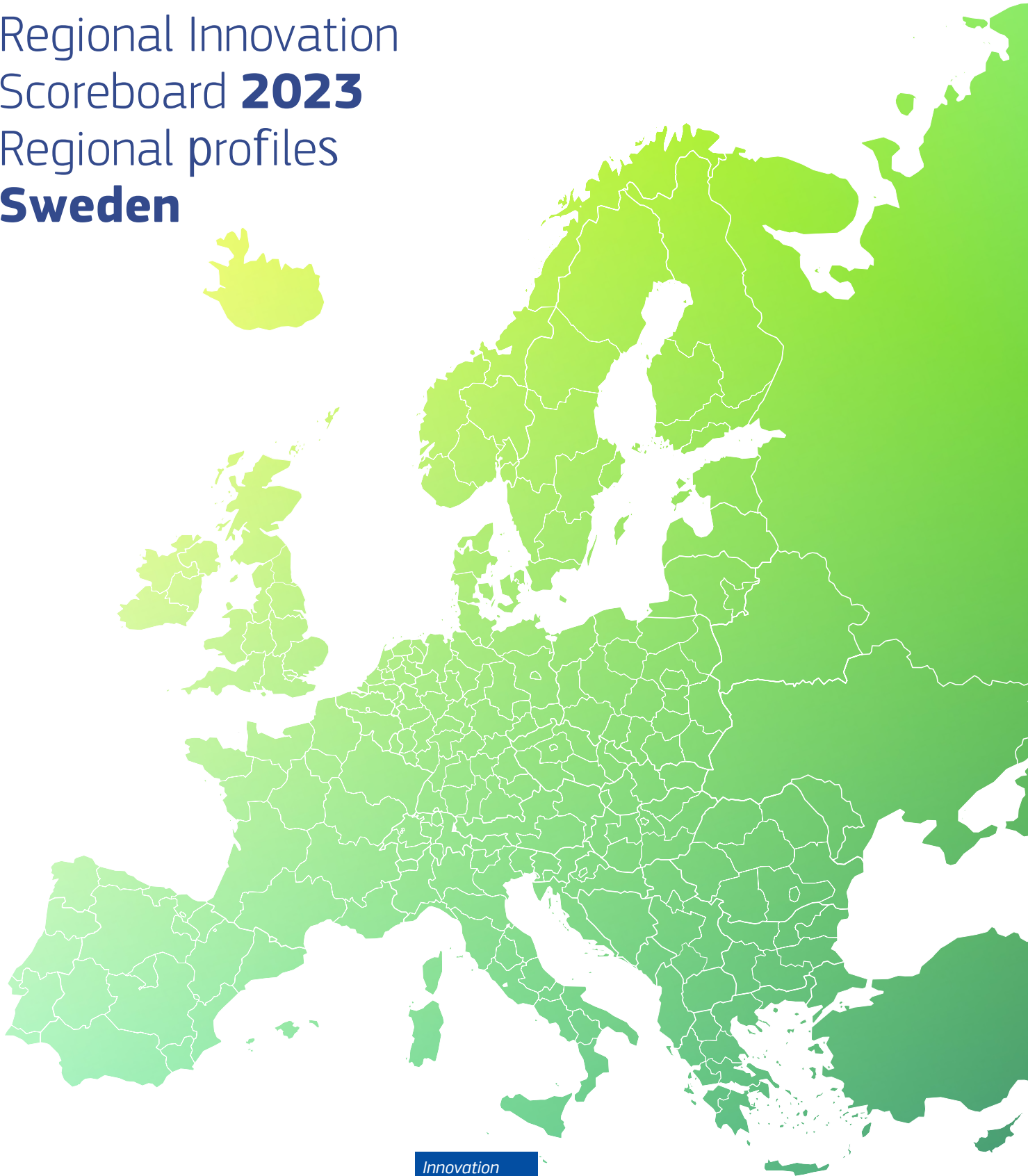# Regional Innovation
Scoreboard **2023**
Regional profiles
Sweden

Innovation

Regional Innovation Scoreboard 2023 – Regional profiles Sweden

Regional Innovation Scoreboard 2023

Regional profiles Sweden

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SWEDEN
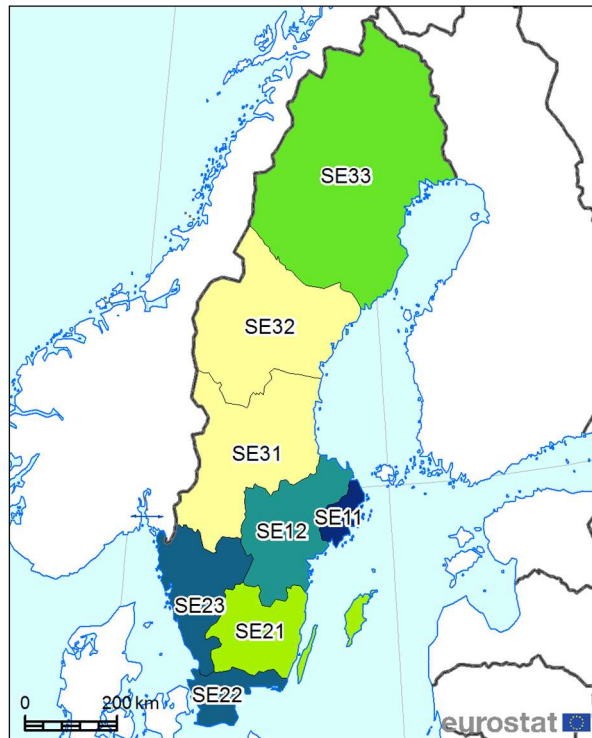
Map administrative boundaries: ©EuroGeographics ©UN-FAO ©Turkstat

NUTS	Region	RII	Rank	Group	Change
SE	Sweden	134.5	--	Innovation Leader	10.4
SE11	Stockholm	149.8	4	Innovation Leader +	8.1
SE12	Östra Mellansverige	127.0	32	Innovation Leader –	7.9
SE21	Småland med öarna	103.5	91	Strong Innovator –	2.9
SE22	Sydsverige	136.0	14	Innovation Leader	7.0
SE23	Västsverige	138.5	10	Innovation Leader	14.9
SE31	Norra Mellansverige	91.4	129	Moderate Innovator +	3.6
SE32	Mellersta Norrland	93.7	122	Moderate Innovator +	-2.3
SE33	Övre Norrland	115.1	56	Strong Innovator	-1.0

Sweden is an Innovation Leader and includes eight regions.

