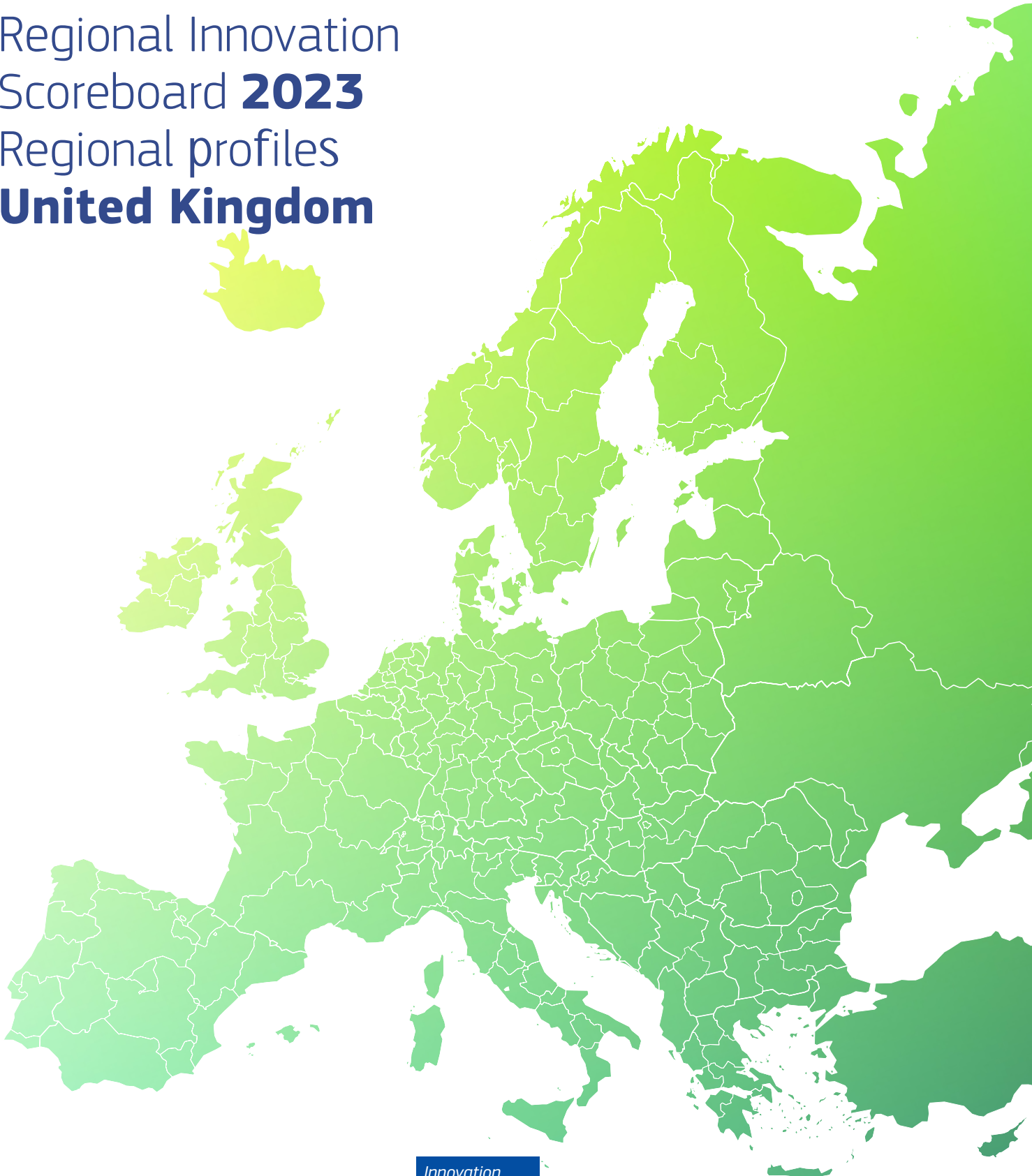




European
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Regional Innovation Scoreboard **2023** Regional profiles **United Kingdom**



Innovation

Regional Innovation Scoreboard 2023 – Regional profiles United Kingdom

European Commission

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Regional Innovation Scoreboard 2023

Regional profiles United Kingdom

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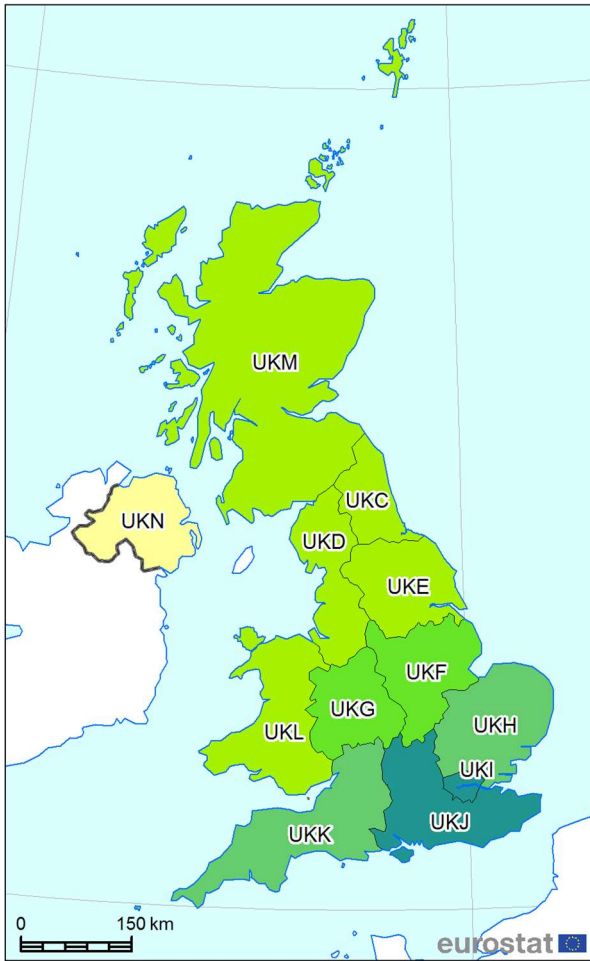
as part of the European Innovation Scoreboard project

for the European Commission, Directorate-General for Research and Innovation under

Framework Contract N° 2018/RTD/A2/OP/PP-07001-2018 Lot 2 (EDAR)



UNITED KINGDOM



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

The United Kingdom is a Strong Innovator and includes 12 regions.

Two regions are Innovation Leaders, and *London* (UKI), the capital region, is the most innovative region. Nine regions are Strong Innovators and *Northern Ireland* (UKN) is the only Moderate Innovator.

Performance has increased for 11 regions, most strongly for *Wales* (UKL), and decreased for one region, *North East* (UKC). For three regions performance increased at a higher rate than that of the EU (8.5), for nine regions performance increased (or even decreased) at a lower rate.

| NUTS | Region | RII | Rank | Group | Change |
|------|--------------------------|-------|------|----------------------|--------|
| UK | United Kingdom | 113.9 | -- | Strong Innovator | 2.7 |
| UKC | North East | 101.9 | 97 | Strong Innovator - | -0.6 |
| UKD | North West | 104.9 | 89 | Strong Innovator - | 3.9 |
| UKE | Yorkshire and The Humber | 107.9 | 75 | Strong Innovator - | 5.6 |
| UKF | East Midlands | 112.9 | 62 | Strong Innovator | 6.6 |
| UKG | West Midlands | 112.5 | 64 | Strong Innovator | 6.8 |
| UKH | East of England | 121.2 | 50 | Strong Innovator + | 7.4 |
| UKI | London | 131.1 | 16 | Innovation Leader - | 5.5 |
| UKJ | South East | 130.3 | 22 | Innovation Leader - | 6.2 |
| UKK | South West | 117.7 | 54 | Strong Innovator + | 9.3 |
| UKL | Wales | 105.8 | 82 | Strong Innovator - | 10.9 |
| UKM | Scotland | 107.3 | 76 | Strong Innovator - | 5.8 |
| UKN | Northern Ireland | 94.8 | 120 | Moderate Innovator + | 8.6 |

