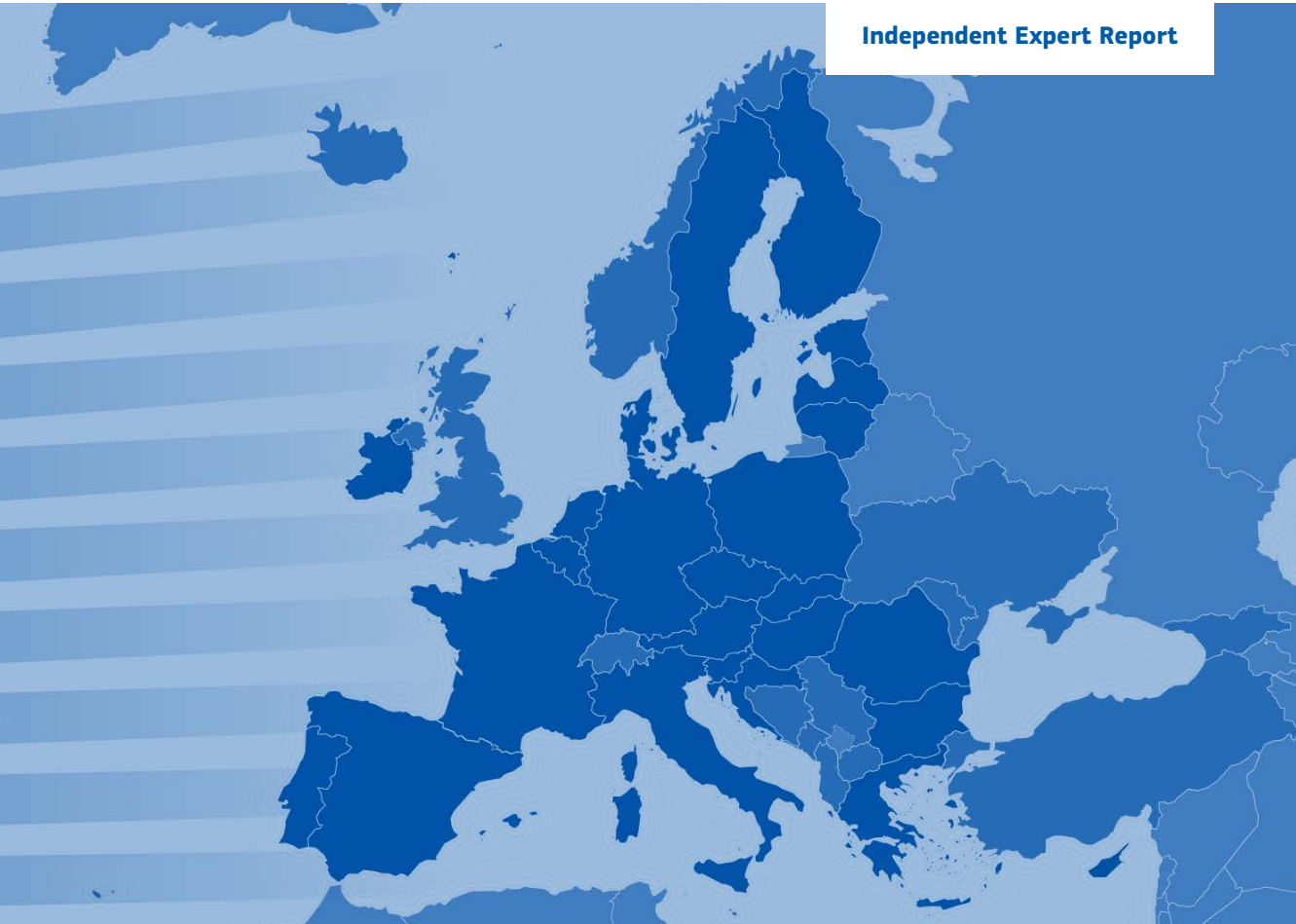




European Innovation Scoreboard 2026



Independent Expert Report

European Innovation Scoreboard 2026

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European Innovation Scoreboard 2026

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FOREWORD

Europe is at a defining moment for its innovation ambition. The 2026 European Innovation Scoreboard (EIS) arrives as the European Commission is stepping up its commitment to global leadership in research and innovation with the aim of strengthening Europe's competitiveness and economic security. The EIS provides a sharp picture of where we stand and what we must do next when it comes to innovation performance.

Despite continuous geopolitical challenges, our Union has proved resilient. The EU's innovation dynamics has improved steadily since 2019, with progress reflected across all Member States. After a period of slower growth, this year's results show renewed momentum. This is a welcome sign that our collective effort is bearing fruit.

We remain committed to strengthening Europe's innovation capacity and narrowing the gap with global competitors. This is why the Commission launched Startup and Scaleup Strategy one year ago, complemented by the proposal for the next Horizon Europe programme (2028-34), which doubles funding for research and innovation.

Innovation needs a strong business case – to attract investment and move from lab to market. In an increasing complex geopolitical environment, European firms need clearer demand signals and a Single Market that enables scale. The Commission proposal for an Industrial Accelerator Act aims to increase demand for low-carbon, European-made technologies and products in selected strategic sectors. With the proposed European Competitiveness Fund, the EU will deliver more focused public investment to support businesses and attract private funding throughout the entire investment journey. Meanwhile, the recent EU Inc. initiative will make it easier for businesses to start, operate and grow across the EU.

The EIS is more than a measurement exercise, it is a strategic compass for policymakers, researchers and innovators across Europe. We invite you to explore its findings and use them as a basis for the bold decisions that will shape Europe's innovation future.



Ekaterina ZAHARIEVA

Commissioner for
Startups, Research &
Innovation

Ekaterina Zaharieva

1. EXECUTIVE SUMMARY

1.1 The EIS is a tool supporting EU level policy development

Since 2001, the EIS has provided a comparative assessment of the research and innovation performance of EU Member States, other European countries and selected global competitors, helping policymakers identify strengths, weaknesses and areas where further action is needed. Over time, the EIS has evolved from a benchmarking exercise into an established reference point for evidence-based innovation policy in Europe. All performance scores described in this report are relative to that of the EU in 2019 and in 2026, facilitating the tracking of progress and trend analysis.

1.2 Europe's innovation performance remains strong with sustained growth

Since 2019, the EU's innovation performance continues to improve steadily

All countries within the EU have increased their innovation performance from the base year of 2019, nonetheless the scale of these increases varies widely, from Luxembourg at 0.5%-points to Estonia at 19.8%-points. The innovation performance of 12 Member States has increased more significantly compared to the EU. Conversely, 15 Member States have recorded a smaller increase in their innovation performance in comparison to the EU.

The EU's innovation performance has increased since 2025

The EU's annual innovation performance has increased by +1.7%-points from 2025 to 2026 after a year of slower growth. Fifteen Member States increased their score in comparison to last year, of which 11 increased by more than the EU. Malta and Italy improved the most, by +15.7%-points, and +5.0%-points, respectively. However, the score of 12 Member States decreased, with the most significant declines observed for Finland (-2.7%-points), and Czechia (-2.5%-points).

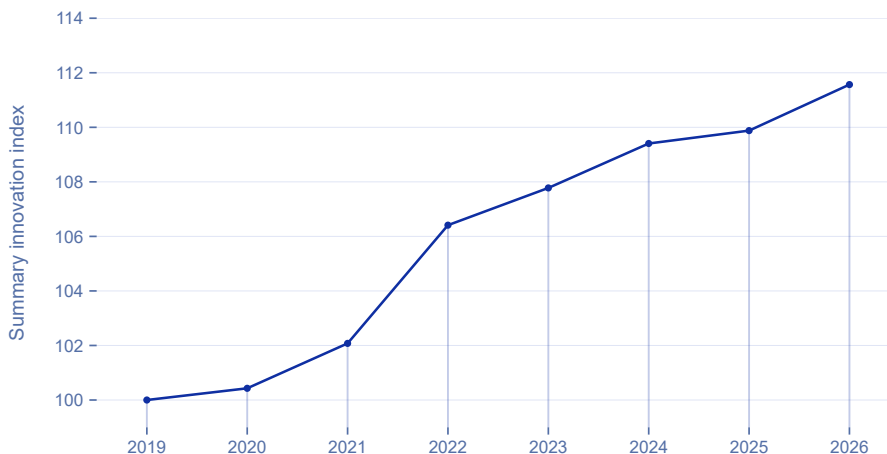


Figure 1: Change in performance of the EU over time

Based on their performance relative to the EU average in 2026 the EU Member States fall into four different performance groups. In performance order, Sweden, Denmark and the Netherlands are Innovation Leaders with innovation performance well above the EU average (above 125% of EU average). Finland, Belgium, Ireland, Luxembourg, Austria, Germany, France, Estonia and Malta are Strong Innovators with performance above 100% of the EU average. Italy, Spain, Portugal, Cyprus,

Slovenia, Lithuania, Czechia, Greece and Hungary are Moderate Innovators with performance below the EU average. Croatia, Poland, Slovakia, Latvia, Bulgaria, and Romania are Emerging Innovators with performance well below the EU average (below 70% of EU average).