Four regions are Innovation Leaders, two regions are Strong Innovators, and two regions are Moderate Innovators. *Stockholm* (SE11), the capital region, is the fourth most innovative region in Europe

Performance has increased for six regions, most strongly for *Västsverige* (SE23), and decreased for two regions. Only for *Västsverige* (SE23) performance increased at a higher rate than that of the EU (8.5), for the other regions performance increased (or even decreased) at a lower rate.

Stockholm (SE11)

	Data	Normalised score	Relative to	
			SE	EU
Tertiary education	60.1	0.945	134	180
Lifelong learning	36.5	1.000	100	269
International scientific co-publications	5073	1.000	140	326
Most-cited scientific publications	1276.6	0.742	111	136
Above average digital skills	36.7	0.704	103	150
R&D expenditures public sector	0.89	0.615	96	108
R&D expenditures business sector	2.45	0.859	99	127
Non-R&D innovation expenditures	±	0.323	81	80
Innovation expenditures per person employed	±	0.873	112	145
Employed ICT specialists	15.7	1.000	101	190
Product innovators	±	0.948	117	170
Business process innovators	±	0.893	109	138
Innovative SMEs collaborating	±	0.601	97	123
Public-private co-publications	910.5	1.000	132	255
PCT patent applications	9.94	1.000	100	162
Trademark applications	15.07	1.000	146	200
Design applications	4.04	0.585	103	101
Employment knowledge-intensive activities	29.2	1.000	126	176
Employment innovative enterprises	±	0.751	102	131
Sales of innovative products	±	0.679	128	141
Air emissions by fine particulates	4.4	0.936	102	156
Average normalised score	--	0.831	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.820	--	--
Performance 2023 relative to EU in 2023	--	--	111.3	149.8
Performance 2023 relative to EU in 2016	--	--	--	162.4
Regional Innovation Index (RII) 2016	--	0.779	--	--
Performance 2016 relative to EU in 2016	--	--	113.9	154.3
Performance change over time	--	--	-2.6	8.1

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Stockholm (SE11) is an Innovation Leader +. Innovation performance has increased over time (8.1%).

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (111.3) and the EU (149.8) in 2023, the RII in 2023 relative to the EU in 2016 (162.4), and the RII in 2016 relative to both Sweden (113.9) and the EU in 2016 (154.3). The last row shows performance change between 2016 and 2023 compared to Sweden (-2.6%) and to the EU (8.1%).

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

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

	SE11	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	0.3	1.9	4.4
Manufacturing (C)	4.5	10.0	16.4
Utilities & Construction (D-F)	5.8	8.1	8.3
Services (G-N)	81.9	72.4	63.7
Public administration (O-U)	7.4	7.6	7.2
Average number of employed persons per enterprise	4.4	3.8	5.1
GDP per capita (PPS)	55,300	39,800	32,400
GDP per capita growth (PPS)	3.2	2.8	2.5
Population density	334	23	106
Urbanisation	91.2	73.5	75.8
Population size (000s)	2,390	10,380	447,210
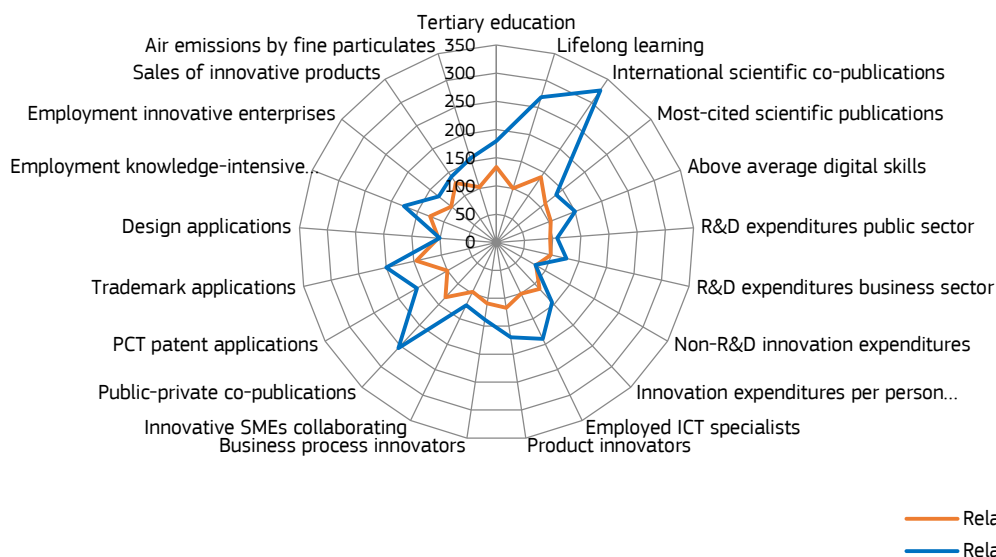
Relative to country
Relative to EU

Ostra Mellansverige (SE12)

