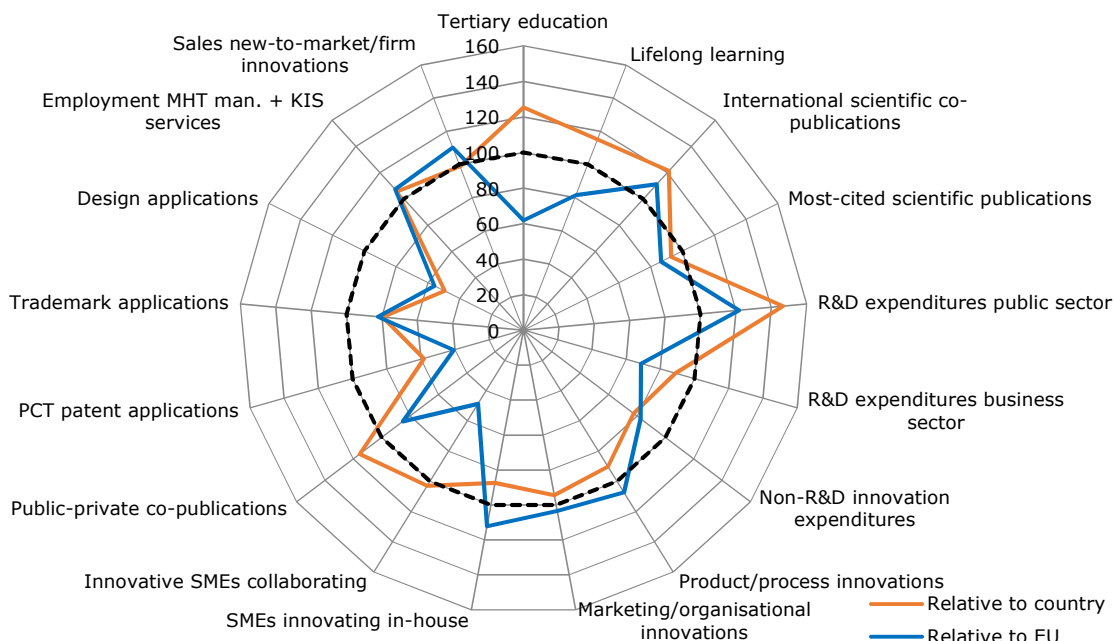
Lazio (ITI4) is a Moderate Innovator; innovation performance has increased over time (1.4%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. R&D expenditures public sector) and weaknesses (e.g. PCT patent applications).

The table below shows data highlighting possible structural differences, e.g. Employment in Public administration (above average) and Employment in Manufacturing (below average).

	ITI4	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.2	3.9	4.6
Manufacturing (C)	7.3	18.4	15.4
Utilities & Construction (D-F)	7.2	7.9	8.2
Services (G-N)	73.5	64.3	64.1
Public administration (O-U)	9.8	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	4.2	3.7	5.5
GDP per capita (PPS), 2017	33,200	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.73	2.29	2.86
Population density, 2017	348	203	118
Urbanisation, 2018	83.9	79.7	76.0
Population size, 2018 (000s)	5,900	60,480	512,380



Regional Innovation Scoreboard 2019

Abruzzo (ITF1)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	25.8	0.206	91	45
Lifelong learning	6.1	0.167	75	53
International scientific co-publications	783	0.499	95	87
Most-cited scientific publications	0.104	0.506	100	93
R&D expenditures public sector	0.55	0.501	106	88
R&D expenditures business sector	0.45	0.324	71	55
Non-R&D innovation expenditures	±	0.649	±	±
Product/process innovations	±	0.555	±	±
Marketing/ org. innovations	±	0.491	±	±
SMEs innovating in-house	±	0.596	±	±
Innovative SMEs collaborating	±	0.122	±	±
Public-private co-publications	9.3	0.194	65	48
PCT patent applications	2.02	0.184	61	43
Trademark applications	4.96	0.349	76	79
Design applications	2.43	0.360	65	73
Employment MHT manuf./KIS services	13.5	0.428	84	85
Sales new-to-market/firm innovations	±	0.692	±	±
Average score	--	0.401	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.339	--	--
RII 2019 (same year)	--	--	89.4	69.8
RII 2019 (cf. to EU 2011)	--	--	--	73.1
Regional Innovation Index 2011	--	0.268	--	--
RII 2011 (same year)	--	--	77.9	57.7
RII - change between 2011 and 2019	--	15.3	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

