

Regional Innovation Scoreboard 2017

Stuttgart (DE11)

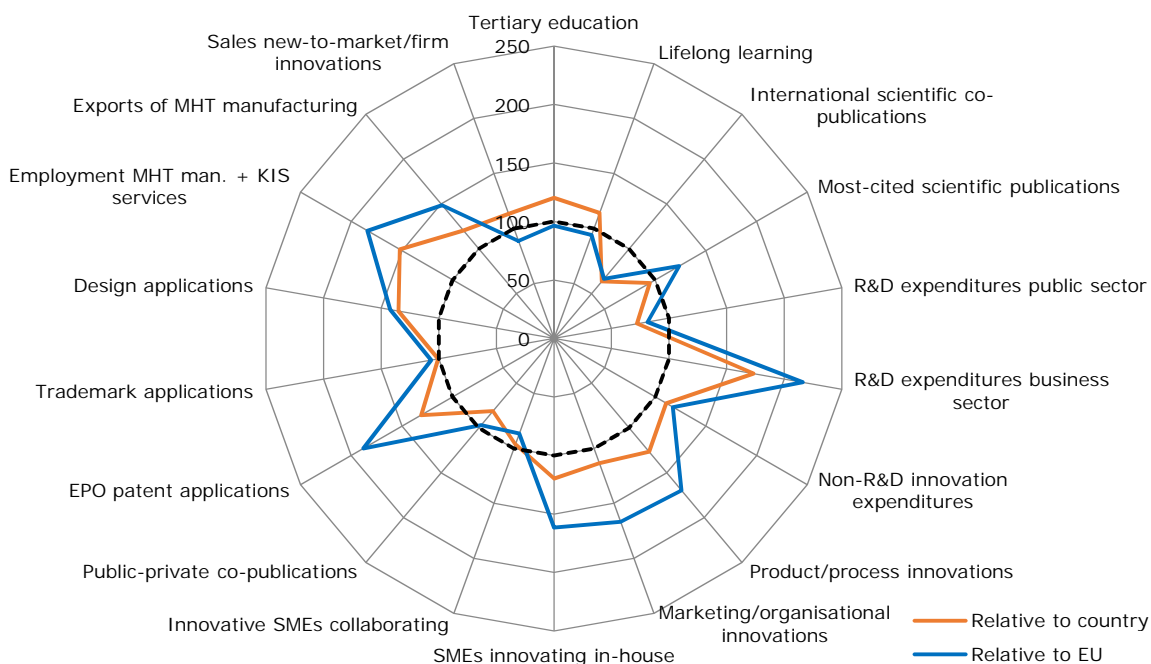
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	37.5	0.530	120	96
Lifelong learning	9.8	0.444	114	94
International scientific co-publications	476	0.278	64	67
Most-cited scientific publications	10.9	0.676	95	124
R&D expenditures public sector	0.49	0.445	72	81
R&D expenditures business sector	5.51	0.985	173	216
Non-R&D innovation expenditures	±	0.352	±	±
Product/process innovations	±	0.756	±	±
Marketing/ org. innovations	±	0.648	±	±
SMEs innovating in-house	±	0.738	±	±
Innovative SMEs collaborating	±	0.310	±	±
Public-private co-publications	92.3	0.287	81	97
EPO patent applications	15.01	0.733	131	188
Trademark applications	6.71	0.419	100	106
Design applications	2.27	0.741	135	142
Employment MHT manuf./KIS services	27.4	0.982	152	184
Exports of MHT manufacturing	78.3	0.940	120	149
Sales new-to-market/firm innovations	±	0.415	±	±
Average score	--	0.593	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.634	--	--
RII 2017 (same year)	--	--	115.3	139.6
RII 2017 (cf. to EU 2011)	--	--	--	143.2
Regional Innovation Index 2011	--	0.636	--	--
RII 2011 (same year)	--	--	113.0	143.7
RII - change between 2011 and 2017	--	-0.4	--	--

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Stuttgart is an Innovation Leader +, and innovation performance has decreased slightly over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2017, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. Business R&D expenditures) and weaknesses (e.g. International scientific co-publications). The table below shows data highlighting possible structural differences. For instance, the region is densely populated, with higher employment share in manufacturing, and a higher than average GDP per capita.

	DE11	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.1	1.7	5.1
Manufacturing (C)	29.4	19.6	15.5
Utilities & Construction (D-F)	7.0	8.2	8.5
Services (G-N)	57.0	63.4	63.2
Public administration (O-U)	5.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	44500	34500	27600
GDP per capita growth (PPS), 2010-2014	3.42	3.13	2.00
Population density, 2015	383	229	117
Urbanisation, 2015	87.4	79.5	74.1
Population size, 2016 (000s)	4070	82180	510280



Regional Innovation Scoreboard 2017

Karlsruhe (DE12)

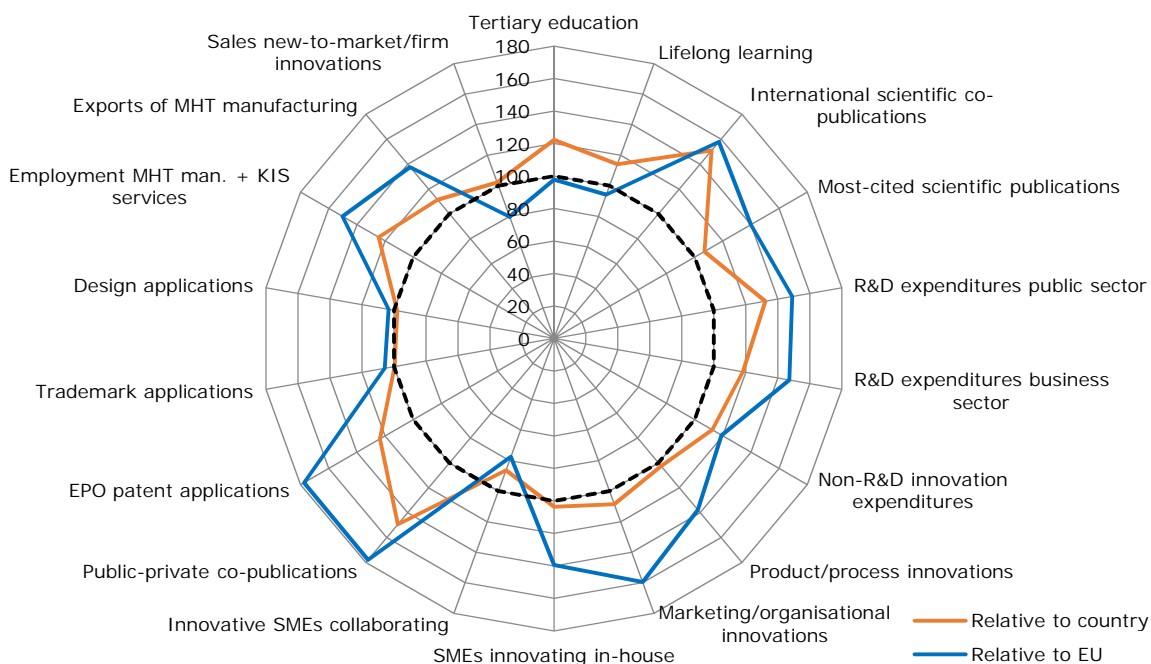
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	38.0	0.539	122	98
Lifelong learning	9.8	0.444	114	94
International scientific co-publications	2440	0.659	151	158
Most-cited scientific publications	13.0	0.763	107	140
R&D expenditures public sector	1.64	0.813	132	149
R&D expenditures business sector	2.66	0.671	118	147
Non-R&D innovation expenditures	±	0.358	±	±
Product/process innovations	±	0.614	±	±
Marketing/ org. innovations	±	0.620	±	±
SMEs innovating in-house	±	0.637	±	±
Innovative SMEs collaborating	±	0.278	±	±
Public-private co-publications	286.6	0.528	149	178
EPO patent applications	13.40	0.692	124	178
Trademark applications	6.61	0.416	100	106
Design applications	1.20	0.539	98	103
Employment MHT manuf./KIS services	22.4	0.803	124	150
Exports of MHT manufacturing	72.7	0.871	112	138
Sales new-to-market/firm innovations	±	0.374	±	±
Average score	--	0.590	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.630	--	--
RII 2017 (same year)	--	--	114.6	138.8
RII 2017 (cf. to EU 2011)	--	--	--	142.4
Regional Innovation Index 2011	--	0.647	--	--
RII 2011 (same year)	--	--	115.1	146.3
RII - change between 2011 and 2017	--	-3.9	--	--

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Karlsruhe is an Innovation Leader, and innovation performance has decreased over time.

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	DE12	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.5	1.7	5.1
Manufacturing (C)	25.0	19.6	15.5
Utilities & Construction (D-F)	6.8	8.2	8.5
Services (G-N)	61.7	63.4	63.2
Public administration (O-U)	5.9	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	38300	34500	27600
GDP per capita growth (PPS), 2010-2014	2.13	3.13	2.00
Population density, 2015	396	229	117
Urbanisation, 2015	86.1	79.5	74.1
Population size, 2016 (000s)	2760	82180	510280



Regional Innovation Scoreboard 2017

Freiburg (DE13)

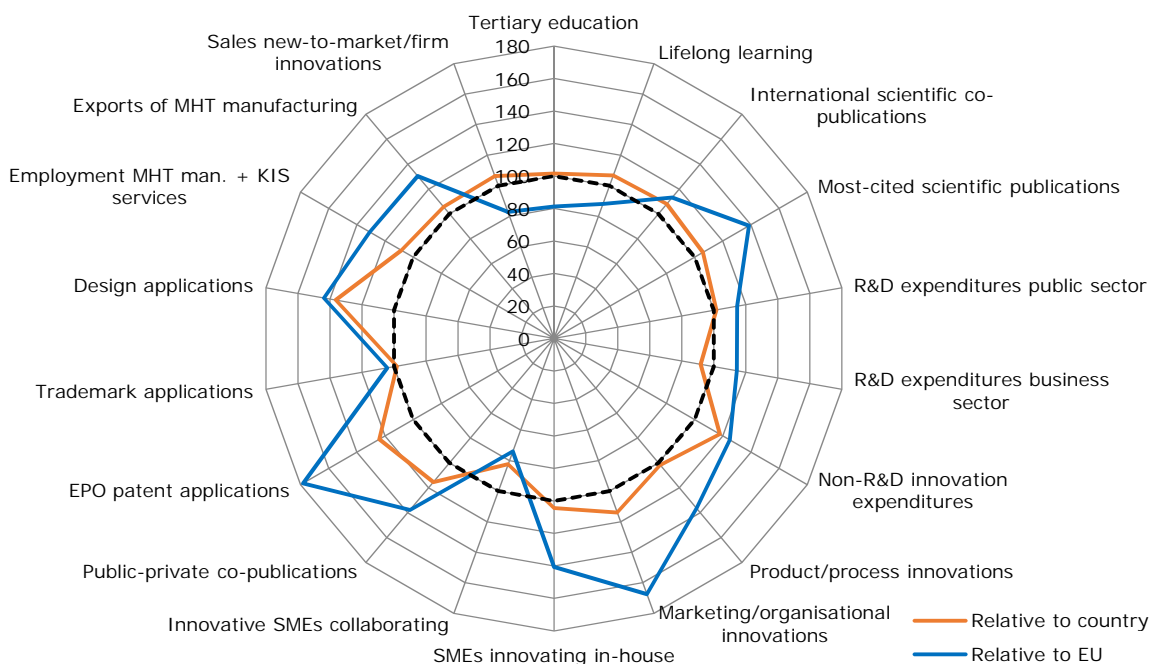
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	32.7	0.448	102	81
Lifelong learning	8.9	0.415	107	88
International scientific co-publications	1287	0.472	108	113
Most-cited scientific publications	12.8	0.756	106	139
R&D expenditures public sector	0.97	0.625	102	114
R&D expenditures business sector	1.66	0.521	92	114
Non-R&D innovation expenditures	±	0.375	±	±
Product/process innovations	±	0.608	±	±
Marketing/ org. innovations	±	0.651	±	±
SMEs innovating in-house	±	0.643	±	±
Innovative SMEs collaborating	±	0.265	±	±
Public-private co-publications	177.0	0.409	116	138
EPO patent applications	13.50	0.695	124	178
Trademark applications	6.41	0.409	98	104
Design applications	2.32	0.749	136	144
Employment MHT manuf./KIS services	19.5	0.699	108	131
Exports of MHT manufacturing	69.0	0.825	106	130
Sales new-to-market/firm innovations	±	0.389	±	±
Average score	--	0.553	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.591	--	--
RII 2017 (same year)	--	--	107.5	130.1
RII 2017 (cf. to EU 2011)	--	--	--	133.5
Regional Innovation Index 2011	--	0.614	--	--
RII 2011 (same year)	--	--	109.2	138.7
RII - change between 2011 and 2017	--	-5.2	--	--

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Freiburg is an Innovation Leader, and innovation performance has decreased over time.

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	DE13	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.3	1.7	5.1
Manufacturing (C)	27.1	19.6	15.5
Utilities & Construction (D-F)	7.1	8.2	8.5
Services (G-N)	58.9	63.4	63.2
Public administration (O-U)	5.6	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	33200	34500	27600
GDP per capita growth (PPS), 2010-2014	3.17	3.13	2.00
Population density, 2015	236	229	117
Urbanisation, 2015	75.5	79.5	74.1
Population size, 2016 (000s)	2220	82180	510280



Regional Innovation Scoreboard 2017

Tübingen (DE14)

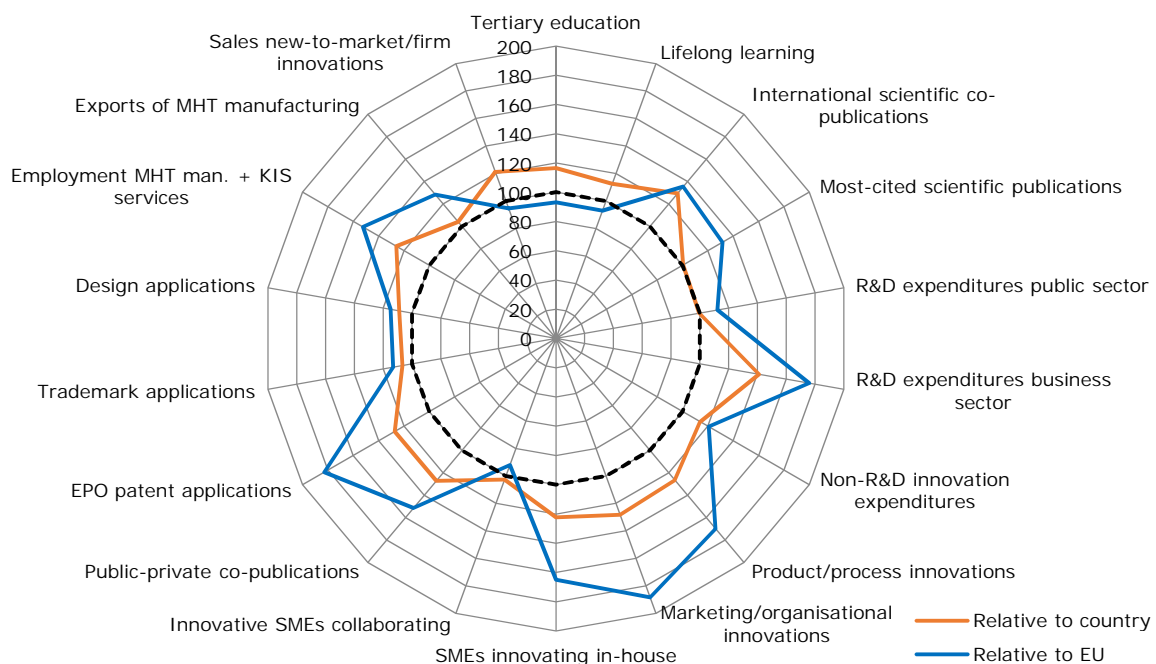
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	36.5	0.513	116	93
Lifelong learning	9.6	0.437	113	93
International scientific co-publications	1816	0.565	129	135
Most-cited scientific publications	11.9	0.717	100	131
R&D expenditures public sector	0.93	0.612	99	112
R&D expenditures business sector	3.72	0.802	141	176
Non-R&D innovation expenditures	±	0.363	±	±
Product/process innovations	±	0.756	±	±
Marketing/ org. innovations	±	0.732	±	±
SMEs innovating in-house	±	0.753	±	±
Innovative SMEs collaborating	±	0.330	±	±
Public-private co-publications	211.6	0.450	127	151
EPO patent applications	14.18	0.713	127	183
Trademark applications	7.56	0.445	106	113
Design applications	1.48	0.599	109	115
Employment MHT manuf./KIS services	22.7	0.814	126	152
Exports of MHT manufacturing	68.0	0.812	104	128
Sales new-to-market/firm innovations	±	0.443	±	±
Average score	--	0.603	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.644	--	--
RII 2017 (same year)	--	--	117.2	141.9
RII 2017 (cf. to EU 2011)	--	--	--	145.6
Regional Innovation Index 2011	--	0.641	--	--
RII 2011 (same year)	--	--	114.1	145.0
RII - change between 2011 and 2017	--	0.7	--	--

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Tübingen is an Innovation Leader +, and innovation performance has increased slightly over time.

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	DE14	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.0	1.7	5.1
Manufacturing (C)	29.9	19.6	15.5
Utilities & Construction (D-F)	7.4	8.2	8.5
Services (G-N)	54.6	63.4	63.2
Public administration (O-U)	6.2	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	36900	34500	27600
GDP per capita growth (PPS), 2010-2014	3.23	3.13	2.00
Population density, 2015	203	229	117
Urbanisation, 2015	69.0	79.5	74.1
Population size, 2016 (000s)	1820	82180	510280



Regional Innovation Scoreboard 2017

Oberbayern (DE21)

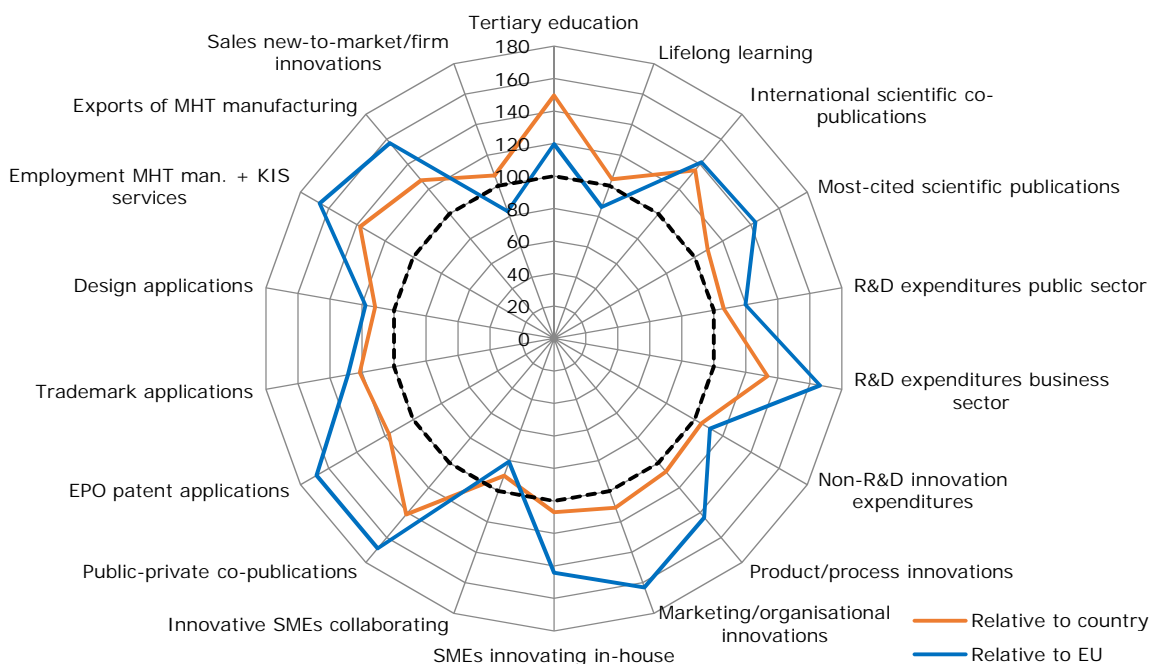
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	45.0	0.659	150	120
Lifelong learning	8.6	0.405	104	86
International scientific co-publications	1973	0.590	135	141
Most-cited scientific publications	13.4	0.781	109	143
R&D expenditures public sector	1.06	0.654	106	120
R&D expenditures business sector	3.35	0.759	133	166
Non-R&D innovation expenditures	±	0.333	±	±
Product/process innovations	±	0.641	±	±
Marketing/ org. innovations	±	0.633	±	±
SMEs innovating in-house	±	0.658	±	±
Innovative SMEs collaborating	±	0.289	±	±
Public-private co-publications	258.9	0.500	141	169
EPO patent applications	12.10	0.657	117	169
Trademark applications	9.81	0.507	121	129
Design applications	1.56	0.615	112	118
Employment MHT manuf./KIS services	24.8	0.889	138	166
Exports of MHT manufacturing	82.5	0.993	127	157
Sales new-to-market/firm innovations	±	0.391	±	±
Average score	--	0.608	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.650	--	--
RII 2017 (same year)	--	--	118.3	143.2
RII 2017 (cf. to EU 2011)	--	--	--	146.9
Regional Innovation Index 2011	--	0.643	--	--
RII 2011 (same year)	--	--	114.4	145.4
RII - change between 2011 and 2017	--	1.5	--	--

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Oberbayern is an Innovation Leader +, and innovation performance has increased over time.