North East (UK) (UKC)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 36.1 | 0.412 | 58 | 78 |
| Lifelong learning | 13.4 | 0.470 | 90 | 127 |
| International scientific co-publications | 2365 | 0.572 | 119 | 186 |
| Most-cited scientific publications | 1298.4 | 0.756 | 95 | 138 |
| Above average digital skills | 39.7 | 0.773 | 95 | 164 |
| R&D expenditures public sector | 0.49 | 0.428 | 95 | 75 |
| R&D expenditures business sector | 0.72 | 0.466 | 78 | 69 |
| Non-R&D innovation expenditures | ± | 0.520 | 119 | 129 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 3.8 | 0.428 | 64 | 81 |
| Product innovators | ± | 0.417 | 74 | 75 |
| Business process innovators | ± | 0.468 | 107 | 72 |
| Innovative SMEs collaborating | ± | 0.609 | 72 | 125 |
| Public-private co-publications | 360.8 | 0.633 | 113 | 161 |
| PCT patent applications | 2.55 | 0.547 | 98 | 89 |
| Trademark applications | 1.90 | 0.127 | 43 | 25 |
| Design applications | 0.74 | 0.250 | 63 | 43 |
| Employment knowledge-intensive activities | 13.0 | 0.417 | 72 | 73 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.491 | 187 | 102 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.510 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.558 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 89.4 | 101.9 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 110.5 |
| Regional Innovation Index (RII) 2016 | -- | 0.561 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 92.0 | 111.1 |
| Performance change over time | -- | -- | -2.5 | -0.6 |

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

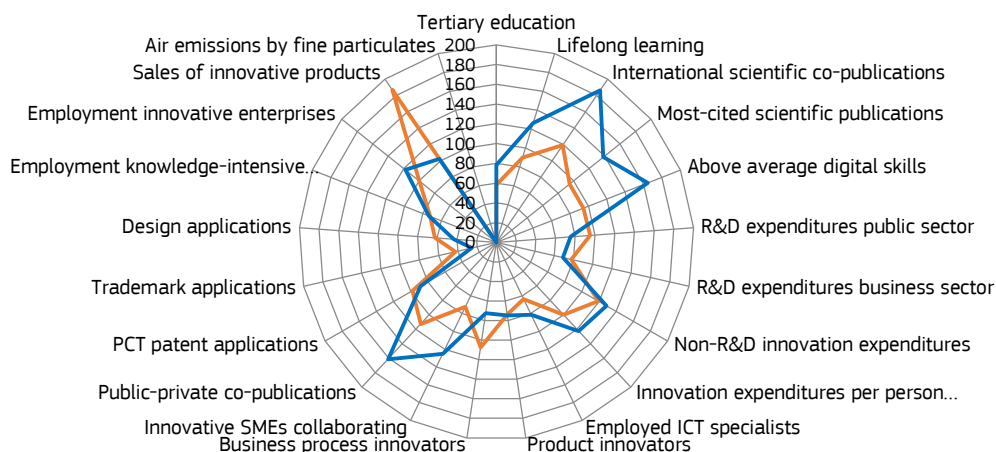
North East (UK) (UKC) is a Strong Innovator -. Innovation performance has decreased over time (-0.6%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (89.4) and the EU (101.9) in 2023, the RII in 2023 relative to the EU in 2016 (110.5), and the RII in 2016 relative to both the United Kingdom (92) and the EU in 2016 (111.1). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (-2.5%) and to the EU (-0.6%).

The radar graph shows relative strengths compared to the United Kingdom (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. Employment in Public administration (above EU average) and Employment in Agriculture & Mining (below EU average).

| | UKC | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.3 | 1.4 | 4.4 |
| Manufacturing (C) | 11.0 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 9.0 | 8.6 | 8.3 |
| Services (G-N) | 70.3 | 74.2 | 63.7 |
| Public administration (O-U) | 8.4 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 309 | 273 | 106 |
| Urbanisation | 91.1 | 87.1 | 75.8 |
| Population size (000s) | 2,660 | 66,650 | 447,210 |



— Relative to country
— Relative to EU

North West (UK) (UKD)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 45.3 | 0.616 | 87 | 117 |
| Lifelong learning | 14.0 | 0.492 | 94 | 133 |
| International scientific co-publications | 1998 | 0.483 | 100 | 157 |
| Most-cited scientific publications | 1280.3 | 0.744 | 93 | 136 |
| Above average digital skills | 41.1 | 0.805 | 99 | 171 |
| R&D expenditures public sector | 0.45 | 0.406 | 90 | 71 |
| R&D expenditures business sector | 0.99 | 0.546 | 91 | 81 |
| Non-R&D innovation expenditures | ± | 0.504 | 115 | 125 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 4.3 | 0.497 | 74 | 94 |
| Product innovators | ± | 0.500 | 89 | 90 |
| Business process innovators | ± | 0.400 | 92 | 62 |
| Innovative SMEs collaborating | ± | 0.724 | 86 | 149 |
| Public-private co-publications | 339.2 | 0.614 | 109 | 157 |
| PCT patent applications | 1.97 | 0.481 | 86 | 78 |
| Trademark applications | 2.58 | 0.173 | 58 | 35 |
| Design applications | 0.89 | 0.275 | 69 | 47 |
| Employment knowledge-intensive activities | 14.8 | 0.502 | 87 | 88 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.322 | 123 | 67 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.525 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.574 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 92.1 | 104.9 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 113.8 |
| Regional Innovation Index (RII) 2016 | -- | 0.555 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 90.9 | 109.9 |
| Performance change over time | -- | -- | 1.2 | 3.9 |

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

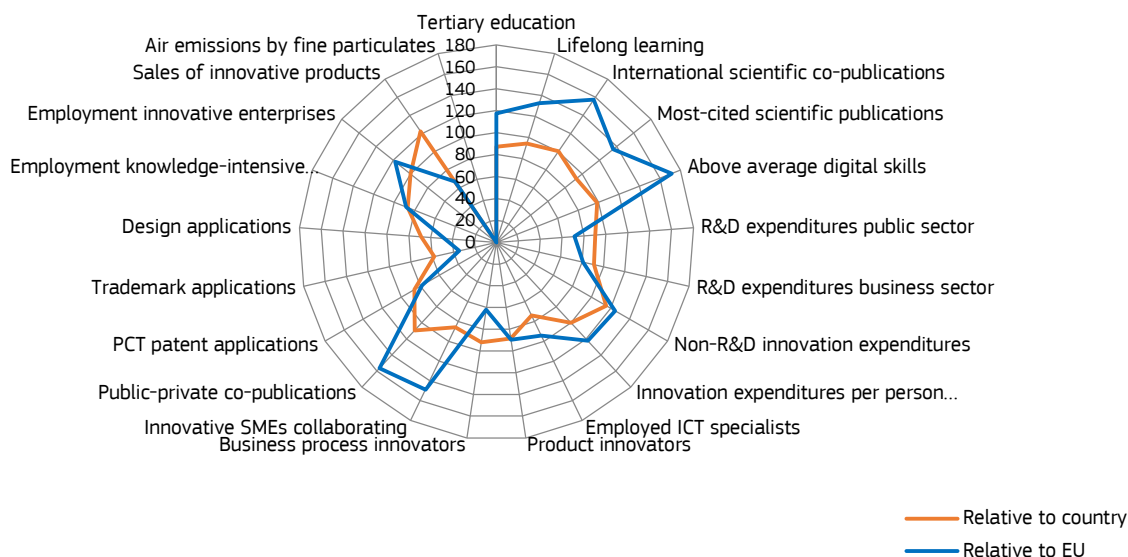
North West (UK) (UKD) is a Strong Innovator -. Innovation performance has increased over time (3.9%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (92.1) and the EU (104.9) in 2023, the RII in 2023 relative to the EU in 2016 (113.8), and the RII in 2016 relative to both the United Kingdom (90.9) and the EU in 2016 (109.9). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (1.2%) and to the EU (3.9%).