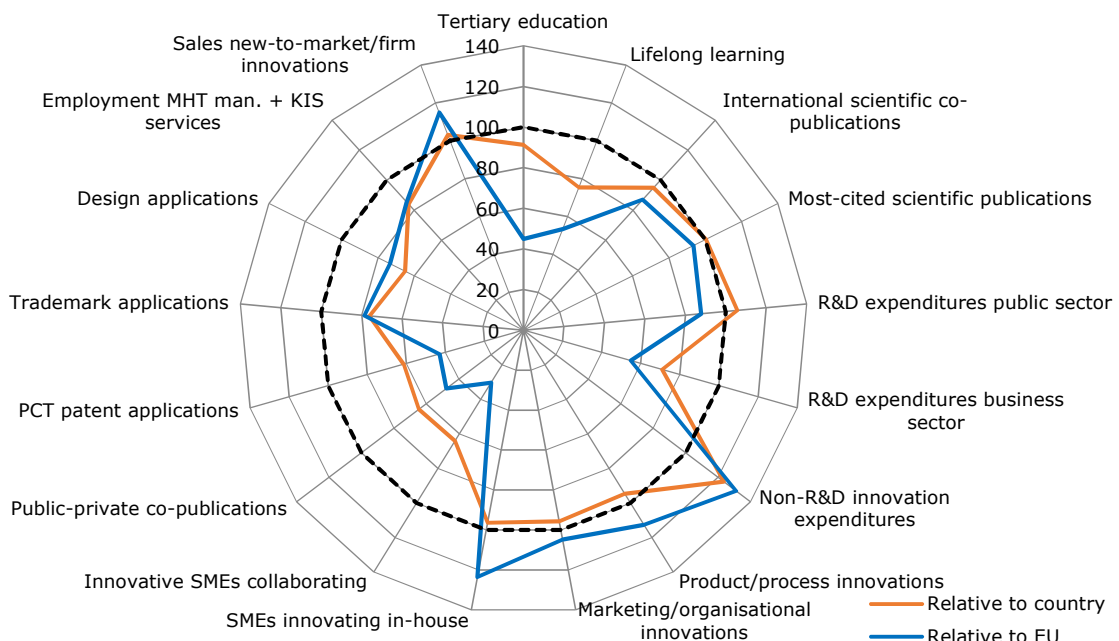
Abruzzo (ITF1) is a Moderate Innovator; innovation performance has increased over time (15.3%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and GDP per capita growth (below average).

	ITF1	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	5.4	3.9	4.6
Manufacturing (C)	20.5	18.4	15.4
Utilities & Construction (D-F)	10.4	7.9	8.2
Services (G-N)	58.0	64.3	64.1
Public administration (O-U)	5.7	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	3.0	3.7	5.5
GDP per capita (PPS), 2017	25,000	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.67	2.29	2.86
Population density, 2017	122	203	118
Urbanisation, 2018	62.1	79.7	76.0
Population size, 2018 (000s)	1,320	60,480	512,380



Regional Innovation Scoreboard 2019

Molise (ITF2)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	26.1	0.212	94	46
Lifelong learning	7.1	0.197	89	63
International scientific co-publications	641	0.451	86	79
Most-cited scientific publications	0.083	0.405	80	75
R&D expenditures public sector	0.33	0.371	78	65
R&D expenditures business sector	0.69	0.412	90	70
Non-R&D innovation expenditures	±	0.632	±	±
Product/process innovations	±	0.440	±	±
Marketing/ org. innovations	±	0.417	±	±
SMEs innovating in-house	±	0.474	±	±
Innovative SMEs collaborating	±	0.063	±	±
Public-private co-publications	4.9	0.142	47	35
PCT patent applications	1.56	0.122	41	29
Trademark applications	1.66	0.111	24	25
Design applications	0.08	0.048	9	10
Employment MHT manuf./KIS services	13.6	0.432	85	86
Sales new-to-market/firm innovations	±	0.684	±	±
Average score	--	0.330	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.279	--	--
RII 2019 (same year)	--	--	73.6	57.4
RII 2019 (cf. to EU 2011)	--	--	--	60.1
Regional Innovation Index 2011	--	0.221	--	--
RII 2011 (same year)	--	--	64.3	47.6
RII - change between 2011 and 2019	--	12.5	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