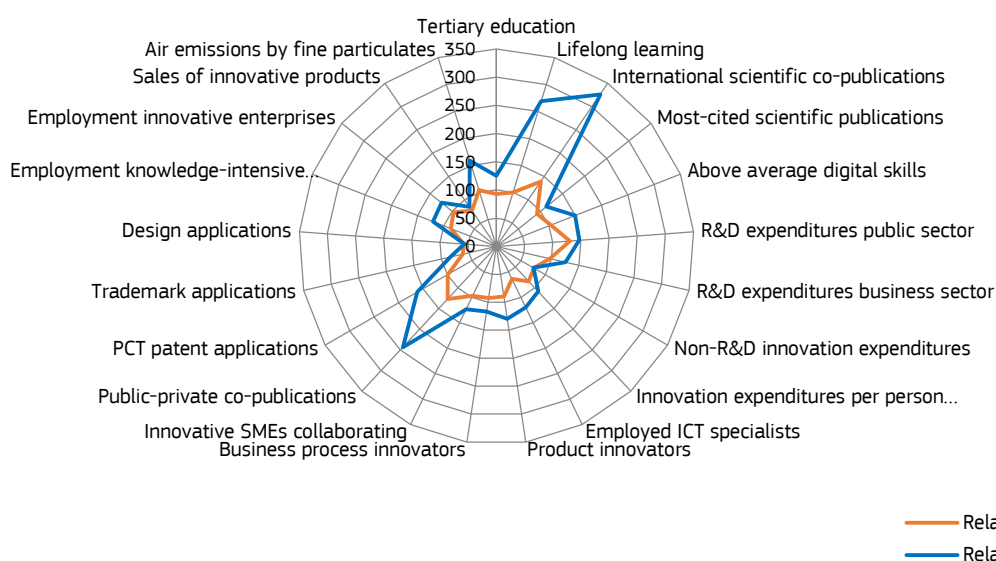|	Data	Normalised score	Relative to SE	Relative to EU
Tertiary education	47.1	0.656	93	125
Lifelong learning	35.1	1.000	100	269
International scientific co-publications	4583	1.000	140	326
Most-cited scientific publications	1090.7	0.618	92	113
Above average digital skills	36.6	0.703	103	149
R&D expenditures public sector	1.52	0.837	130	147
R&D expenditures business sector	2.38	0.847	97	126
Non-R&D innovation expenditures	±	0.305	77	76
Innovation expenditures per person employed	±	0.655	84	109
Employed ICT specialists	5.3	0.632	64	120
Product innovators	±	0.725	89	130
Business process innovators	±	0.753	92	117
Innovative SMEs collaborating	±	0.601	97	123
Public-private co-publications	822.4	0.956	126	244
PCT patent applications	8.45	0.995	100	162
Trademark applications	6.20	0.419	61	84
Design applications	1.29	0.330	58	57
Employment knowledge-intensive activities	18.7	0.687	87	121
Employment innovative enterprises	±	0.714	97	124
Sales of innovative products	±	0.409	77	85
Air emissions by fine particulates	4.0	0.954	104	159
Average normalised score	--	0.705	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.695	--	--
Performance 2023 relative to EU in 2023	--	--	94.4	127.0
Performance 2023 relative to EU in 2016	--	--	--	137.7
Regional Innovation Index (RII) 2016	--	0.655	--	--
Performance 2016 relative to EU in 2016	--	--	95.8	129.8
Performance change over time	--	--	-1.5	7.9

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Östra Mellansverige (SE12) is an Innovation Leader -. Innovation performance has increased over time (7.9%). The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (94.4) and the EU (127) in 2023, the RII in 2023 relative to the EU in 2016 (137.7), and the RII in 2016 relative to both Sweden (95.8) and the EU in 2016 (129.8). The last row shows performance change between 2016 and 2023 compared to Sweden (-1.5%) and to the EU (7.9%).

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

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

	SE12	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	1.9	1.9	4.4
Manufacturing (C)	12.5	10.0	16.4
Utilities & Construction (D-F)	8.7	8.1	8.3
Services (G-N)	68.8	72.4	63.7
Public administration (O-U)	8.1	7.6	7.2
Average number of employed persons per enterprise	3.7	3.8	5.1
GDP per capita (PPS)	33,700	39,800	32,400
GDP per capita growth (PPS)	2.4	2.8	2.5
Population density	40	23	106
Urbanisation	82.0	73.5	75.8
Population size (000s)	1,740	10,380	447,210

Småland med öarna (SE21)

	Data	Normalised score	Relative to SE	Relative to EU
Tertiary education	40.2	0.503	71	96
Lifelong learning	32.6	1.000	100	269
International scientific co-publications	1012	0.243	34	79
Most-cited scientific publications	896.4	0.489	73	90
Above average digital skills	35.4	0.675	99	144
R&D expenditures public sector	0.25	0.275	43	48
R&D expenditures business sector	1.26	0.616	71	91
Non-R&D innovation expenditures	±	0.357	90	88
Innovation expenditures per person employed	±	0.484	62	80
Employed ICT specialists	4.5	0.531	54	101
Product innovators	±	0.678	84	121
Business process innovators	±	0.771	94	119
Innovative SMEs collaborating	±	0.595	96	122
Public-private co-publications	127.5	0.376	50	96
PCT patent applications	4.43	0.721	72	117
Trademark applications	7.09	0.480	70	96
Design applications	9.38	0.891	157	154
Employment knowledge-intensive activities	14.1	0.469	59	83
Employment innovative enterprises	±	0.719	98	125
Sales of innovative products	±	0.303	57	63
Air emissions by fine particulates	5.5	0.882	96	147
Average normalised score	--	0.574	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.567	--	--
Performance 2023 relative to EU in 2023	--	--	76.9	103.5
Performance 2023 relative to EU in 2016	--	--	--	112.2
Regional Innovation Index (RII) 2016	--	0.552	--	--
Performance 2016 relative to EU in 2016	--	--	80.7	109.3
Performance change over time	--	--	-3.8	2.9

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Småland med öarna (SE21) is a Strong Innovator –. Innovation performance has increased over time (2.9%).