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	DE21	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.7	5.1
Manufacturing (C)	18.8	19.6	15.5
Utilities & Construction (D-F)	6.7	8.2	8.5
Services (G-N)	66.1	63.4	63.2
Public administration (O-U)	6.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	49400	34500	27600
GDP per capita growth (PPS), 2010-2014	3.65	3.13	2.00
Population density, 2015	260	229	117
Urbanisation, 2015	79.9	79.5	74.1
Population size, 2016 (000s)	4590	82180	510280



Regional Innovation Scoreboard 2017

Niederbayern (DE22)

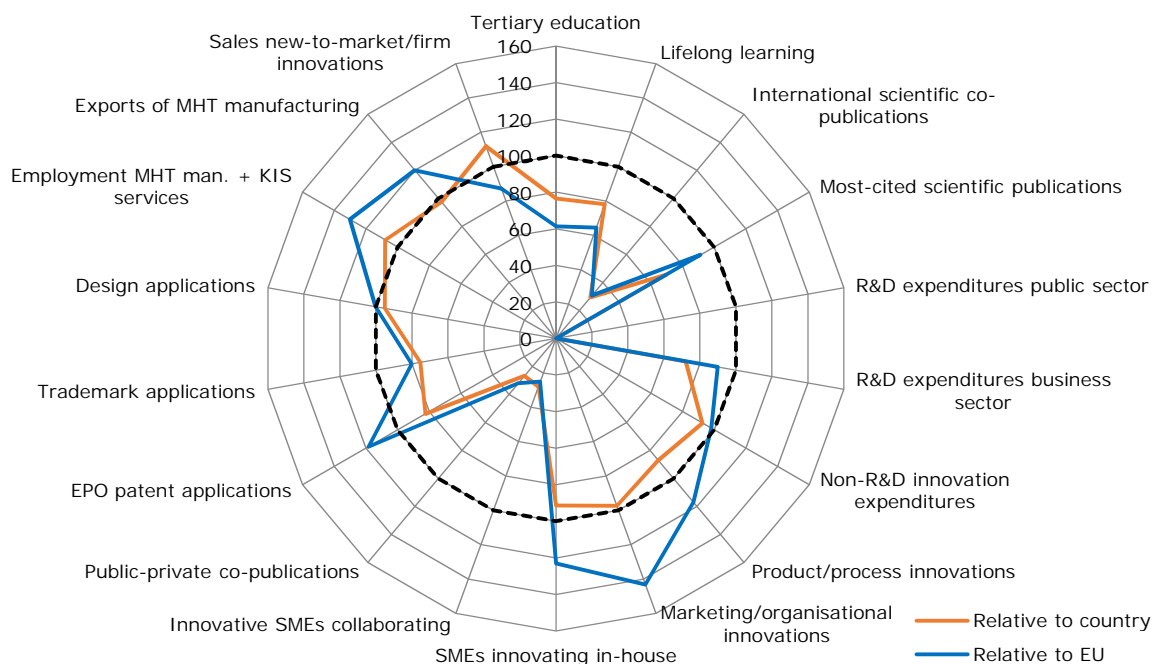
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	26.3	0.337	77	61
Lifelong learning	5.8	0.304	78	65
International scientific co-publications	121	0.128	29	31
Most-cited scientific publications	7.3	0.499	70	91
R&D expenditures public sector	0.00	0.000	0	0
R&D expenditures business sector	1.07	0.410	72	90
Non-R&D innovation expenditures	±	0.295	±	±
Product/process innovations	±	0.521	±	±
Marketing/ org. innovations	±	0.556	±	±
SMEs innovating in-house	±	0.562	±	±
Innovative SMEs collaborating	±	0.090	±	±
Public-private co-publications	14.2	0.095	27	32
EPO patent applications	6.06	0.462	82	118
Trademark applications	3.79	0.315	75	80
Design applications	1.13	0.523	95	100
Employment MHT manuf./KIS services	19.4	0.695	108	130
Exports of MHT manufacturing	63.8	0.760	97	120
Sales new-to-market/firm innovations	±	0.409	±	±
Average score	--	0.387	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.413	--	--
RII 2017 (same year)	--	--	75.2	91.0
RII 2017 (cf. to EU 2011)	--	--	--	93.4
Regional Innovation Index 2011	--	0.485	--	--
RII 2011 (same year)	--	--	86.2	109.6
RII - change between 2011 and 2017	--	-16.2	--	--

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Niederbayern is a Strong - Innovator, and innovation performance has decreased significantly over time.

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	DE22	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.8	1.7	5.1
Manufacturing (C)	25.7	19.6	15.5
Utilities & Construction (D-F)	10.5	8.2	8.5
Services (G-N)	54.0	63.4	63.2
Public administration (O-U)	6.1	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	33800	34500	27600
GDP per capita growth (PPS), 2010-2014	3.37	3.13	2.00
Population density, 2015	117	229	117
Urbanisation, 2015	47.3	79.5	74.1
Population size, 2016 (000s)	1210	82180	510280



Regional Innovation Scoreboard 2017

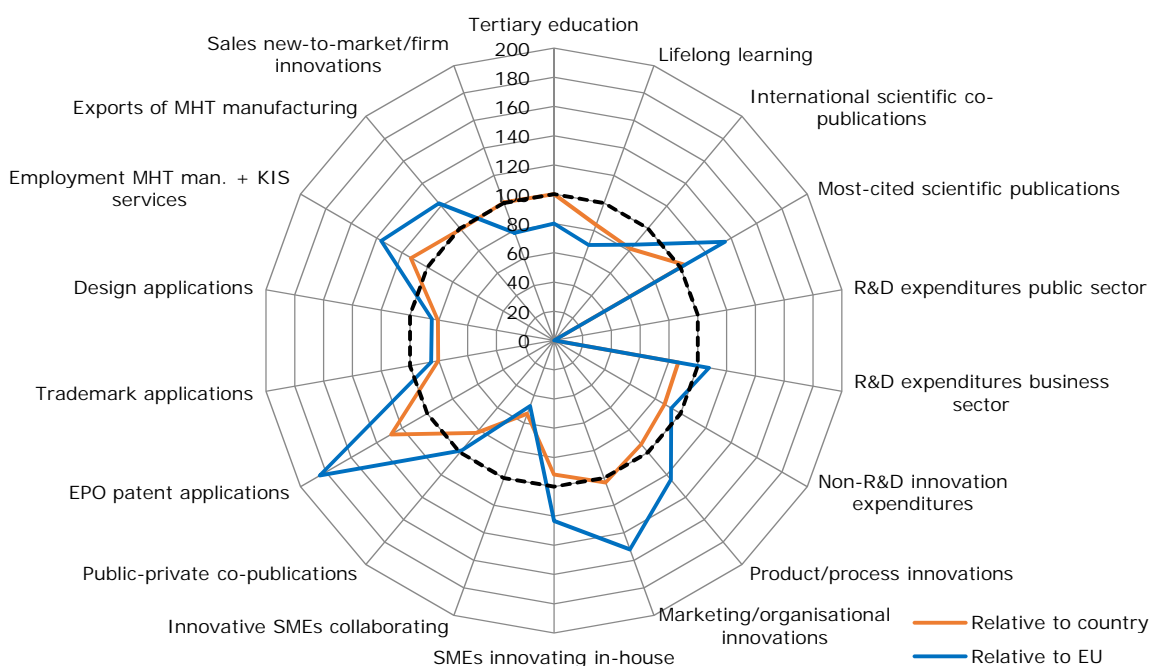
Oberpfalz (DE23)

	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	32.3	0.441	100	80
Lifelong learning	6.4	0.327	84	70
International scientific co-publications	757	0.356	82	85
Most-cited scientific publications	12.4	0.737	103	135
R&D expenditures public sector	0.00	0.000	0	0
R&D expenditures business sector	1.49	0.491	86	108
Non-R&D innovation expenditures	±	0.278	±	±
Product/process innovations	±	0.554	±	±
Marketing/ org. innovations	±	0.590	±	±
SMEs innovating in-house	±	0.564	±	±
Innovative SMEs collaborating	±	0.171	±	±
Public-private co-publications	95.1	0.292	82	98
EPO patent applications	14.49	0.720	129	185
Trademark applications	4.31	0.336	80	85
Design applications	0.81	0.443	80	85
Employment MHT manuf./KIS services	20.3	0.728	113	136
Exports of MHT manufacturing	64.9	0.774	99	122
Sales new-to-market/firm innovations	±	0.367	±	±
Average score	--	0.454	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.485	--	--
RII 2017 (same year)	--	--	88.2	106.8
RII 2017 (cf. to EU 2011)	--	--	--	109.6
Regional Innovation Index 2011	--	0.531	--	--
RII 2011 (same year)	--	--	94.4	119.9
RII - change between 2011 and 2017	--	-10.3	--	--

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Oberpfalz is a Strong Innovator, and innovation performance has decreased significantly over time. The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. EPO patent applications) and weaknesses (e.g. Public sector R&D expenditures). The table below shows data highlighting possible structural differences. For instance, the region is less densely populated, with higher employment shares in manufacturing and agriculture, and lower shares in services.

	DE23	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.8	1.7	5.1
Manufacturing (C)	27.3	19.6	15.5
Utilities & Construction (D-F)	8.2	8.2	8.5
Services (G-N)	54.3	63.4	63.2
Public administration (O-U)	7.4	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	35800	34500	27600
GDP per capita growth (PPS), 2010-2014	3.92	3.13	2.00
Population density, 2015	112	229	117
Urbanisation, 2015	58.2	79.5	74.1
Population size, 2016 (000s)	1090	82180	510280



Regional Innovation Scoreboard 2017

Oberfranken (DE24)

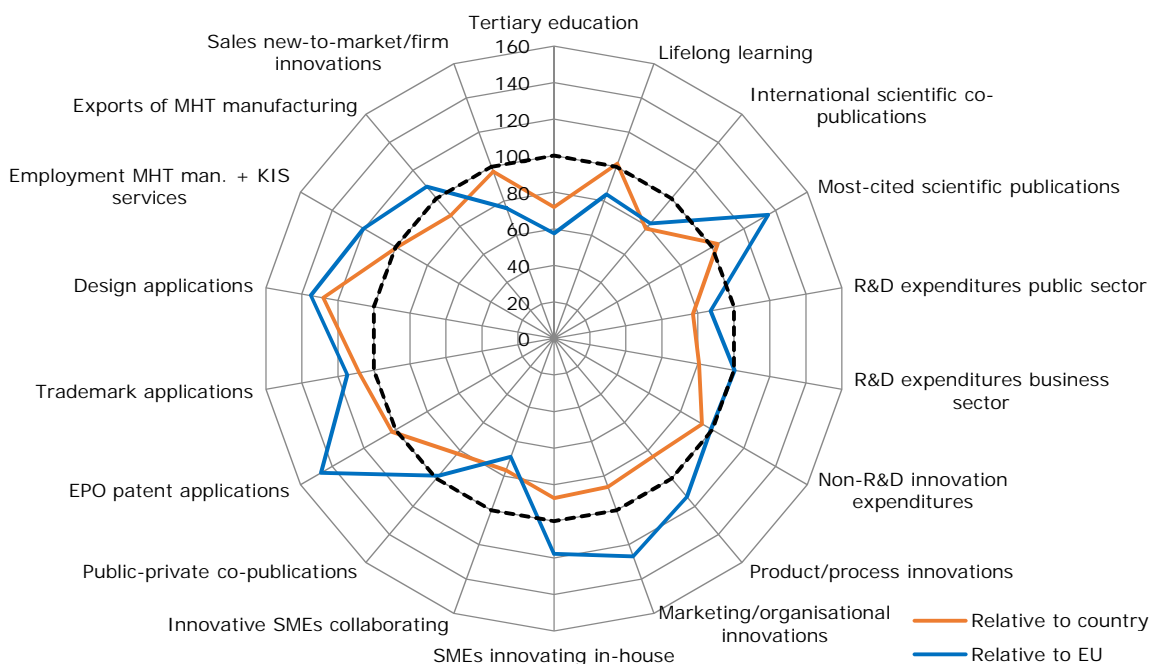
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	25.1	0.317	72	58
Lifelong learning	8.3	0.395	102	84
International scientific co-publications	701	0.342	78	82
Most-cited scientific publications	12.4	0.738	103	135
R&D expenditures public sector	0.56	0.475	77	87
R&D expenditures business sector	1.31	0.458	81	100
Non-R&D innovation expenditures	±	0.298	±	±
Product/process innovations	±	0.504	±	±
Marketing/ org. innovations	±	0.493	±	±
SMEs innovating in-house	±	0.538	±	±
Innovative SMEs collaborating	±	0.247	±	±
Public-private co-publications	94.7	0.291	82	98
EPO patent applications	9.24	0.573	102	147
Trademark applications	7.80	0.452	108	115
Design applications	2.05	0.705	128	135
Employment MHT manuf./KIS services	17.9	0.642	99	120
Exports of MHT manufacturing	57.7	0.685	88	108
Sales new-to-market/firm innovations	±	0.356	±	±
Average score	--	0.473	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.505	--	--
RII 2017 (same year)	--	--	91.9	111.2
RII 2017 (cf. to EU 2011)	--	--	--	114.1
Regional Innovation Index 2011	--	0.547	--	--
RII 2011 (same year)	--	--	97.2	123.6
RII - change between 2011 and 2017	--	-9.4	--	--

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

Oberfranken is a Strong + Innovator, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. EPO patent applications) and weaknesses (e.g. Tertiary education). The table below shows data highlighting possible structural differences. For instance, the region is less densely populated, with higher employment share in manufacturing, lower share in services, lower than average GDP per capita, but higher GDP per capita growth.

	DE24	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.7	5.1
Manufacturing (C)	27.7	19.6	15.5
Utilities & Construction (D-F)	7.5	8.2	8.5
Services (G-N)	56.5	63.4	63.2
Public administration (O-U)	6.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	31500	34500	27600
GDP per capita growth (PPS), 2010-2014	3.74	3.13	2.00
Population density, 2015	146	229	117
Urbanisation, 2015	64.9	79.5	74.1
Population size, 2016 (000s)	1060	82180	510280



Regional Innovation Scoreboard 2017

Mittelfranken (DE25)

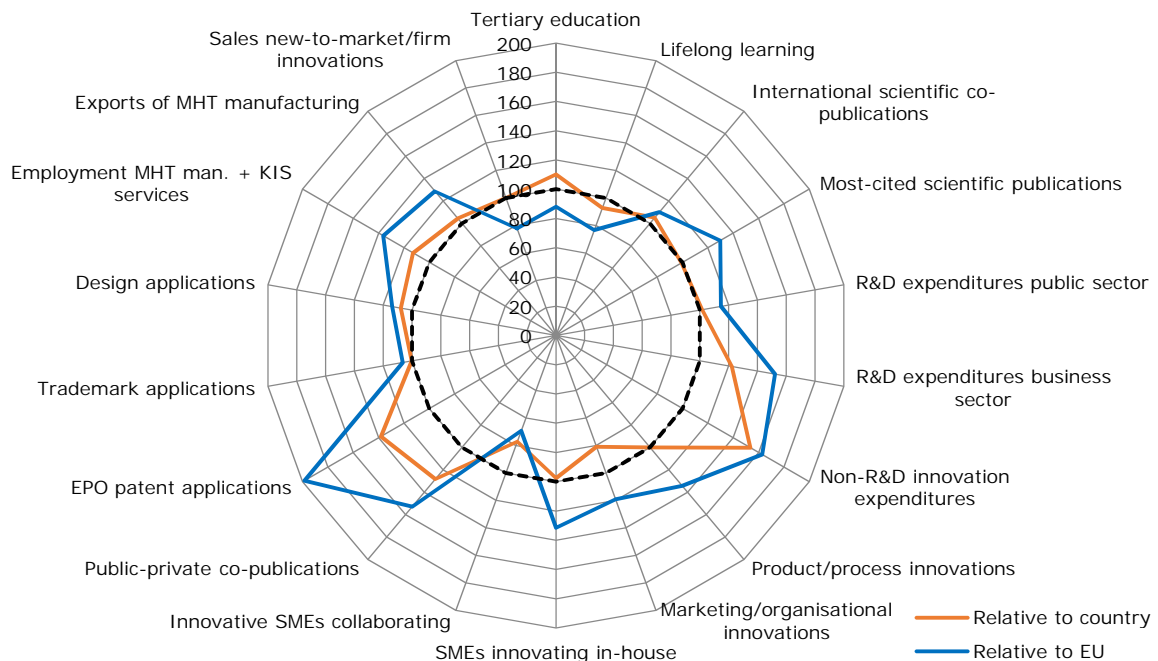
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	34.9	0.485	110	88
Lifelong learning	7.3	0.361	93	77
International scientific co-publications	1222	0.459	105	110
Most-cited scientific publications	11.7	0.708	99	130
R&D expenditures public sector	0.97	0.625	102	114
R&D expenditures business sector	2.83	0.694	122	152
Non-R&D innovation expenditures	±	0.489	±	±
Product/process innovations	±	0.598	±	±
Marketing/ org. innovations	±	0.463	±	±
SMEs innovating in-house	±	0.601	±	±
Innovative SMEs collaborating	±	0.248	±	±
Public-private co-publications	215.1	0.454	128	153
EPO patent applications	16.70	0.774	138	199
Trademark applications	6.68	0.418	100	106
Design applications	1.45	0.593	108	114
Employment MHT manuf./KIS services	20.3	0.728	113	136
Exports of MHT manufacturing	68.1	0.814	104	129
Sales new-to-market/firm innovations	±	0.365	±	±
Average score	--	0.549	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.586	--	--
RII 2017 (same year)	--	--	106.6	129.1
RII 2017 (cf. to EU 2011)	--	--	--	132.5
Regional Innovation Index 2011	--	0.596	--	--
RII 2011 (same year)	--	--	106.0	134.7
RII - change between 2011 and 2017	--	-2.3	--	--

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

Mittelfranken is an Innovation Leader, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. EPO patent applications) and weaknesses (e.g. Innovative SMEs collaborating). The table below shows data highlighting possible structural differences. For instance, the region has higher employment share in manufacturing, lower shares in utilities & construction, and higher GDP per capita than the average.