The radar graph shows relative strengths compared to the United Kingdom (orange line) and the EU (blue line), showing relative strengths (e.g. Above average digital skills) and weaknesses (e.g. Trademark applications).

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

| | UKD | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 0.9 | 1.4 | 4.4 |
| Manufacturing (C) | 10.8 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 8.3 | 8.6 | 8.3 |
| Services (G-N) | 73.5 | 74.2 | 63.7 |
| Public administration (O-U) | 6.5 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 515 | 273 | 106 |
| Urbanisation | 96.1 | 87.1 | 75.8 |
| Population size (000s) | 7,300 | 66,650 | 447,210 |



Yorkshire and The Humber (UKE)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 38.3 | 0.461 | 65 | 88 |
| Lifelong learning | 14.6 | 0.515 | 99 | 139 |
| International scientific co-publications | 2004 | 0.484 | 101 | 158 |
| Most-cited scientific publications | 1263.4 | 0.733 | 92 | 134 |
| Above average digital skills | 41.1 | 0.806 | 99 | 171 |
| R&D expenditures public sector | 0.52 | 0.444 | 99 | 78 |
| R&D expenditures business sector | 0.66 | 0.446 | 74 | 66 |
| Non-R&D innovation expenditures | ± | 0.520 | 119 | 129 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 3.9 | 0.451 | 67 | 86 |
| Product innovators | ± | 0.596 | 106 | 107 |
| Business process innovators | ± | 0.539 | 124 | 83 |
| Innovative SMEs collaborating | ± | 1.000 | 119 | 205 |
| Public-private co-publications | 356.2 | 0.629 | 112 | 160 |
| PCT patent applications | 1.96 | 0.479 | 86 | 78 |
| Trademark applications | 3.23 | 0.217 | 73 | 44 |
| Design applications | 2.06 | 0.417 | 104 | 72 |
| Employment knowledge-intensive activities | 13.1 | 0.422 | 73 | 74 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.228 | 87 | 47 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.540 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.591 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 94.7 | 107.9 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 117.0 |
| Regional Innovation Index (RII) 2016 | -- | 0.563 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 92.2 | 111.5 |
| Performance change over time | -- | -- | 2.5 | 5.6 |

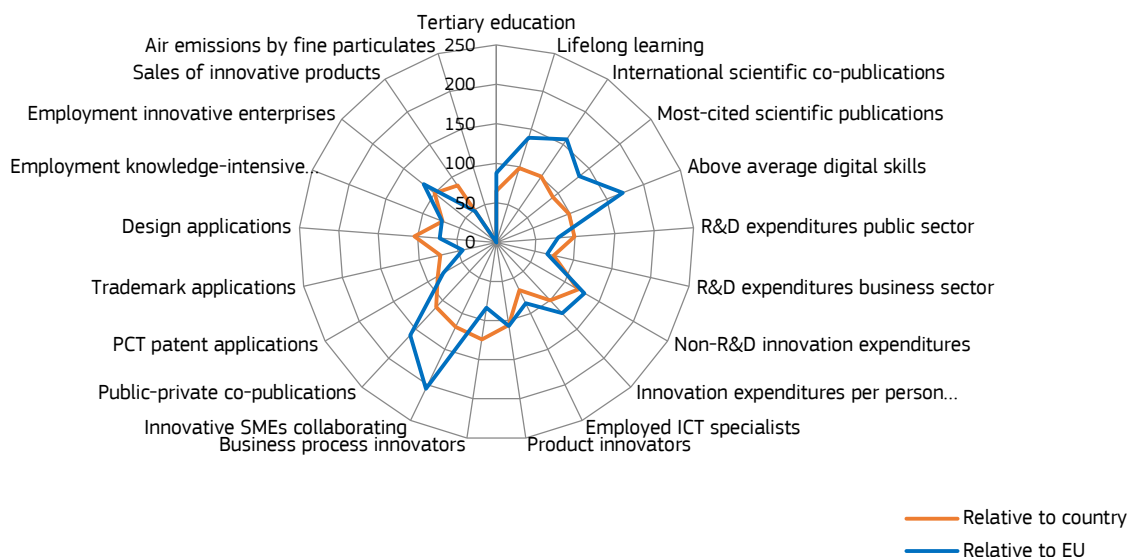
± Scores are not shown as these would allow recalculating confidential regional CIS data.

Yorkshire and The Humber (UKE) is a Strong Innovator -. Innovation performance has increased over time (5.6%). 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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (94.7) and the EU (107.9) in 2023, the RII in 2023 relative to the EU in 2016 (117), and the RII in 2016 relative to both the United Kingdom (92.2) and the EU in 2016 (111.5). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (2.5%) and to the EU (5.6%).

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

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

| | UKE | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.3 | 1.4 | 4.4 |
| Manufacturing (C) | 12.0 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 8.5 | 8.6 | 8.3 |
| Services (G-N) | 71.6 | 74.2 | 63.7 |
| Public administration (O-U) | 6.6 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 356 | 273 | 106 |
| Urbanisation | 90.4 | 87.1 | 75.8 |
| Population size (000s) | 5,490 | 66,650 | 447,210 |



East Midlands (UK) (UKF)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 40.0 | 0.499 | 71 | 95 |
| Lifelong learning | 14.8 | 0.523 | 100 | 141 |
| International scientific co-publications | 1916 | 0.463 | 96 | 151 |
| Most-cited scientific publications | 1273.4 | 0.739 | 93 | 135 |
| Above average digital skills | 40.3 | 0.788 | 96 | 168 |
| R&D expenditures public sector | 0.35 | 0.345 | 77 | 61 |
| R&D expenditures business sector | 1.45 | 0.661 | 110 | 98 |
| Non-R&D innovation expenditures | ± | 0.479 | 110 | 119 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 3.5 | 0.395 | 59 | 75 |
| Product innovators | ± | 0.632 | 112 | 113 |
| Business process innovators | ± | 0.457 | 105 | 71 |
| Innovative SMEs collaborating | ± | 1.000 | 119 | 205 |
| Public-private co-publications | 320.7 | 0.597 | 106 | 152 |
| PCT patent applications | 1.53 | 0.423 | 76 | 69 |
| Trademark applications | 3.41 | 0.230 | 77 | 46 |
| Design applications | 2.40 | 0.451 | 113 | 78 |
| Employment knowledge-intensive activities | 14.3 | 0.479 | 83 | 84 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.729 | 278 | 152 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.565 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.618 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 99.1 | 112.9 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 122.5 |
| Regional Innovation Index (RII) 2016 | -- | 0.585 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 95.9 | 115.8 |
| Performance change over time | -- | -- | 3.2 | 6.6 |

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

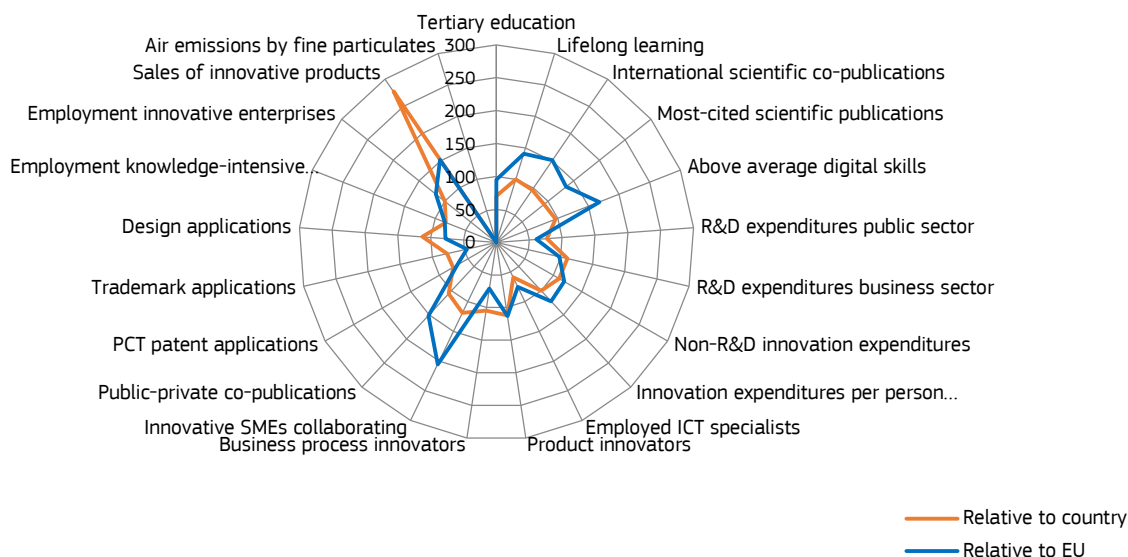
East Midlands (UK) (UKF) is a Strong Innovator. Innovation performance has increased over time (6.6%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (99.1) and the EU (112.9) in 2023, the RII in 2023 relative to the EU in 2016 (122.5), and the RII in 2016 relative to both the United Kingdom (95.9) and the EU in 2016 (115.8). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (3.2%) and to the EU (6.6%).