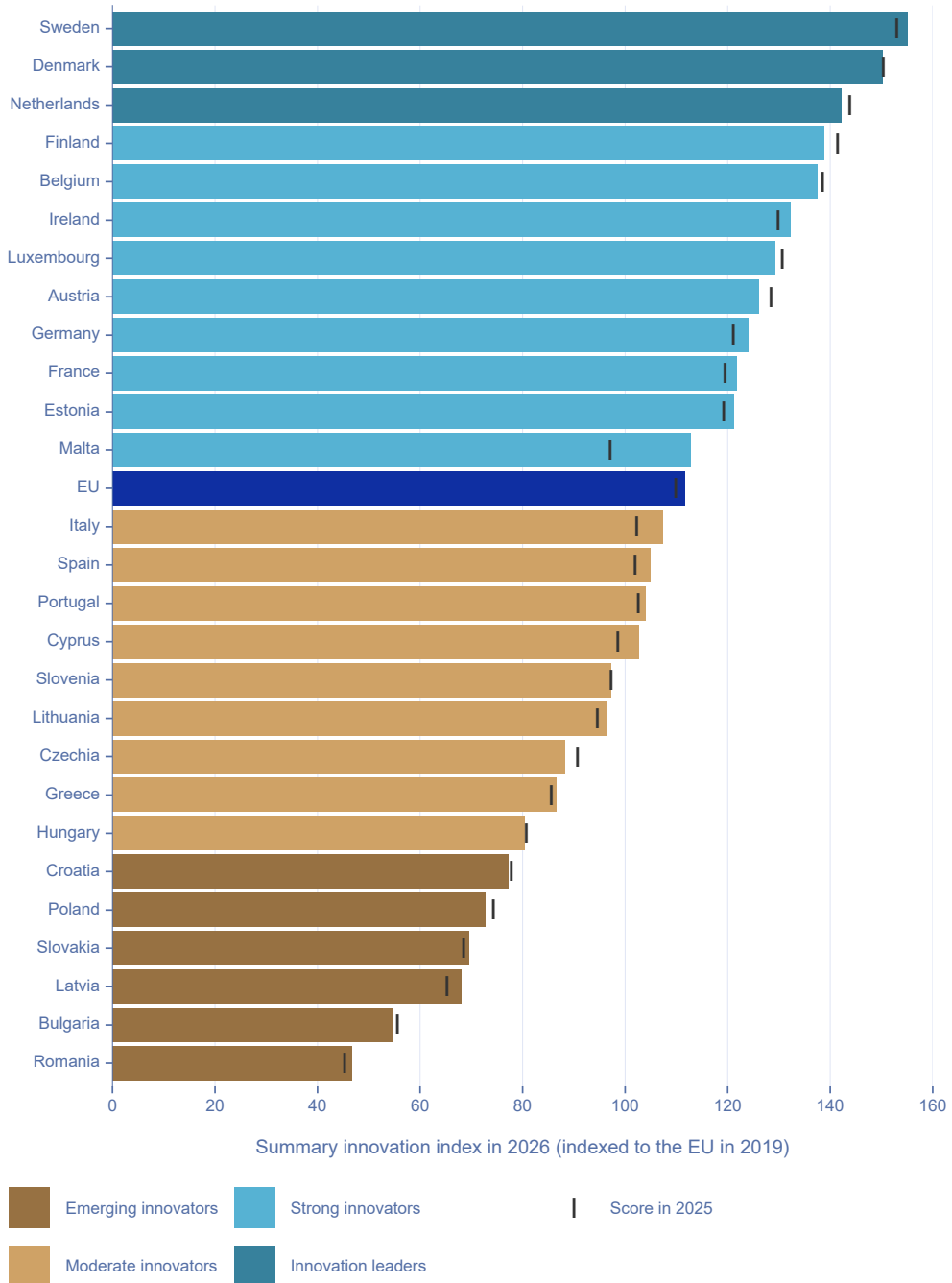


Figure 2: Innovation performance of the EU Member States in 2026 and change since 2025

1.3 Performance within the EU

Sweden remains at the top spot of EU innovators

Sweden retains its position as the most innovative Member State, ahead of Denmark which remains in 2nd place, and followed by the Netherlands, which also remains 3rd. Sweden has increased its score by +7.6%-points in comparison to 2019, and +2.1%-points in the last year.

Changes in performance groups

Finland ranks 4th (as in 2025) and its overall score increased by +8.3%-points since 2019. However, Finland has dropped from the Leading Innovators to the Strong Innovators performance group in 2026, as its score relative to the EU dropped from 128.8 in 2025 to 124.4 in 2026.

Malta has moved up from the Moderate Innovators to the Strong Innovators group, with its score relative to the EU moving from 88.4 in 2025 to 101.1 in 2026 surpassing the threshold of the Strong Innovators group (100). Malta's overall index increased the most of any Member State since 2025, but it only records the 8th highest growth (+13.1%-points) amongst Member States since 2019.

Croatia has moved down from the Moderate Innovators to the Emerging Innovators group, with its score relative to the EU dropping slightly below the threshold, from 70.8 to 69.2 in 2026, even though its overall index increased by +11.0%-points since 2019.

Belgium has shifted from the Leading Innovators to the Strong Innovators between 2025 and 2026 within this edition, with its score relative to the EU moving from 126.1 to 123.2, just below the threshold of 125, although its performance increased by +11.6%-points since 2019 (the same progression as the EU average).

1.4 Neighbouring countries and global competitors

Switzerland leads among all European countries for the ninth year in a row

Four of the EU neighbouring countries score above the EU average in 2026, namely Switzerland, United Kingdom, Norway and Iceland. Switzerland ranks 1st in the extended ranking outperforming all EU Member States in 2026, at 141.3% of the EU average in 2026.

Mixed Performance among Emerging Innovators in the Western Balkans

Among the Western Balkans countries, Serbia is the strongest performer, ranking 5th in the Emerging Innovators group at 67% of the EU average in 2026. Montenegro and Bosnia and Herzegovina recorded the highest growth, with increases of +2.8%-points and +1.5%-points respectively. By contrast, North Macedonia and Albania had modest declines of -0.7%-points and -0.4%-points respectively compared to 2025.

Georgia, a new addition to the Innovation Scoreboard

Data availability is a critical element for countries' effective participation in the EIS. Data gaps resulting from missing data, outdated data or data comparability issues have been a persistent barrier to adequately reflect EU neighbouring countries' performance in the EIS. This year Georgia has reached the 75% data availability threshold and joined the EIS for the first time entering the Emerging Innovators group.

South Korea remains the top innovator in 2026, while China slightly outperforms Canada and Australia overtakes the United States

South Korea remains the most innovative global competitor in 2026 outperforming the EU average by 21.9% in 2026. China, Canada, Australia and the United States (which drops to 5th place in 2026) also outperform the EU. Between 2019 and 2026 all competitors improved their innovation performance, but China, South Korea and Australia widened their lead over the EU. Over the last year the EU has gained ground on the United States and Canada. The detailed results by indicator point to significantly higher growth since 2019 of government support for business R&D in China, the United States and Canada and of business R&D expenditure in the USA, China, Japan and South Korea, than in the EU.

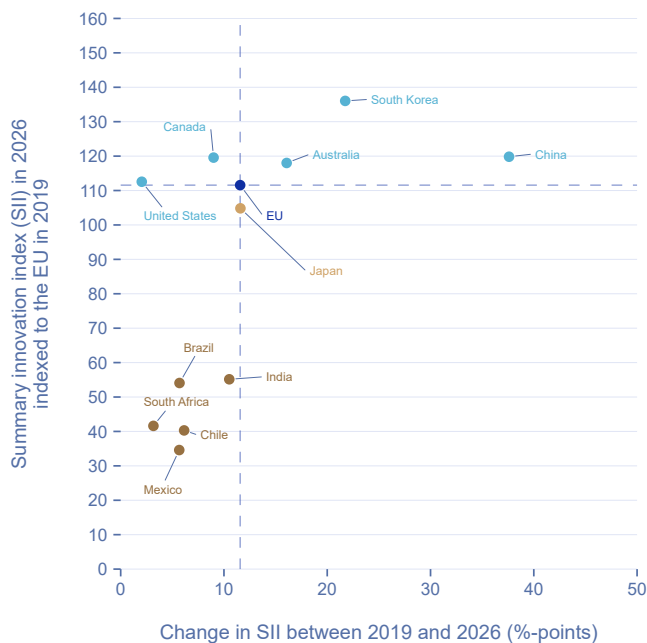


Figure 3: Innovation performance change of the EU and global competitors - 2019 to 2026

The EIS uses the best-available data and meets the highest quality methodology standards

Data is sourced from Eurostat and international providers, with additional input from national statistical offices where needed. The Scoreboard team works closely with data providers to ensure the data included is as up to date and robust as possible. Since the 2024 edition, the data collection and calculation process for the EIS has been automated. The EIS is constructed using the COINr package developed by the European Commission's Competence Centre for Composite Indicators and Scoreboards. The automated approach provides a highly replicable and easy to follow data pipeline which feeds the COINr package and automatically provides the main outputs of the EIS, including the summary innovation index (SII). The European Commission's Joint Research Centre (JRC) supports the EIS by auditing the statistical robustness of the composite indicators to ensure transparency and reliability.