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (76.9) and the EU (103.5) in 2023, the RII in 2023 relative to the EU in 2016 (112.2), and the RII in 2016 relative to both Sweden (80.7) and the EU in 2016 (109.3). The last row shows performance change between 2016 and 2023 compared to Sweden (-3.8%) and to the EU (2.9%).

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

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

	SE21	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	3.8	1.9	4.4
Manufacturing (C)	16.9	10.0	16.4
Utilities & Construction (D-F)	8.4	8.1	8.3
Services (G-N)	63.3	72.4	63.7
Public administration (O-U)	7.6	7.6	7.2
Average number of employed persons per enterprise	n/a	3.8	5.1
GDP per capita (PPS)	33,400	39,800	32,400
GDP per capita growth (PPS)	2.0	2.8	2.5
Population density	24	23	106
Urbanisation	60.3	73.5	75.8
Population size (000s)	870	10,380	447,210

Legend:
- Relative to country (orange)
- Relative to EU (blue)
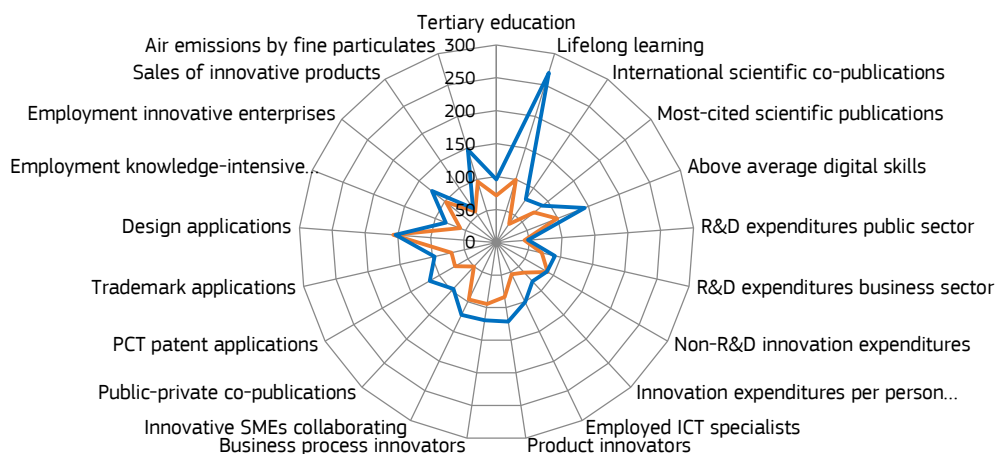
Sydsverige (SE22)

	Data	Normalised score	Relative to	
			SE	EU
Tertiary education	50.1	0.723	103	138
Lifelong learning	35.1	1.000	100	269
International scientific co-publications	3477	0.841	117	274
Most-cited scientific publications	1117.9	0.636	95	116
Above average digital skills	35.8	0.684	100	146
R&D expenditures public sector	1.18	0.724	113	127
R&D expenditures business sector	2.46	0.861	99	128
Non-R&D innovation expenditures	±	0.401	101	99
Innovation expenditures per person employed	±	0.734	94	122
Employed ICT specialists	7.7	0.957	97	182
Product innovators	±	0.894	110	160
Business process innovators	±	0.732	90	113
Innovative SMEs collaborating	±	0.612	99	126
Public-private co-publications	598.8	0.815	108	208
PCT patent applications	11.80	1.000	100	162
Trademark applications	12.00	0.815	119	163
Design applications	4.20	0.596	105	103
Employment knowledge-intensive activities	19.6	0.730	92	128
Employment innovative enterprises	±	0.746	101	130
Sales of innovative products	±	0.559	105	116
Air emissions by fine particulates	7.4	0.785	86	131
Average normalised score	--	0.755	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.745	--	--
Performance 2023 relative to EU in 2023	--	--	101.1	136.0
Performance 2023 relative to EU in 2016	--	--	--	147.5
Regional Innovation Index (RII) 2016	--	0.709	--	--
Performance 2016 relative to EU in 2016	--	--	103.7	140.4
Performance change over time	--	--	-2.6	7.0

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Sydsverige (SE22) is an Innovation Leader. Innovation performance has increased over time (7%).

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (101.1) and the EU (136) in 2023, the RII in 2023 relative to the EU in 2016 (147.5), and the RII in 2016 relative to both Sweden (103.7) and the EU in 2016 (140.4). The last row shows performance change between 2016 and 2023 compared to Sweden (-2.6%) and to the EU (7%).

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

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

	SE22	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.9	4.4
Manufacturing (C)	8.7	10.0	16.4
Utilities & Construction (D-F)	8.2	8.1	8.3
Services (G-N)	73.7	72.4	63.7
Public administration (O-U)	7.6	7.6	7.2
Average number of employed persons per enterprise	n/a	3.8	5.1
GDP per capita (PPS)	34,000	39,800	32,400
GDP per capita growth (PPS)	2.4	2.8	2.5
Population density	108	23	106
Urbanisation	63.5	73.5	75.8
Population size (000s)	1,550	10,380	447,210
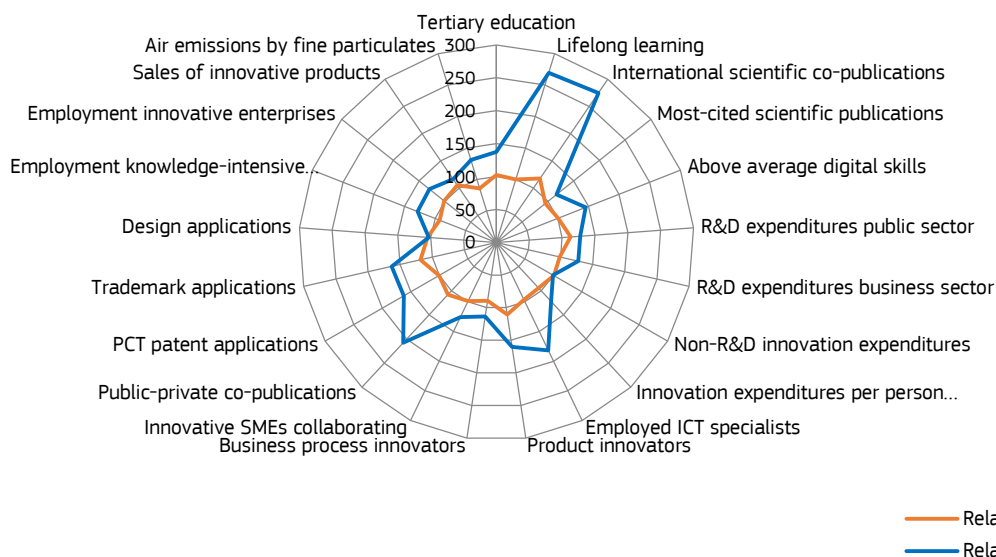
Västsverige (SE23)