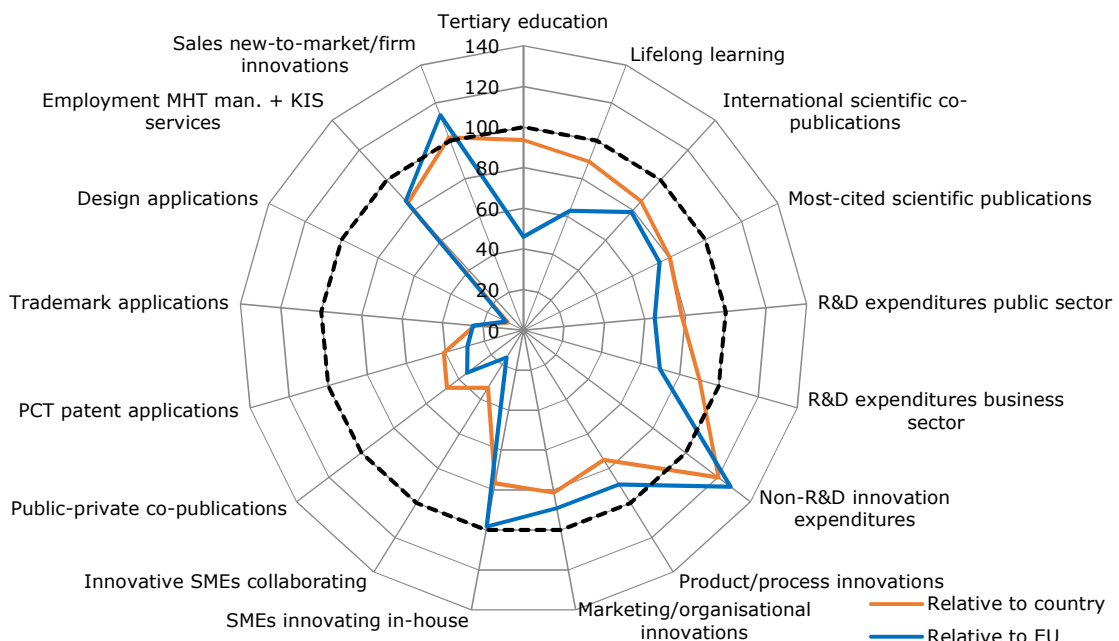
Molise (ITF2) is a Moderate - Innovator; innovation performance has increased over time (12.5%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Design applications).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and Average employed persons per enterprise (below average).

	ITF2	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	6.3	3.9	4.6
Manufacturing (C)	16.8	18.4	15.4
Utilities & Construction (D-F)	8.9	7.9	8.2
Services (G-N)	58.8	64.3	64.1
Public administration (O-U)	9.2	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.5	3.7	5.5
GDP per capita (PPS), 2017	20,100	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.55	2.29	2.86
Population density, 2017	70	203	118
Urbanisation, 2018	50.0	79.7	76.0
Population size, 2018 (000s)	310	60,480	512,380



Regional Innovation Scoreboard 2019

Campania (ITF3)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	21.4	0.127	56	28
Lifelong learning	6.3	0.173	78	55
International scientific co-publications	584	0.431	82	75
Most-cited scientific publications	0.111	0.541	107	100
R&D expenditures public sector	0.65	0.552	116	97
R&D expenditures business sector	0.51	0.348	76	59
Non-R&D innovation expenditures	±	0.615	±	±
Product/process innovations	±	0.425	±	±
Marketing/ org. innovations	±	0.498	±	±
SMEs innovating in-house	±	0.460	±	±
Innovative SMEs collaborating	±	0.101	±	±
Public-private co-publications	6.3	0.160	53	39
PCT patent applications	1.71	0.143	48	33
Trademark applications	4.78	0.336	73	76
Design applications	1.24	0.250	45	51
Employment MHT manuf./KIS services	12.4	0.383	75	76
Sales new-to-market/firm innovations	±	0.643	±	±
Average score	--	0.364	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.307	--	--
RII 2019 (same year)	--	--	81.0	63.3
RII 2019 (cf. to EU 2011)	--	--	--	66.2
Regional Innovation Index 2011	--	0.255	--	--
RII 2011 (same year)	--	--	74.2	55.0
RII - change between 2011 and 2019	--	11.3	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