2. WHY MEASURING INNOVATION PERFORMANCE MATTERS

2.1 Innovation in a time of geopolitical turbulence

Europe's innovation agenda is being shaped by a more unstable and contested global environment than at any time in recent decades. Geopolitical rivalry, economic fragmentation, supply-chain disruption, rapid technological change and growing pressure on strategic sectors are reshaping the conditions under which firms, researchers and public institutions operate. In this context, improving innovation performance across the European Union (EU) is no longer only a question of long-term productivity or economic growth. It is increasingly a condition for Europe's competitiveness, resilience and capacity to act in its own strategic interest.

Innovation matters because it strengthens the Union's ability to respond to several challenges at once. It supports productivity growth and the creation of high-value activities, but it also helps the EU adapt to climate change, accelerate the digital transition, improve health security, strengthen defence-related capabilities and reduce dependencies in critical technologies and inputs. This broader strategic role of innovation is reflected in the EU policy agenda. The 2025 Competitiveness Compass¹ identified innovation as a central driver of the Union's future competitiveness and calls for stronger performance in research, technology adoption and business scale-up to support productivity growth, decarbonisation and economic security. In parallel, the EU Startup and Scaleup Strategy² seeks to improve the framework conditions for innovative firms to start, grow and scale in the EU, while initiatives such as Choose Europe for Science³ and the European Research Area (ERA)⁴ agenda aim to strengthen Europe's research base, talent attraction and knowledge circulation

The case for stronger innovation performance is reinforced by the pace of global technological competition. Although the EU has improved its innovation performance over the longer term, it continues to be outperformed by several global competitors and faces mounting pressure from countries that are moving faster in key technology fields. The challenge is especially acute in areas where innovation and strategic dependency intersect. Recent shocks have exposed vulnerabilities in energy systems, advanced technologies, raw materials, health-related supply chains and other critical inputs. These risks have sharpened the policy focus on resilience and strategic autonomy. Innovation is central to this effort: it helps develop alternatives to scarce inputs, improve resource efficiency, strengthen domestic technological capabilities and diversify sources of supply. This logic is increasingly visible across the EU's policy framework, including in the Strategic Technologies for Europe Platform (STEP⁵), which focuses support on digital and deep-tech innovation, clean and resource-efficient technologies, and biotechnologies.

At the same time, the Union's long-term strength rests on combining international openness and collaboration with a stronger capacity to develop, adopt and scale innovation within the Single Market⁶. This means improving the conditions under which knowledge is translated into marketable products, productive investment and business growth. It also means making better use of the Union's research strengths, talent base and industrial capabilities, while ensuring that innovative firms can access finance, skills, infrastructure and markets. This is particularly important because, in many areas, the EU performs well in scientific output, yet does not fully turn these strengths into commercial leadership, fast-growing firms and productivity gains.

1 https://commission.europa.eu/topics/competitiveness/competitiveness-compass_en

2 https://research-and-innovation.ec.europa.eu/strategy/strategy-research-and-innovation/jobs-and-economy/eu-startup-and-scaleup-strategy_en

3 https://commission.europa.eu/topics/research-and-innovation/choose-europe_en

4 <https://european-research-area.ec.europa.eu/>

5 https://strategic-technologies.europa.eu/index_en

6 https://single-market-economy.ec.europa.eu/publications/single-market-our-european-home-market-uncertain-world_en

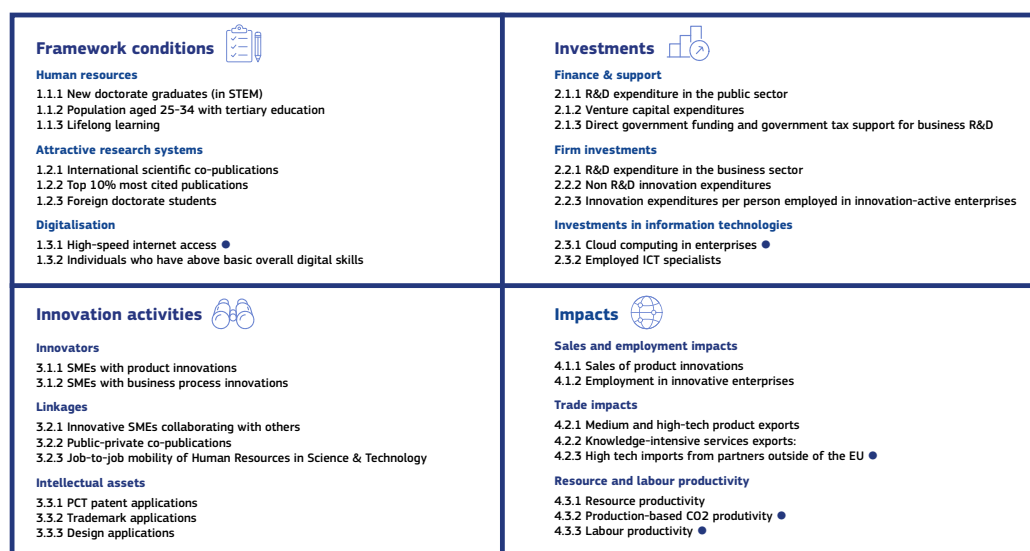
The European Innovation Scoreboard (EIS) reflects this broad understanding of innovation by covering framework conditions, investments, innovation activities and impacts, including indicators linked to technological capacity and resilience. Improving innovation performance across the EU also matters for cohesion, since persistent gaps in innovation capacity weaken the overall performance of the Single Market, limit the diffusion of new technologies and reduce the Union's collective ability to respond to shared challenges. Against this backdrop, the EIS provides a robust comparative base for monitoring performance, identifying strengths and weaknesses, and tracking how national innovation systems evolve over time. In the turbulent geopolitical context, such evidence is essential for guiding policy choices, targeting reform efforts and understanding where progress is being made and where vulnerabilities remain.

2.2 Measuring performance of national innovation systems

The EIS provides an annual assessment of research and innovation (R&I) performance of the EU Member States and selected third countries, and the relative strengths and weaknesses of their R&I systems. It covers the 27 EU Member States as well as 13 neighbouring countries: Albania, Bosnia and Herzegovina, Georgia, Iceland, Moldova, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Türkiye, Ukraine and the United Kingdom. The Republic of Georgia is included in the EIS 2026 edition for the first time, extending the coverage of neighbouring countries. On a more limited number of globally available indicators, the EIS compares the EU's performance with that of Australia, Brazil, Canada, Chile, China, India, Japan, Mexico, South Africa, South Korea, and the United States.

2.2.1 The European Innovation Scoreboard framework

The EIS methodological framework is based on a total of 32 indicators, divided into four main categories and 12 dimensions (Figure 4). The indicator framework was last updated in 2025⁷ and the figure below highlights the indicators introduced in 2025.



Legend ● Indicators introduced in 2025

Figure 4: EIS measurement framework

⁷ European Innovation Scoreboard 2025. Technical report on the revision of the scoreboard methodology. Available at: https://research-and-innovation.ec.europa.eu/document/download/6a7e54cc-9841-4199-8b36-87914a366fb9_en?filename=ec_rtd_eis-2025-technical-report-revision.pdf

Framework conditions

Innovation stems from knowledge-based activities, where information and expertise come together to drive progress. The EIS assesses the prevalence of tertiary education and science, technology, engineering and maths (STEM) doctorates, the trend towards international collaboration and dissemination of research results, and the extent of digitalisation, recognising that advanced digital skills and infrastructures are instrumental in accessing information and nurturing innovation.

Investments

Access to finance plays a vital role in developing new solutions and facilitating their adoption by the market or firms. The EIS therefore evaluates the investments directed towards R&D and innovation coming from diverse sources such as the public sector, venture capitalists, and businesses. In addition, the EIS assesses the investment made by businesses in their digitalisation through indicators on Cloud computing in enterprises and Employed ICT specialists, reflecting the growing importance of advanced digital tools and skills in Europe's innovation systems.

Innovation activities

To evaluate a country's innovation activities, the EIS places an emphasis on small and medium enterprises (SMEs), measuring their introduction of novel products or business processes and the degree to which they collaborate or copublish across different sectors. As highlighted before, an invention must be successfully commercialised or exploited to be considered an innovation. Therefore, the EIS examines how often companies translate inventions into marketed products or related assets. To gauge the intellectual capital of a country, the EIS also quantifies the number of patents, trademarks, or designs generated by innovators.

Impacts

Lastly, the EIS evaluates the impact of innovation activities on sales and employment, trade, and resource and labour productivity. It includes indicators such as Employment in innovative enterprises, Sales of new-to-market and new-to-firm innovations, and the export value of medium- and high-tech products or knowledge-intensive services. To reflect industrial and strategic resilience, the EIS includes an indicator on high-tech imports from partners outside of the EU, capturing Member States' reliance on external sources for high-tech goods and services. In addition, the EIS goes beyond purely economic metrics by including environmental and social impacts, assessed through three forms of productivity: Resource productivity, Production-based CO₂ productivity, and Labour productivity.

The EIS draws on data sourced from Eurostat (notably the Community Innovation Survey (CIS), including for this EIS edition preliminary Fast-Track data from the CIS2024 for 20 Member States and three neighbouring countries), international organisations (OECD, etc.), national statistical offices (for neighbouring countries that do not automatically provide data to Eurostat) and specialised data providers (for patents, publications, and venture capital data). For further details, on the methodology for collecting and analysing data see section 8 and the EIS Methodology Report. The EIS team is grateful for the support of Eurostat and all data providers including Invest Europe and national statistical offices. In addition, the Joint Research Centre (JRC) Competence Centre on Composite Indicators and Scoreboards carries out periodic statistical audits on the EIS to provide a statistical assessment of the composite indicators and contribute to improving transparency and reliability of the results.