	Data	Normalised score	Relative to	
			SE	EU
Tertiary education	48.0	0.676	96	129
Lifelong learning	34.6	1.000	100	269
International scientific co-publications	2829	0.684	95	223
Most-cited scientific publications	1256.6	0.728	109	133
Above average digital skills	34.9	0.663	97	141
R&D expenditures public sector	0.86	0.603	94	106
R&D expenditures business sector	4.24	1.000	115	148
Non-R&D innovation expenditures	±	0.592	149	146
Innovation expenditures per person employed	±	0.960	124	159
Employed ICT specialists	5.4	0.647	65	123
Product innovators	±	0.852	105	153
Business process innovators	±	0.873	107	135
Innovative SMEs collaborating	±	0.678	110	139
Public-private co-publications	782.2	0.932	123	238
PCT patent applications	8.26	0.984	99	160
Trademark applications	9.47	0.643	94	129
Design applications	4.09	0.588	104	101
Employment knowledge-intensive activities	21.9	0.839	106	148
Employment innovative enterprises	±	0.795	108	139
Sales of innovative products	±	0.514	97	107
Air emissions by fine particulates	5.3	0.893	98	149
Average normalised score	--	0.769	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.759	--	--
Performance 2023 relative to EU in 2023	--	--	103.0	138.5
Performance 2023 relative to EU in 2016	--	--	--	150.2
Regional Innovation Index (RII) 2016	--	0.683	--	--
Performance 2016 relative to EU in 2016	--	--	99.9	135.3
Performance change over time	--	--	3.1	14.9

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Västsverige (SE23) is an Innovation Leader. Innovation performance has increased over time (14.9%).
The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (103) and the EU (138.5) in 2023, the RII in 2023 relative to the EU in 2016 (150.2), and the RII in 2016 relative to both Sweden (99.9) and the EU in 2016 (135.3). The last row shows performance change between 2016 and 2023 compared to Sweden (3.1%) and to the EU (14.9%).
The radar graph shows relative strengths compared to Sweden (orange line) and the EU (blue line), showing relative strengths (e.g. Lifelong learning) and weaknesses (e.g. Design applications).
The table below shows data highlighting possible structural differences, e.g. Employment in Utilities & Construction (above EU average) and GDP per capita growth (below EU average).

	SE23	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	1.8	1.9	4.4
Manufacturing (C)	11.9	10.0	16.4
Utilities & Construction (D-F)	8.9	8.1	8.3
Services (G-N)	70.9	72.4	63.7
Public administration (O-U)	6.5	7.6	7.2
Average number of employed persons per enterprise	n/a	3.8	5.1
GDP per capita (PPS)	37,600	39,800	32,400
GDP per capita growth (PPS)	1.7	2.8	2.5
Population density	60	23	106
Urbanisation	71.0	73.5	75.8
Population size (000s)	2,070	10,380	447,210
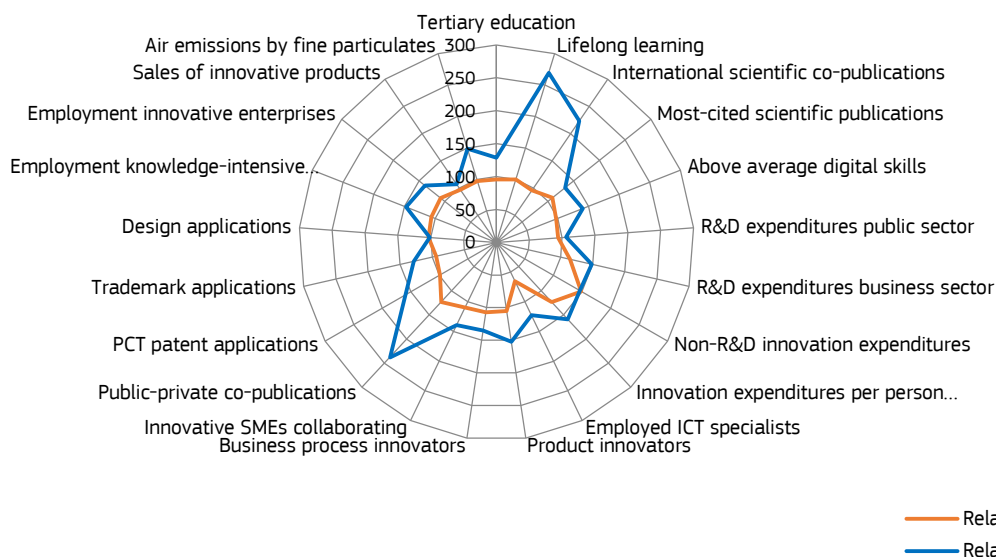
Norra Mellansverige (SE31)