	DE25	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.6	1.7	5.1
Manufacturing (C)	24.2	19.6	15.5
Utilities & Construction (D-F)	7.2	8.2	8.5
Services (G-N)	60.4	63.4	63.2
Public administration (O-U)	6.6	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	37600	34500	27600
GDP per capita growth (PPS), 2010-2014	3.39	3.13	2.00
Population density, 2015	238	229	117
Urbanisation, 2015	80.5	79.5	74.1
Population size, 2016 (000s)	1740	82180	510280



Regional Innovation Scoreboard 2017

Unterfranken (DE26)

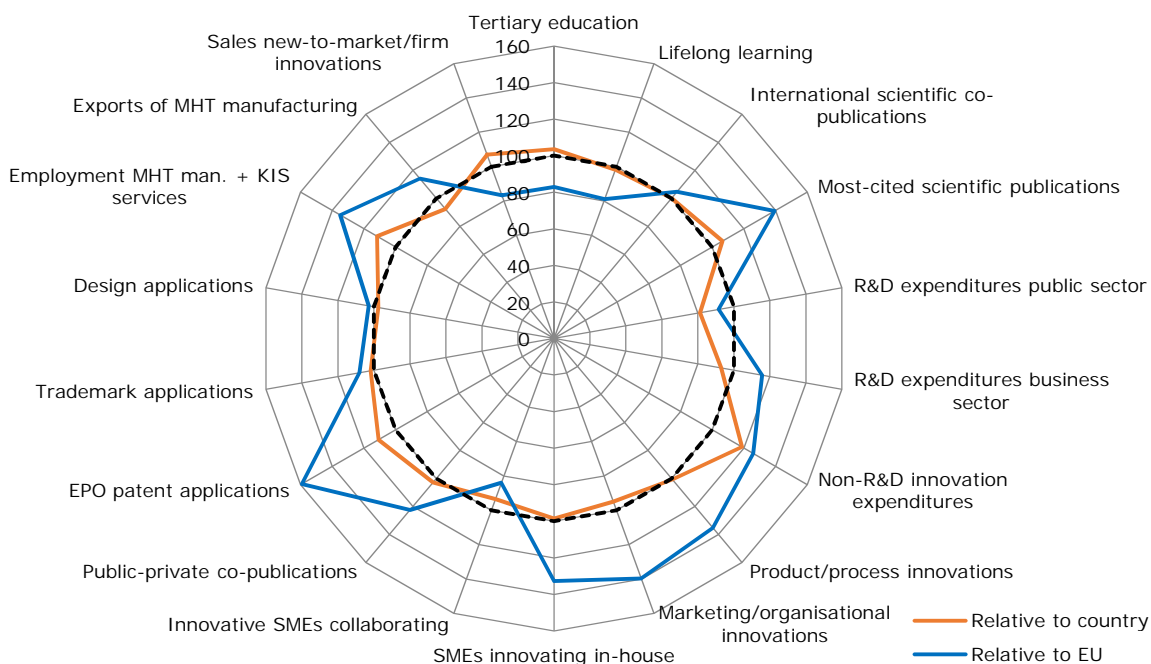
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	33.2	0.456	104	83
Lifelong learning	7.9	0.382	98	81
International scientific co-publications	1113	0.437	100	105
Most-cited scientific publications	12.9	0.760	107	139
R&D expenditures public sector	0.62	0.500	81	92
R&D expenditures business sector	1.70	0.528	93	116
Non-R&D innovation expenditures	±	0.378	±	±
Product/process innovations	±	0.602	±	±
Marketing/ org. innovations	±	0.543	±	±
SMEs innovating in-house	±	0.606	±	±
Innovative SMEs collaborating	±	0.301	±	±
Public-private co-publications	142.4	0.364	103	122
EPO patent applications	10.80	0.620	111	159
Trademark applications	6.90	0.425	102	108
Design applications	1.19	0.537	98	103
Employment MHT manuf./KIS services	20.1	0.720	112	135
Exports of MHT manufacturing	60.6	0.721	92	114
Sales new-to-market/firm innovations	±	0.391	±	±
Average score	--	0.515	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.550	--	--
RII 2017 (same year)	--	--	100.1	121.2
RII 2017 (cf. to EU 2011)	--	--	--	124.4
Regional Innovation Index 2011	--	0.551	--	--
RII 2011 (same year)	--	--	98.0	124.6
RII - change between 2011 and 2017	--	-0.2	--	--

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

Unterfranken is an Innovation Leader -, and innovation performance has remained stable over time.

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	DE26	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.6	1.7	5.1
Manufacturing (C)	26.0	19.6	15.5
Utilities & Construction (D-F)	8.1	8.2	8.5
Services (G-N)	57.9	63.4	63.2
Public administration (O-U)	6.4	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	34300	34500	27600
GDP per capita growth (PPS), 2010-2014	3.41	3.13	2.00
Population density, 2015	153	229	117
Urbanisation, 2015	60.3	79.5	74.1
Population size, 2016 (000s)	1310	82180	510280



Regional Innovation Scoreboard 2017

Schwaben (DE27)

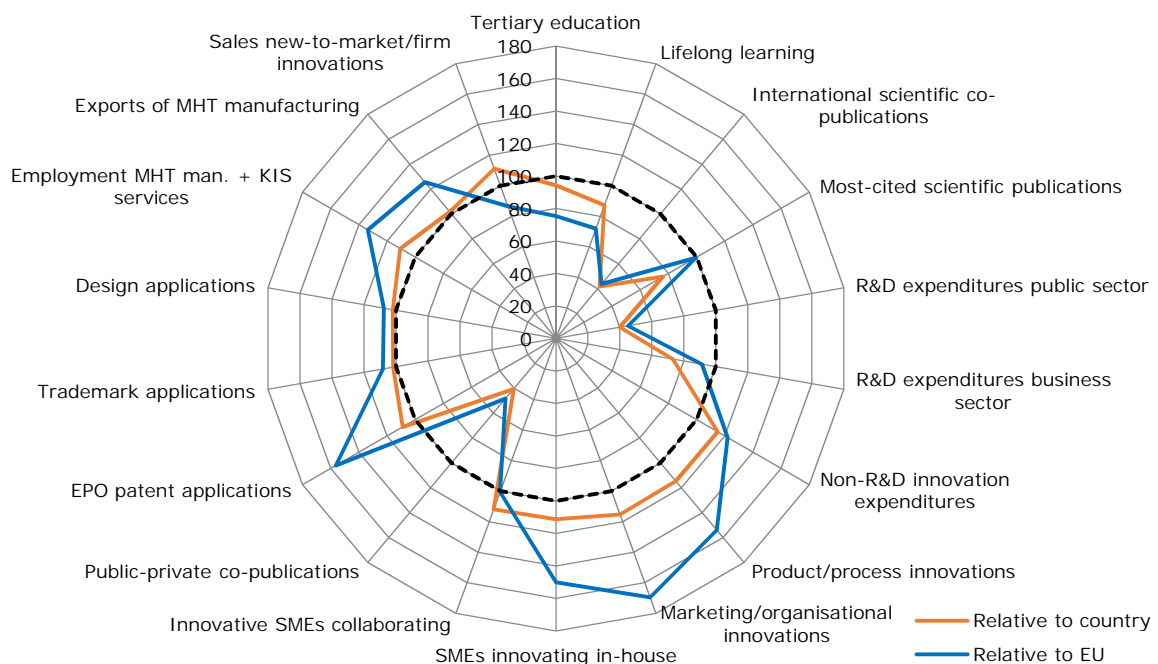
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	30.8	0.415	94	75
Lifelong learning	6.7	0.339	87	72
International scientific co-publications	223	0.182	42	44
Most-cited scientific publications	8.1	0.543	76	100
R&D expenditures public sector	0.15	0.246	40	45
R&D expenditures business sector	1.10	0.416	73	91
Non-R&D innovation expenditures	±	0.366	±	±
Product/process innovations	±	0.686	±	±
Marketing/ org. innovations	±	0.658	±	±
SMEs innovating in-house	±	0.685	±	±
Innovative SMEs collaborating	±	0.360	±	±
Public-private co-publications	27.5	0.143	40	48
EPO patent applications	10.45	0.610	109	156
Trademark applications	6.91	0.425	102	108
Design applications	1.30	0.561	102	108
Employment MHT manuf./KIS services	19.9	0.713	111	134
Exports of MHT manufacturing	66.5	0.794	102	126
Sales new-to-market/firm innovations	±	0.406	±	±
Average score	--	0.475	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.507	--	--
RII 2017 (same year)	--	--	92.3	111.7
RII 2017 (cf. to EU 2011)	--	--	--	114.7
Regional Innovation Index 2011	--	0.526	--	--
RII 2011 (same year)	--	--	93.6	118.9
RII - change between 2011 and 2017	--	-4.2	--	--

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Schwaben is a Strong + Innovator, and innovation performance has decreased over time.

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	DE27	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.5	1.7	5.1
Manufacturing (C)	26.4	19.6	15.5
Utilities & Construction (D-F)	8.7	8.2	8.5
Services (G-N)	56.7	63.4	63.2
Public administration (O-U)	5.7	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	34200	34500	27600
GDP per capita growth (PPS), 2010-2014	3.59	3.13	2.00
Population density, 2015	184	229	117
Urbanisation, 2015	71.7	79.5	74.1
Population size, 2016 (000s)	1850	82180	510280



Regional Innovation Scoreboard 2017

Berlin (DE30)

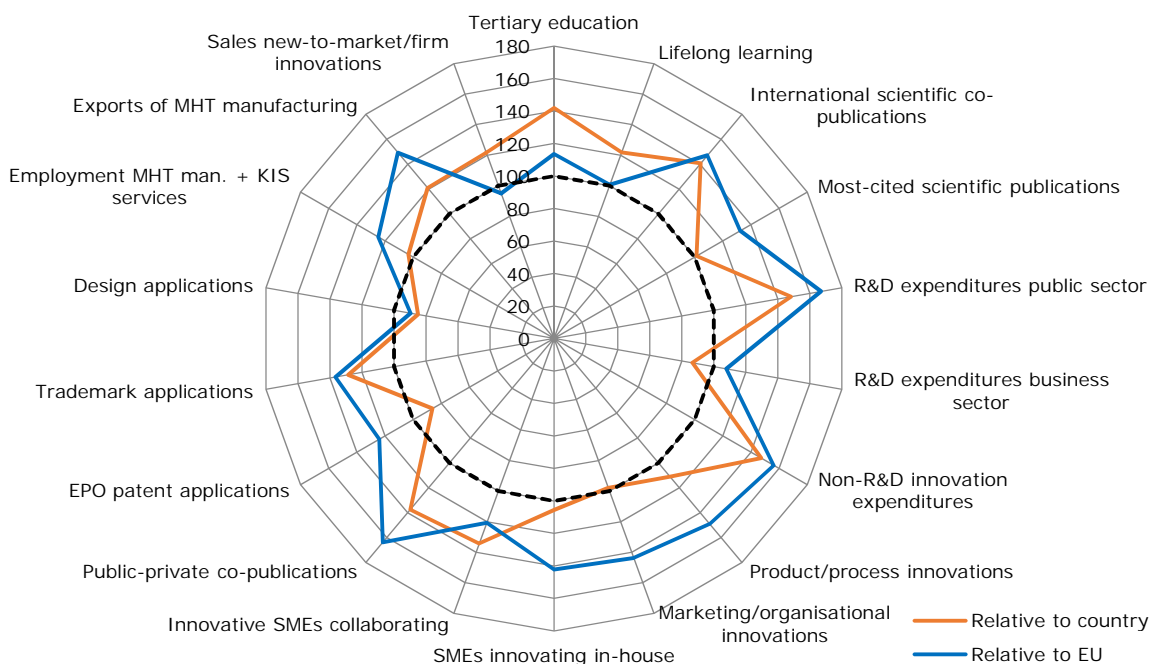
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	43.0	0.625	142	113
Lifelong learning	10.8	0.474	122	101
International scientific co-publications	2128	0.613	141	147
Most-cited scientific publications	12.0	0.723	101	133
R&D expenditures public sector	2.06	0.911	148	167
R&D expenditures business sector	1.49	0.491	86	108
Non-R&D innovation expenditures	±	0.469	±	±
Product/process innovations	±	0.664	±	±
Marketing/ org. innovations	±	0.559	±	±
SMEs innovating in-house	±	0.650	±	±
Innovative SMEs collaborating	±	0.432	±	±
Public-private co-publications	245.3	0.486	137	164
EPO patent applications	6.63	0.484	86	124
Trademark applications	11.02	0.537	129	136
Design applications	0.90	0.467	85	89
Employment MHT manuf./KIS services	18.6	0.667	103	125
Exports of MHT manufacturing	78.6	0.945	121	149
Sales new-to-market/firm innovations	±	0.445	±	±
Average score	--	0.591	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.632	--	--
RII 2017 (same year)	--	--	114.9	139.1
RII 2017 (cf. to EU 2011)	--	--	--	142.7
Regional Innovation Index 2011	--	0.595	--	--
RII 2011 (same year)	--	--	105.7	134.4
RII - change between 2011 and 2017	--	8.4	--	--

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Berlin is an Innovation Leader, and innovation performance has increased over time.

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	DE30	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.0	1.7	5.1
Manufacturing (C)	8.2	19.6	15.5
Utilities & Construction (D-F)	6.6	8.2	8.5
Services (G-N)	77.0	63.4	63.2
Public administration (O-U)	8.1	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	32800	34500	27600
GDP per capita growth (PPS), 2010-2014	2.26	3.13	2.00
Population density, 2015	3918	229	117
Urbanisation, 2015	100.0	79.5	74.1
Population size, 2016 (000s)	3520	82180	510280



Regional Innovation Scoreboard 2017

Brandenburg (DE40)

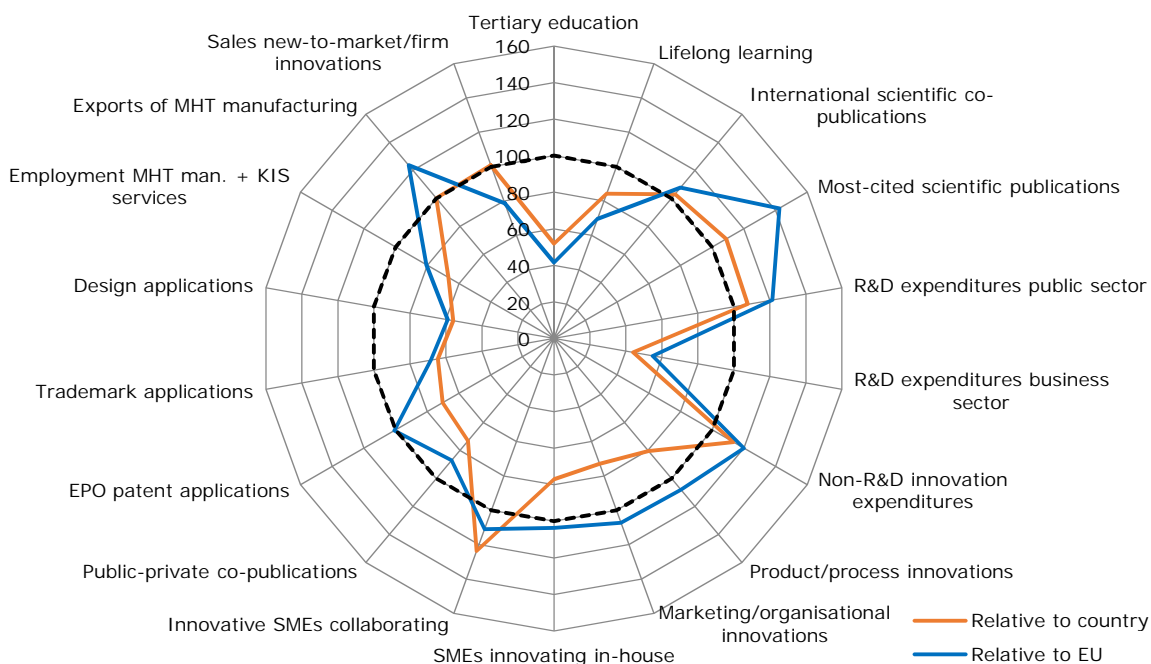
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	20.0	0.229	52	42
Lifelong learning	6.4	0.327	84	70
International scientific co-publications	1173	0.449	103	108
Most-cited scientific publications	13.3	0.777	109	142
R&D expenditures public sector	1.09	0.663	108	121
R&D expenditures business sector	0.45	0.250	44	55
Non-R&D innovation expenditures	±	0.360	±	±
Product/process innovations	±	0.481	±	±
Marketing/ org. innovations	±	0.417	±	±
SMEs innovating in-house	±	0.473	±	±
Innovative SMEs collaborating	±	0.398	±	±
Public-private co-publications	76.5	0.259	73	87
EPO patent applications	4.43	0.393	70	101
Trademark applications	2.77	0.269	64	68
Design applications	0.39	0.307	56	59
Employment MHT manuf./KIS services	12.0	0.430	67	81
Exports of MHT manufacturing	65.5	0.782	100	124
Sales new-to-market/firm innovations	±	0.369	±	±
Average score	--	0.424	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.453	--	--
RII 2017 (same year)	--	--	82.4	99.8
RII 2017 (cf. to EU 2011)	--	--	--	102.4
Regional Innovation Index 2011	--	0.471	--	--
RII 2011 (same year)	--	--	83.7	106.4
RII - change between 2011 and 2017	--	-4.0	--	--

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Brandenburg is a Strong - Innovator, and innovation performance has decreased over time.

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	DE40	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.5	1.7	5.1
Manufacturing (C)	12.2	19.6	15.5
Utilities & Construction (D-F)	11.8	8.2	8.5
Services (G-N)	63.1	63.4	63.2
Public administration (O-U)	10.4	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	24400	34500	27600
GDP per capita growth (PPS), 2010-2014	3.09	3.13	2.00
Population density, 2015	83	229	117
Urbanisation, 2015	64.7	79.5	74.1
Population size, 2016 (000s)	2480	82180	510280



Regional Innovation Scoreboard 2017

Bremen (DE50)

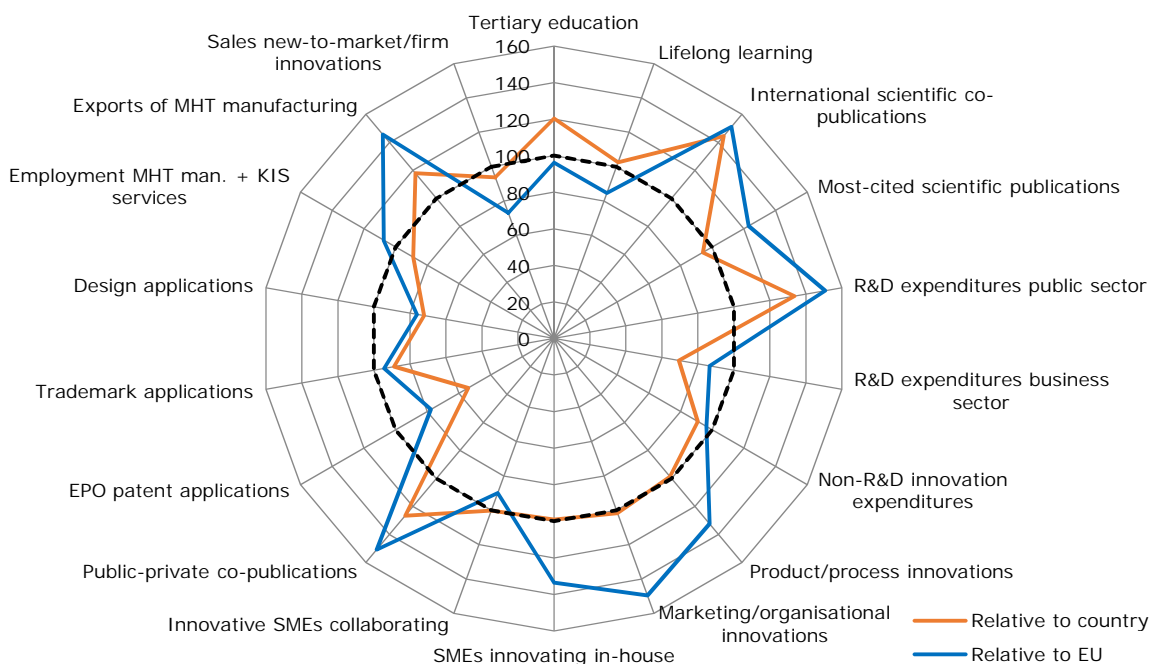
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	37.5	0.530	120	96
Lifelong learning	8.4	0.399	103	85
International scientific co-publications	2243	0.631	145	151
Most-cited scientific publications	10.8	0.671	94	123
R&D expenditures public sector	1.68	0.823	134	151
R&D expenditures business sector	1.00	0.395	69	87
Non-R&D innovation expenditures	±	0.290	±	±
Product/process innovations	±	0.590	±	±
Marketing/ org. innovations	±	0.581	±	±
SMEs innovating in-house	±	0.610	±	±
Innovative SMEs collaborating	±	0.322	±	±
Public-private co-publications	210.0	0.448	127	151
EPO patent applications	2.67	0.303	54	78
Trademark applications	5.26	0.371	89	94
Design applications	0.65	0.397	72	76
Employment MHT manuf./KIS services	16.0	0.573	89	107
Exports of MHT manufacturing	76.7	0.921	118	146
Sales new-to-market/firm innovations	±	0.343	±	±
Average score	--	0.511	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.546	--	--
RII 2017 (same year)	--	--	99.3	120.2
RII 2017 (cf. to EU 2011)	--	--	--	123.3
Regional Innovation Index 2011	--	0.515	--	--
RII 2011 (same year)	--	--	91.6	116.5
RII - change between 2011 and 2017	--	6.9	--	--

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

Bremen is an Innovation Leader -, and innovation performance has increased over time.