2.2.2 Interpreting scores, rankings and performance groups

The Summary Innovation Index (SII) provides a single, comparable score that reflects the overall innovation performance of each country. It is calculated as the unweighted average of the 32 indicators, i.e. each indicator is assigned an equal weight. To ensure comparability, scores present performance relative to the EU average rather than absolute values. For example, a score of 110.0 in 2026 indicates that the country is performing 10.0%-points above the EU average in 2019. To assess the innovation performance of a country over time, SII scores are presented relative to the EU score for the baseline year (2019 in this edition).

Countries are grouped into performance categories (Emerging, Moderate, Strong, and Leader) based on how their SII compares to the EU average in the current year (2026). Country rankings, presented for either the EU Member States only or including neighbouring countries, provide an additional comparative perspective. Strengths and weaknesses are identified by comparing a country's indicator scores to the EU average, highlighting areas of relative advantage or lag. Taken together, and complemented by structural indicators that provide context, these elements enable a nuanced interpretation of innovation performance within and across countries.

Users are encouraged to consult the interactive online tool⁸, explore individual country profiles, and access the underlying data and methodology files to conduct their own analysis or draw tailored insights. Box 1 below provides further guidance on how to interpret SII values, rankings, reference years, indicator classifications, and available supporting resources.

How to assess a country's performance:

- Countries are assessed using the SII, a composite indicator based on 32 indicators covering various aspects of innovation.
- Based on their SII score relative to the EU average, countries are classified into Innovation Leaders, Strong Innovators, Moderate Innovators, or Emerging Innovators.

Reference years:

- Data can be indexed to the EU in the current year (2026) or in the baseline year (2019) – this is clearly indicated in the report and online tool.
- Indexing to the EU in the current year is used to determine the performance group. Sweden performs at 139.0% of the EU average in 2026, meaning it outperforms the EU average by 39% and is above the 125% threshold which puts it in the Leading Innovators group.
- Indexing to the EU in the baseline year shows performance change over 8 years. For example, in 2026, Sweden performs at 155.8% of the EU average in 2019. Indexing to the baseline year is especially useful for showing trends in line charts, or changes from year to year.

Indicators:

- The SII is the unweighted average of 32 indicators, grouped into 12 dimensions and four pillars.

⁸ See: <https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis#/eis>

- Structural indicators provide contextual socio-economic information that helps users interpret national innovation performance but are not included in the SII calculation.

Rankings:

- Countries are ranked based on their SII score: Sweden ranks 1st in the EU in 2026; Switzerland ranks 1st overall, including neighbouring countries.
- Each indicator can be ranked among EU Member States and neighbouring countries, showing relative performance.
- Within each country, the top three and bottom three indicators (based on scores) are identified as strengths and weaknesses.

Additional resources complementing this report which can be downloaded from EIS web page https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en:

- **EIS 2026 Methodology report:** a detailed explanation of how data and scores were calculated.
- **Annex B:** performance results for each of the indicators used in the EIS 2026.
- **Replication package:** Excel datasheets and a COINr package enabling replication of the 2026 results.

EIS Online tool - accessible via <https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis#/eis>:

- Interactive data exploration and analysis:
 - **New in 2026: Online Methodology explainer**
 - **New in 2026: Download maps/diagrams and related data on the online tool.**

Box 1: How to use and interpret EIS results

The EIS is part of a broader family of 'scoreboards' that provide additional insights at either more disaggregated territorial levels (regional) or on specific thematic or policy topics. These 'scoreboards' include the Regional Innovation Scoreboard (last published in 2025, next edition to be published in 2027), the Eco-Innovation Index (last published 2024, next edition to be published in autumn 2026), the European Research Area (ERA) Scoreboard (last edition 2025), Digital Economy and Society Indicators and the most recent addition, the European Startup and Scaleup Scoreboard (ESSS) (see section 6 of this report for a discussion on the complementarities between the EIS and the ESSS). For Global competitors, the Global Innovation Index (GII) provides a comprehensive analysis of innovation ecosystems across 139 economies (including all EU Member States), tracking global innovation trends through investment patterns, technological progress, adoption rates, and socioeconomic impacts.

We thank Invest Europe for sharing data on Venture capital expenditures, the European Union Intellectual Property Office, Science-Metrix (Elsevier) and Fraunhofer ISI for providing data on trademarks and designs, scientific publications and patents, DG EUROSTAT Units G2, and all National Statistical Offices that shared data.

2.2.3 How the EIS supports better policy making

Since 2001, the EIS has provided a comparative assessment of the R&I performance of EU Member States, other European countries and selected global competitors, helping policymakers identify strengths, weaknesses and areas where further action is needed. Its value for policymaking lies above all in its ability to translate complex innovation systems into a clear and comparable evidence base. By combining data on framework conditions, investment, innovation activities and impacts, the EIS allows governments and public authorities to monitor performance over time, benchmark themselves against peers, and identify where reform efforts or additional support may be required. The online interactive tool allows users to compare country profiles, analyse trends and explore relative strengths and weaknesses in more detail.

At EU level, the EIS contributes to a wider architecture of monitoring and policy learning. It supports the work of the European Commission by providing continuous assessment of country innovation performance and policy-relevant evidence for experts and practitioners working on R&I. The scoreboard is also used alongside other monitoring instruments to inform broader debates on competitiveness, cohesion, industrial transformation and the implementation of EU innovation priorities.

The EIS is one of several inputs used by the European Commission to a wider evidence base for assessing country performance and informing policy discussion. The EIS contributes, notably, to the European Semester by supplying comparative innovation performance assessment that feeds into the analysis underpinning the semester country reports. These reports offer a detailed assessment of each Member State's economic and social developments and challenges, and the EIS helps situate innovation performance within the broader competitiveness and structural reform picture considered in that exercise.

The scoreboard is also increasingly embedded in EU instruments that target innovation gaps. It has been used as a reference to check the eligibility of applicants under the Regional Innovation Scheme (RIS) of the European Institute of Innovation and Technology and its KICs, where countries must be classified as moderate or emerging innovators in at least one recent EIS edition to qualify. In the Commission proposal for Horizon Europe 2028–2034, EIS performance is one of the criteria for distinguishing between 'transition' countries and 'widening' countries, giving the scoreboard a direct role in shaping the targeting of support within that strand.

Box 2: The EIS as a tool supporting EU level policy development

At national level, the EIS is particularly useful because it offers both a headline signal and a more detailed diagnostic. The overall ranking and performance group attract political and media attention, helping to raise the visibility of innovation issues in national debate. At the same time, the underlying indicators give ministries, agencies and advisory bodies a more granular picture of where performance is improving, where bottlenecks remain, and which parts of the innovation system may require targeted action. In that sense, the EIS serves not only as a communication tool, but also as a guide for policy design, implementation and review.

Ireland provides a clear example of how the EIS can be used to support the development of national strategic frameworks. The Irish Government has explicitly linked the ambition of its national R&I strategy, Impact 2030⁹, to improving Ireland's position in the EIS, with the objective of achieving Innovation Leader status by 2030. Government communications accompanying the annual publication of EIS results use the scoreboard to monitor progress towards this ambition, highlight areas of strength, communicate improvements in Ireland's relative position, and identify areas where further policy intervention is required. For example, in 2024 the Government welcomed Ireland's improvement to 7th place among EU Member States, while also recognising continuing challenges in areas such as design applications and environment-related technologies¹⁰. In this way, the EIS functions not only as an international benchmarking tool but also as an element of Ireland's policy monitoring framework — providing evidence to inform priorities, track outcomes, and support accountability for the implementation of Impact 2030.

In **Albania**, the EIS is used as a central reference for identifying reform needs in the national innovation system, as part of the EU accession process. A recent POLICY ANSWERS report – commissioned with the involvement of the National Agency for Scientific Research and Innovation (NASRI/AKKSHI) sets out specific recommendations to improve Albania's position in the EIS. The recommendations emphasise the need for strengthened governance and monitoring through regular quarterly meetings with key stakeholders in Albania. Enhanced statistical reporting is highlighted as a priority, aiming for Albania to report on at least 29 of the 32 EIS indicators by 2027, focusing on missing data for indicators such as high-speed internet access, innovation expenditures and labour productivity. Targeted policy measures, including the introduction of STEM doctoral fellowships, promotion of cloud computing adoption in enterprises and strengthened public-private collaboration in R&I, are recommended to boost performance¹¹.

Box 3: Member States use of the EIS to inform and steer reform priorities

⁹ See: <https://www.gov.ie/en/department-of-further-and-higher-education-research-innovation-and-science/publications/impact-2030-irelands-research-and-innovation-strategy>

¹⁰ See: <https://www.gov.ie/en/department-of-further-and-higher-education-research-innovation-and-science/press-releases/minister-odonovan-welcomes-irelands-improved-european-ranking-in-research-and-innovation>

¹¹ See: <https://enlargement-fohub.eu/documents/policy-answers-policy-report-general-and-specific-recommendations-to-improve-the-position-of-albania-in-the-european-innovation-scoreboard-eis/>

3. INNOVATION PERFORMANCE AND TRENDS IN THE EU

This section discusses the innovation performance of the 27 EU Member States showing rankings and trends.