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

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

| | UKF | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.2 | 1.4 | 4.4 |
| Manufacturing (C) | 13.9 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 8.3 | 8.6 | 8.3 |
| Services (G-N) | 71.4 | 74.2 | 63.7 |
| Public administration (O-U) | 5.1 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 308 | 273 | 106 |
| Urbanisation | 83.2 | 87.1 | 75.8 |
| Population size (000s) | 4,810 | 66,650 | 447,210 |



West Midlands (UK) (UKG)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 43.0 | 0.565 | 80 | 108 |
| Lifelong learning | 13.4 | 0.470 | 90 | 127 |
| International scientific co-publications | 1725 | 0.416 | 87 | 136 |
| Most-cited scientific publications | 1273.8 | 0.740 | 93 | 135 |
| Above average digital skills | 42.5 | 0.837 | 102 | 178 |
| R&D expenditures public sector | 0.34 | 0.339 | 75 | 60 |
| R&D expenditures business sector | 1.73 | 0.722 | 121 | 107 |
| Non-R&D innovation expenditures | ± | 0.512 | 117 | 127 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 3.7 | 0.422 | 63 | 80 |
| Product innovators | ± | 0.555 | 98 | 99 |
| Business process innovators | ± | 0.513 | 118 | 79 |
| Innovative SMEs collaborating | ± | 1.000 | 119 | 205 |
| Public-private co-publications | 248.6 | 0.525 | 94 | 134 |
| PCT patent applications | 1.82 | 0.462 | 83 | 75 |
| Trademark applications | 3.33 | 0.224 | 75 | 45 |
| Design applications | 2.43 | 0.454 | 113 | 78 |
| Employment knowledge-intensive activities | 15.9 | 0.555 | 96 | 98 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.543 | 207 | 113 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.563 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.616 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 98.8 | 112.5 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 122.1 |
| Regional Innovation Index (RII) 2016 | -- | 0.582 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 95.4 | 115.2 |
| Performance change over time | -- | -- | 3.4 | 6.8 |

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

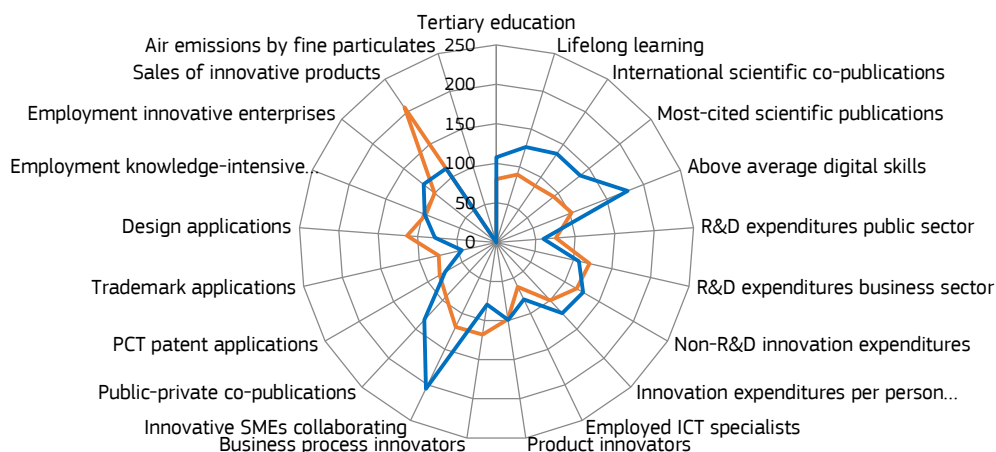
West Midlands (UK) (UKG) is a Strong Innovator. Innovation performance has increased over time (6.8%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (98.8) and the EU (112.5) in 2023, the RII in 2023 relative to the EU in 2016 (122.1), and the RII in 2016 relative to both the United Kingdom (95.4) and the EU in 2016 (115.2). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (3.4%) and to the EU (6.8%).

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

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

| | UKG | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.3 | 1.4 | 4.4 |
| Manufacturing (C) | 12.6 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 9.4 | 8.6 | 8.3 |
| Services (G-N) | 70.9 | 74.2 | 63.7 |
| Public administration (O-U) | 5.8 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 454 | 273 | 106 |
| Urbanisation | 89.4 | 87.1 | 75.8 |
| Population size (000s) | 5,910 | 66,650 | 447,210 |



— Relative to country
— Relative to EU

East of England (UKH)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 43.8 | 0.583 | 82 | 111 |
| Lifelong learning | 13.5 | 0.473 | 91 | 128 |
| International scientific co-publications | 2552 | 0.617 | 128 | 201 |
| Most-cited scientific publications | 1586.2 | 0.947 | 119 | 173 |
| Above average digital skills | 42.2 | 0.830 | 102 | 177 |
| R&D expenditures public sector | 0.65 | 0.510 | 113 | 90 |
| R&D expenditures business sector | 2.78 | 0.915 | 153 | 136 |
| Non-R&D innovation expenditures | ± | 0.211 | 48 | 52 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 6.0 | 0.728 | 108 | 138 |
| Product innovators | ± | 0.670 | 119 | 120 |
| Business process innovators | ± | 0.445 | 102 | 69 |
| Innovative SMEs collaborating | ± | 0.939 | 111 | 193 |
| Public-private co-publications | 568.0 | 0.794 | 141 | 203 |
| PCT patent applications | 4.73 | 0.745 | 133 | 121 |
| Trademark applications | 3.93 | 0.265 | 89 | 53 |
| Design applications | 1.75 | 0.385 | 96 | 66 |
| Employment knowledge-intensive activities | 17.1 | 0.611 | 106 | 108 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.052 | 20 | 11 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.607 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.664 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 106.4 | 121.2 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 131.5 |
| Regional Innovation Index (RII) 2016 | -- | 0.626 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 102.7 | 124.1 |
| Performance change over time | -- | -- | 3.7 | 7.4 |

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

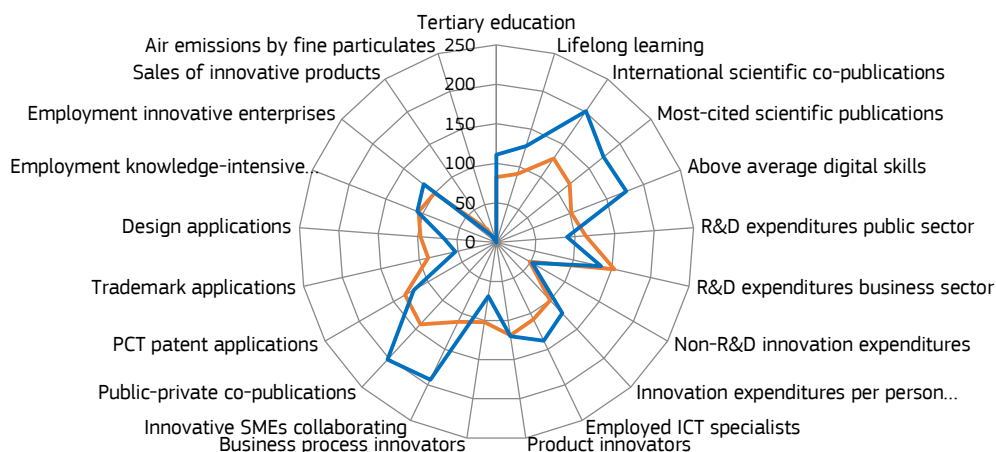
East of England (UKH) is a Strong Innovator +. Innovation performance has increased over time (7.4%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (106.4) and the EU (121.2) in 2023, the RII in 2023 relative to the EU in 2016 (131.5), and the RII in 2016 relative to both the United Kingdom (102.7) and the EU in 2016 (124.1). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (3.7%) and to the EU (7.4%).