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	DE50	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.0	1.7	5.1
Manufacturing (C)	13.5	19.6	15.5
Utilities & Construction (D-F)	6.4	8.2	8.5
Services (G-N)	74.5	63.4	63.2
Public administration (O-U)	5.3	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	43800	34500	27600
GDP per capita growth (PPS), 2010-2014	3.01	3.13	2.00
Population density, 2015	1591	229	117
Urbanisation, 2015	100.0	79.5	74.1
Population size, 2016 (000s)	670	82180	510280



Regional Innovation Scoreboard 2017

Hamburg (DE60)

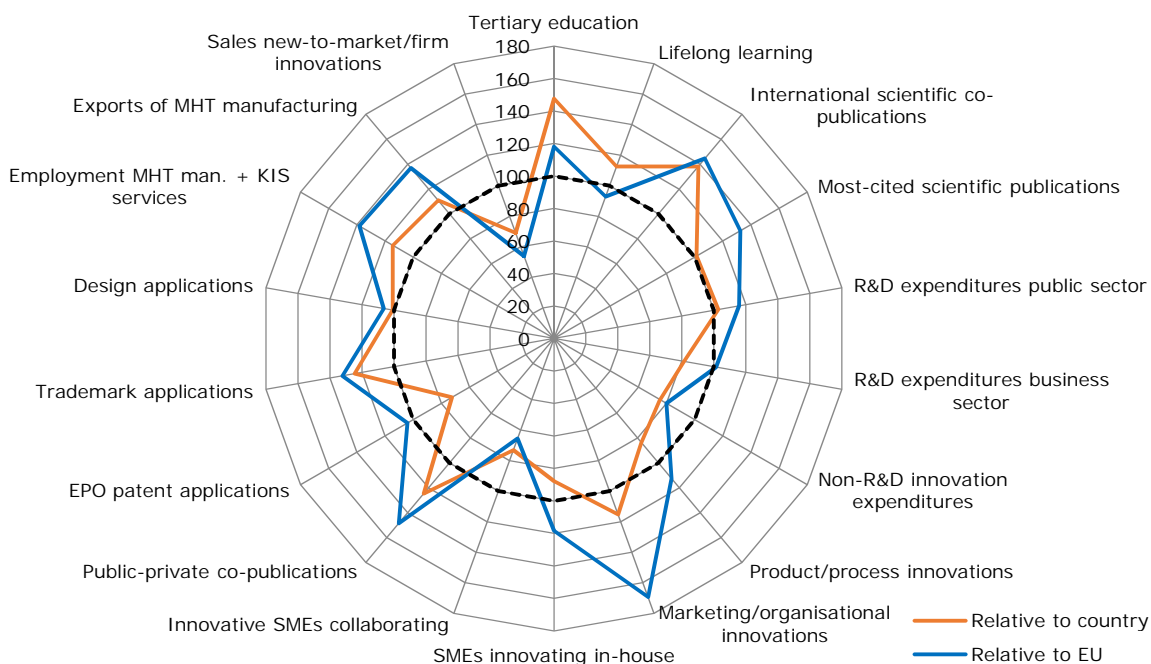
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	44.5	0.651	148	118
Lifelong learning	9.6	0.437	113	93
International scientific co-publications	2059	0.603	138	145
Most-cited scientific publications	12.0	0.723	101	133
R&D expenditures public sector	0.99	0.632	103	116
R&D expenditures business sector	1.33	0.462	81	101
Non-R&D innovation expenditures	±	0.240	±	±
Product/process innovations	±	0.501	±	±
Marketing/ org. innovations	±	0.658	±	±
SMEs innovating in-house	±	0.540	±	±
Innovative SMEs collaborating	±	0.235	±	±
Public-private co-publications	204.2	0.441	125	149
EPO patent applications	4.70	0.405	72	104
Trademark applications	10.33	0.520	124	132
Design applications	1.27	0.555	101	106
Employment MHT manuf./KIS services	20.6	0.738	114	138
Exports of MHT manufacturing	72.3	0.866	111	137
Sales new-to-market/firm innovations	±	0.253	±	±
Average score	--	0.526	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.561	--	--
RII 2017 (same year)	--	--	102.2	123.7
RII 2017 (cf. to EU 2011)	--	--	--	126.9
Regional Innovation Index 2011	--	0.541	--	--
RII 2011 (same year)	--	--	96.2	122.3
RII - change between 2011 and 2017	--	4.6	--	--

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

Hamburg is an Innovation Leader -, and innovation performance has increased over time.

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	DE60	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.0	1.7	5.1
Manufacturing (C)	10.4	19.6	15.5
Utilities & Construction (D-F)	5.4	8.2	8.5
Services (G-N)	78.7	63.4	63.2
Public administration (O-U)	5.1	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	57500	34500	27600
GDP per capita growth (PPS), 2010-2014	2.15	3.13	2.00
Population density, 2015	2351	229	117
Urbanisation, 2015	100.0	79.5	74.1
Population size, 2016 (000s)	1790	82180	510280



Regional Innovation Scoreboard 2017

Darmstadt (DE71)

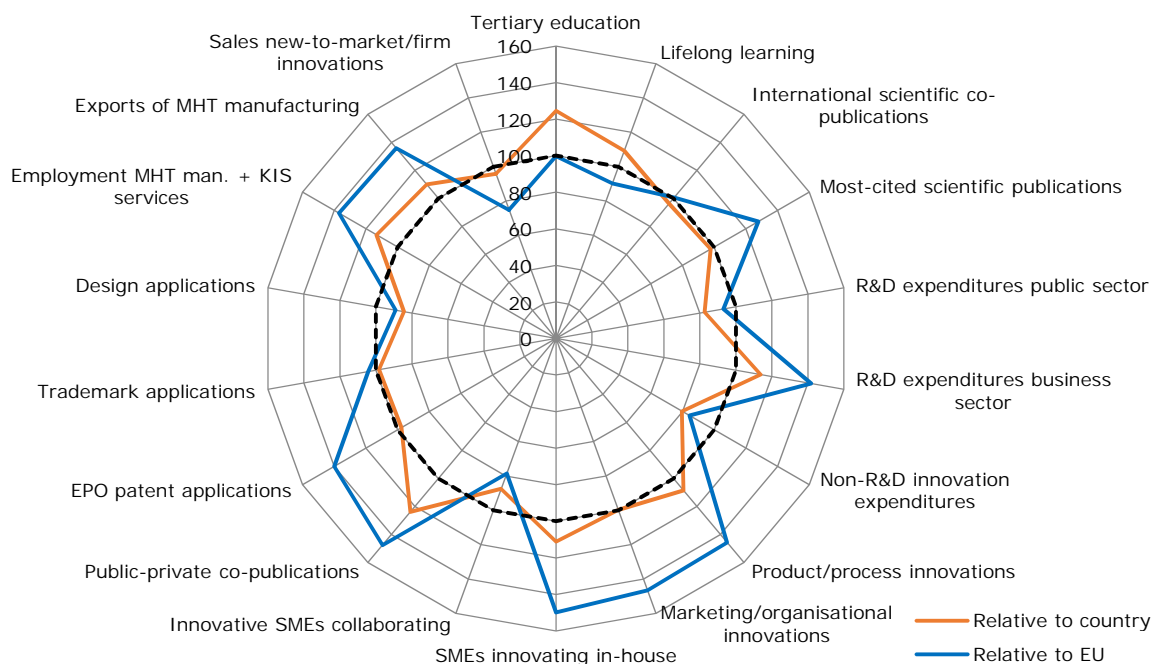
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	38.6	0.549	125	100
Lifelong learning	9.2	0.425	109	90
International scientific co-publications	1032	0.420	96	101
Most-cited scientific publications	11.4	0.698	98	128
R&D expenditures public sector	0.64	0.508	83	93
R&D expenditures business sector	2.48	0.647	114	142
Non-R&D innovation expenditures	±	0.253	±	±
Product/process innovations	±	0.649	±	±
Marketing/ org. innovations	±	0.570	±	±
SMEs innovating in-house	±	0.684	±	±
Innovative SMEs collaborating	±	0.282	±	±
Public-private co-publications	201.4	0.438	124	147
EPO patent applications	8.41	0.546	97	140
Trademark applications	6.43	0.410	98	104
Design applications	0.89	0.464	84	89
Employment MHT manuf./KIS services	20.4	0.731	113	137
Exports of MHT manufacturing	71.8	0.859	110	136
Sales new-to-market/firm innovations	±	0.351	±	±
Average score	--	0.527	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.563	--	--
RII 2017 (same year)	--	--	102.4	123.9
RII 2017 (cf. to EU 2011)	--	--	--	127.2
Regional Innovation Index 2011	--	0.568	--	--
RII 2011 (same year)	--	--	101.0	128.3
RII - change between 2011 and 2017	--	-1.1	--	--

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

Darmstadt is an Innovation Leader -, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. SMEs innovating in-house) and weaknesses (e.g. Innovative SMEs collaborating). The table below shows data highlighting possible structural differences. For instance, the region is highly densely populated with higher employment shares in services, and significantly higher than average GDP per capita.

	DE71	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.8	1.7	5.1
Manufacturing (C)	15.5	19.6	15.5
Utilities & Construction (D-F)	6.4	8.2	8.5
Services (G-N)	71.2	63.4	63.2
Public administration (O-U)	6.0	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	45600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.32	3.13	2.00
Population density, 2015	523	229	117
Urbanisation, 2015	93.8	79.5	74.1
Population size, 2016 (000s)	3920	82180	510280



Regional Innovation Scoreboard 2017

Gießen (DE72)

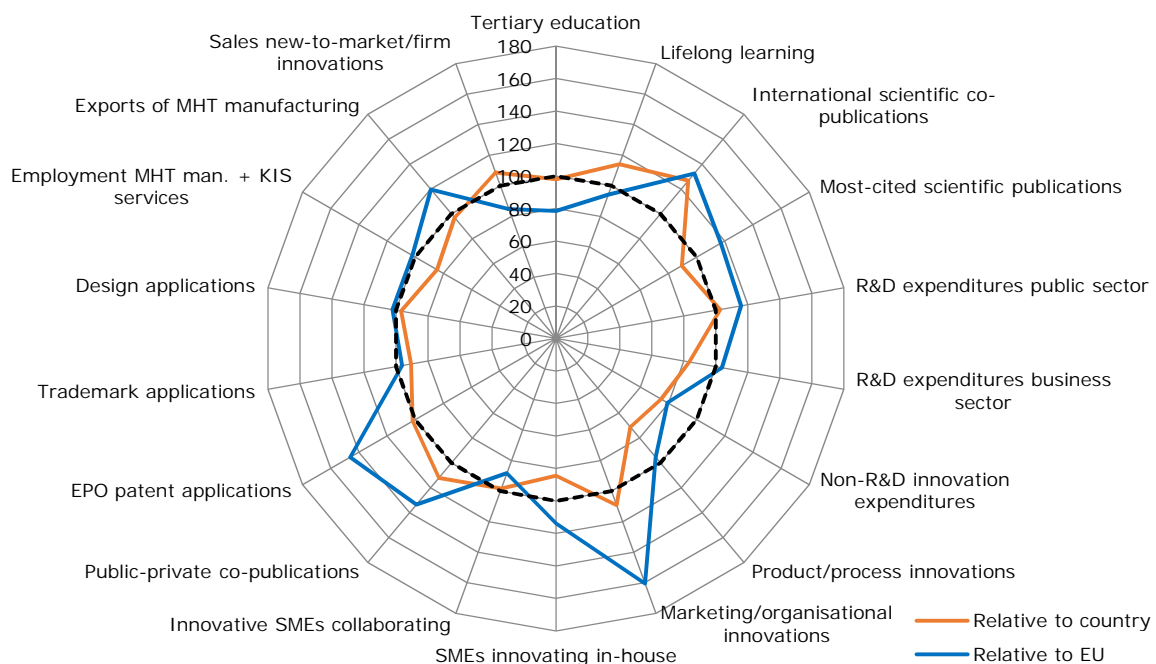
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	31.8	0.432	98	78
Lifelong learning	9.8	0.444	114	94
International scientific co-publications	1743	0.553	127	133
Most-cited scientific publications	10.1	0.639	90	117
R&D expenditures public sector	0.99	0.632	103	116
R&D expenditures business sector	1.39	0.473	83	104
Non-R&D innovation expenditures	±	0.238	±	±
Product/process innovations	±	0.426	±	±
Marketing/ org. innovations	±	0.623	±	±
SMEs innovating in-house	±	0.520	±	±
Innovative SMEs collaborating	±	0.316	±	±
Public-private co-publications	167.1	0.396	112	134
EPO patent applications	9.15	0.570	102	146
Trademark applications	5.47	0.378	91	96
Design applications	1.17	0.532	97	102
Employment MHT manuf./KIS services	15.2	0.545	84	102
Exports of MHT manufacturing	63.6	0.758	97	120
Sales new-to-market/firm innovations	±	0.398	±	±
Average score	--	0.493	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.527	--	--
RII 2017 (same year)	--	--	95.8	116.0
RII 2017 (cf. to EU 2011)	--	--	--	119.0
Regional Innovation Index 2011	--	0.553	--	--
RII 2011 (same year)	--	--	98.4	125.1
RII - change between 2011 and 2017	--	-6.1	--	--

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

Gießen is a Strong + Innovator, and innovation performance has decreased over time.

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	DE72	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.4	1.7	5.1
Manufacturing (C)	22.1	19.6	15.5
Utilities & Construction (D-F)	7.8	8.2	8.5
Services (G-N)	61.5	63.4	63.2
Public administration (O-U)	7.2	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	29200	34500	27600
GDP per capita growth (PPS), 2010-2014	2.65	3.13	2.00
Population density, 2015	192	229	117
Urbanisation, 2015	65.8	79.5	74.1
Population size, 2016 (000s)	1040	82180	510280



Regional Innovation Scoreboard 2017

Kassel (DE73)

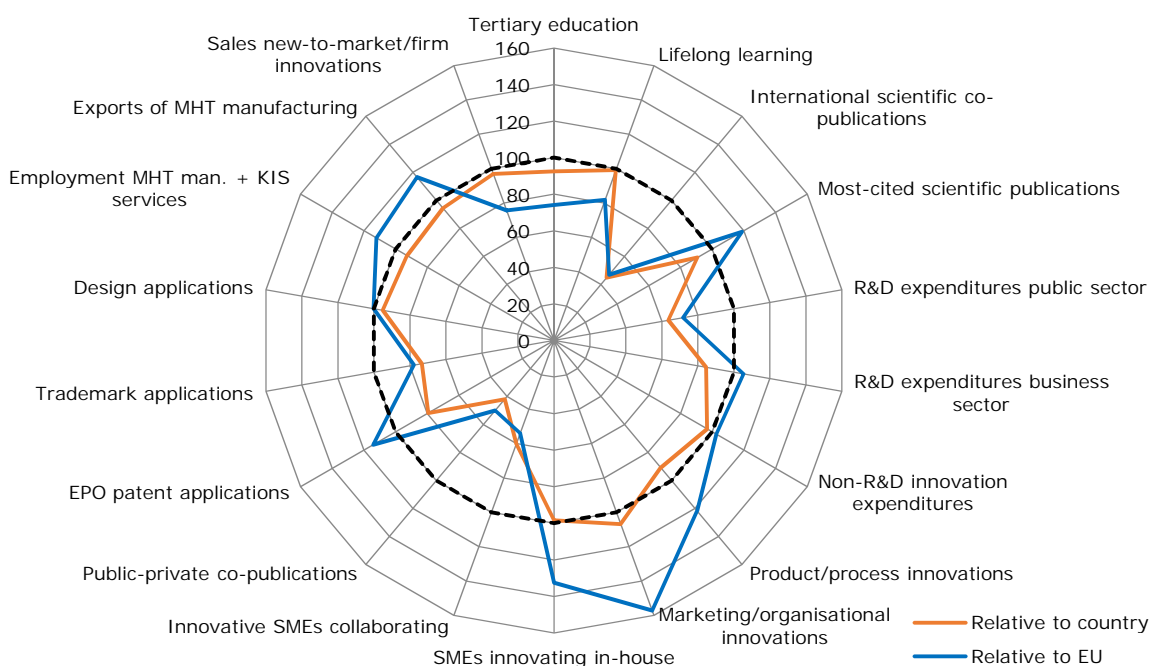
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	30.4	0.408	93	74
Lifelong learning	8.0	0.385	99	82
International scientific co-publications	253	0.196	45	47
Most-cited scientific publications	10.3	0.648	91	119
R&D expenditures public sector	0.38	0.391	64	72
R&D expenditures business sector	1.43	0.480	85	105
Non-R&D innovation expenditures	±	0.308	±	±
Product/process innovations	±	0.543	±	±
Marketing/ org. innovations	±	0.611	±	±
SMEs innovating in-house	±	0.606	±	±
Innovative SMEs collaborating	±	0.194	±	±
Public-private co-publications	29.1	0.148	42	50
EPO patent applications	5.63	0.445	79	114
Trademark applications	3.58	0.306	73	78
Design applications	1.13	0.523	95	100
Employment MHT manuf./KIS services	16.7	0.599	93	112
Exports of MHT manufacturing	61.9	0.737	94	117
Sales new-to-market/firm innovations	±	0.355	±	±
Average score	--	0.438	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.468	--	--
RII 2017 (same year)	--	--	85.1	103.0
RII 2017 (cf. to EU 2011)	--	--	--	105.7
Regional Innovation Index 2011	--	0.463	--	--
RII 2011 (same year)	--	--	82.3	104.6
RII - change between 2011 and 2017	--	1.1	--	--

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

Kassel is a Strong Innovator, and innovation performance has increased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2017, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. Marketing & organisational innovations) and weaknesses (e.g. International scientific co-publications). The table below shows data highlighting possible structural differences. For instance, the region is less densely populated, with higher employment shares in public administration and agriculture, and slightly lower than average GDP per capita.

	DE73	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.2	1.7	5.1
Manufacturing (C)	20.2	19.6	15.5
Utilities & Construction (D-F)	7.2	8.2	8.5
Services (G-N)	62.4	63.4	63.2
Public administration (O-U)	7.9	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	31900	34500	27600
GDP per capita growth (PPS), 2010-2014	3.31	3.13	2.00
Population density, 2015	146	229	117
Urbanisation, 2015	62.8	79.5	74.1
Population size, 2016 (000s)	1210	82180	510280



Mecklenburg-Vorpommern (DE80)

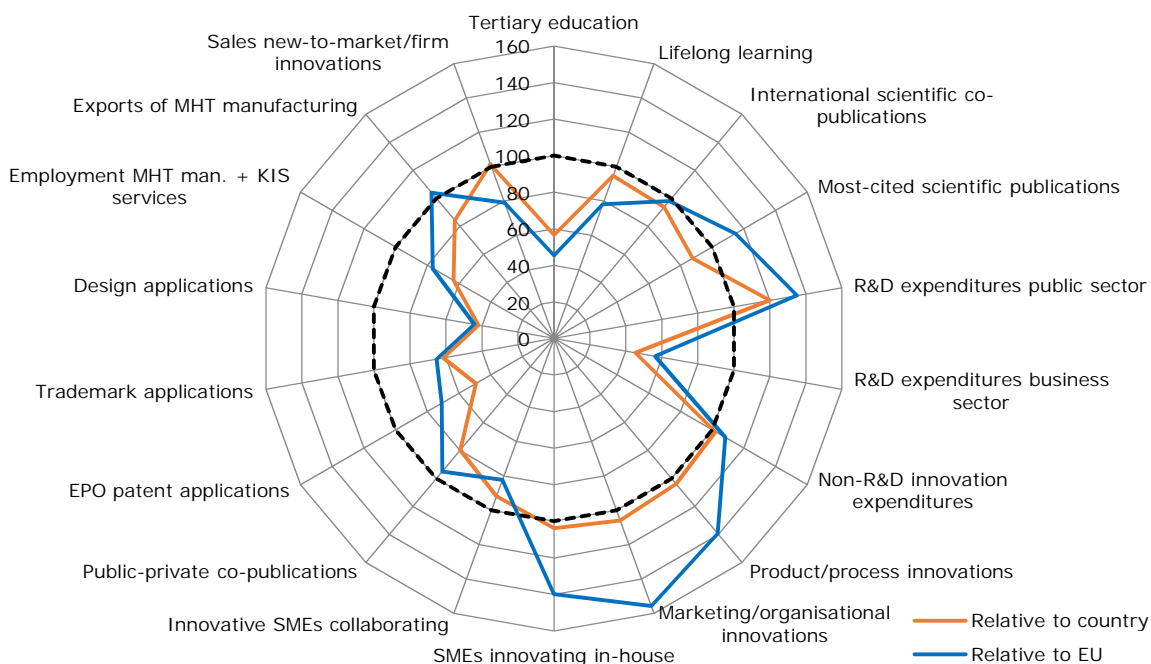
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	21.2	0.250	57	45
Lifelong learning	7.5	0.368	95	78
International scientific co-publications	983	0.409	94	98
Most-cited scientific publications	9.8	0.626	88	115
R&D expenditures public sector	1.35	0.738	120	135
R&D expenditures business sector	0.47	0.257	45	56
Non-R&D innovation expenditures	±	0.325	±	±
Product/process innovations	±	0.621	±	±
Marketing/ org. innovations	±	0.605	±	±
SMEs innovating in-house	±	0.639	±	±
Innovative SMEs collaborating	±	0.295	±	±
Public-private co-publications	89.4	0.282	80	95
EPO patent applications	2.23	0.276	49	71
Trademark applications	2.51	0.256	61	65
Design applications	0.22	0.231	42	44
Employment MHT manuf./KIS services	11.4	0.409	63	77
Exports of MHT manufacturing	55.6	0.658	84	104
Sales new-to-market/firm innovations	±	0.371	±	±
Average score	--	0.423	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.452	--	--
RII 2017 (same year)	--	--	82.2	99.5
RII 2017 (cf. to EU 2011)	--	--	--	102.1
Regional Innovation Index 2011	--	0.445	--	--
RII 2011 (same year)	--	--	79.2	100.7
RII - change between 2011 and 2017	--	1.5	--	--

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

Mecklenburg-Vorpommern is a Strong Innovator, and innovation performance has increased over time.