3.1 Innovation performance of the EU in 2026

Based on their SII in 2026, the EU Member States are categorised into four performance groups, namely Innovation Leaders, Strong Innovators, Moderate Innovators, and Emerging Innovators:

- Innovation Leader Member States with performance above 125% of the EU average in 2026. This group includes three Member States, ranked by order of performance: **Sweden, Denmark and the Netherlands**.
- Strong Innovators have a performance between 100% and 125% of the EU average. This group includes nine Member States, ranked by order of performance: **Finland, Belgium, Ireland, Luxembourg, Austria, Germany, France, Estonia and Malta**.
- Moderate Innovators perform between 70% and 100% of the EU average. This group includes nine countries, ranked by order of performance: **Italy, Spain, Portugal, Cyprus, Slovenia, Lithuania, Czechia, Greece and Hungary**.
- Emerging Innovators are Member States that have a performance level below 70% of the EU average. This group includes six Member States, ranked by order of performance: **Croatia, Poland, Slovakia, Latvia, Bulgaria, and Romania**.

Four Member States have moved from one performance group to another:

- Finland has dropped from the Leading Innovators to the Strong Innovators performance group in 2026, with its score relative to the EU dropping from 128.8 in 2025 to 124.4 in 2026, even though its rank is unchanged, and its overall score increased by 8.3%-points since 2019. The biggest contributors to the year-on-year drop in Finland's overall score in 2026 were *Sales of product innovations, Employment in innovative enterprises and SMEs with product innovations*¹².
- Malta has moved up from the Moderate Innovators to the Strong Innovators group, with its score relative to the EU average moving up from 88.4 in 2025 to 101.1 in 2026 (just above 100 that marks the threshold of the Strong Innovators group). Malta's overall index increased by 15.7%-points since 2025, the most of any Member State, and increased by 13.1%-points since 2019. Indicators that contributed the most positively to Malta's overall index in 2026 were *Innovation expenditures per person employed in innovation-active enterprises; Non-R&D innovation expenditures and Design applications*.
- Croatia has dropped from the Moderate Innovators to the Emerging Innovators group, with its score relative to the EU dropping slightly below the threshold, from 70.8 to 69.2 in 2026, even though its overall index increased by 11.0%-points since 2019. The indicators that contributed the most to Croatia's index drop were *Venture capital expenditures; Employment in innovative enterprises and SMEs with business process innovations*.

¹² Note that the drops in Sales of product innovations and Employment in innovative enterprises were already present in EIS 2025, with no new data for this edition. Only SMEs with product innovations (out of these three) had a new year of data from the CIS 2024 fast track.

- Belgium dropped from the Leading Innovators to the Strong Innovators between 2025 and 2026 within this edition, with its score relative to the EU moving from 126.1 to 123.2, just below the threshold of 125, and although its performance increased by 11.6%-points since 2019 (the same progression as the EU average). The indicators that contributed the most negatively to Belgium's overall index were *Sales of product innovations*; *Foreign doctorate students* and *Venture capital expenditures*.

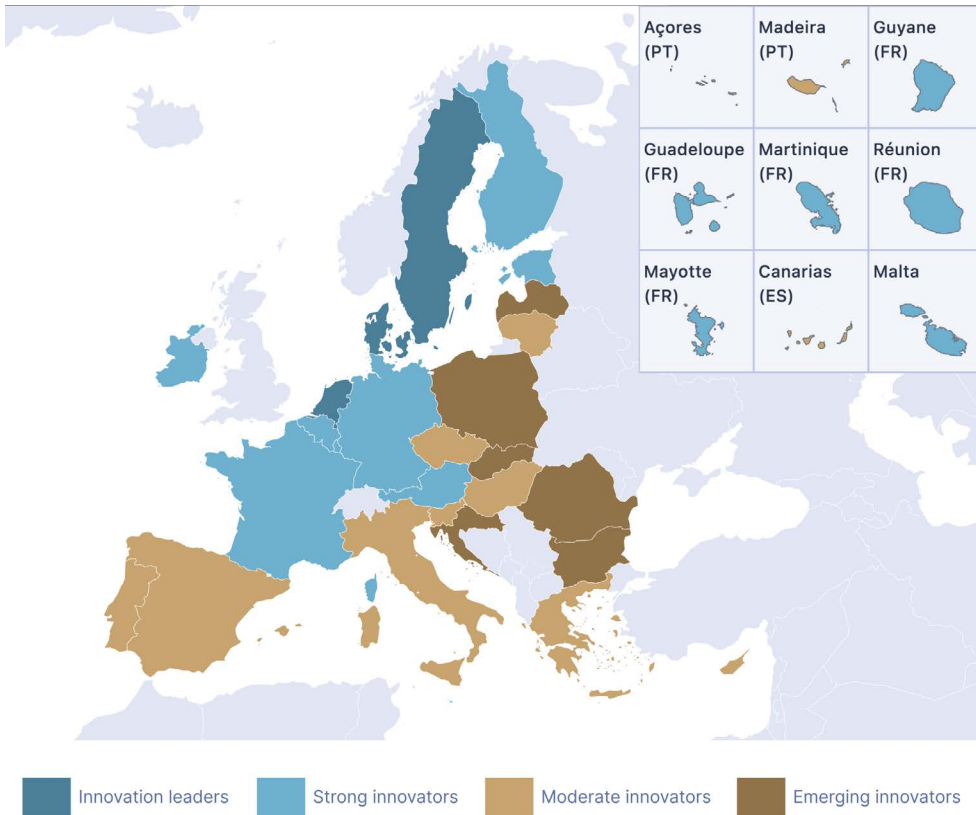


Figure 5: Innovation performance of the EU Member States in 2026 (map)

3.2 Innovation performance trends

Figure 6 shows the 2026 scores for the SII for all EU Member States, relative to the EU in 2019 and compares them to their SII score in 2025. Both years are drawn from the EIS 2026 time series and are not directly comparable to scores published in previous EIS editions. The results show that 12 Member States rank above the EU average and 15 below. Compared to 2025, the ranking in 2026 remains unchanged for 21 Member States, while 6 Member States have shifted positions upwards or downwards. Notably, Malta shifted upwards by five positions between 2025 and 2026, while Portugal dropped three positions.