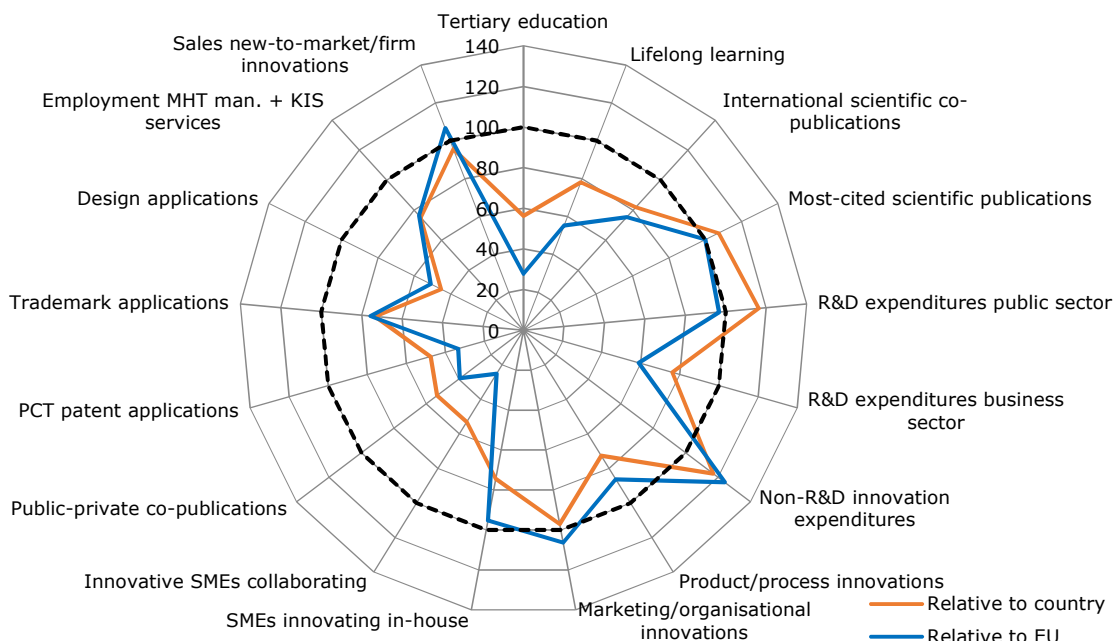
Campania (ITF3) is a Moderate Innovator; innovation performance has increased over time (11.3%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Population density (above average) and GDP per capita (below average).

	ITF3	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	4.2	3.9	4.6
Manufacturing (C)	12.2	18.4	15.4
Utilities & Construction (D-F)	9.0	7.9	8.2
Services (G-N)	67.4	64.3	64.1
Public administration (O-U)	7.2	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.9	3.7	5.5
GDP per capita (PPS), 2017	18,500	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.29	2.29	2.86
Population density, 2017	428	203	118
Urbanisation, 2018	84.4	79.7	76.0
Population size, 2018 (000s)	5,830	60,480	512,380



Regional Innovation Scoreboard 2019

Puglia (ITF4)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	22.2	0.142	63	31
Lifelong learning	5.3	0.142	64	46
International scientific co-publications	466	0.385	73	67
Most-cited scientific publications	0.102	0.496	98	92
R&D expenditures public sector	0.52	0.485	102	85
R&D expenditures business sector	0.28	0.246	54	42
Non-R&D innovation expenditures	±	0.591	±	±
Product/process innovations	±	0.463	±	±
Marketing/ org. innovations	±	0.528	±	±
SMEs innovating in-house	±	0.496	±	±
Innovative SMEs collaborating	±	0.178	±	±
Public-private co-publications	5.7	0.152	50	37
PCT patent applications	1.71	0.143	48	33
Trademark applications	3.58	0.249	54	56
Design applications	3.09	0.409	74	84
Employment MHT manuf./KIS services	9.1	0.248	49	49
Sales new-to-market/firm innovations	±	0.628	±	±
Average score	--	0.352	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.297	--	--
RII 2019 (same year)	--	--	78.4	61.2
RII 2019 (cf. to EU 2011)	--	--	--	64.1
Regional Innovation Index 2011	--	0.272	--	--
RII 2011 (same year)	--	--	79.3	58.7
RII - change between 2011 and 2019	--	5.3	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