	Data	Normalised score	Relative to	
			SE	EU
Tertiary education	33.8	0.361	51	69
Lifelong learning	33.6	1.000	100	269
International scientific co-publications	778	0.187	26	61
Most-cited scientific publications	1022.5	0.573	85	105
Above average digital skills	35.2	0.671	98	143
R&D expenditures public sector	0.25	0.275	43	48
R&D expenditures business sector	1.03	0.557	64	83
Non-R&D innovation expenditures	±	0.283	71	70
Innovation expenditures per person employed	±	0.487	63	81
Employed ICT specialists	2.4	0.247	25	47
Product innovators	±	0.591	73	106
Business process innovators	±	0.751	92	116
Innovative SMEs collaborating	±	0.606	98	124
Public-private co-publications	176.9	0.443	59	113
PCT patent applications	3.73	0.661	66	107
Trademark applications	4.60	0.311	45	62
Design applications	2.05	0.417	73	72
Employment knowledge-intensive activities	12.2	0.379	48	67
Employment innovative enterprises	±	0.622	85	108
Sales of innovative products	±	0.242	46	50
Air emissions by fine particulates	3.3	0.989	108	165
Average normalised score	--	0.507	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.501	--	--
Performance 2023 relative to EU in 2023	--	--	67.9	91.4
Performance 2023 relative to EU in 2016	--	--	--	99.1
Regional Innovation Index (RII) 2016	--	0.482	--	--
Performance 2016 relative to EU in 2016	--	--	70.5	95.5
Performance change over time	--	--	-2.5	3.6

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Norra Mellansverige (SE31) is a Moderate Innovator +. Innovation performance has increased over time (3.6%).

The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (67.9) and the EU (91.4) in 2023, the RII in 2023 relative to the EU in 2016 (99.1), and the RII in 2016 relative to both Sweden (70.5) and the EU in 2016 (95.5). The last row shows performance change between 2016 and 2023 compared to Sweden (-2.5%) and to the EU (3.6%).

The radar graph shows relative strengths compared to Sweden (orange line) and the EU (blue line), showing relative strengths (e.g. Lifelong learning) and weaknesses (e.g. Employed ICT specialists).

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

	SE31	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	3.2	1.9	4.4
Manufacturing (C)	13.1	10.0	16.4
Utilities & Construction (D-F)	9.6	8.1	8.3
Services (G-N)	65.7	72.4	63.7
Public administration (O-U)	8.4	7.6	7.2
Average number of employed persons per enterprise	n/a	3.8	5.1
GDP per capita (PPS)	32,100	39,800	32,400
GDP per capita growth (PPS)	3.1	2.8	2.5
Population density	12	23	106
Urbanisation	56.5	73.5	75.8
Population size (000s)	860	10,380	447,210
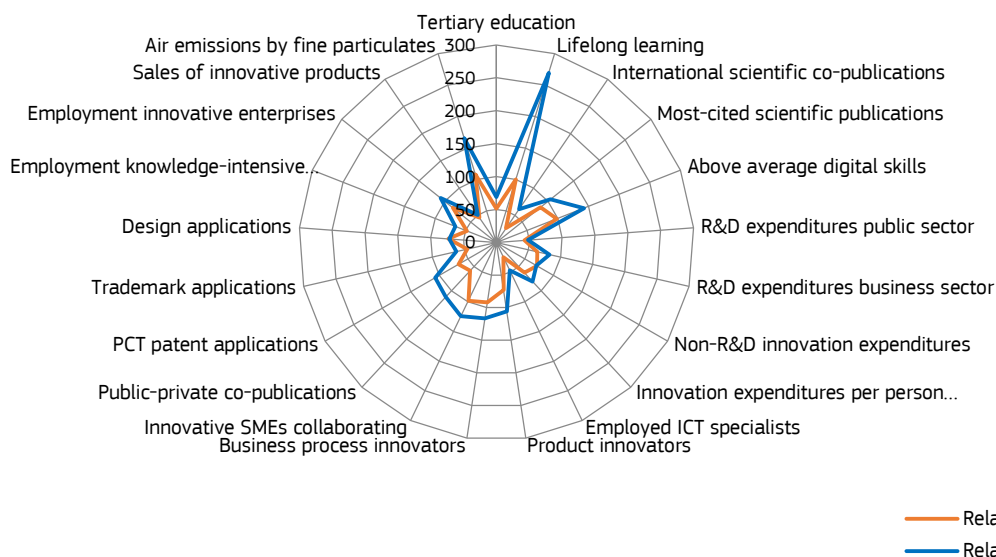
Relative to country
Relative to EU

Mellersta Norrland (SE32)