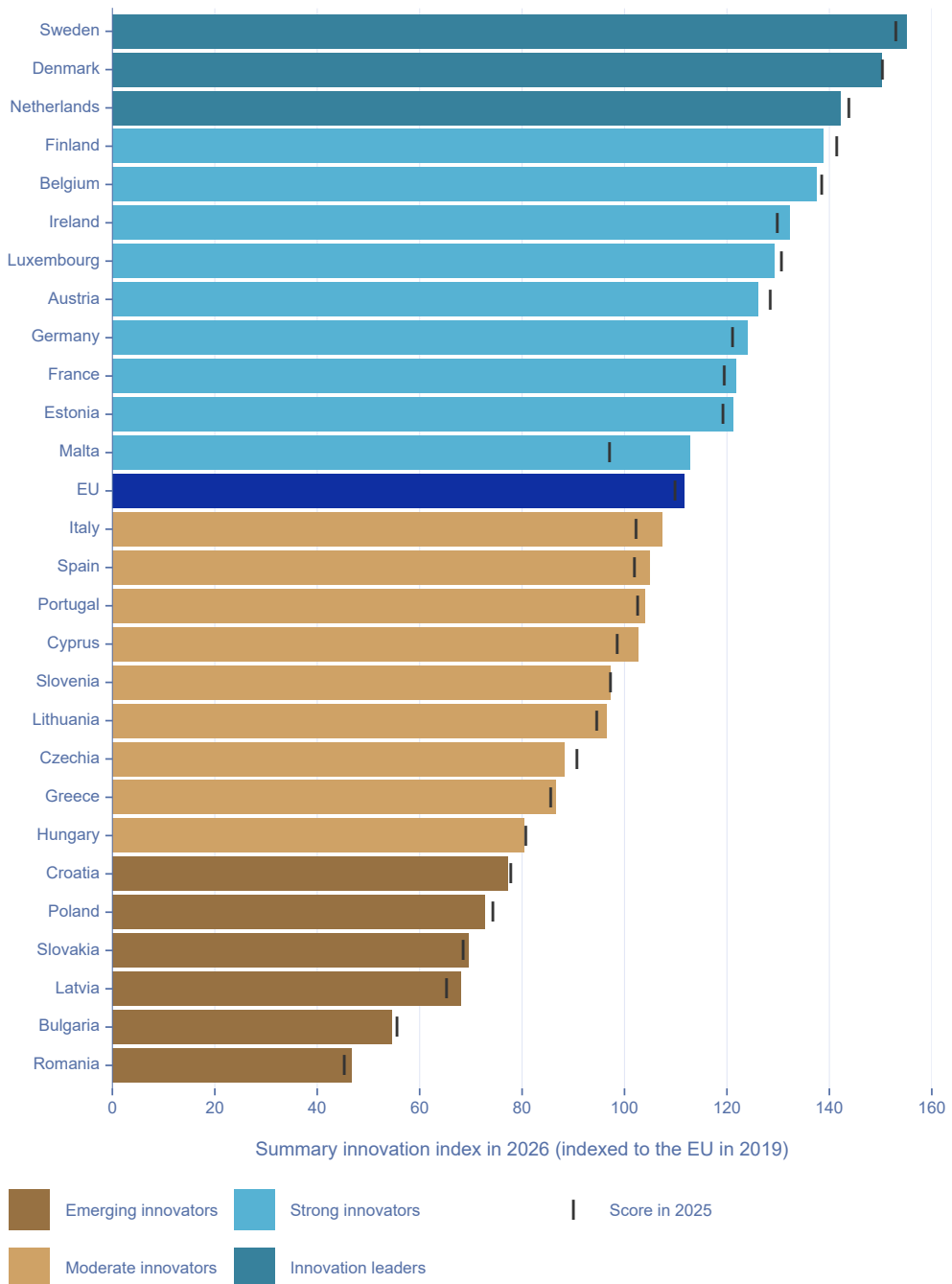


Figure 6: Innovation performance of the EU Member States, compared to 2025

Using 2019 as the base year, Malta, Italy, Cyprus, Germany, Spain, Latvia, Ireland, France, Sweden, Lithuania, Estonia, Portugal, Romania, Slovakia and Greece have increased their innovation performance since 2025. The scores for the remaining Member States decreased or remained stable. The changes range from Malta at +15.7%-points to Finland at -2.7%-points. The EU's score increased by +1.7%-points, from 109.9% in 2025 to 111.6% in 2026.

Compared to 2019, all EU Member States improved their innovation performance, with increases ranging from +0.5%-points in Luxembourg to +19.8%-points in Estonia. The EU average stood at +11.6%-points. Several countries recorded notably strong improvements well above the average, including Lithuania (+19.7%-points), Poland (+16.3%-points), Italy (+15.0%-points), Greece (+14.6%-points), Spain (+14.1%-points) and Cyprus (+13.8%-points). Several other Member States performed close to or slightly above the EU average, such as Hungary (+13.4%-points), Malta (+13.1%-points), Portugal (+13.0%-points), Czechia (+12.6%-points) and Belgium (+11.6%-points). More modest progress was observed in France, Croatia, Ireland, Slovakia, Austria, Finland, Romania and Sweden with increases between +7.6%-points and +11.2%-points. Meanwhile, Slovenia (+7.4%-points), the Netherlands (+7.1%-points), Latvia (+6.2%-points), Denmark (+6.2%-points), Germany (+5.7%-points), Bulgaria (+4.5%-points) and Luxembourg (+0.5%-points) recorded the smallest improvements since 2019.

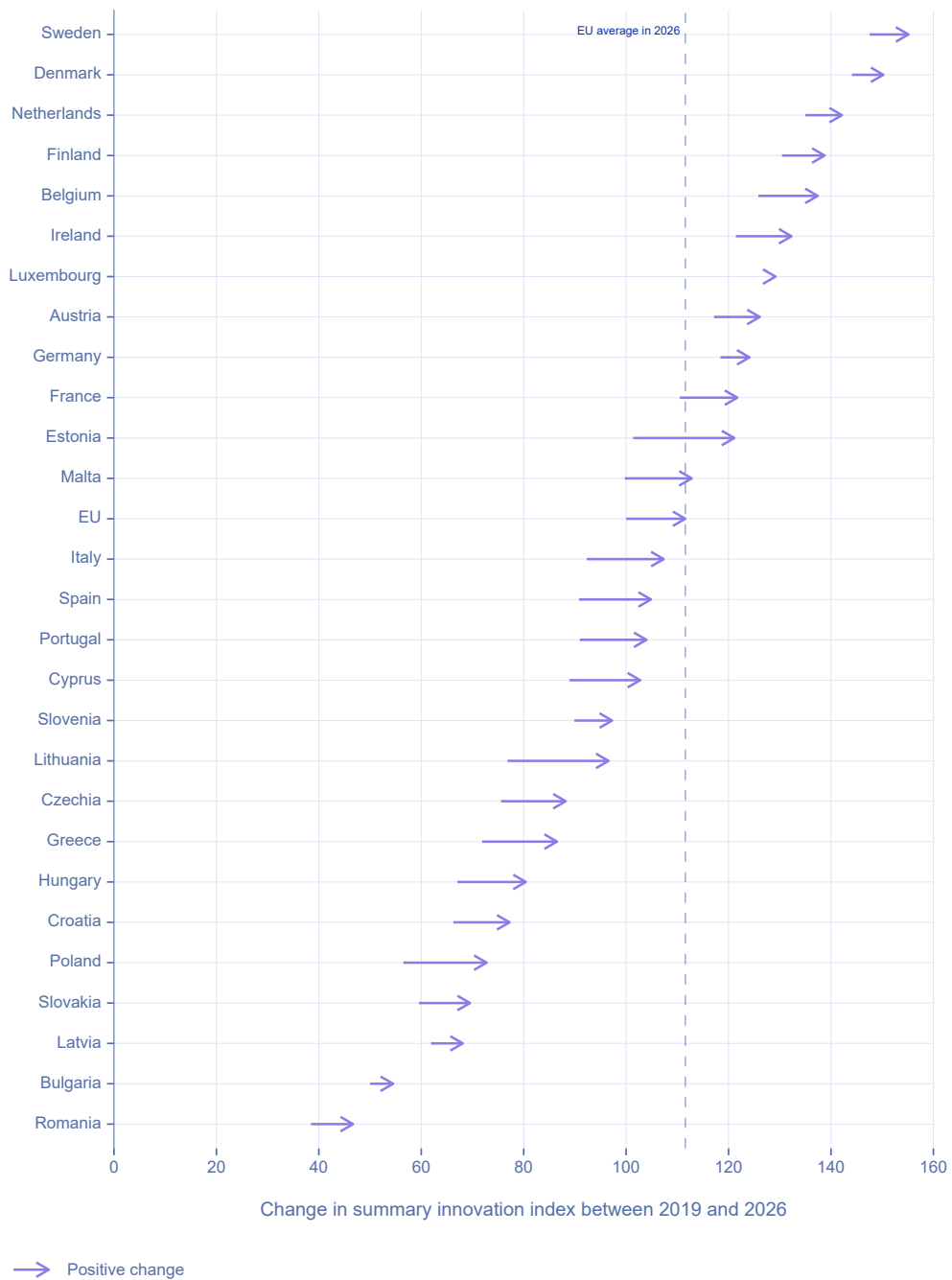


Figure 7: Innovation performance change of the EU Member States - 2019 to 2026

3.2.1 Innovation Leaders

For the Innovation Leaders, Sweden (scoring 155.1% of the EU average in 2019) leads the group in 2026, closely followed by Denmark (150.2%) and the Netherlands (142.1%).

Since 2019, Innovation Leaders have seen notable progress in the dimensions of Resource and labour productivity and Finance and support, though performance in Intellectual assets has lagged.

Resource and labour productivity improved across the group, with Denmark leading with a +50.5%-points change. The Netherlands (+31.1%-points) and Sweden (+19.4%-points) also recorded notable gains.

Finance and support improved across the group, with Denmark leading with a +47.9%-points change. Sweden (+43.4%-points) also recorded notable gains, while the Netherlands (+8.7%-points) had more moderate gains.

At the more detailed indicator level, the strongest improvements were found in *Venture capital expenditures*, *Production-based CO2 productivity*, and *International scientific co-publications*. *Venture capital expenditures* are significantly higher than in 2019 for Sweden (+207.9%-points), Denmark (+159.8%-points), and the Netherlands (+34.4%-points), although the trend is negative for all three countries since 2024. *Production-based CO2 productivity* increased strongly across the group, with Denmark (+109.9%-points) increasing the most, followed by the Netherlands (+79.3%-points), and Sweden (+23.3%-points). For *International scientific co-publications*, Denmark (+65.9%-points) grew the most, followed by Sweden (+55.9%-points) and the Netherlands (+43.7%-points).

However, all countries in this group recorded declines in the *Intellectual assets dimension*. For Denmark, the decline was led by *Design applications* (-76.4%-points), while for Sweden and the Netherlands, the decline was mainly in *Patent applications* (-38.3%-points and -16.8%-points respectively).

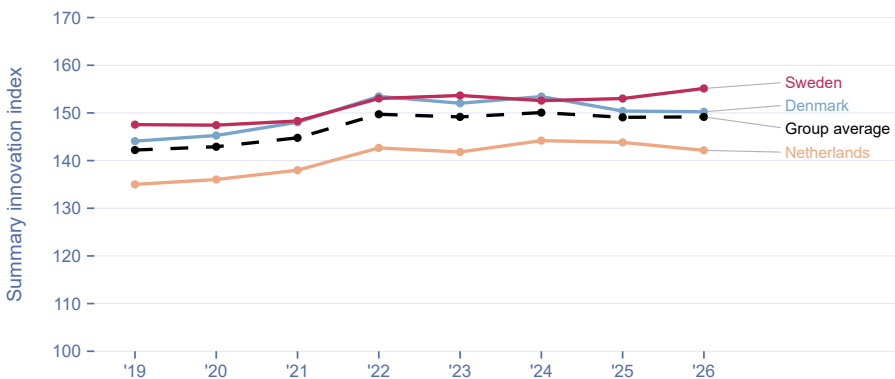


Figure 8: Performance trends of Innovation Leaders

Sweden's innovation performance picked up in 2026, after 3 years of relative stability. Sweden has attained their highest score in 2026 at 155.1 points with a growth of +7.6%-points.