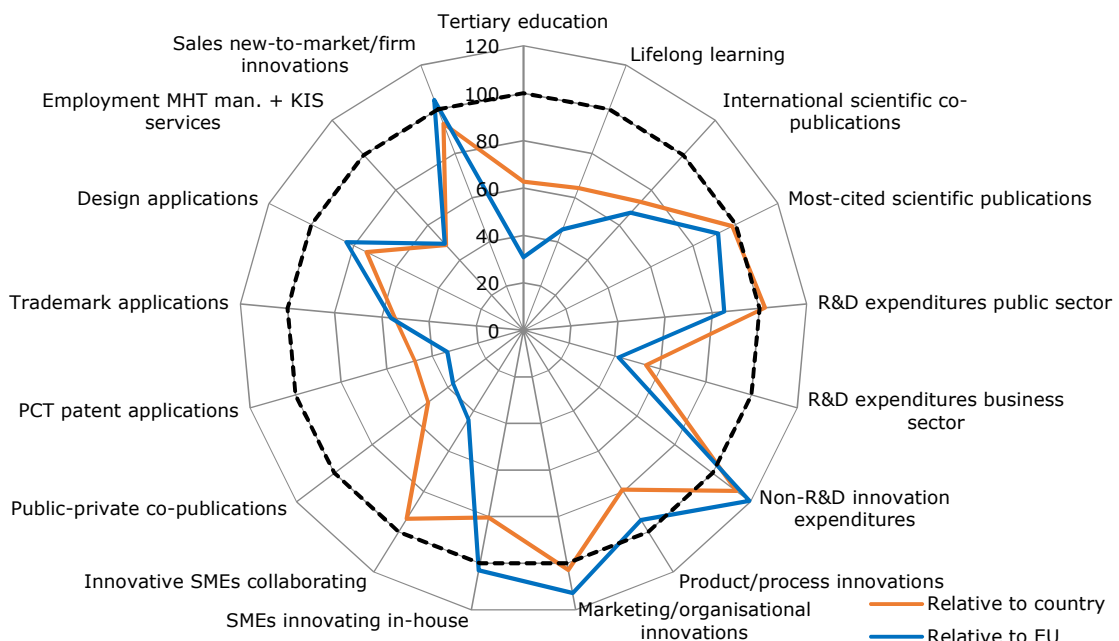
Puglia (ITF4) is a Moderate Innovator; innovation performance has increased over time (5.3%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Tertiary education).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and GDP per capita (below average).

	ITF4	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	8.4	3.9	4.6
Manufacturing (C)	13.4	18.4	15.4
Utilities & Construction (D-F)	8.4	7.9	8.2
Services (G-N)	62.6	64.3	64.1
Public administration (O-U)	7.2	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.8	3.7	5.5
GDP per capita (PPS), 2017	18,700	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.26	2.29	2.86
Population density, 2017	210	203	118
Urbanisation, 2018	83.7	79.7	76.0
Population size, 2018 (000s)	4,050	60,480	512,380



Regional Innovation Scoreboard 2019

Basilicata (ITF5)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	29.2	0.268	118	58
Lifelong learning	7.2	0.200	90	64
International scientific co-publications	537	0.413	79	72
Most-cited scientific publications	0.067	0.326	65	60
R&D expenditures public sector	0.45	0.446	94	78
R&D expenditures business sector	0.13	0.153	33	26
Non-R&D innovation expenditures	±	0.768	±	±
Product/process innovations	±	0.545	±	±
Marketing/ org. innovations	±	0.429	±	±
SMEs innovating in-house	±	0.575	±	±
Innovative SMEs collaborating	±	0.158	±	±
Public-private co-publications	2.7	0.105	35	26
PCT patent applications	1.61	0.129	43	30
Trademark applications	2.70	0.186	41	42
Design applications	1.42	0.269	49	55
Employment MHT manuf./KIS services	14.7	0.477	94	95
Sales new-to-market/firm innovations	±	0.689	±	±
Average score	--	0.361	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.305	--	--
RII 2019 (same year)	--	--	80.4	62.7
RII 2019 (cf. to EU 2011)	--	--	--	65.7
Regional Innovation Index 2011	--	0.235	--	--
RII 2011 (same year)	--	--	68.4	50.7
RII - change between 2011 and 2019	--	15.0	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