The radar graph shows relative strengths compared to the United Kingdom (orange line) and the EU (blue line), showing relative strengths (e.g. Public-private 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 Manufacturing (below EU average).

| | UKH | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.3 | 1.4 | 4.4 |
| Manufacturing (C) | 8.7 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 9.2 | 8.6 | 8.3 |
| Services (G-N) | 74.4 | 74.2 | 63.7 |
| Public administration (O-U) | 6.3 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 326 | 273 | 106 |
| Urbanisation | 81.6 | 87.1 | 75.8 |
| Population size (000s) | 6,240 | 66,650 | 447,210 |



— Relative to country
— Relative to EU

Regional Innovation Scoreboard 2023

London (UKI)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 67.9 | 1.000 | 141 | 190 |
| Lifelong learning | 16.0 | 0.568 | 109 | 153 |
| International scientific co-publications | 4404 | 1.000 | 208 | 326 |
| Most-cited scientific publications | 1496.4 | 0.887 | 111 | 162 |
| Above average digital skills | 42.5 | 0.837 | 102 | 178 |
| R&D expenditures public sector | 0.52 | 0.444 | 99 | 78 |
| R&D expenditures business sector | 0.57 | 0.414 | 69 | 61 |
| Non-R&D innovation expenditures | ± | 0.332 | 76 | 82 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 10.3 | 1.000 | 149 | 190 |
| Product innovators | ± | 0.555 | 98 | 99 |
| Business process innovators | ± | 0.408 | 94 | 63 |
| Innovative SMEs collaborating | ± | 0.769 | 91 | 158 |
| Public-private co-publications | 728.6 | 0.900 | 160 | 229 |
| PCT patent applications | 2.12 | 0.498 | 89 | 81 |
| Trademark applications | 8.12 | 0.550 | 184 | 110 |
| Design applications | 2.73 | 0.480 | 120 | 83 |
| Employment knowledge-intensive activities | 22.6 | 0.872 | 151 | 153 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.195 | 74 | 41 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.656 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.718 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 115.1 | 131.1 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 142.2 |
| Regional Innovation Index (RII) 2016 | -- | 0.690 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 113.1 | 136.7 |
| Performance change over time | -- | -- | 2.0 | 5.5 |

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

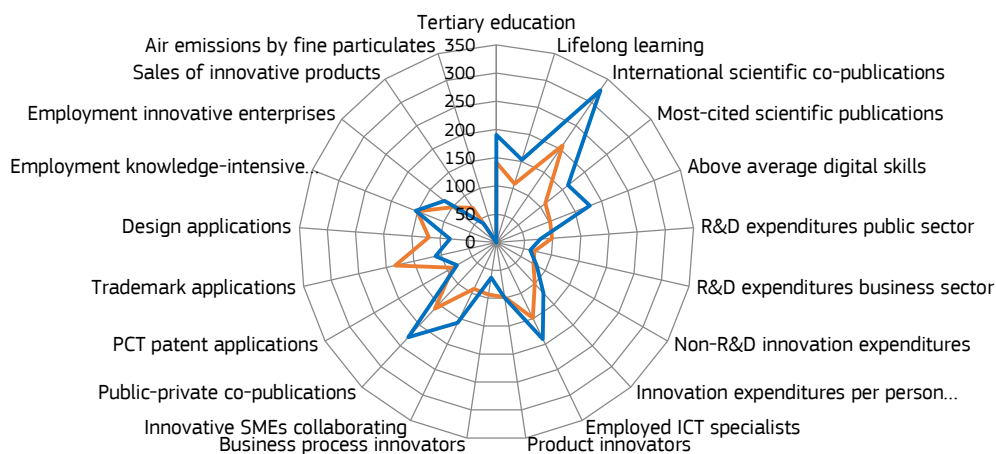
London (UKI) is an Innovation Leader -. Innovation performance has increased over time (5.5%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (115.1) and the EU (131.1) in 2023, the RII in 2023 relative to the EU in 2016 (142.2), and the RII in 2016 relative to both the United Kingdom (113.1) and the EU in 2016 (136.7). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (2%) and to the EU (5.5%).

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

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

| | UKI | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 0.3 | 1.4 | 4.4 |
| Manufacturing (C) | 3.1 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 7.2 | 8.6 | 8.3 |
| Services (G-N) | 83.3 | 74.2 | 63.7 |
| Public administration (O-U) | 6.2 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 5,714 | 273 | 106 |
| Urbanisation | 100.0 | 87.1 | 75.8 |
| Population size (000s) | 8,980 | 66,650 | 447,210 |



— Relative to country
— Relative to EU

South East (UK) (UKJ)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 49.7 | 0.714 | 101 | 136 |
| Lifelong learning | 15.8 | 0.561 | 107 | 151 |
| International scientific co-publications | 2813 | 0.680 | 142 | 222 |
| Most-cited scientific publications | 1425.6 | 0.840 | 105 | 154 |
| Above average digital skills | 42.8 | 0.844 | 103 | 180 |
| R&D expenditures public sector | 0.62 | 0.495 | 110 | 87 |
| R&D expenditures business sector | 1.62 | 0.699 | 117 | 104 |
| Non-R&D innovation expenditures | ± | 0.429 | 98 | 106 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 8.2 | 1.000 | 149 | 190 |
| Product innovators | ± | 0.603 | 107 | 108 |
| Business process innovators | ± | 0.423 | 97 | 65 |
| Innovative SMEs collaborating | ± | 0.863 | 102 | 177 |
| Public-private co-publications | 485.0 | 0.734 | 131 | 187 |
| PCT patent applications | 4.12 | 0.695 | 124 | 113 |
| Trademark applications | 4.46 | 0.301 | 101 | 60 |
| Design applications | 2.25 | 0.436 | 109 | 75 |
| Employment knowledge-intensive activities | 20.3 | 0.763 | 132 | 134 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.551 | 210 | 115 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.652 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.714 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 114.4 | 130.3 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 141.4 |
| Regional Innovation Index (RII) 2016 | -- | 0.682 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 111.8 | 135.1 |
| Performance change over time | -- | -- | 2.6 | 6.2 |