Denmark's performance has stabilised following a drop in 2025. Denmark's score in 2026 is 150.2, up +6.2%-points since 2019.

The Netherlands' performance has been relatively stable since 2022, with a slight dip (-1.7%-points) in 2026 to 142.1, which is still +7.1%-points higher than in 2019.

Box 4: Country level observations for Innovation Leaders

3.2.2 Strong Innovators

For the Strong Innovators, Finland (scoring 138.8% of the EU average in 2019) now leads the group, having moved down from the Innovation Leaders, while Belgium (137.4%) dropped to second in 2026, closely followed by Ireland (132.3%), Luxembourg (129.2%), and Austria (126.1%). Germany (124.1%) and France (121.7%) are also among the Strong Innovators, maintaining stable high-level performance. Malta (112.8%) joins the group this year, having risen from the Moderate Innovators following strong progression since 2025 (+15.7%-points).

Since 2019, Strong Innovators have seen notable progress in the dimensions of Digitalisation, Investments in information technologies, and Resource and labour productivity, though performance in Intellectual assets has lagged.

Performance in *Digitalisation* was mixed, with most countries improving. Ireland stands out with the highest increase (+108.1%-points), followed by Austria (+79.8%-points), Germany (+78.1%-points) and France (+75.2%-points). Luxembourg was the only country to register a decline in this dimension (-2.4%-points), with Malta progressing by a modest +6.2%-points.

Investments in information technologies improved across the group, with Austria leading with a +62.4%-points change. Malta (+61.7%-points), Germany (+61.4%-points), Luxembourg (+55.2%-points) and Estonia (+53.7%-points) also recorded strong gains. France (+29.2%-points) and Finland (+21.9%-points) posted more moderate improvements.

At the more detailed indicator level, the strongest improvements were found in *Cloud Computing*, *High speed internet access*, and *Public-private co-publications*. All Member States in the Strong Innovators group recorded gains for *Cloud Computing*. Six of the nine members of the group progressed by around 100%-points or more, led by Malta (+162.4%-points), including Germany, Austria, Ireland, Estonia, down to Luxembourg (+97.6%-points). The lowest growth was in Finland (+43.6%-points), which had the highest score in 2019 and still has the highest in 2026.

The indicator *High speed internet access* similarly improved across the group, with four Member States growing by around 150%-points or more: Ireland (+176.8%-points), followed by Austria (+174.7%-points), France (+149.1%-points), and Germany (+146.8%-points). On the other hand, Malta saw no growth relative to 2019, and Luxembourg improved by a more modest +15.4%-points.

Public-private co-publications grew significantly in Luxembourg (+169.5%-points), Estonia (+100.5%-points), Austria (+94.8%-points), and Malta (+82.1%-points), while France recorded only a slight improvement (+2.3%-points).

However, there has been a decline in the dimension of *Intellectual assets* among the Strong Innovators, with all countries in the group experiencing a decrease. Luxembourg experienced the sharpest drop (–43.8%-points), followed by Germany (–33%-points), Austria (–27.4%-points) and Malta (–26.6%-points). As in the EIS 2025, this decline has been primarily driven by a significant reduction in the indicator *Design applications*, with negative changes recorded across all Strong Innovators. Germany (–61.7%-points) recorded the sharpest drop, followed by Luxembourg (–58.7%-points), Malta (–55.8%-points) and Austria (–49.7%-points).

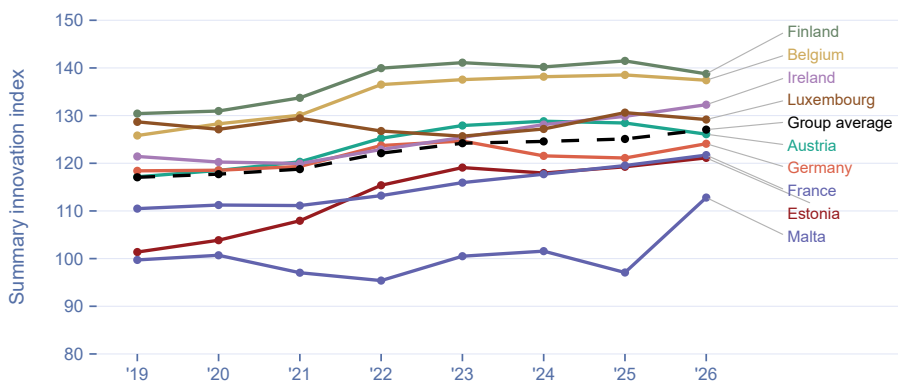


Figure 9: Performance trends of Strong Innovators

Finland demonstrated strong improvement between 2019 and 2022 but plateaued until 2025, and then dropped by –2.7%-points in 2026. As a result it moved down a performance group to lead the Strong Innovators group.

Belgium's performance growth has slowed down since 2022 and declined slightly in 2026 (–1.1%-points), nonetheless still performing +11.6%-points above its 2019 value.

Ireland's innovation performance has grown consistently since 2019 to take it to third place in the Strong Innovators group in 2026. Since 2025, it grew by +2.4%-points up to 132.3, 10.9%-points higher than in 2019.

Luxembourg's performance has fluctuated over the monitoring period and dropped by –1.5%-points in 2026 to 129.2, only +0.5%-points higher than in 2019.

Austria's performance grew solidly until 2024 reaching 128.8, but has declined since, with the latest year-on-year drop of –2.3%-points making it 126.1, still +8.9%-points higher than in 2019.

Germany's score improved by +3.0%-points since 2025 to reach 124.1, albeit still below its peak of 124.7 in 2023, after which it experienced 2 years of decline.

France demonstrated consistently strong growth since 2021, with the latest year-on-year growth of 2.2%-points making its score reach 121.7, up 11.2%-points compared to 2019.

Estonia's performance has improved in the past two years, after a dip in 2024, before which its performance grew even more strongly. The latest increase of +1.9%-points brings Estonia to 121.1, an impressive 19.8%-points higher than in 2019, the highest growth over the entire period among Member States.

Malta moved up to the Strong Innovators group following a very strong year-on-year growth of +15.7%-points in 2026, after some years of fluctuations. In 2026, Malta's performance is not only above the EU average, but 13.1%-points higher than its performance in 2019.

Box 5: Country level observations for Strong Innovators

3.2.3 Moderate Innovators

Among Moderate Innovators, Italy (scoring 107.3% of the EU average in 2019) leads the group in 2026, followed by Spain (104.9%), Portugal (104%), and Cyprus (102.7%). The lowest scores in the group were for Czechia (88.2%), Greece (86.5%), and joined by Hungary (80.4%) at the bottom, which moved up from the Emerging Innovators following a gradual upward trend.

Since 2019, Moderate Innovators have seen notable progress in the dimensions of Digitalisation and Investments in information technologies, though performance in Intellectual assets has lagged, as in other performance groups.

In the *Digitalisation* dimension, all Moderate Innovators recorded improvements, with Hungary leading with a +96.7%-points change and Cyprus (+96%-points), Italy (+83.6%-points) and Czechia (+70.2%-points) also showing important gains. Portugal (+26.2%-points), Slovenia (+24%-points), and Spain (+11%-points) posted more moderate gains.

Investments in information technologies improved across the group, with Lithuania leading with a +91.3%-points change. Italy (+84.8%-points), Hungary (+60.7%-points), and Cyprus (+57.8%-points) also recorded notable gains. Portugal (+36.9%-points), Slovenia (+29.4%-points), and Greece (+20.2%-points) recorded more modest growth.

At the indicator level, the strongest improvements were in *Cloud Computing*, *High speed internet access*, and *Public-private co-publications*. In Cloud Computing, Italy leads with a +223.7%-point increase, more than doubling its baseline score since 2019, followed by Lithuania (+149.6%-points), Hungary (+126.2%-points), Czechia (+119.8%-points), and Cyprus (+104.5%-points). Portugal (+59.1%-points) and Greece (+48.5%-points) showed more moderate improvements, though gains were recorded across all countries in the group.

The indicator *High speed internet* similarly improved across the group, with Cyprus (+232.4%-points) leading, followed by Hungary (+148.1%-points) and Italy (+138.9%-points), all of which made substantial gains. Portugal (+39.6%-points) and Spain (+20.5%-points) posted the smallest increase, though all countries improved on this indicator.

Public-private co-publications also expanded significantly, with again Cyprus topping the dimension with +211%-points increase, more than doubling its 2019 performance, followed by Portugal

(+76.3%-points), Greece (+65%-points), and Italy (+64.8%-points). Lithuania (+29.1%-points), and Czechia (+26.7%-points) showed the smallest improvements within the group.

However, much like the Innovation Leaders and Strong Innovators, the Moderate Innovators have also declined in the dimension of *Intellectual assets*, with eight of the nine countries experiencing a decline. Portugal recorded the sharpest drop (–18.9%-points), followed by Cyprus (–14.4%-points), Czechia (–14.4%-points) and Spain (–11.5%-points). The only country to increase its score in this dimension was Lithuania (+17.9%-points). *Design applications* was the largest driver of this decline, with negative changes recorded across all countries except Lithuania. The sharpest drops were observed in Cyprus (–52.3%-points), Czechia (–47.8%-points), and Portugal (–42.2%-points), pointing to a broad downward trend in design-related intellectual property across the group.