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	DE80	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.5	1.7	5.1
Manufacturing (C)	11.7	19.6	15.5
Utilities & Construction (D-F)	12.2	8.2	8.5
Services (G-N)	63.6	63.4	63.2
Public administration (O-U)	9.1	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	23000	34500	27600
GDP per capita growth (PPS), 2010-2014	2.92	3.13	2.00
Population density, 2015	69	229	117
Urbanisation, 2015	58.2	79.5	74.1
Population size, 2016 (000s)	1610	82180	510280



Regional Innovation Scoreboard 2017

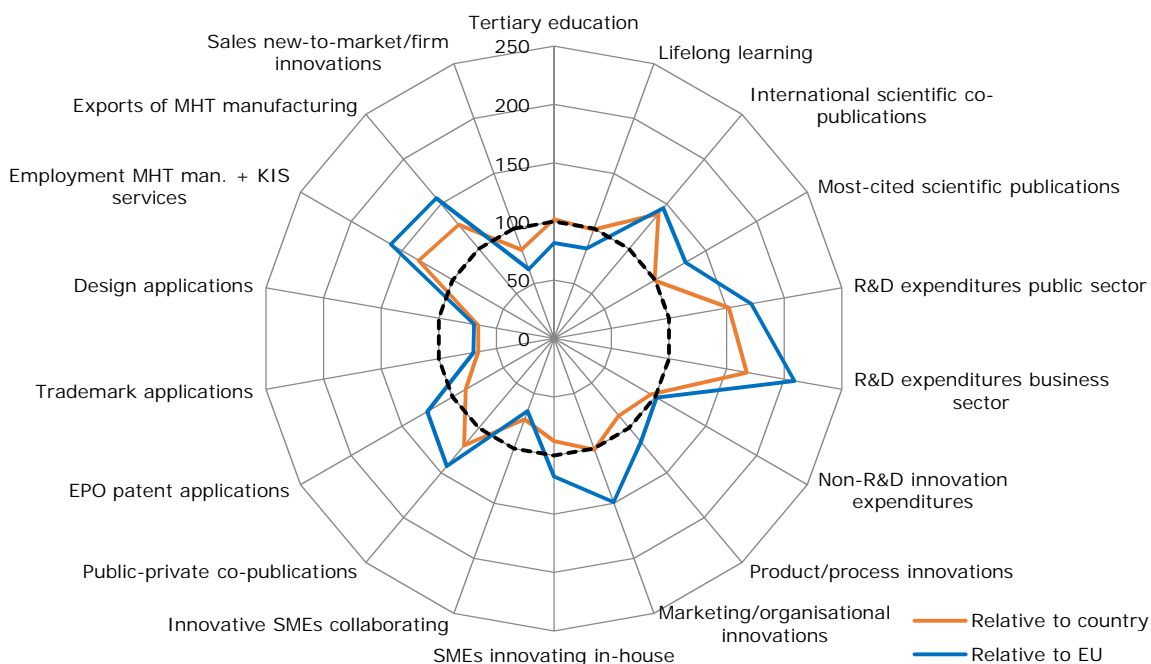
Braunschweig (DE91)

	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	32.8	0.449	102	82
Lifelong learning	8.0	0.385	99	82
International scientific co-publications	2079	0.606	139	145
Most-cited scientific publications	11.7	0.708	99	130
R&D expenditures public sector	2.17	0.935	152	171
R&D expenditures business sector	5.16	0.952	168	209
Non-R&D innovation expenditures	±	0.304	±	±
Product/process innovations	±	0.515	±	±
Marketing/ org. innovations	±	0.578	±	±
SMEs innovating in-house	±	0.540	±	±
Innovative SMEs collaborating	±	0.236	±	±
Public-private co-publications	188.6	0.423	120	142
EPO patent applications	6.73	0.487	87	125
Trademark applications	2.88	0.274	66	70
Design applications	0.54	0.362	66	69
Employment MHT manuf./KIS services	24.0	0.860	133	161
Exports of MHT manufacturing	82.3	0.990	127	156
Sales new-to-market/firm innovations	±	0.296	±	±
Average score	--	0.550	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.588	--	--
RII 2017 (same year)	--	--	106.9	129.4
RII 2017 (cf. to EU 2011)	--	--	--	132.8
Regional Innovation Index 2011	--	0.599	--	--
RII 2011 (same year)	--	--	106.6	135.4
RII - change between 2011 and 2017	--	-2.6	--	--

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

Braunschweig is an Innovation Leader, and innovation performance has decreased over time. The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2017, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. Business R&D expenditures) and weaknesses (e.g. Sales of new innovations). The table below shows data highlighting possible structural differences. For instance, the region is somewhat less urban with higher employment share in manufacturing, and significantly higher than average GDP per capita growth.

	DE91	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.7	5.1
Manufacturing (C)	24.1	19.6	15.5
Utilities & Construction (D-F)	6.3	8.2	8.5
Services (G-N)	61.3	63.4	63.2
Public administration (O-U)	6.6	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	36100	34500	27600
GDP per capita growth (PPS), 2010-2014	4.22	3.13	2.00
Population density, 2015	196	229	117
Urbanisation, 2015	70.6	79.5	74.1
Population size, 2016 (000s)	1600	82180	510280



Regional Innovation Scoreboard 2017

Hannover (DE92)

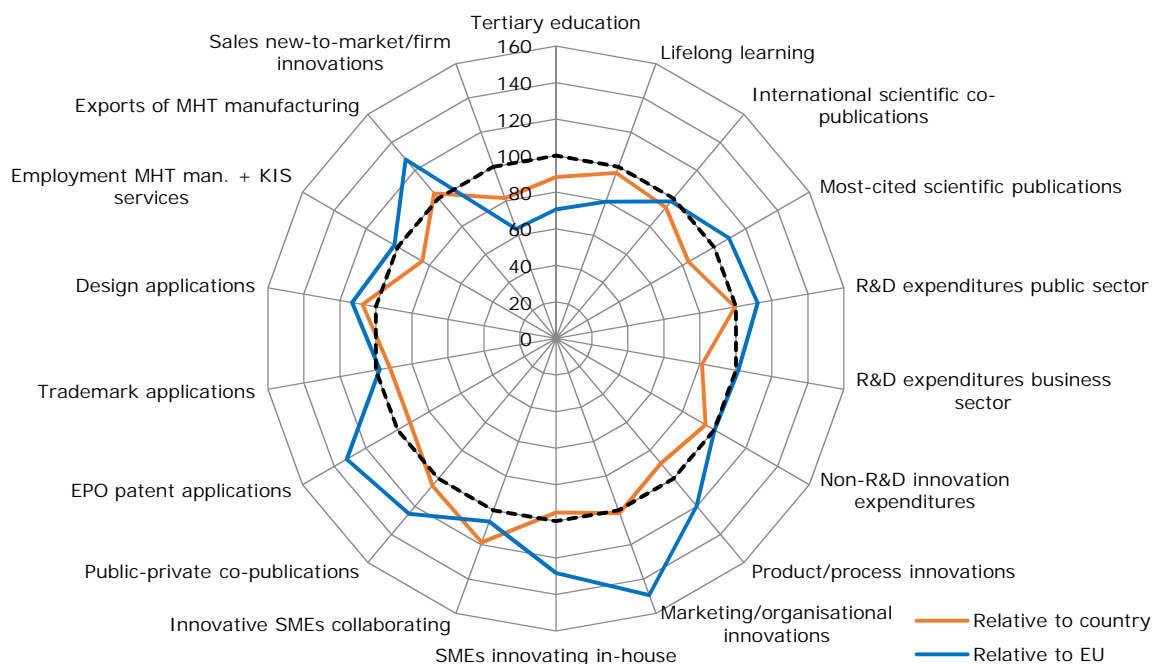
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	29.3	0.389	88	71
Lifelong learning	7.7	0.375	96	80
International scientific co-publications	979	0.408	94	98
Most-cited scientific publications	9.2	0.598	84	110
R&D expenditures public sector	0.93	0.612	99	112
R&D expenditures business sector	1.33	0.462	81	101
Non-R&D innovation expenditures	±	0.301	±	±
Product/process innovations	±	0.533	±	±
Marketing/ org. innovations	±	0.580	±	±
SMEs innovating in-house	±	0.586	±	±
Innovative SMEs collaborating	±	0.382	±	±
Public-private co-publications	148.5	0.372	105	125
EPO patent applications	7.51	0.515	92	132
Trademark applications	5.67	0.385	92	98
Design applications	1.44	0.590	107	113
Employment MHT manuf./KIS services	15.2	0.545	84	102
Exports of MHT manufacturing	67.7	0.809	104	128
Sales new-to-market/firm innovations	±	0.299	±	±
Average score	--	0.486	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.519	--	--
RII 2017 (same year)	--	--	94.4	114.3
RII 2017 (cf. to EU 2011)	--	--	--	117.3
Regional Innovation Index 2011	--	0.529	--	--
RII 2011 (same year)	--	--	94.0	119.5
RII - change between 2011 and 2017	--	-2.2	--	--

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

Hannover is a Strong + Innovator, and innovation performance has decreased over time.

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	DE92	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.6	1.7	5.1
Manufacturing (C)	16.2	19.6	15.5
Utilities & Construction (D-F)	7.2	8.2	8.5
Services (G-N)	66.9	63.4	63.2
Public administration (O-U)	8.1	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	32600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.36	3.13	2.00
Population density, 2015	234	229	117
Urbanisation, 2015	74.0	79.5	74.1
Population size, 2016 (000s)	2130	82180	510280



Regional Innovation Scoreboard 2017

Lüneburg (DE93)

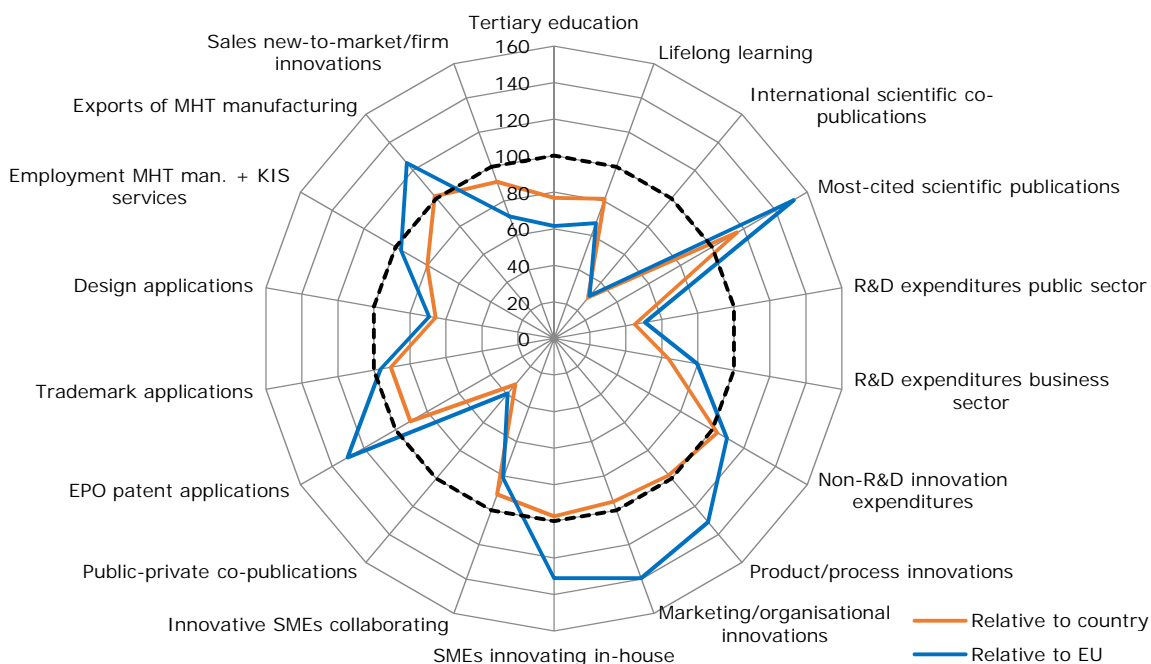
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	26.4	0.339	77	62
Lifelong learning	6.1	0.316	81	67
International scientific co-publications	119	0.127	29	30
Most-cited scientific publications	14.6	0.827	116	152
R&D expenditures public sector	0.19	0.277	45	51
R&D expenditures business sector	0.86	0.363	64	80
Non-R&D innovation expenditures	±	0.328	±	±
Product/process innovations	±	0.584	±	±
Marketing/ org. innovations	±	0.542	±	±
SMEs innovating in-house	±	0.599	±	±
Innovative SMEs collaborating	±	0.292	±	±
Public-private co-publications	19.7	0.117	33	39
EPO patent applications	7.30	0.508	91	130
Trademark applications	5.48	0.379	91	96
Design applications	0.54	0.362	66	69
Employment MHT manuf./KIS services	14.4	0.516	80	97
Exports of MHT manufacturing	66.4	0.793	102	125
Sales new-to-market/firm innovations	±	0.333	±	±
Average score	--	0.422	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.451	--	--
RII 2017 (same year)	--	--	82.1	99.3
RII 2017 (cf. to EU 2011)	--	--	--	101.9
Regional Innovation Index 2011	--	0.449	--	--
RII 2011 (same year)	--	--	79.9	101.5
RII - change between 2011 and 2017	--	0.5	--	--

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

Lüneburg is a Strong - Innovator, and innovation performance has increased slightly over time.

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	DE93	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.7	1.7	5.1
Manufacturing (C)	15.3	19.6	15.5
Utilities & Construction (D-F)	8.4	8.2	8.5
Services (G-N)	63.9	63.4	63.2
Public administration (O-U)	8.7	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	23600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.96	3.13	2.00
Population density, 2015	109	229	117
Urbanisation, 2015	60.6	79.5	74.1
Population size, 2016 (000s)	1700	82180	510280



Regional Innovation Scoreboard 2017

Weser-Ems (DE94)

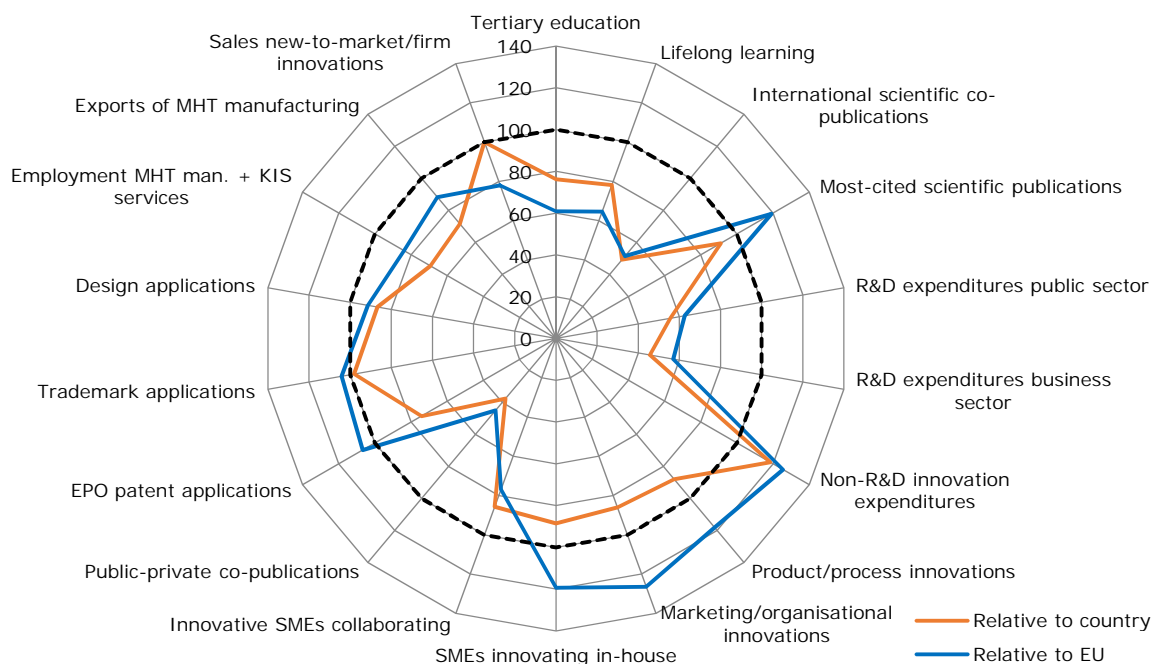
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	26.2	0.336	76	61
Lifelong learning	5.8	0.304	78	65
International scientific co-publications	298	0.215	49	51
Most-cited scientific publications	10.4	0.650	91	119
R&D expenditures public sector	0.29	0.342	56	63
R&D expenditures business sector	0.48	0.260	46	57
Non-R&D innovation expenditures	±	0.377	±	±
Product/process innovations	±	0.526	±	±
Marketing/ org. innovations	±	0.491	±	±
SMEs innovating in-house	±	0.545	±	±
Innovative SMEs collaborating	±	0.276	±	±
Public-private co-publications	24.4	0.133	38	45
EPO patent applications	4.95	0.416	74	107
Trademark applications	6.42	0.410	98	104
Design applications	0.94	0.477	87	91
Employment MHT manuf./KIS services	12.5	0.448	69	84
Exports of MHT manufacturing	47.5	0.559	72	88
Sales new-to-market/firm innovations	±	0.366	±	±
Average score	--	0.396	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.423	--	--
RII 2017 (same year)	--	--	77.0	93.2
RII 2017 (cf. to EU 2011)	--	--	--	95.6
Regional Innovation Index 2011	--	0.440	--	--
RII 2011 (same year)	--	--	78.3	99.5
RII - change between 2011 and 2017	--	-3.8	--	--

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

Weser-Ems is a Strong - Innovator, and innovation performance has decreased over time.

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	DE94	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.6	1.7	5.1
Manufacturing (C)	18.5	19.6	15.5
Utilities & Construction (D-F)	10.0	8.2	8.5
Services (G-N)	60.6	63.4	63.2
Public administration (O-U)	7.2	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	29900	34500	27600
GDP per capita growth (PPS), 2010-2014	2.49	3.13	2.00
Population density, 2015	166	229	117
Urbanisation, 2015	65.8	79.5	74.1
Population size, 2016 (000s)	2500	82180	510280



Regional Innovation Scoreboard 2017

Düsseldorf (DEA1)

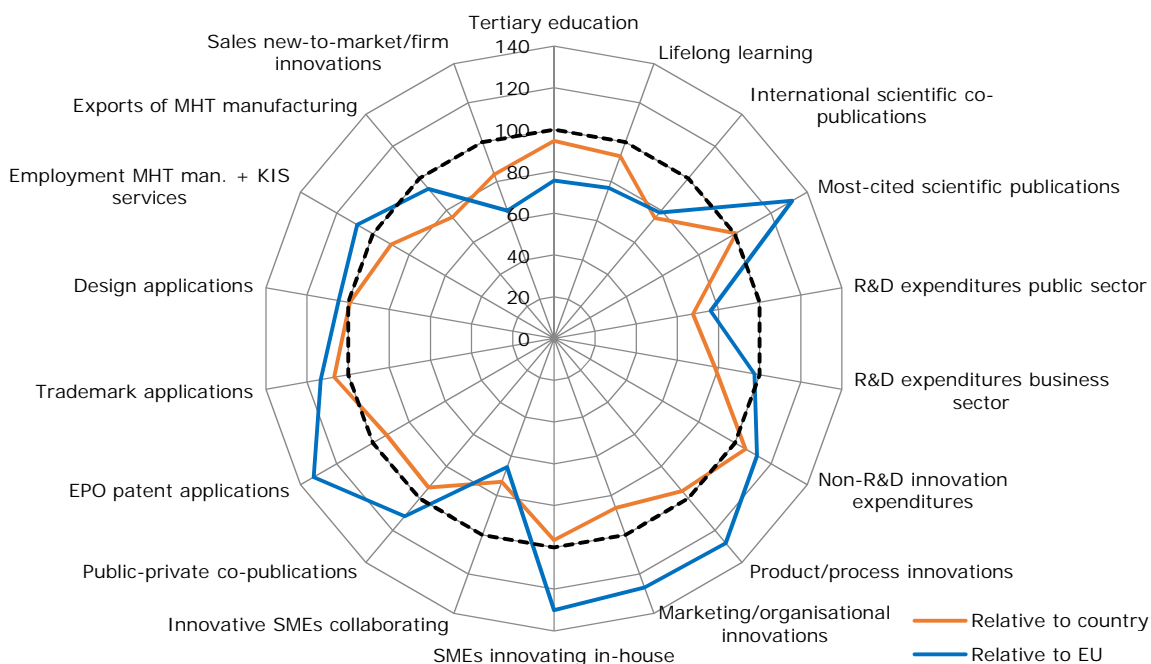
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	30.9	0.417	95	76
Lifelong learning	7.3	0.361	93	77
International scientific co-publications	649	0.328	75	79
Most-cited scientific publications	11.9	0.719	101	132
R&D expenditures public sector	0.43	0.416	68	76
R&D expenditures business sector	1.24	0.444	78	97
Non-R&D innovation expenditures	±	0.337	±	±
Product/process innovations	±	0.570	±	±
Marketing/ org. innovations	±	0.493	±	±
SMEs innovating in-house	±	0.594	±	±
Innovative SMEs collaborating	±	0.235	±	±
Public-private co-publications	119.0	0.330	93	111
EPO patent applications	7.58	0.518	92	133
Trademark applications	7.60	0.446	107	113
Design applications	1.23	0.546	99	105
Employment MHT manuf./KIS services	16.2	0.581	90	109
Exports of MHT manufacturing	50.2	0.591	76	93
Sales new-to-market/firm innovations	±	0.305	±	±
Average score	--	0.457	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.488	--	--
RII 2017 (same year)	--	--	88.9	107.6
RII 2017 (cf. to EU 2011)	--	--	--	110.4
Regional Innovation Index 2011	--	0.521	--	--
RII 2011 (same year)	--	--	92.6	117.7
RII - change between 2011 and 2017	--	-7.3	--	--

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

Düsseldorf is a Strong Innovator, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. EPO patent applications) and weaknesses (e.g. Innovative SMEs collaborating). The table below shows data highlighting possible structural differences. For instance, the region is highly densely populated, with higher employment shares in services, and somewhat higher than average GDP per capita.