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

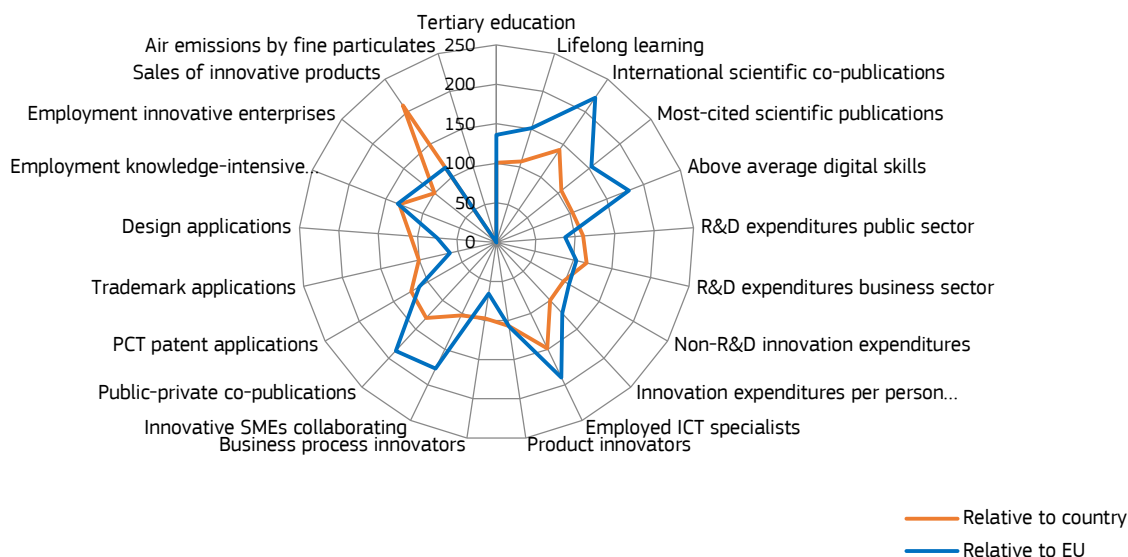
South East (UK) (UKJ) is an Innovation Leader -. Innovation performance has increased over time (6.2%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (114.4) and the EU (130.3) in 2023, the RII in 2023 relative to the EU in 2016 (141.4), and the RII in 2016 relative to both the United Kingdom (111.8) and the EU in 2016 (135.1). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (2.6%) and to the EU (6.2%).

The radar graph shows relative strengths compared to the United Kingdom (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. Population density (above EU average) and Employment in Agriculture & Mining (below EU average).

| | UKJ | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.0 | 1.4 | 4.4 |
| Manufacturing (C) | 8.3 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 8.5 | 8.6 | 8.3 |
| Services (G-N) | 75.8 | 74.2 | 63.7 |
| Public administration (O-U) | 6.4 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 481 | 273 | 106 |
| Urbanisation | 89.0 | 87.1 | 75.8 |
| Population size (000s) | 9,180 | 66,650 | 447,210 |



South West (UK) (UKK)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 46.4 | 0.641 | 91 | 122 |
| Lifelong learning | 17.1 | 0.610 | 117 | 164 |
| International scientific co-publications | 1866 | 0.450 | 94 | 147 |
| Most-cited scientific publications | 1330.9 | 0.778 | 97 | 142 |
| Above average digital skills | 41.7 | 0.819 | 100 | 174 |
| R&D expenditures public sector | 0.46 | 0.412 | 92 | 72 |
| R&D expenditures business sector | 1.12 | 0.581 | 97 | 86 |
| Non-R&D innovation expenditures | ± | 0.500 | 114 | 124 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 4.4 | 0.507 | 75 | 96 |
| Product innovators | ± | 0.635 | 113 | 114 |
| Business process innovators | ± | 0.513 | 118 | 79 |
| Innovative SMEs collaborating | ± | 1.000 | 119 | 205 |
| Public-private co-publications | 313.5 | 0.590 | 105 | 150 |
| PCT patent applications | 3.65 | 0.654 | 117 | 106 |
| Trademark applications | 3.38 | 0.227 | 76 | 46 |
| Design applications | 1.38 | 0.342 | 85 | 59 |
| Employment knowledge-intensive activities | 15.3 | 0.526 | 91 | 93 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.579 | 221 | 121 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.589 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.644 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 103.3 | 117.7 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 127.6 |
| Regional Innovation Index (RII) 2016 | -- | 0.597 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 97.9 | 118.3 |
| Performance change over time | -- | -- | 5.4 | 9.3 |

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

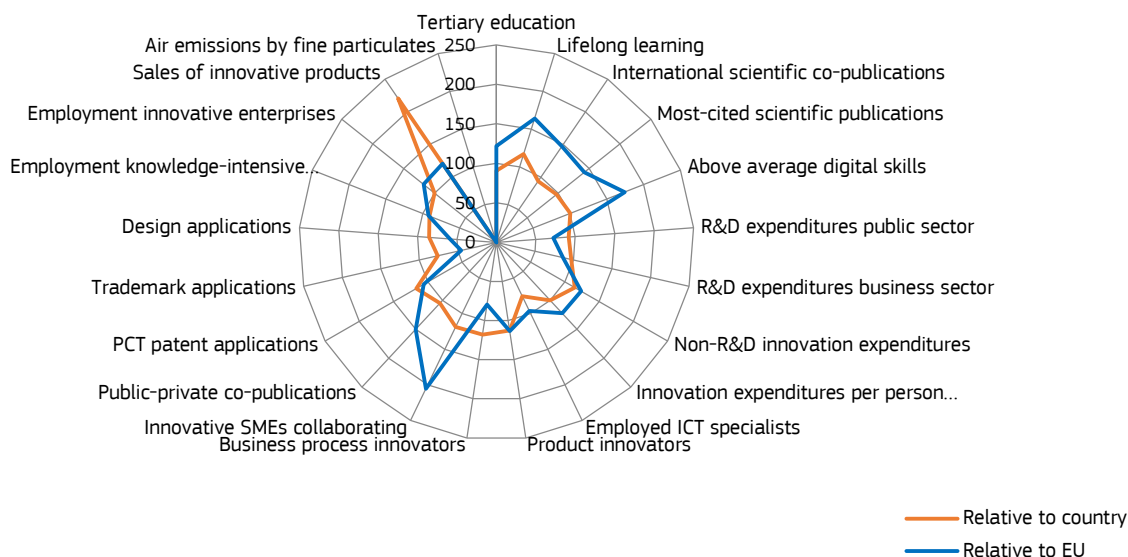
South West (UK) (UKK) is a Strong Innovator +. Innovation performance has increased over time (9.3%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (103.3) and the EU (117.7) in 2023, the RII in 2023 relative to the EU in 2016 (127.6), and the RII in 2016 relative to both the United Kingdom (97.9) and the EU in 2016 (118.3). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (5.4%) and to the EU (9.3%).

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

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

| | UKK | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 1.8 | 1.4 | 4.4 |
| Manufacturing (C) | 9.4 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 9.2 | 8.6 | 8.3 |
| Services (G-N) | 72.3 | 74.2 | 63.7 |
| Public administration (O-U) | 7.2 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 235 | 273 | 106 |
| Urbanisation | 77.2 | 87.1 | 75.8 |
| Population size (000s) | 5,620 | 66,650 | 447,210 |



Wales (UKL)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 41.2 | 0.525 | 74 | 100 |
| Lifelong learning | 15.7 | 0.557 | 107 | 150 |
| International scientific co-publications | 1776 | 0.429 | 89 | 140 |
| Most-cited scientific publications | 1175.2 | 0.674 | 84 | 123 |
| Above average digital skills | 40.3 | 0.788 | 96 | 168 |
| R&D expenditures public sector | 0.40 | 0.376 | 84 | 66 |
| R&D expenditures business sector | 0.59 | 0.422 | 70 | 63 |
| Non-R&D innovation expenditures | ± | 1.000 | 229 | 247 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 2.9 | 0.321 | 48 | 61 |
| Product innovators | ± | 0.542 | 96 | 97 |
| Business process innovators | ± | 0.351 | 81 | 54 |
| Innovative SMEs collaborating | ± | 0.694 | 82 | 142 |
| Public-private co-publications | 303.1 | 0.580 | 103 | 148 |
| PCT patent applications | 2.01 | 0.485 | 87 | 79 |
| Trademark applications | 2.39 | 0.160 | 54 | 32 |
| Design applications | 0.66 | 0.237 | 59 | 41 |
| Employment knowledge-intensive activities | 11.2 | 0.332 | 57 | 58 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.701 | 267 | 146 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.529 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.579 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 92.9 | 105.8 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 114.7 |
| Regional Innovation Index (RII) 2016 | -- | 0.524 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 85.9 | 103.8 |
| Performance change over time | -- | -- | 7.0 | 10.9 |