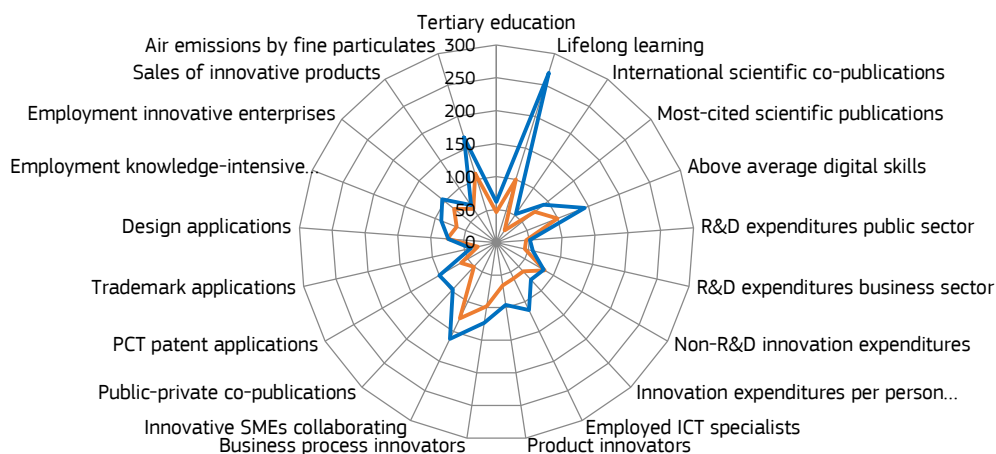|	Data	Normalised score	Relative to	
			SE	EU
Tertiary education	32.1	0.324	46	62
Lifelong learning	31.2	1.000	100	269
International scientific co-publications	672	0.161	22	52
Most-cited scientific publications	913.7	0.501	75	92
Above average digital skills	35.4	0.676	99	144
R&D expenditures public sector	0.27	0.290	45	51
R&D expenditures business sector	0.49	0.384	44	57
Non-R&D innovation expenditures	±	0.336	84	83
Innovation expenditures per person employed	±	0.465	60	77
Employed ICT specialists	5.1	0.601	61	114
Product innovators	±	0.534	66	96
Business process innovators	±	0.799	98	124
Innovative SMEs collaborating	±	0.790	128	162
Public-private co-publications	130.2	0.380	50	97
PCT patent applications	3.25	0.617	62	100
Trademark applications	2.95	0.198	29	40
Design applications	2.14	0.425	75	73
Employment knowledge-intensive activities	15.0	0.512	65	90
Employment innovative enterprises	±	0.602	82	105
Sales of innovative products	±	0.329	62	68
Air emissions by fine particulates	2.9	1.000	109	167
Average normalised score	--	0.520	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.513	--	--
Performance 2023 relative to EU in 2023	--	--	69.7	93.7
Performance 2023 relative to EU in 2016	--	--	--	101.7
Regional Innovation Index (RII) 2016	--	0.525	--	--
Performance 2016 relative to EU in 2016	--	--	76.7	103.9
Performance change over time	--	--	-7.0	-2.3

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Mellersta Norrland (SE32) is a Moderate Innovator +. Innovation performance has decreased over time (-2.3%). The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (69.7) and the EU (93.7) in 2023, the RII in 2023 relative to the EU in 2016 (101.7), and the RII in 2016 relative to both Sweden (76.7) and the EU in 2016 (103.9). The last row shows performance change between 2016 and 2023 compared to Sweden (-7%) and to the EU (-2.3%).

The radar graph shows relative strengths compared to Sweden (orange line) and the EU (blue line), showing relative strengths (e.g. Lifelong learning) and weaknesses (e.g. Trademark applications).

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

	SE32	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	2.8	1.9	4.4
Manufacturing (C)	9.9	10.0	16.4
Utilities & Construction (D-F)	9.3	8.1	8.3
Services (G-N)	68.2	72.4	63.7
Public administration (O-U)	9.8	7.6	7.2
Average number of employed persons per enterprise	n/a	3.8	5.1
GDP per capita (PPS)	34,900	39,800	32,400
GDP per capita growth (PPS)	3.6	2.8	2.5
Population density	5	23	106
Urbanisation	50.6	73.5	75.8
Population size (000s)	380	10,380	447,210

- Relative to country
- Relative to EU

Övre Norrland (SE33)

	Data	Normalised score	Relative to SE	Relative to EU
Tertiary education	47.2	0.659	93	125
Lifelong learning	30.7	1.000	100	269
International scientific co-publications	5137	1.000	140	326
Most-cited scientific publications	1058.9	0.597	89	109
Above average digital skills	32.5	0.608	89	129
R&D expenditures public sector	1.77	0.912	142	160
R&D expenditures business sector	0.72	0.466	53	69
Non-R&D innovation expenditures	±	0.324	81	80
Innovation expenditures per person employed	±	0.619	80	103
Employed ICT specialists	4.1	0.479	48	91
Product innovators	±	0.589	73	106
Business process innovators	±	0.724	89	112
Innovative SMEs collaborating	±	0.461	75	95
Public-private co-publications	812.6	0.950	126	242
PCT patent applications	6.26	0.857	86	139
Trademark applications	3.39	0.228	33	46
Design applications	2.96	0.501	88	86
Employment knowledge-intensive activities	14.1	0.469	59	83
Employment innovative enterprises	±	0.673	92	117
Sales of innovative products	±	0.293	55	61
Air emissions by fine particulates	3.0	1.000	109	167
Average normalised score	--	0.639	--	--
Country EIS-RIS correction factor	--	0.987	--	--
Regional Innovation Index (RII) 2023	--	0.630	--	--
Performance 2023 relative to EU in 2023	--	--	85.5	115.1
Performance 2023 relative to EU in 2016	--	--	--	124.8
Regional Innovation Index (RII) 2016	--	0.635	--	--
Performance 2016 relative to EU in 2016	--	--	92.9	125.8
Performance change over time	--	--	-7.4	-1.0

± Scores are not shown as these would allow recalculating confidential regional CIS data.