	DEA1	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.9	1.7	5.1
Manufacturing (C)	17.3	19.6	15.5
Utilities & Construction (D-F)	8.1	8.2	8.5
Services (G-N)	67.0	63.4	63.2
Public administration (O-U)	6.6	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	37600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.78	3.13	2.00
Population density, 2015	972	229	117
Urbanisation, 2015	97.5	79.5	74.1
Population size, 2016 (000s)	5170	82180	510280



Regional Innovation Scoreboard 2017

Köln (DEA2)

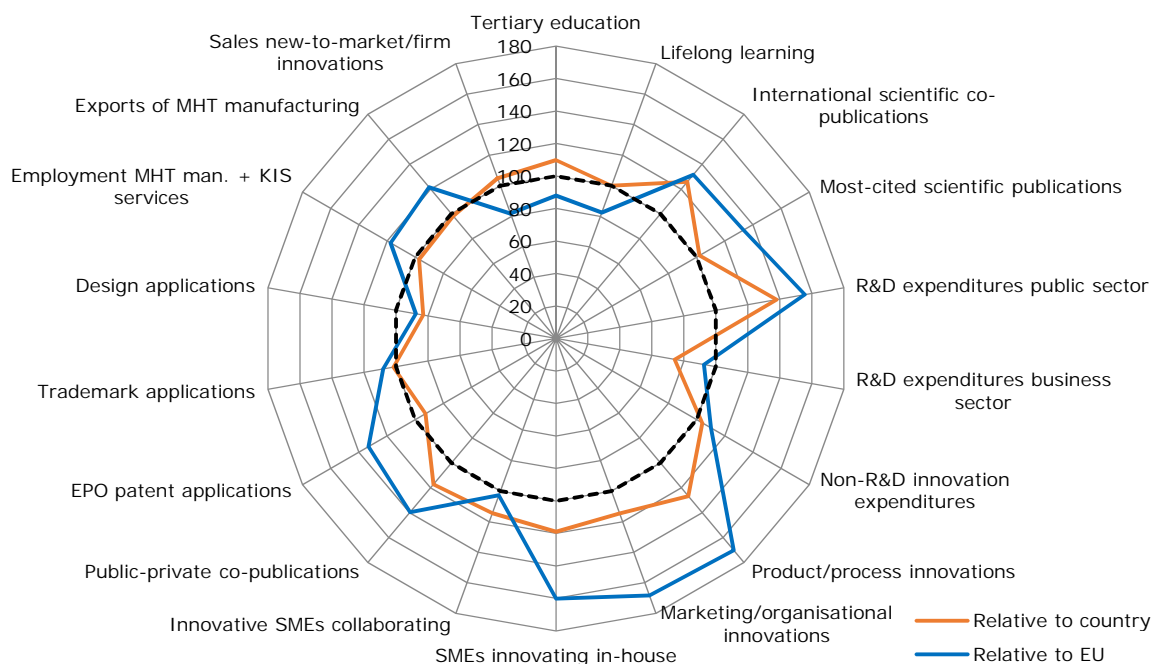
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	34.8	0.484	110	88
Lifelong learning	8.1	0.389	100	83
International scientific co-publications	1717	0.549	126	132
Most-cited scientific publications	12.1	0.728	102	133
R&D expenditures public sector	1.79	0.850	138	156
R&D expenditures business sector	1.13	0.422	74	93
Non-R&D innovation expenditures	±	0.331	±	±
Product/process innovations	±	0.758	±	±
Marketing/ org. innovations	±	0.654	±	±
SMEs innovating in-house	±	0.732	±	±
Innovative SMEs collaborating	±	0.368	±	±
Public-private co-publications	181.8	0.415	117	140
EPO patent applications	7.61	0.519	93	133
Trademark applications	6.88	0.424	102	108
Design applications	0.86	0.456	83	87
Employment MHT manuf./KIS services	17.5	0.627	97	117
Exports of MHT manufacturing	64.4	0.768	98	121
Sales new-to-market/firm innovations	±	0.384	±	±
Average score	--	0.548	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.585	--	--
RII 2017 (same year)	--	--	106.4	128.8
RII 2017 (cf. to EU 2011)	--	--	--	132.2
Regional Innovation Index 2011	--	0.565	--	--
RII 2011 (same year)	--	--	100.4	127.6
RII - change between 2011 and 2017	--	4.6	--	--

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

Köln is an Innovation Leader, and innovation performance has increased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2017, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. Product & process innovations) and weaknesses (e.g. Sales of new innovations). The table below shows data highlighting possible structural differences. For instance, the region is highly densely populated, with higher employment shares in services and public administration, lower shares in manufacturing, and somewhat higher than average GDP per capita.

	DEA2	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	0.9	1.7	5.1
Manufacturing (C)	16.0	19.6	15.5
Utilities & Construction (D-F)	7.3	8.2	8.5
Services (G-N)	67.6	63.4	63.2
Public administration (O-U)	8.2	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	37300	34500	27600
GDP per capita growth (PPS), 2010-2014	2.80	3.13	2.00
Population density, 2015	596	229	117
Urbanisation, 2015	91.5	79.5	74.1
Population size, 2016 (000s)	4420	82180	510280



Regional Innovation Scoreboard 2017

Münster (DEA3)

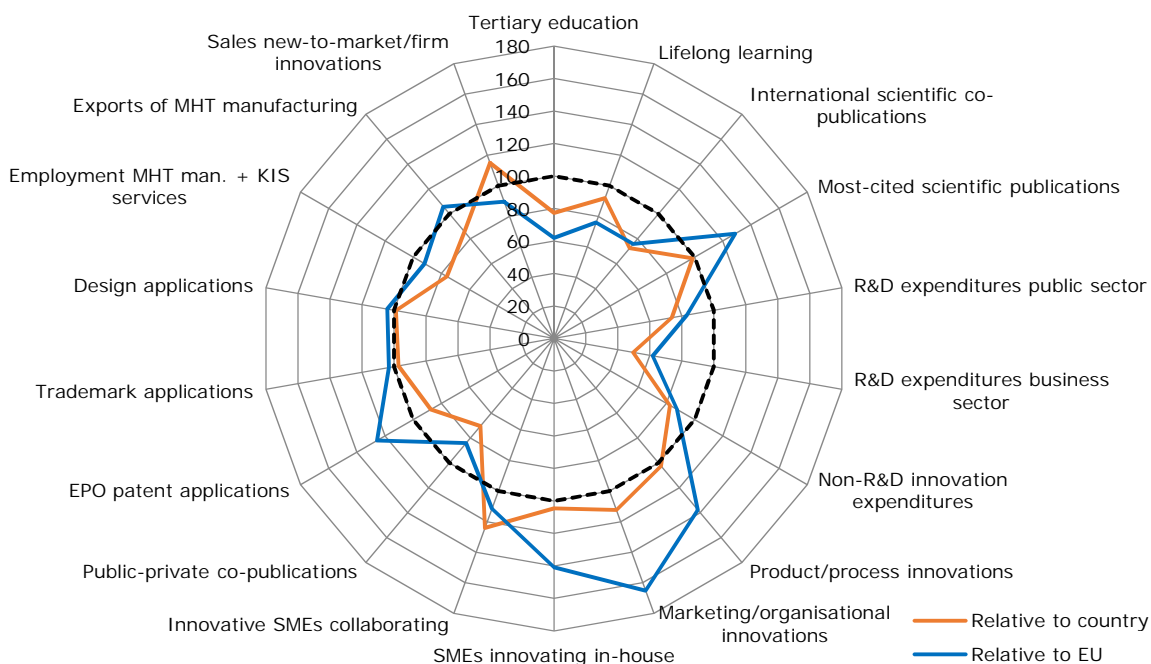
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	26.5	0.341	77	62
Lifelong learning	7.2	0.357	92	76
International scientific co-publications	608	0.317	73	76
Most-cited scientific publications	11.6	0.703	99	129
R&D expenditures public sector	0.51	0.453	74	83
R&D expenditures business sector	0.55	0.281	49	62
Non-R&D innovation expenditures	±	0.263	±	±
Product/process innovations	±	0.614	±	±
Marketing/ org. innovations	±	0.641	±	±
SMEs innovating in-house	±	0.644	±	±
Innovative SMEs collaborating	±	0.399	±	±
Public-private co-publications	71.7	0.249	70	84
EPO patent applications	6.79	0.490	87	126
Trademark applications	6.28	0.405	97	103
Design applications	1.22	0.544	99	104
Employment MHT manuf./KIS services	13.7	0.491	76	92
Exports of MHT manufacturing	56.4	0.669	86	106
Sales new-to-market/firm innovations	±	0.420	±	±
Average score	--	0.460	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.491	--	--
RII 2017 (same year)	--	--	89.4	108.2
RII 2017 (cf. to EU 2011)	--	--	--	111.1
Regional Innovation Index 2011	--	0.497	--	--
RII 2011 (same year)	--	--	88.4	112.3
RII - change between 2011 and 2017	--	-1.2	--	--

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

Münster is a Strong Innovator, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2017, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. Marketing & organisational innovations) and weaknesses (e.g. Tertiary education). The table below shows data highlighting possible structural differences. For instance, the region is densely populated, with higher employment shares in utilities & construction and agriculture, and lower than average GDP per capita.

	DEA3	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.4	1.7	5.1
Manufacturing (C)	18.3	19.6	15.5
Utilities & Construction (D-F)	9.3	8.2	8.5
Services (G-N)	63.1	63.4	63.2
Public administration (O-U)	6.8	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	29600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.90	3.13	2.00
Population density, 2015	376	229	117
Urbanisation, 2015	90.3	79.5	74.1
Population size, 2016 (000s)	2610	82180	510280



Regional Innovation Scoreboard 2017

Detmold (DEA4)

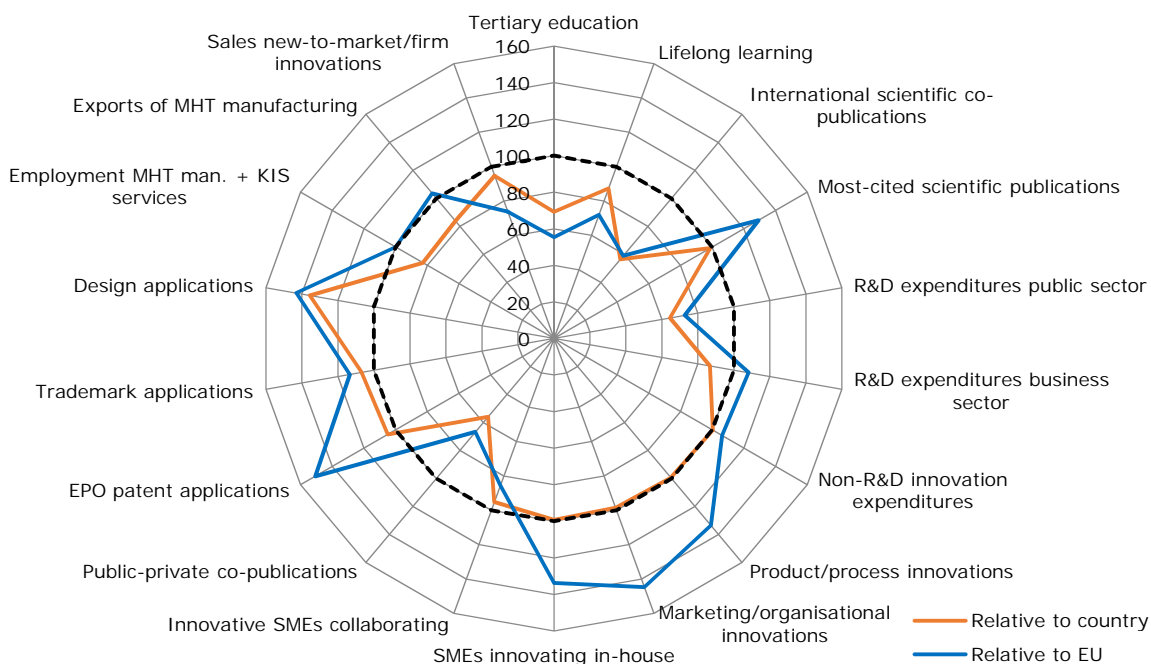
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	24.4	0.305	69	55
Lifelong learning	6.7	0.339	87	72
International scientific co-publications	382	0.246	56	59
Most-cited scientific publications	11.6	0.705	99	129
R&D expenditures public sector	0.39	0.397	64	73
R&D expenditures business sector	1.50	0.493	87	108
Non-R&D innovation expenditures	±	0.319	±	±
Product/process innovations	±	0.595	±	±
Marketing/ org. innovations	±	0.563	±	±
SMEs innovating in-house	±	0.611	±	±
Innovative SMEs collaborating	±	0.306	±	±
Public-private co-publications	47.8	0.198	56	67
EPO patent applications	9.71	0.588	105	151
Trademark applications	7.61	0.446	107	113
Design applications	2.30	0.746	136	143
Employment MHT manuf./KIS services	14.9	0.534	83	100
Exports of MHT manufacturing	55.3	0.655	84	104
Sales new-to-market/firm innovations	±	0.347	±	±
Average score	--	0.466	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.498	--	--
RII 2017 (same year)	--	--	90.6	109.7
RII 2017 (cf. to EU 2011)	--	--	--	112.6
Regional Innovation Index 2011	--	0.517	--	--
RII 2011 (same year)	--	--	92.0	116.9
RII - change between 2011 and 2017	--	-4.4	--	--

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

Detmold is a Strong Innovator, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. EPO patent applications) and weaknesses (e.g. Tertiary education). The table below shows data highlighting possible structural differences. For instance, the region is densely populated, with higher employment shares in manufacturing, lower shares in public administration, and higher than average GDP per capita growth.

	DEA4	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.3	1.7	5.1
Manufacturing (C)	24.5	19.6	15.5
Utilities & Construction (D-F)	8.3	8.2	8.5
Services (G-N)	60.4	63.4	63.2
Public administration (O-U)	5.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	33400	34500	27600
GDP per capita growth (PPS), 2010-2014	4.05	3.13	2.00
Population density, 2015	313	229	117
Urbanisation, 2015	80.6	79.5	74.1
Population size, 2016 (000s)	2060	82180	510280



Regional Innovation Scoreboard 2017

Arnsberg (DEA5)

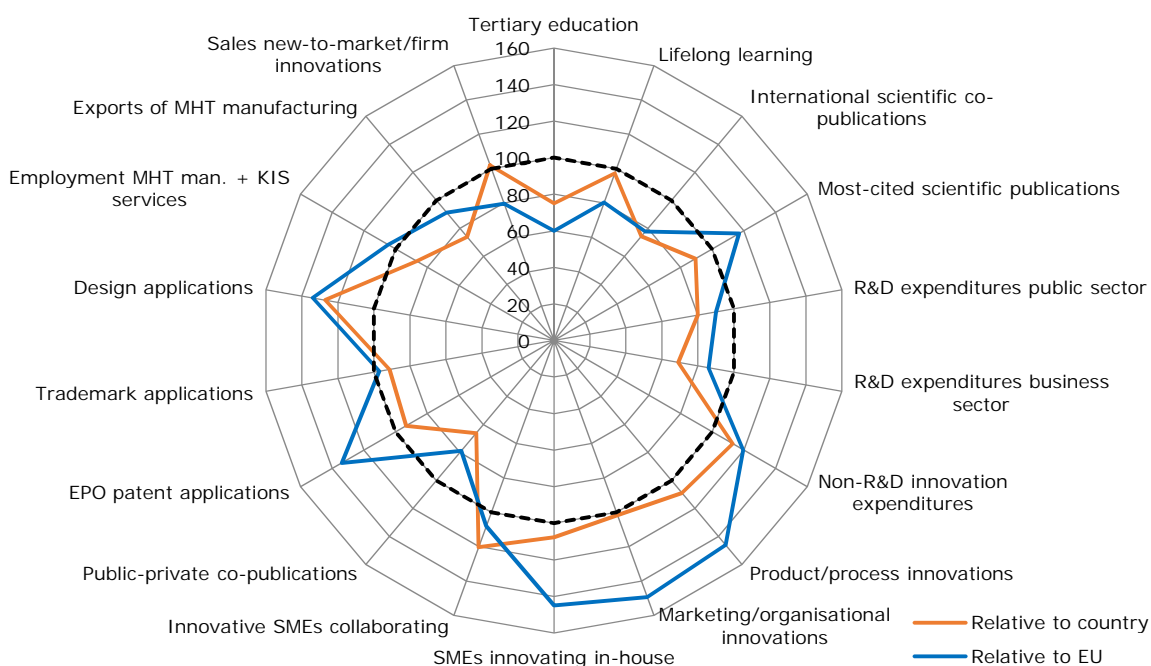
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	25.9	0.330	75	60
Lifelong learning	7.8	0.378	97	80
International scientific co-publications	637	0.325	74	78
Most-cited scientific publications	10.1	0.638	89	117
R&D expenditures public sector	0.60	0.492	80	90
R&D expenditures business sector	0.99	0.392	69	86
Non-R&D innovation expenditures	±	0.359	±	±
Product/process innovations	±	0.651	±	±
Marketing/ org. innovations	±	0.580	±	±
SMEs innovating in-house	±	0.662	±	±
Innovative SMEs collaborating	±	0.387	±	±
Public-private co-publications	64.1	0.234	66	79
EPO patent applications	7.71	0.522	93	134
Trademark applications	5.56	0.381	91	97
Design applications	2.02	0.699	127	134
Employment MHT manuf./KIS services	15.6	0.559	87	105
Exports of MHT manufacturing	49.1	0.577	74	91
Sales new-to-market/firm innovations	±	0.373	±	±
Average score	--	0.475	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.507	--	--
RII 2017 (same year)	--	--	92.2	111.7
RII 2017 (cf. to EU 2011)	--	--	--	114.6
Regional Innovation Index 2011	--	0.522	--	--
RII 2011 (same year)	--	--	92.9	118.1
RII - change between 2011 and 2017	--	-3.5	--	--

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

Arnsberg is a Strong + Innovator, and innovation performance has decreased over time.