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

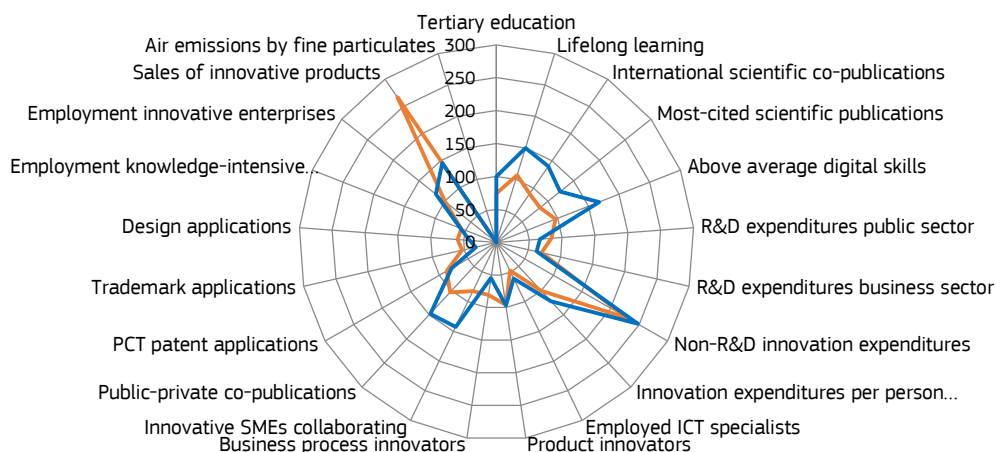
Wales (UKL) is a Strong Innovator -. Innovation performance has increased over time (10.9%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (92.9) and the EU (105.8) in 2023, the RII in 2023 relative to the EU in 2016 (114.7), and the RII in 2016 relative to both the United Kingdom (85.9) and the EU in 2016 (103.8). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (7%) and to the EU (10.9%).

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

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

| | UKL | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 2.3 | 1.4 | 4.4 |
| Manufacturing (C) | 10.4 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 8.8 | 8.6 | 8.3 |
| Services (G-N) | 69.9 | 74.2 | 63.7 |
| Public administration (O-U) | 8.6 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 151 | 273 | 106 |
| Urbanisation | 77.7 | 87.1 | 75.8 |
| Population size (000s) | 3,140 | 66,650 | 447,210 |



— Relative to country
— Relative to EU

Regional Innovation Scoreboard 2023

Scotland (UKM)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 57.3 | 0.882 | 125 | 168 |
| Lifelong learning | 14.7 | 0.519 | 99 | 140 |
| International scientific co-publications | 3077 | 0.744 | 155 | 243 |
| Most-cited scientific publications | 1282.1 | 0.745 | 93 | 136 |
| Above average digital skills | 41.0 | 0.803 | 98 | 171 |
| R&D expenditures public sector | 0.82 | 0.586 | 130 | 103 |
| R&D expenditures business sector | 0.85 | 0.506 | 85 | 75 |
| Non-R&D innovation expenditures | ± | 0.479 | 110 | 119 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 3.4 | 0.385 | 57 | 73 |
| Product innovators | ± | 0.446 | 79 | 80 |
| Business process innovators | ± | 0.325 | 75 | 50 |
| Innovative SMEs collaborating | ± | 0.546 | 65 | 112 |
| Public-private co-publications | 472.9 | 0.725 | 129 | 185 |
| PCT patent applications | 2.21 | 0.508 | 91 | 83 |
| Trademark applications | 2.39 | 0.160 | 54 | 32 |
| Design applications | 0.85 | 0.268 | 67 | 46 |
| Employment knowledge-intensive activities | 11.8 | 0.360 | 62 | 63 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.344 | 131 | 72 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.537 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.588 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 94.3 | 107.3 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 116.4 |
| Regional Innovation Index (RII) 2016 | -- | 0.559 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 91.6 | 110.6 |
| Performance change over time | -- | -- | 2.7 | 5.8 |

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

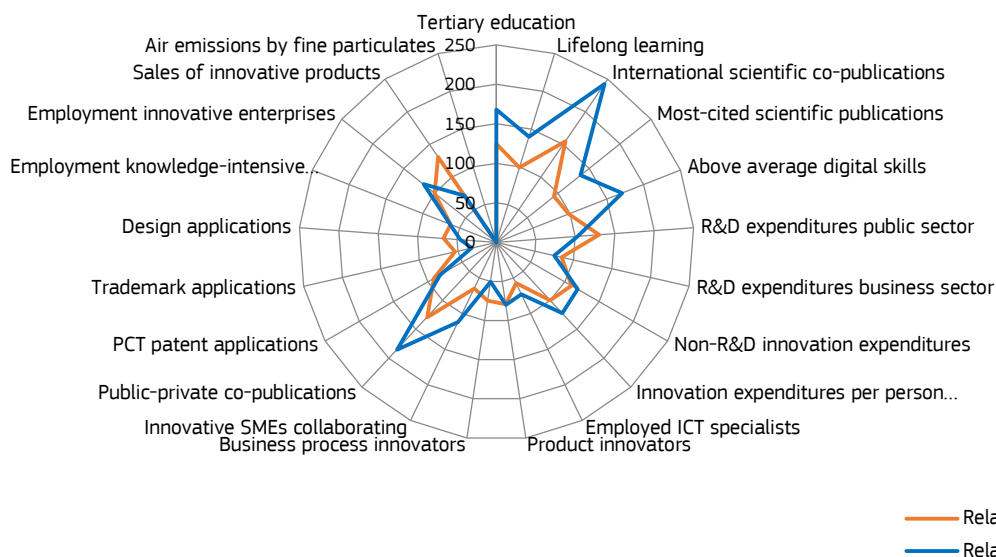
Scotland (UKM) is a Strong Innovator -. Innovation performance has increased over time (5.8%).

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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (94.3) and the EU (107.3) in 2023, the RII in 2023 relative to the EU in 2016 (116.4), and the RII in 2016 relative to both the United Kingdom (91.6) and the EU in 2016 (110.6). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (2.7%) and to the EU (5.8%).

The radar graph shows relative strengths compared to the United Kingdom (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. Employment in Public administration (above EU average) and Employment in Manufacturing (below EU average).

| | UKM | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 3.6 | 1.4 | 4.4 |
| Manufacturing (C) | 7.3 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 9.0 | 8.6 | 8.3 |
| Services (G-N) | 72.1 | 74.2 | 63.7 |
| Public administration (O-U) | 8.0 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 69 | 273 | 106 |
| Urbanisation | 80.9 | 87.1 | 75.8 |
| Population size (000s) | 5,450 | 66,650 | 447,210 |



— Relative to country
— Relative to EU

Northern Ireland (UK) (UKN)

| | Data | Normalised score | Relative to | |
|---|--------|------------------|-------------|-------|
| | | | UK | EU |
| Tertiary education | 48.1 | 0.678 | 96 | 129 |
| Lifelong learning | 10.9 | 0.375 | 72 | 101 |
| International scientific co-publications | 1625 | 0.392 | 82 | 128 |
| Most-cited scientific publications | 1288.2 | 0.749 | 94 | 137 |
| Above average digital skills | 40.8 | 0.799 | 98 | 170 |
| R&D expenditures public sector | 0.39 | 0.370 | 82 | 65 |
| R&D expenditures business sector | 1.11 | 0.578 | 97 | 86 |
| Non-R&D innovation expenditures | ± | 0.488 | 112 | 121 |
| Innovation expenditures per person employed | ± | 0.737 | 100 | 122 |
| Employed ICT specialists | 3.4 | 0.385 | 57 | 73 |
| Product innovators | ± | 0.398 | 70 | 71 |
| Business process innovators | ± | 0.344 | 79 | 53 |
| Innovative SMEs collaborating | ± | 0.553 | 66 | 114 |
| Public-private co-publications | 234.2 | 0.510 | 91 | 130 |
| PCT patent applications | 1.52 | 0.422 | 76 | 68 |
| Trademark applications | 2.19 | 0.146 | 49 | 29 |
| Design applications | 0.86 | 0.271 | 68 | 47 |
| Employment knowledge-intensive activities | 13.9 | 0.460 | 80 | 81 |
| Employment innovative enterprises | ± | 0.676 | 100 | 118 |
| Sales of innovative products | ± | 0.156 | 59 | 32 |
| Air emissions by fine particulates | n/a | n/a | n/a | n/a |
| Average normalised score | -- | 0.474 | -- | -- |
| Country EIS-RIS correction factor | -- | 1.094 | -- | -- |
| Regional Innovation Index (RII) 2023 | -- | 0.519 | -- | -- |
| Performance 2023 relative to EU in 2023 | -- | -- | 83.2 | 94.8 |
| Performance 2023 relative to EU in 2016 | -- | -- | -- | 102.8 |
| Regional Innovation Index (RII) 2016 | -- | 0.476 | -- | -- |
| Performance 2016 relative to EU in 2016 | -- | -- | 78.0 | 94.2 |
| Performance change over time | -- | -- | 5.3 | 8.6 |