Övre Norrland (SE33) is a Strong Innovator. Innovation performance has decreased over time (-1%).
The first 21 rows and two data columns in the table on the left show the values and the normalised scores per indicator. The last two data columns show relative performance of the normalised scores compared to Sweden and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both Sweden (85.5) and the EU (115.1) in 2023, the RII in 2023 relative to the EU in 2016 (124.8), and the RII in 2016 relative to both Sweden (92.9) and the EU in 2016 (125.8). The last row shows performance change between 2016 and 2023 compared to Sweden (-7.4%) and to the EU (-1%).
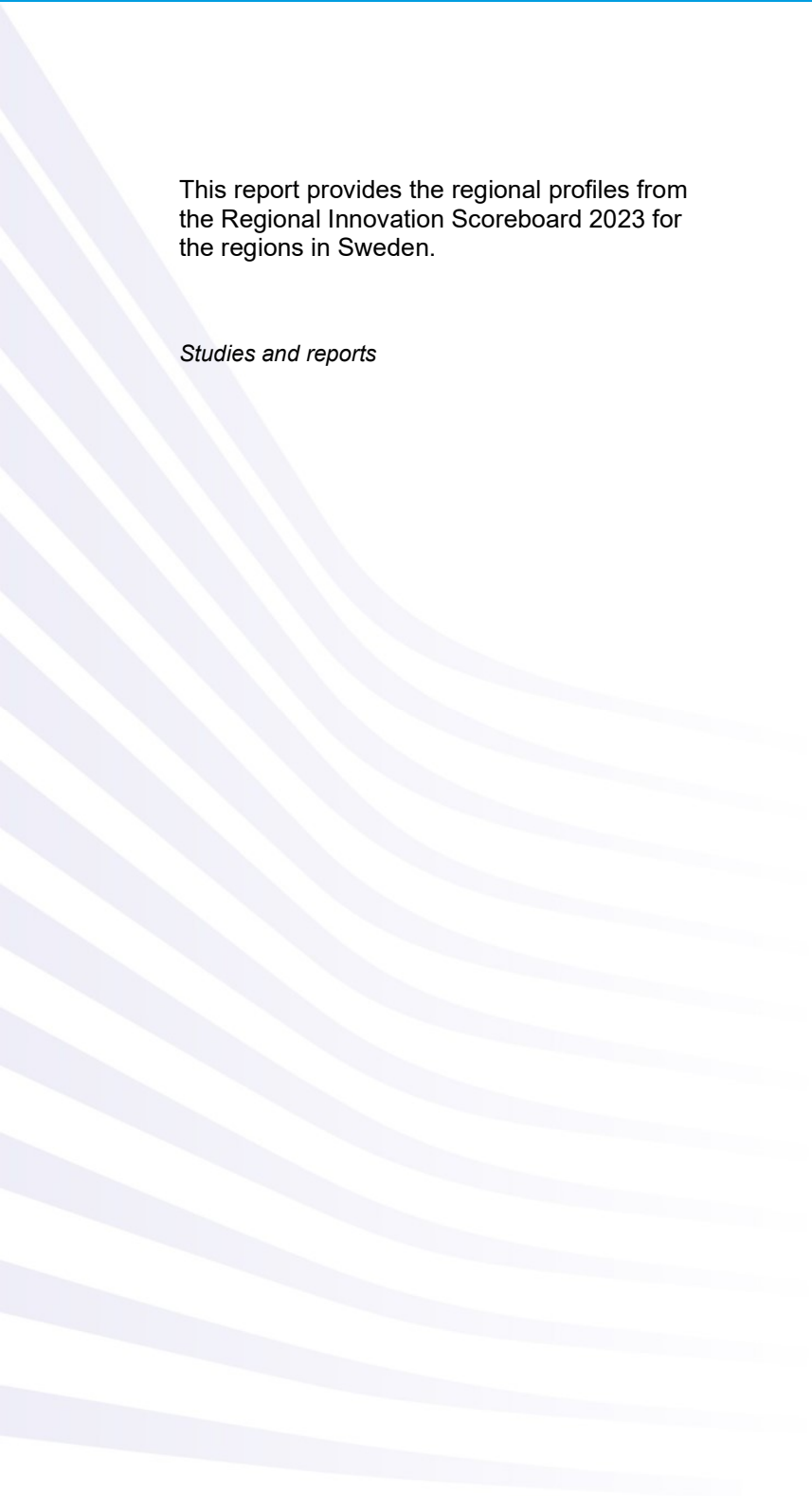The radar graph shows relative strengths compared to Sweden (orange line) and the EU (blue line), showing relative strengths (e.g. International scientific co-publications) and weaknesses (e.g. Trademark applications).
The table below shows data highlighting possible structural differences, e.g. GDP per capita growth (above EU average) and Population density (below EU average).

	SE33	SE	EU
Share of employment in:			
Agriculture & Mining (A-B)	4.7	1.9	4.4
Manufacturing (C)	9.1	10.0	16.4
Utilities & Construction (D-F)	10.6	8.1	8.3
Services (G-N)	67.0	72.4	63.7
Public administration (O-U)	8.6	7.6	7.2
Average number of employed persons per enterprise	n/a	3.8	5.1
GDP per capita (PPS)	41,100	39,800	32,400
GDP per capita growth (PPS)	5.3	2.8	2.5
Population density	3	23	106
Urbanisation	66.5	73.5	75.8
Population size (000s)	520	10,380	447,210
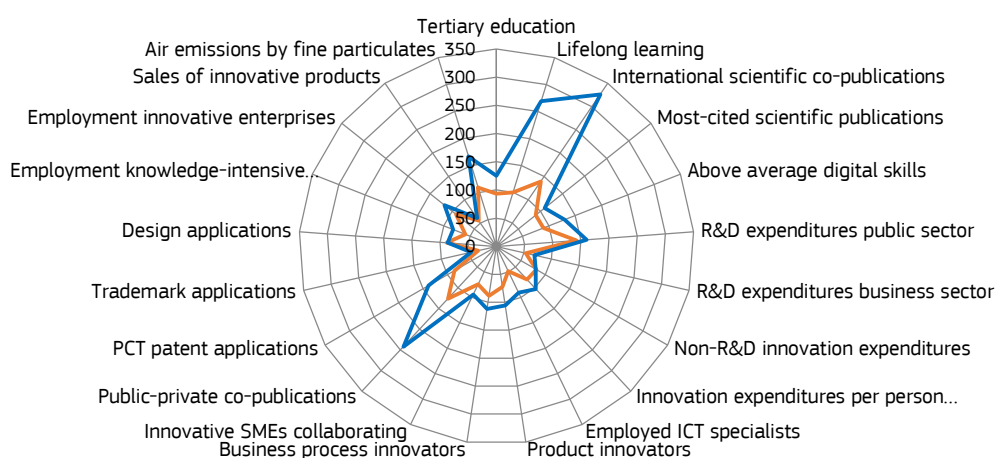
This report provides the regional profiles from the Regional Innovation Scoreboard 2023 for the regions in Sweden.

Studies and reports