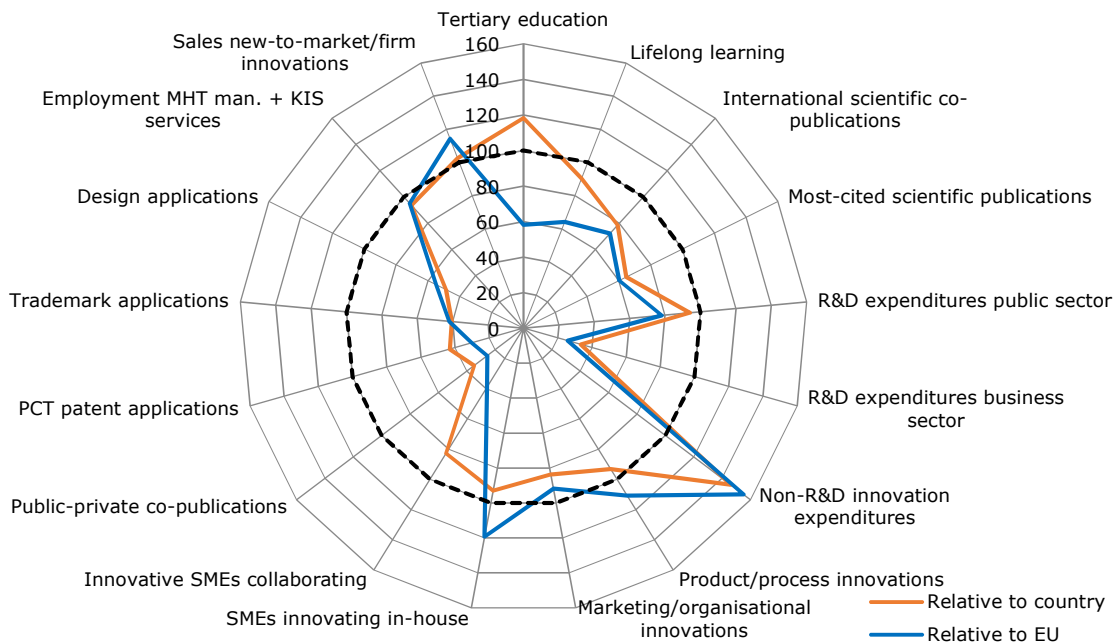
Basilicata (ITF5) is a Moderate Innovator; innovation performance has increased over time (15%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Public-private co-publications).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and Population density (below average).

	ITF5	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	8.8	3.9	4.6
Manufacturing (C)	15.8	18.4	15.4
Utilities & Construction (D-F)	10.4	7.9	8.2
Services (G-N)	57.8	64.3	64.1
Public administration (O-U)	7.2	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.8	3.7	5.5
GDP per capita (PPS), 2017	21,400	28,900	30,000
GDP per capita growth (PPS), 2013-2017	2.22	2.29	2.86
Population density, 2017	57	203	118
Urbanisation, 2018	38.5	79.7	76.0
Population size, 2018 (000s)	570	60,480	512,380



Regional Innovation Scoreboard 2019

Calabria (ITF6)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	20.7	0.115	51	25
Lifelong learning	6.0	0.163	74	52
International scientific co-publications	439	0.374	71	65
Most-cited scientific publications	0.110	0.535	106	99
R&D expenditures public sector	0.47	0.458	96	80
R&D expenditures business sector	0.10	0.128	28	22
Non-R&D innovation expenditures	±	0.531	±	±
Product/process innovations	±	0.421	±	±
Marketing/ org. innovations	±	0.442	±	±
SMEs innovating in-house	±	0.464	±	±
Innovative SMEs collaborating	±	0.195	±	±
Public-private co-publications	1.6	0.080	27	20
PCT patent applications	1.56	0.121	40	28
Trademark applications	2.20	0.150	33	34
Design applications	0.06	0.037	7	8
Employment MHT manuf./KIS services	7.7	0.191	37	38
Sales new-to-market/firm innovations	±	0.596	±	±
Average score	--	0.294	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.248	--	--
RII 2019 (same year)	--	--	65.5	51.1
RII 2019 (cf. to EU 2011)	--	--	--	53.6
Regional Innovation Index 2011	--	0.213	--	--
RII 2011 (same year)	--	--	62.1	46.0
RII - change between 2011 and 2019	--	7.6	--	--