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	DEA5	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.0	1.7	5.1
Manufacturing (C)	23.3	19.6	15.5
Utilities & Construction (D-F)	7.6	8.2	8.5
Services (G-N)	61.7	63.4	63.2
Public administration (O-U)	6.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	30800	34500	27600
GDP per capita growth (PPS), 2010-2014	3.16	3.13	2.00
Population density, 2015	447	229	117
Urbanisation, 2015	89.6	79.5	74.1
Population size, 2016 (000s)	3600	82180	510280



Regional Innovation Scoreboard 2017

Koblenz (DEB1)

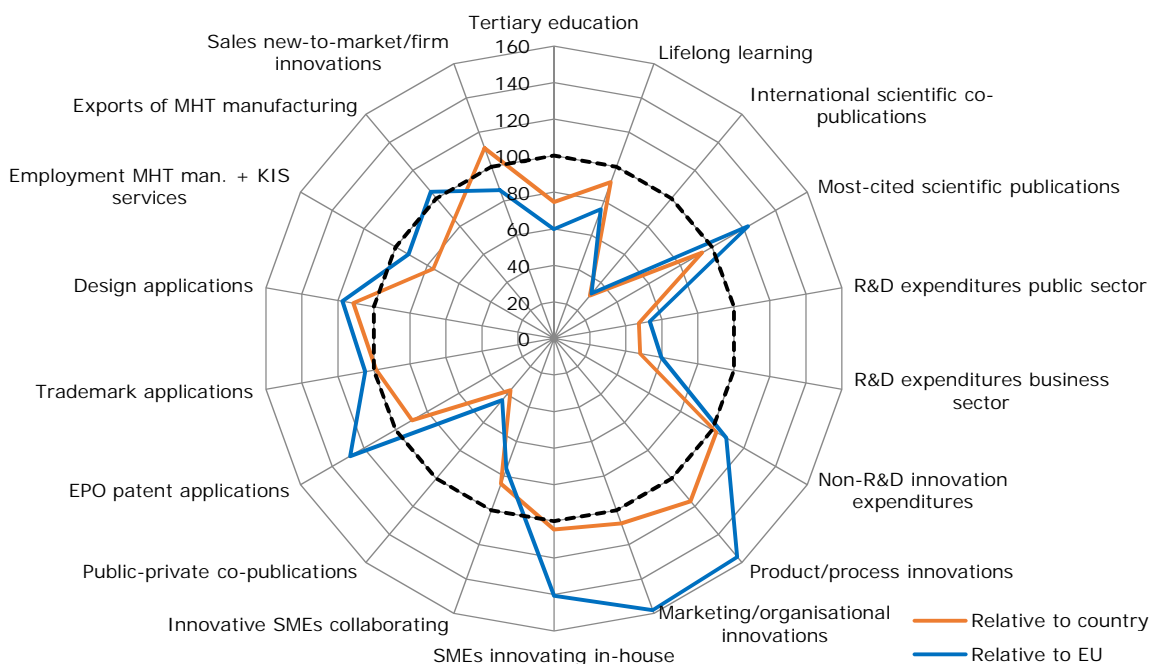
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	25.8	0.329	75	60
Lifelong learning	7.1	0.353	91	75
International scientific co-publications	130	0.133	31	32
Most-cited scientific publications	10.8	0.669	94	123
R&D expenditures public sector	0.21	0.291	47	53
R&D expenditures business sector	0.52	0.272	48	60
Non-R&D innovation expenditures	±	0.327	±	±
Product/process innovations	±	0.695	±	±
Marketing/ org. innovations	±	0.614	±	±
SMEs innovating in-house	±	0.643	±	±
Innovative SMEs collaborating	±	0.272	±	±
Public-private co-publications	23.7	0.131	37	44
EPO patent applications	7.13	0.502	90	129
Trademark applications	6.51	0.413	99	105
Design applications	1.55	0.613	111	117
Employment MHT manuf./KIS services	13.7	0.491	76	92
Exports of MHT manufacturing	55.9	0.663	85	105
Sales new-to-market/firm innovations	±	0.405	±	±
Average score	--	0.434	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.464	--	--
RII 2017 (same year)	--	--	84.4	102.2
RII 2017 (cf. to EU 2011)	--	--	--	104.8
Regional Innovation Index 2011	--	0.455	--	--
RII 2011 (same year)	--	--	80.9	102.8
RII - change between 2011 and 2017	--	2.0	--	--

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

Koblenz is a Strong - Innovator, and innovation performance has increased over time.

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	DEB1	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.4	1.7	5.1
Manufacturing (C)	18.9	19.6	15.5
Utilities & Construction (D-F)	8.6	8.2	8.5
Services (G-N)	61.1	63.4	63.2
Public administration (O-U)	10.0	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	29200	34500	27600
GDP per capita growth (PPS), 2010-2014	3.14	3.13	2.00
Population density, 2015	184	229	117
Urbanisation, 2015	60.9	79.5	74.1
Population size, 2016 (000s)	1490	82180	510280



Regional Innovation Scoreboard 2017

Trier (DEB2)

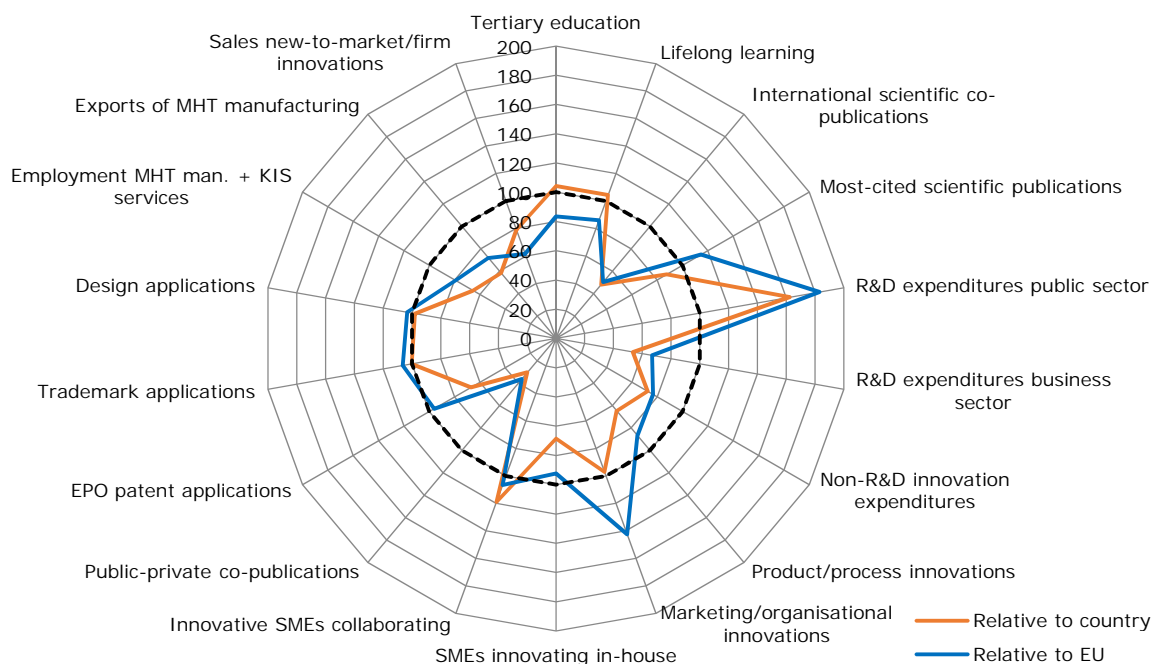
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	33.4	0.460	104	83
Lifelong learning	8.6	0.405	104	86
International scientific co-publications	285	0.210	48	50
Most-cited scientific publications	9.8	0.625	88	115
R&D expenditures public sector	2.48	1.000	162	183
R&D expenditures business sector	0.63	0.304	54	67
Non-R&D innovation expenditures	±	0.230	±	±
Product/process innovations	±	0.386	±	±
Marketing/ org. innovations	±	0.554	±	±
SMEs innovating in-house	±	0.421	±	±
Innovative SMEs collaborating	±	0.382	±	±
Public-private co-publications	17.2	0.107	30	36
EPO patent applications	4.04	0.375	67	96
Trademark applications	6.70	0.419	100	106
Design applications	1.20	0.539	98	103
Employment MHT manuf./KIS services	11.8	0.423	66	79
Exports of MHT manufacturing	39.2	0.455	58	72
Sales new-to-market/firm innovations	±	0.289	±	±
Average score	--	0.421	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.450	--	--
RII 2017 (same year)	--	--	81.9	99.1
RII 2017 (cf. to EU 2011)	--	--	--	101.7
Regional Innovation Index 2011	--	0.455	--	--
RII 2011 (same year)	--	--	81.0	102.9
RII - change between 2011 and 2017	--	-1.2	--	--

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

Trier is a Strong - Innovator, and innovation performance has decreased over time.

The table on the left shows the normalised scores per indicator and relative results compared to the country and the EU. The table also shows the RII in 2017 compared to that of the country and the EU in 2011, the RII in 2017 compared to that of the EU in 2011, and performance change over time. The radar graph shows relative strengths compared to Germany (red line) and the EU (blue line), highlighting relative strengths (e.g. Public sector R&D expenditures) and weaknesses (e.g. Public-private co-publications). The table below shows data highlighting possible structural differences. For instance, the region is less densely populated, with higher employment shares in utilities & construction and agriculture, and a much lower than average GDP per capita.

	DEB2	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	3.5	1.7	5.1
Manufacturing (C)	16.2	19.6	15.5
Utilities & Construction (D-F)	10.0	8.2	8.5
Services (G-N)	63.7	63.4	63.2
Public administration (O-U)	6.6	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	26800	34500	27600
GDP per capita growth (PPS), 2010-2014	3.67	3.13	2.00
Population density, 2015	107	229	117
Urbanisation, 2015	44.1	79.5	74.1
Population size, 2016 (000s)	530	82180	510280



Regional Innovation Scoreboard 2017

Rheinhausen-Pfalz (DEB3)

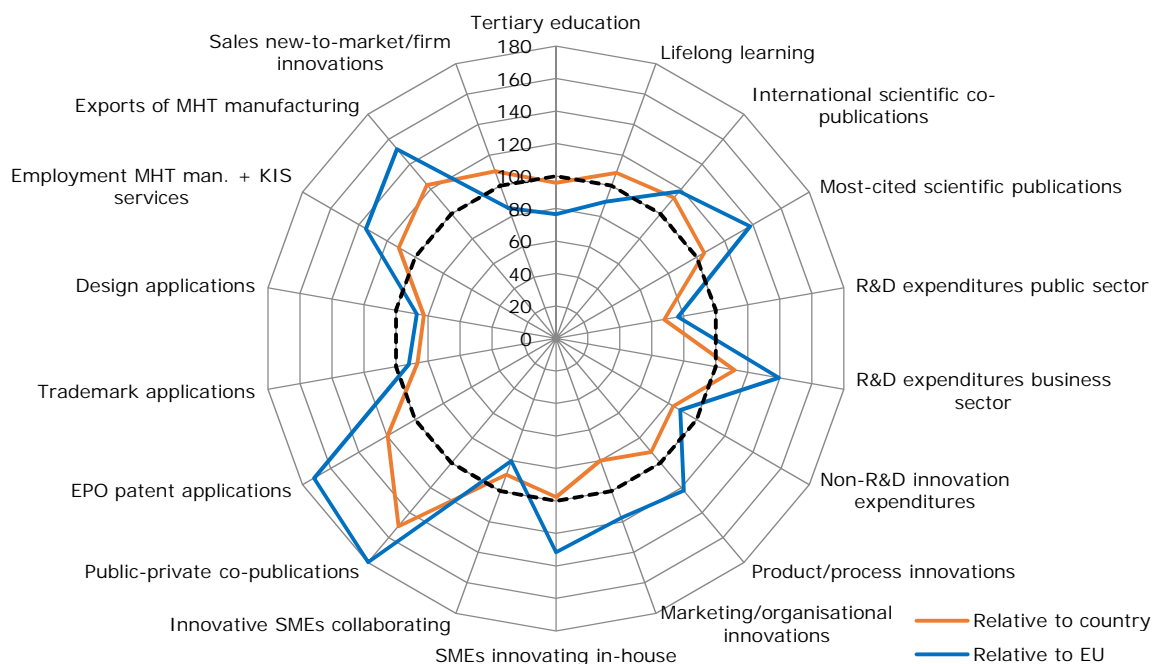
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	31.2	0.422	96	77
Lifelong learning	9.1	0.422	108	90
International scientific co-publications	1396	0.492	113	118
Most-cited scientific publications	12.7	0.753	105	138
R&D expenditures public sector	0.43	0.416	68	76
R&D expenditures business sector	2.40	0.635	112	139
Non-R&D innovation expenditures	±	0.265	±	±
Product/process innovations	±	0.545	±	±
Marketing/ org. innovations	±	0.457	±	±
SMEs innovating in-house	±	0.601	±	±
Innovative SMEs collaborating	±	0.287	±	±
Public-private co-publications	292.2	0.534	151	180
EPO patent applications	12.57	0.670	120	172
Trademark applications	4.99	0.361	86	92
Design applications	0.85	0.454	82	87
Employment MHT manuf./KIS services	20.1	0.720	112	135
Exports of MHT manufacturing	80.0	0.962	123	152
Sales new-to-market/firm innovations	±	0.400	±	±
Average score	--	0.522	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.558	--	--
RII 2017 (same year)	--	--	101.5	122.8
RII 2017 (cf. to EU 2011)	--	--	--	126.0
Regional Innovation Index 2011	--	0.584	--	--
RII 2011 (same year)	--	--	103.9	132.1
RII - change between 2011 and 2017	--	-6.0	--	--

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

Rheinhausen-Pfalz is an Innovation Leader -, and innovation performance has decreased over time.

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	DEB3	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.7	5.1
Manufacturing (C)	20.5	19.6	15.5
Utilities & Construction (D-F)	7.8	8.2	8.5
Services (G-N)	61.8	63.4	63.2
Public administration (O-U)	8.0	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	32600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.79	3.13	2.00
Population density, 2015	295	229	117
Urbanisation, 2015	80.4	79.5	74.1
Population size, 2016 (000s)	2030	82180	510280



Regional Innovation Scoreboard 2017

Saarland (DECO)

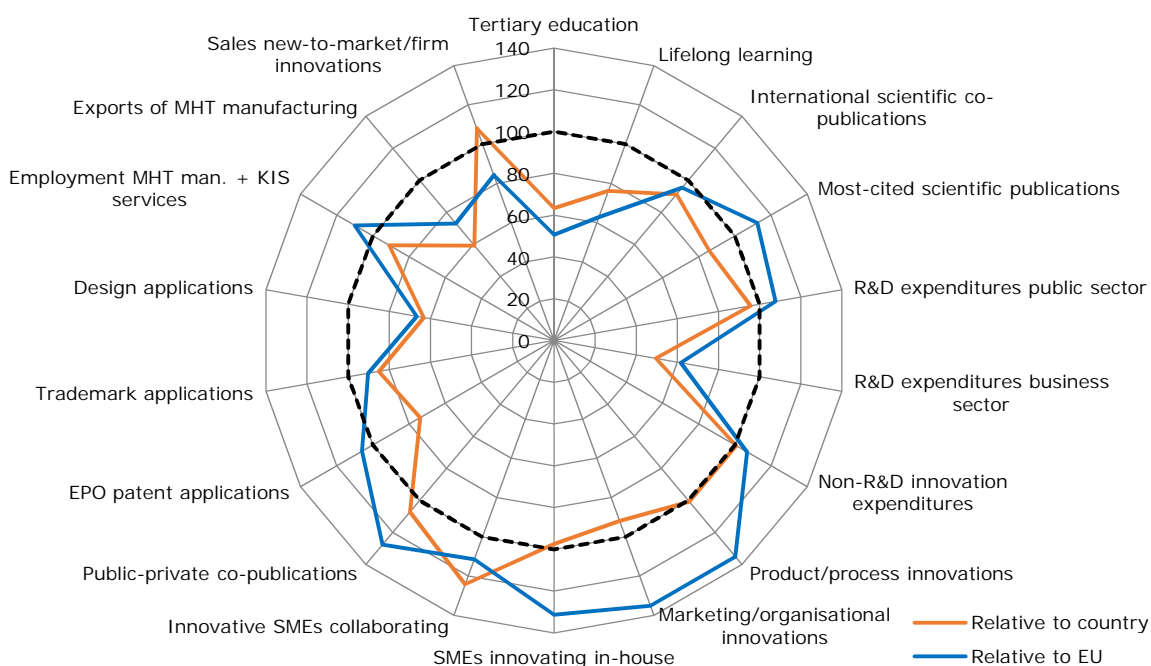
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	22.9	0.279	63	51
Lifelong learning	5.6	0.296	76	63
International scientific co-publications	934	0.398	91	96
Most-cited scientific publications	9.6	0.613	86	112
R&D expenditures public sector	0.86	0.589	96	108
R&D expenditures business sector	0.55	0.281	49	62
Non-R&D innovation expenditures	±	0.321	±	±
Product/process innovations	±	0.602	±	±
Marketing/ org. innovations	±	0.525	±	±
SMEs innovating in-house	±	0.600	±	±
Innovative SMEs collaborating	±	0.399	±	±
Public-private co-publications	153.7	0.379	107	128
EPO patent applications	4.89	0.414	74	106
Trademark applications	4.83	0.355	85	90
Design applications	0.50	0.348	63	67
Employment MHT manuf./KIS services	16.4	0.588	91	110
Exports of MHT manufacturing	39.8	0.463	59	73
Sales new-to-market/firm innovations	±	0.395	±	±
Average score	--	0.436	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.466	--	--
RII 2017 (same year)	--	--	84.7	102.5
RII 2017 (cf. to EU 2011)	--	--	--	105.2
Regional Innovation Index 2011	--	0.495	--	--
RII 2011 (same year)	--	--	88.0	111.9
RII - change between 2011 and 2017	--	-6.7	--	--

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

Saarland is a Strong - Innovator, and innovation performance has decreased over time.

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	DECO	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.4	1.7	5.1
Manufacturing (C)	20.1	19.6	15.5
Utilities & Construction (D-F)	8.0	8.2	8.5
Services (G-N)	62.4	63.4	63.2
Public administration (O-U)	8.1	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	32500	34500	27600
GDP per capita growth (PPS), 2010-2014	3.16	3.13	2.00
Population density, 2015	386	229	117
Urbanisation, 2015	84.4	79.5	74.1
Population size, 2016 (000s)	1000	82180	510280



Regional Innovation Scoreboard 2017

Dresden (DED2)

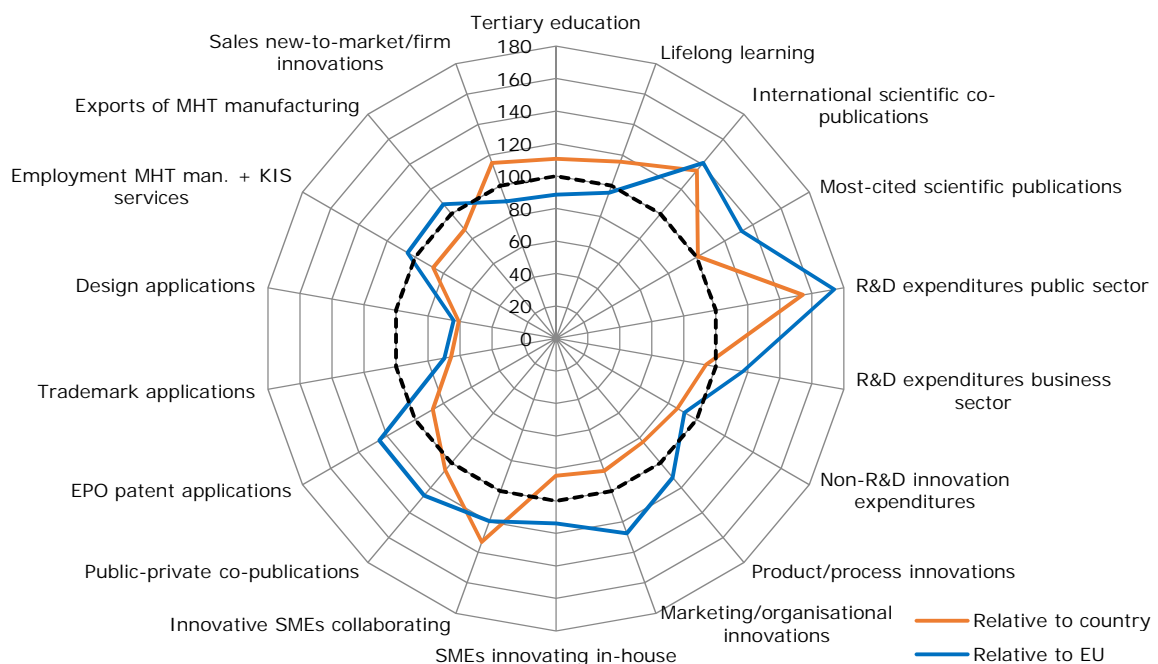
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	35.0	0.487	111	88
Lifelong learning	10.0	0.450	116	96
International scientific co-publications	1963	0.588	135	141
Most-cited scientific publications	12.0	0.720	101	132
R&D expenditures public sector	2.24	0.950	154	174
R&D expenditures business sector	1.73	0.533	94	117
Non-R&D innovation expenditures	±	0.275	±	±
Product/process innovations	±	0.498	±	±
Marketing/ org. innovations	±	0.496	±	±
SMEs innovating in-house	±	0.520	±	±
Innovative SMEs collaborating	±	0.428	±	±
Public-private co-publications	150.7	0.375	106	126
EPO patent applications	6.78	0.489	87	126
Trademark applications	2.87	0.274	66	70
Design applications	0.46	0.334	61	64
Employment MHT manuf./KIS services	15.7	0.563	87	105
Exports of MHT manufacturing	57.5	0.682	87	108
Sales new-to-market/firm innovations	±	0.421	±	±
Average score	--	0.505	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.539	--	--
RII 2017 (same year)	--	--	98.1	118.7
RII 2017 (cf. to EU 2011)	--	--	--	121.8
Regional Innovation Index 2011	--	0.565	--	--
RII 2011 (same year)	--	--	100.6	127.8
RII - change between 2011 and 2017	--	-6.0	--	--

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Dresden is a Strong + Innovator, and innovation performance has decreased over time.