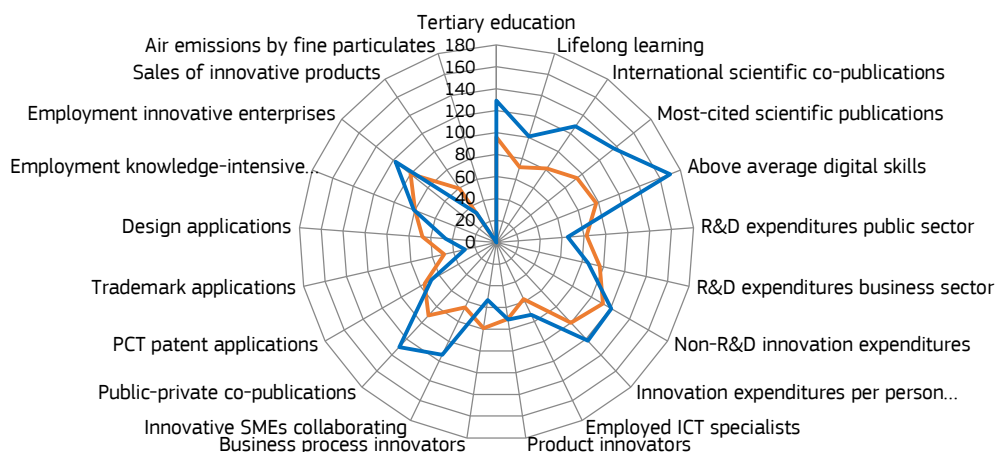
± Scores are not shown as these would allow recalculating confidential regional CIS data.

Northern Ireland (UK) (UKN) is a Moderate Innovator +. Innovation performance has increased over time (8.6%). 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 the United Kingdom and the EU. The next 7 rows show the calculation of the Regional Innovation Index (RII), the RII relative to both the United Kingdom (83.2) and the EU (94.8) in 2023, the RII in 2023 relative to the EU in 2016 (102.8), and the RII in 2016 relative to both the United Kingdom (78) and the EU in 2016 (94.2). The last row shows performance change between 2016 and 2023 compared to the United Kingdom (5.3%) and to the EU (8.6%).

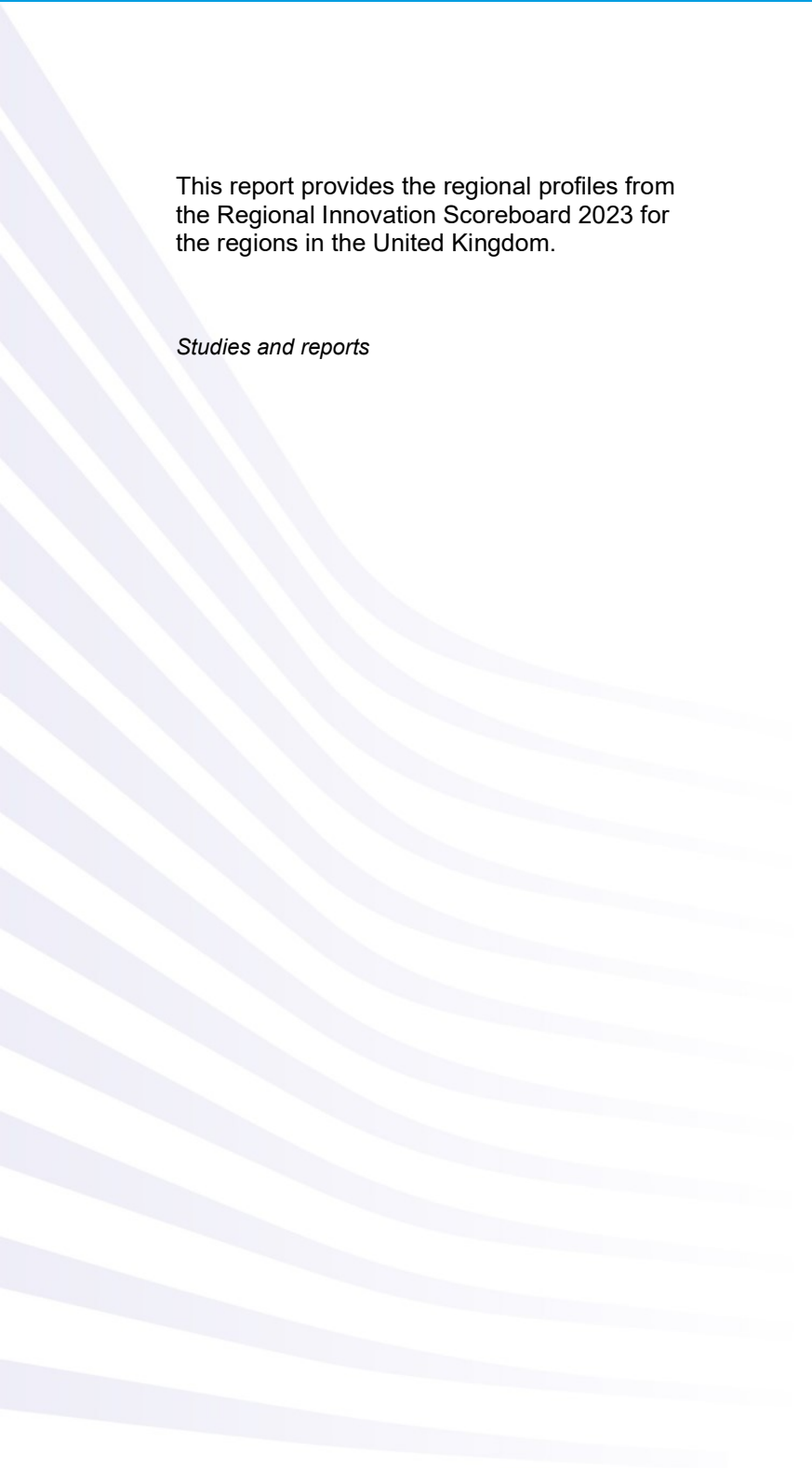

The radar graph shows relative strengths compared to the United Kingdom (orange line) and the EU (blue line), showing relative strengths (e.g. Above average digital skills) and weaknesses (e.g. Trademark applications).

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

| | UKN | UK | EU |
|---|-------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 3.1 | 1.4 | 4.4 |
| Manufacturing (C) | 10.6 | 9.2 | 16.4 |
| Utilities & Construction (D-F) | 8.9 | 8.6 | 8.3 |
| Services (G-N) | 68.5 | 74.2 | 63.7 |
| Public administration (O-U) | 8.8 | 6.7 | 7.2 |
| Average number of employed persons per enterprise | n/a | 8.5 | 5.1 |
| GDP per capita (PPS) | n/a | n/a | 32,400 |
| GDP per capita growth (PPS) | n/a | n/a | 2.5 |
| Population density | 132 | 273 | 106 |
| Urbanisation | 52.6 | 87.1 | 75.8 |
| Population size (000s) | 1,890 | 66,650 | 447,210 |



— Relative to country
— Relative to EU



This report provides the regional profiles from the Regional Innovation Scoreboard 2023 for the regions in the United Kingdom.

Studies and reports