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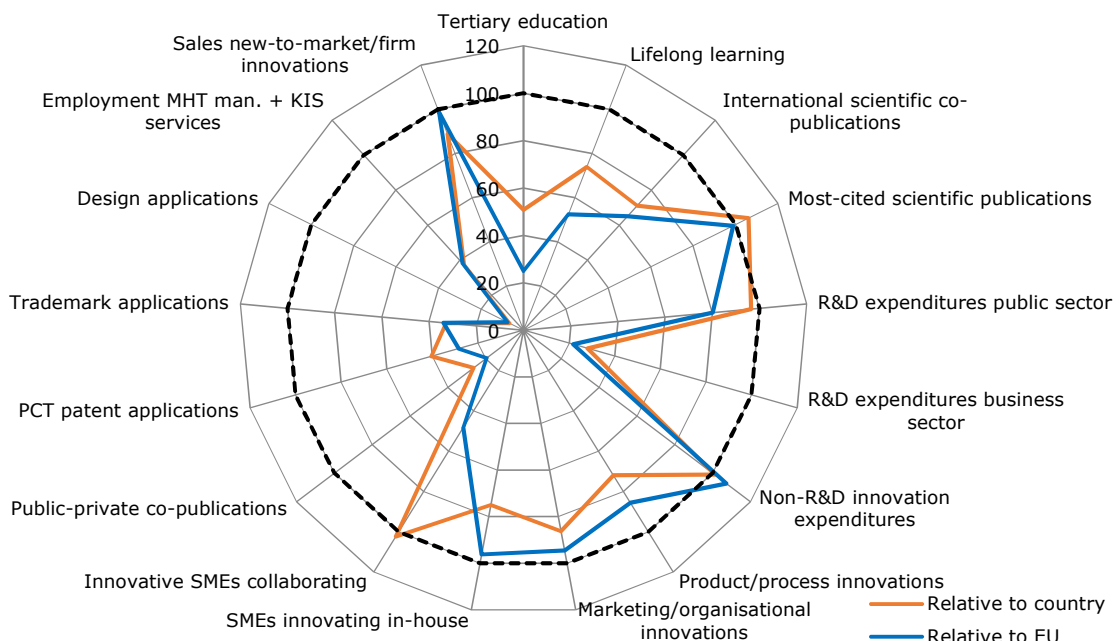
Calabria (ITF6) is a Moderate - Innovator; innovation performance has increased over time (7.6%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Design applications).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and Employment in Manufacturing (below average).

	ITF6	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	11.4	3.9	4.6
Manufacturing (C)	5.9	18.4	15.4
Utilities & Construction (D-F)	9.1	7.9	8.2
Services (G-N)	64.8	64.3	64.1
Public administration (O-U)	8.7	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.4	3.7	5.5
GDP per capita (PPS), 2017	17,400	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.65	2.29	2.86
Population density, 2017	129	203	118
Urbanisation, 2018	66.2	79.7	76.0
Population size, 2018 (000s)	1,960	60,480	512,380



Regional Innovation Scoreboard 2019

Sicilia (ITG1)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	19.1	0.086	38	19
Lifelong learning	5.1	0.136	62	44
International scientific co-publications	470	0.387	74	67
Most-cited scientific publications	0.098	0.477	95	88
R&D expenditures public sector	0.51	0.480	101	84
R&D expenditures business sector	0.26	0.235	52	40
Non-R&D innovation expenditures	±	0.649	±	±
Product/process innovations	±	0.447	±	±
Marketing/ org. innovations	±	0.420	±	±
SMEs innovating in-house	±	0.474	±	±
Innovative SMEs collaborating	±	0.233	±	±
Public-private co-publications	18.5	0.274	91	67
PCT patent applications	1.46	0.108	36	25
Trademark applications	2.13	0.145	32	33
Design applications	0.37	0.127	23	26
Employment MHT manuf./KIS services	8.9	0.240	47	48
Sales new-to-market/firm innovations	±	0.606	±	±
Average score	--	0.325	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.274	--	--
RII 2019 (same year)	--	--	72.4	56.5
RII 2019 (cf. to EU 2011)	--	--	--	59.2
Regional Innovation Index 2011	--	0.243	--	--
RII 2011 (same year)	--	--	70.8	52.4
RII - change between 2011 and 2019	--	6.7	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

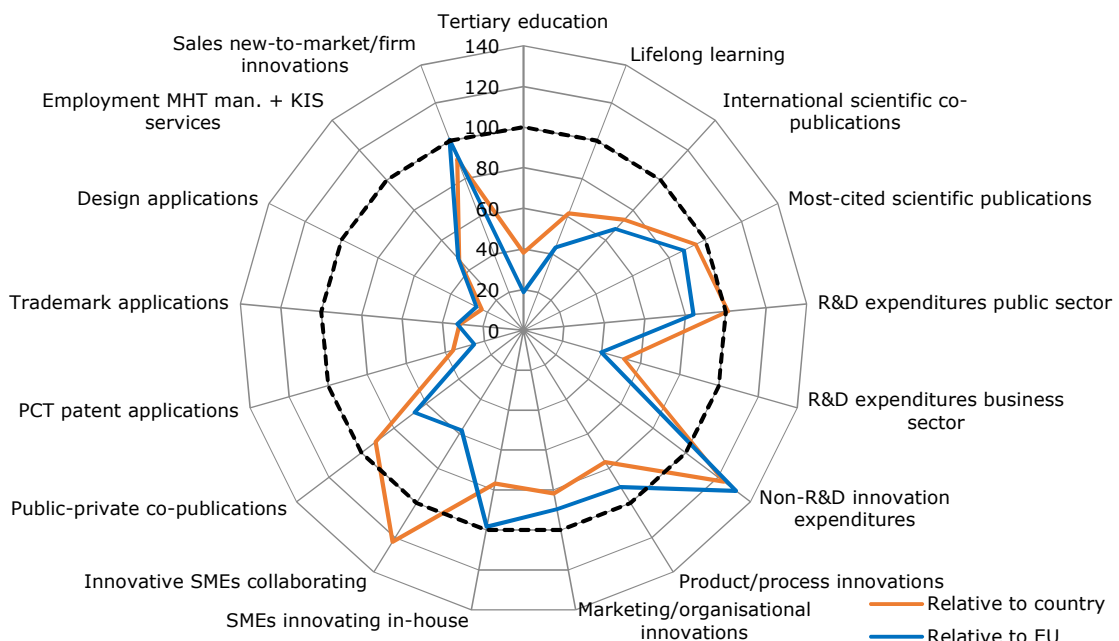
Sicilia (ITG1) is a Moderate - Innovator; innovation performance has increased over time (6.7%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. Tertiary education).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and Employment in Manufacturing (below average).