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	DED2	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.0	1.7	5.1
Manufacturing (C)	18.3	19.6	15.5
Utilities & Construction (D-F)	10.6	8.2	8.5
Services (G-N)	61.6	63.4	63.2
Public administration (O-U)	7.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	25900	34500	27600
GDP per capita growth (PPS), 2010-2014	3.70	3.13	2.00
Population density, 2015	202	229	117
Urbanisation, 2015	78.4	79.5	74.1
Population size, 2016 (000s)	1600	82180	510280



Regional Innovation Scoreboard 2017

Chemnitz (DED4)

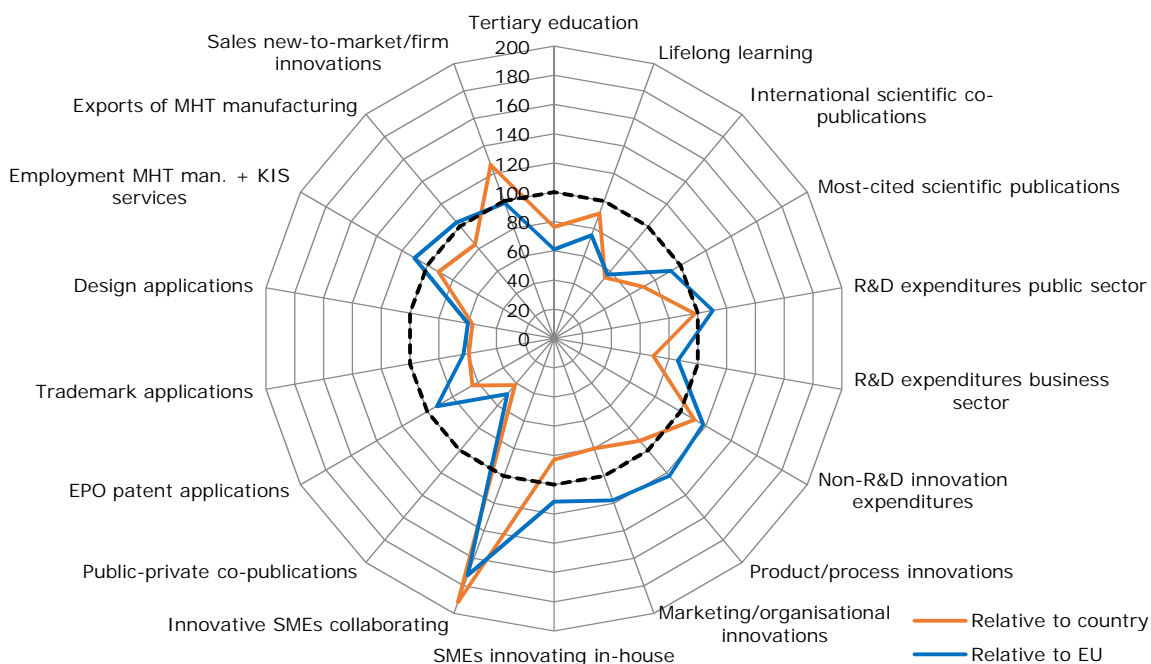
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	26.2	0.336	76	61
Lifelong learning	7.1	0.353	91	75
International scientific co-publications	358	0.238	54	57
Most-cited scientific publications	7.4	0.503	71	92
R&D expenditures public sector	0.90	0.602	98	110
R&D expenditures business sector	0.99	0.392	69	86
Non-R&D innovation expenditures	±	0.354	±	±
Product/process innovations	±	0.547	±	±
Marketing/ org. innovations	±	0.458	±	±
SMEs innovating in-house	±	0.510	±	±
Innovative SMEs collaborating	±	0.617	±	±
Public-private co-publications	28.7	0.147	42	50
EPO patent applications	3.74	0.361	64	93
Trademark applications	2.33	0.247	59	63
Design applications	0.40	0.311	57	60
Employment MHT manuf./KIS services	16.4	0.588	91	110
Exports of MHT manufacturing	55.3	0.655	84	104
Sales new-to-market/firm innovations	±	0.462	±	±
Average score	--	0.427	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.456	--	--
RII 2017 (same year)	--	--	82.9	100.4
RII 2017 (cf. to EU 2011)	--	--	--	103.0
Regional Innovation Index 2011	--	0.468	--	--
RII 2011 (same year)	--	--	83.2	105.7
RII - change between 2011 and 2017	--	-2.7	--	--

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Chemnitz is a Strong - Innovator, and innovation performance has decreased over time.

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	DED4	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.7	1.7	5.1
Manufacturing (C)	23.2	19.6	15.5
Utilities & Construction (D-F)	11.8	8.2	8.5
Services (G-N)	56.7	63.4	63.2
Public administration (O-U)	6.6	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	23900	34500	27600
GDP per capita growth (PPS), 2010-2014	3.41	3.13	2.00
Population density, 2015	225	229	117
Urbanisation, 2015	77.8	79.5	74.1
Population size, 2016 (000s)	1470	82180	510280



Regional Innovation Scoreboard 2017

Leipzig (DED5)

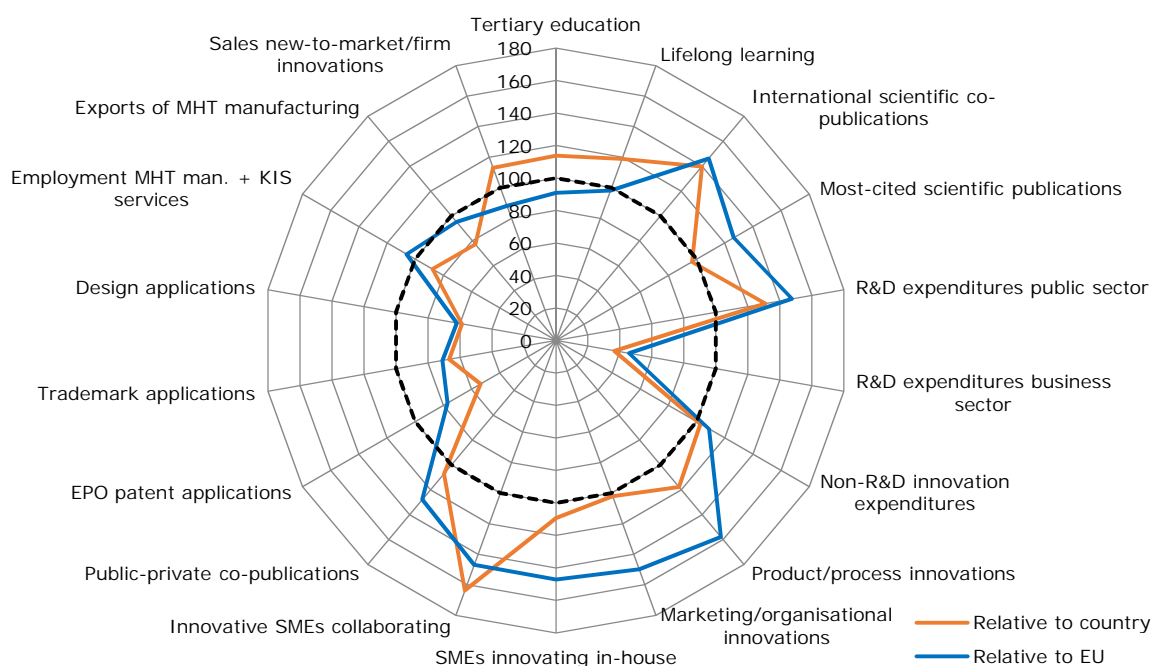
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	35.8	0.501	114	91
Lifelong learning	10.4	0.462	119	98
International scientific co-publications	2103	0.610	140	146
Most-cited scientific publications	11.3	0.690	97	126
R&D expenditures public sector	1.61	0.806	131	148
R&D expenditures business sector	0.33	0.208	37	46
Non-R&D innovation expenditures	±	0.327	±	±
Product/process innovations	±	0.704	±	±
Marketing/ org. innovations	±	0.582	±	±
SMEs innovating in-house	±	0.672	±	±
Innovative SMEs collaborating	±	0.526	±	±
Public-private co-publications	154.1	0.379	107	128
EPO patent applications	2.62	0.300	54	77
Trademark applications	2.97	0.279	67	71
Design applications	0.43	0.323	59	62
Employment MHT manuf./KIS services	15.8	0.566	88	106
Exports of MHT manufacturing	51.1	0.602	77	95
Sales new-to-market/firm innovations	±	0.413	±	±
Average score	--	0.497	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.531	--	--
RII 2017 (same year)	--	--	96.6	117.0
RII 2017 (cf. to EU 2011)	--	--	--	120.1
Regional Innovation Index 2011	--	0.512	--	--
RII 2011 (same year)	--	--	91.0	115.6
RII - change between 2011 and 2017	--	4.4	--	--

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Leipzig is a Strong + Innovator, and innovation performance has increased over time.

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	DED5	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.7	5.1
Manufacturing (C)	12.9	19.6	15.5
Utilities & Construction (D-F)	10.8	8.2	8.5
Services (G-N)	67.3	63.4	63.2
Public administration (O-U)	7.2	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	28200	34500	27600
GDP per capita growth (PPS), 2010-2014	4.44	3.13	2.00
Population density, 2015	254	229	117
Urbanisation, 2015	86.9	79.5	74.1
Population size, 2016 (000s)	1020	82180	510280



Regional Innovation Scoreboard 2017

Sachsen-Anhalt (DEEO)

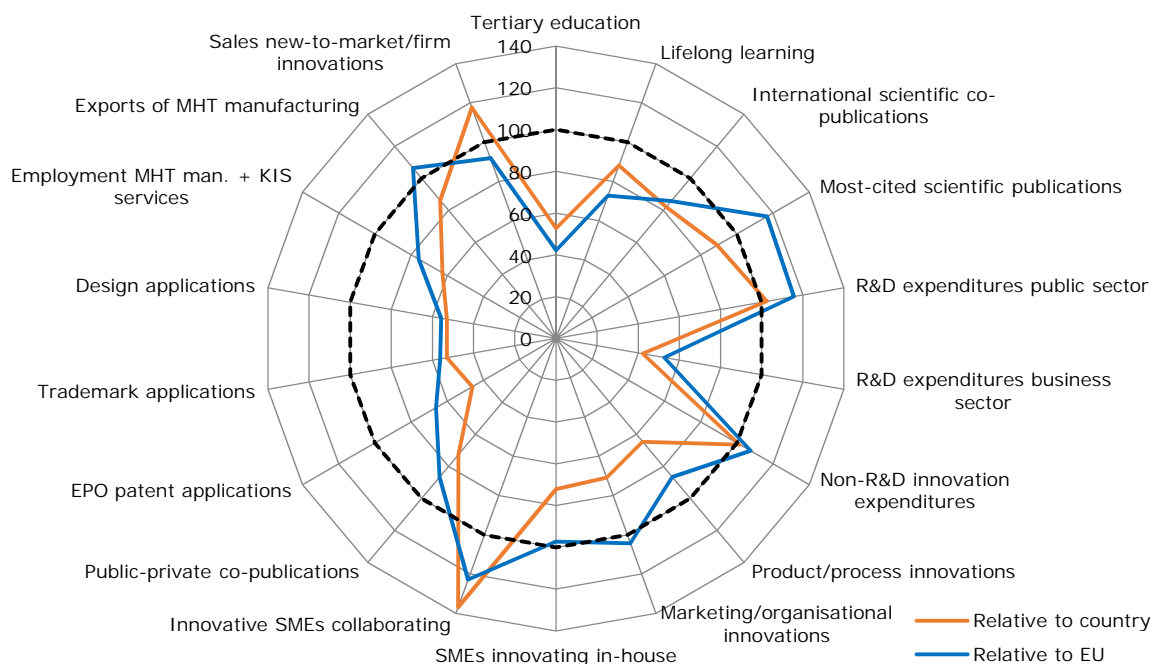
	Data	Norm alised score	Relative to	
			DE	EU
Tertiary education	20.2	0.232	53	42
Lifelong learning	6.8	0.342	88	73
International scientific co-publications	764	0.358	82	86
Most-cited scientific publications	10.1	0.637	89	117
R&D expenditures public sector	0.99	0.632	103	116
R&D expenditures business sector	0.42	0.240	42	53
Non-R&D innovation expenditures	±	0.323	±	±
Product/process innovations	±	0.386	±	±
Marketing/ org. innovations	±	0.405	±	±
SMEs innovating in-house	±	0.444	±	±
Innovative SMEs collaborating	±	0.441	±	±
Public-private co-publications	75.6	0.257	73	87
EPO patent applications	1.97	0.258	46	66
Trademark applications	1.87	0.221	53	56
Design applications	0.35	0.291	53	56
Employment MHT manuf./KIS services	11.3	0.405	63	76
Exports of MHT manufacturing	56.8	0.673	86	106
Sales new-to-market/firm innovations	±	0.430	±	±
Average score	--	0.388	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.414	--	--
RII 2017 (same year)	--	--	75.3	91.2
RII 2017 (cf. to EU 2011)	--	--	--	93.6
Regional Innovation Index 2011	--	0.452	--	--
RII 2011 (same year)	--	--	80.4	102.1
RII - change between 2011 and 2017	--	-8.6	--	--

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Sachsen-Anhalt is a Strong - Innovator, and innovation performance has decreased over time.

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	DEEO	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.5	1.7	5.1
Manufacturing (C)	15.5	19.6	15.5
Utilities & Construction (D-F)	12.3	8.2	8.5
Services (G-N)	61.2	63.4	63.2
Public administration (O-U)	8.5	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	23600	34500	27600
GDP per capita growth (PPS), 2010-2014	2.84	3.13	2.00
Population density, 2015	110	229	117
Urbanisation, 2015	62.9	79.5	74.1
Population size, 2016 (000s)	2250	82180	510280



Schleswig-Holstein (DEFO)

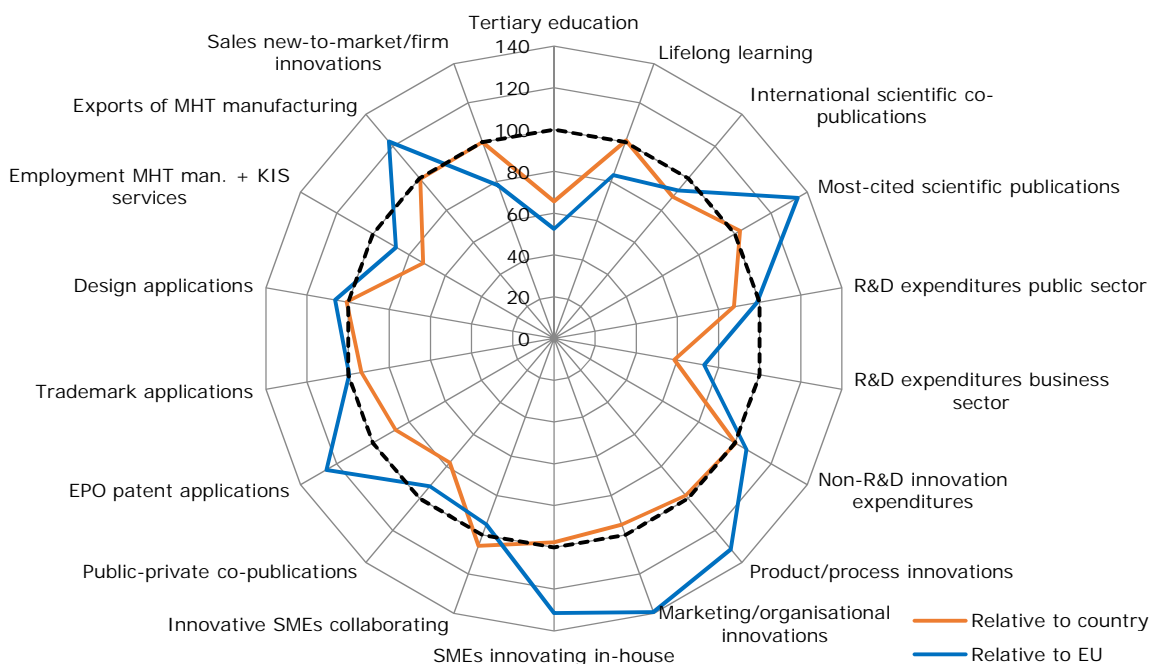
	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	23.5	0.289	66	53
Lifelong learning	8.2	0.392	101	83
International scientific co-publications	880	0.386	88	93
Most-cited scientific publications	12.3	0.735	103	135
R&D expenditures public sector	0.72	0.539	88	99
R&D expenditures business sector	0.74	0.333	59	73
Non-R&D innovation expenditures	±	0.319	±	±
Product/process innovations	±	0.587	±	±
Marketing/ org. innovations	±	0.541	±	±
SMEs innovating in-house	±	0.600	±	±
Innovative SMEs collaborating	±	0.340	±	±
Public-private co-publications	85.1	0.274	78	92
EPO patent applications	6.80	0.490	87	126
Trademark applications	5.85	0.391	94	99
Design applications	1.27	0.555	101	106
Employment MHT manuf./KIS services	13.0	0.466	72	87
Exports of MHT manufacturing	65.2	0.778	100	123
Sales new-to-market/firm innovations	±	0.366	±	±
Average score	--	0.466	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.497	--	--
RII 2017 (same year)	--	--	90.5	109.5
RII 2017 (cf. to EU 2011)	--	--	--	112.4
Regional Innovation Index 2011	--	0.497	--	--
RII 2011 (same year)	--	--	88.4	112.4
RII - change between 2011 and 2017	--	0.0	--	--

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

Schleswig-Holstein is a Strong Innovator, and innovation performance has remained stable over time.

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	DEFO	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.4	1.7	5.1
Manufacturing (C)	12.8	19.6	15.5
Utilities & Construction (D-F)	8.7	8.2	8.5
Services (G-N)	67.1	63.4	63.2
Public administration (O-U)	9.0	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	28100	34500	27600
GDP per capita growth (PPS), 2010-2014	2.86	3.13	2.00
Population density, 2015	180	229	117
Urbanisation, 2015	74.3	79.5	74.1
Population size, 2016 (000s)	2860	82180	510280



Thüringen (DEGO)

	Data	Normalised score	Relative to	
			DE	EU
Tertiary education	22.5	0.272	62	49
Lifelong learning	8.1	0.389	100	83
International scientific co-publications	955	0.403	92	97
Most-cited scientific publications	11.5	0.699	98	128
R&D expenditures public sector	1.15	0.681	111	125
R&D expenditures business sector	1.04	0.403	71	88
Non-R&D innovation expenditures	±	0.309	±	±
Product/process innovations	±	0.579	±	±
Marketing/ org. innovations	±	0.540	±	±
SMEs innovating in-house	±	0.596	±	±
Innovative SMEs collaborating	±	0.338	±	±
Public-private co-publications	81.6	0.268	76	90
EPO patent applications	5.55	0.441	79	113
Trademark applications	3.00	0.280	67	71
Design applications	0.54	0.362	66	69
Employment MHT manuf./KIS services	14.6	0.523	81	98
Exports of MHT manufacturing	65.1	0.777	99	123
Sales new-to-market/firm innovations	±	0.357	±	±
Average score	--	0.457	--	--
Country EIS-RIS correction factor	--	1.068	--	--
Regional Innovation Index 2017	--	0.488	--	--
RII 2017 (same year)	--	--	88.7	107.4
RII 2017 (cf. to EU 2011)	--	--	--	110.2
Regional Innovation Index 2011	--	0.520	--	--
RII 2011 (same year)	--	--	92.5	117.5
RII - change between 2011 and 2017	--	-7.3	--	--

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

Thüringen is a Strong Innovator, and innovation performance has decreased over time.

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	DEGO	DE	EU28
Share of employment in:			
Agriculture & Mining (A-B)	2.4	1.7	5.1
Manufacturing (C)	21.1	19.6	15.5
Utilities & Construction (D-F)	11.3	8.2	8.5
Services (G-N)	57.8	63.4	63.2
Public administration (O-U)	7.4	7.1	7.1
Average employed persons per enterprise (firm size), 2013-2014	9.0	9.0	5.4
GDP per capita (PPS), 2014	24400	34500	27600
GDP per capita growth (PPS), 2010-2014	4.07	3.13	2.00
Population density, 2015	134	229	117
Urbanisation, 2015	63.7	79.5	74.1
Population size, 2016 (000s)	2170	82180	510280