	ITG1	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	8.1	3.9	4.6
Manufacturing (C)	7.1	18.4	15.4
Utilities & Construction (D-F)	8.4	7.9	8.2
Services (G-N)	66.5	64.3	64.1
Public administration (O-U)	9.9	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.6	3.7	5.5
GDP per capita (PPS), 2017	17,700	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.01	2.29	2.86
Population density, 2017	196	203	118
Urbanisation, 2018	82.6	79.7	76.0
Population size, 2018 (000s)	5,030	60,480	512,380



Regional Innovation Scoreboard 2019

Sardegna (ITG2)

	Data	Normalised score	Relative to	
			IT	EU
Tertiary education	23.6	0.167	74	36
Lifelong learning	8.5	0.239	108	77
International scientific co-publications	680	0.465	88	81
Most-cited scientific publications	0.074	0.359	71	66
R&D expenditures public sector	0.71	0.580	122	102
R&D expenditures business sector	0.12	0.145	32	25
Non-R&D innovation expenditures	±	0.347	±	±
Product/process innovations	±	0.367	±	±
Marketing/ org. innovations	±	0.408	±	±
SMEs innovating in-house	±	0.395	±	±
Innovative SMEs collaborating	±	0.088	±	±
Public-private co-publications	14.8	0.246	82	60
PCT patent applications	1.48	0.111	37	26
Trademark applications	1.61	0.108	24	24
Design applications	0.32	0.117	21	24
Employment MHT manuf./KIS services	9.1	0.248	49	49
Sales new-to-market/firm innovations	±	0.603	±	±
Average score	--	0.294	--	--
Country EIS-RIS correction factor	--	0.845	--	--
Regional Innovation Index 2019	--	0.248	--	--
RII 2019 (same year)	--	--	65.4	51.1
RII 2019 (cf. to EU 2011)	--	--	--	53.5
Regional Innovation Index 2011	--	0.247	--	--
RII 2011 (same year)	--	--	71.8	53.2
RII - change between 2011 and 2019	--	0.3	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

Sardegna (ITG2) is a Moderate - Innovator; innovation performance has increased over time (0.3%).

The table on the left shows the normalised scores per indicator and relative results compared to Italy and the EU. The table also shows the Regional Innovation Index (RII) in 2019 compared to that of Italy and the EU in 2019, the RII in 2019 compared to that of the EU in 2011, and performance change over time between 2011 and 2019.

The radar graph shows relative strengths compared to Italy (orange line) and the EU (blue line), showing relative strengths (e.g. R&D expenditures public sector) and weaknesses (e.g. Innovative SMEs collaborating).

The table below shows data highlighting possible structural differences, e.g. Employment in Agriculture & Mining (above average) and Employment in Manufacturing (below average).

	ITG2	IT	EU28
Share of employment in:			
Agriculture & Mining (A-B)	6.6	3.9	4.6
Manufacturing (C)	6.9	18.4	15.4
Utilities & Construction (D-F)	9.5	7.9	8.2
Services (G-N)	67.7	64.3	64.1
Public administration (O-U)	9.3	5.7	7.0
Average employed persons per enterprise (firm size), 2015-2016	2.8	3.7	5.5
GDP per capita (PPS), 2017	20,900	28,900	30,000
GDP per capita growth (PPS), 2013-2017	1.75	2.29	2.86
Population density, 2017	69	203	118
Urbanisation, 2018	58.7	79.7	76.0
Population size, 2018 (000s)	1,650	60,480	512,380