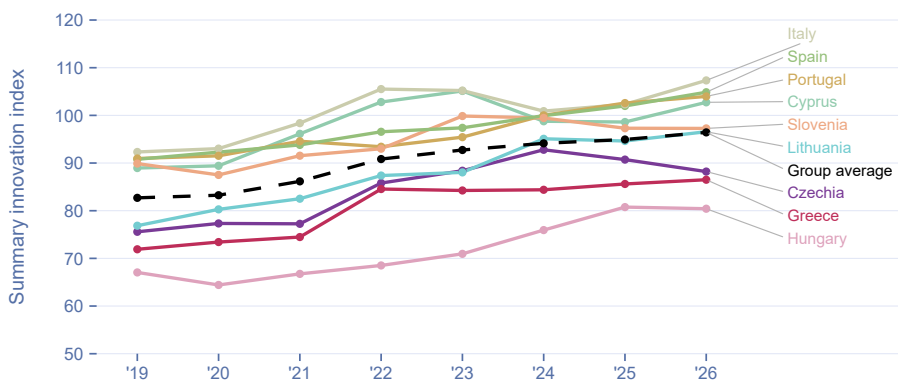


Figure 10: Performance trends of Moderate Innovators

Italy's performance grew strongly in 2026, by +5.0%-points, overtaking its previous peak in 2022. Italy is now the strongest performer of the Moderate Innovators, and +15%-points higher than in 2019.

Spain has grown solidly and consistently since 2019, with the positive trend continuing in 2026 with +2.9%-points growth since 2025. While Spain performs below the EU average, it has narrowed the gap by growing +14.1%-points since 2019, faster than the EU's growth of +11.6%-points.

Portugal's performance increased by +1.4%-points in 2026, continuing the positive trend since 2022, following a dip between 2021 and 2022.

Cyprus's performance increased significantly in 2026 (+4.1%-points), following a dip in 2024 and flatlining in 2025. Despite the strong increase bringing its score up to 102.7, it is still below its 2023 peak of 105.1.

Slovenia's performance was unchanged in 2026 at 97.3, following two years of decline between 2023 to 2025. Nonetheless, its score is +7.4%-points higher than in 2019.

Lithuania's innovation performance grew by +1.9%-points in 2026 following a small dip in 2025. Its growth performance since 2019 is the second-highest among Member States at +19.7%-points.

Czechia's performance declined by 2.5%-points in 2026, for the second consecutive year. Up to 2024, its performance grew and overall it still stands 12.6%-points above its 2019 score.

Greece's performance grew moderately (+0.9%-points) in 2026, following several years of near-stagnation since 2022. Mainly thanks to strong growth in 2022, its 2026 performance is still 14.6%-points higher than in 2019.

Hungary's performance is almost unchanged but narrowly dropping (-0.3%-points) in 2026. This follows a consistently positive trend since 2020, leaving its score 13.4%-points higher than in 2019.

Box 6: Country level observations for Moderate Innovators

3.2.4 Emerging Innovators

Among Emerging Innovators, Croatia (at 77.2% of the EU average in 2019) now leads the group, having moved down from the Moderate Innovators, while Poland (72.8%) dropped to second position, closely followed by Slovakia (69.5%), and Latvia (68.1%). Bulgaria (54.5%) maintained a slower but stable trajectory, while Romania (46.7%) remained the lowest-performing Member State in the group, despite incremental progress over the period.

Since 2019, Emerging Innovators continue to improve in the dimensions of Investments in information technologies and Digitalisation, while performance in Innovators has fallen.

In *Investments in information technologies*, Poland improved the most in the group with a +83.6%-points change, while Latvia (+60.0%-points) and Croatia (+47.5%-points) have also recorded strong gains. Slovakia (+26.3%-points) and Romania (+25.1%-points) registered more moderate improvements, while Bulgaria (+18.8%-points) posted the smallest gain in the dimension.

In the *Digitalisation dimension*, Romania leads with a +47.9%-points change, followed by Bulgaria (+47.6%-points) and Croatia (+45%-points). Latvia (+5.7%-points) posted only marginal improvement compared to 2019.

At the more detailed indicator level, the strongest improvements are concentrated in *Cloud Computing*, *High speed internet access*, and *Production-based CO2 productivity*. *Cloud Computing* has grown strongly across the group, with Poland leading (+182.2%-points), nearly doubling its performance score since 2019, followed by Latvia (+124.6%-points), Croatia (+67%-points), and Slovakia (+64.5%-points), with gains recorded across all countries in the group.

High speed internet access improved greatly across all six countries, with Croatia leading (+121.8%-points), followed by Romania (+94.9%-points), and Slovakia (+93.9%-points). Progress is also apparent in *Production-based CO2 productivity*, with Romania (+64.2%-points) making the strongest gains, followed by Bulgaria (+61.2%-points), Croatia (+45.7%-points) and Slovakia (+43.6%-points), with all countries improving on this indicator.

However, four countries recorded a decline in the dimension of *Innovators*. Croatia experienced the sharpest drop (–83.4%-points), followed by Bulgaria (–14.1%-points), Latvia (–7.6%-points), and Romania (–6.1%-points). At the indicator level, changes in *SMEs introducing product innovations* were a key driver, with Croatia recording the sharpest drop (–106.7%-points), followed by Bulgaria (–21.6%-points) and Latvia (–19.2%-points), while Slovakia was the only country to register an increase (+10.9%-points).

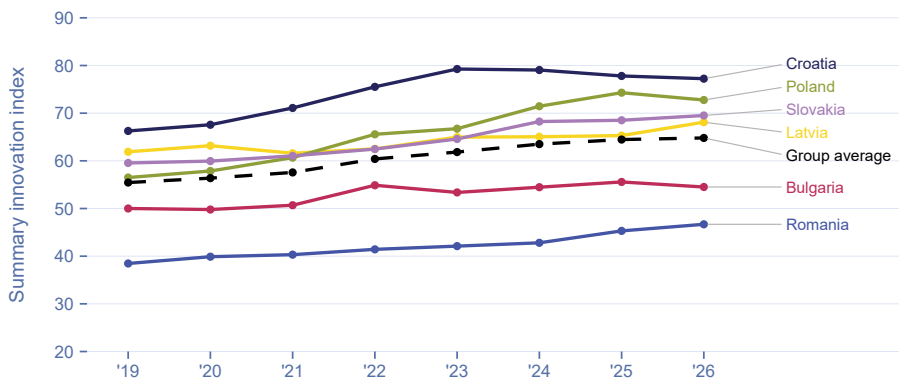


Figure 11: Performance trends of Emerging Innovators

Croatia's performance dipped slightly (–0.6%-points) in 2026, for the third consecutive year. Although it is below its 2023 peak of 79.3, it is still +11.0%-points higher than in 2019.

Poland's innovation performance dropped by –1.6%-points in 2026, following an otherwise consistently positive growth trend since 2019. Despite the drop, Poland's score is still +16.3%-points above 2019.

Slovakia's score increased by +1.0%-point in 2026, following a consistently positive trend leaving it +10.0%-points higher than in 2019, a growth path almost as strong as the EU average.

Latvia displayed strong growth of +2.8%-points in 2026. However, this is on the back of a weaker growth than the EU since 2019 (+6.2%-points vs +11.6%-points), meaning that despite starting in 2019 at 61.9% of the EU average, this gap has increased over time.

Bulgaria's performance dropped by –1.1%-points in 2026, following an overall trend of relatively weak growth since 2019 that has widened the gap with the EU. Its score stands +4.5%-points higher than in 2019.

Romania's performance improved by +1.4%-points in 2026, continuing a positive trend ongoing since 2019, which brings its score +8.2%-points above 2019. However, this is below the EU growth of +11.6%-points since 2019, meaning it was insufficient to close the gap.

Box 7: Country level observations for Emerging Innovators

3.2.5 Is there convergence in innovation performance across the EU?

Convergence in innovation performance across EU Member States and within performance groups was assessed using the coefficient of variation, calculated as the ratio of the standard deviation of the Summary Innovation Index to its mean, indexed to 2019. This metric helps determine whether lower-performing countries are catching up to higher-performing ones (reflected by a lower value, indicating convergence), or whether the gap between top and bottom performers is widening (reflected by a higher value, indicating divergence). Understanding this convergence is particularly important for the EU, as it carries significant implications for both economic and social cohesion.

The analysis indicates a moderately positive convergence trend at the EU level over the 2019–2026 period, as shown by a slight yet consistent decrease in the coefficient of variation for all EU Member States. The highest levels of divergence are observed among countries at the extremes of the performance spectrum, namely the Innovation Leaders and Emerging Innovators, while countries in the middle tiers, namely Strong and Moderate Innovators, exhibit greater internal convergence within these middle-tier groups.

Within groups trends should be interpreted taking into account that group membership is based on the current year (2026) classifications and applied retrospectively across the full time series; where group composition has changed between editions, this can introduce some volatility into the coefficient of variation¹³.

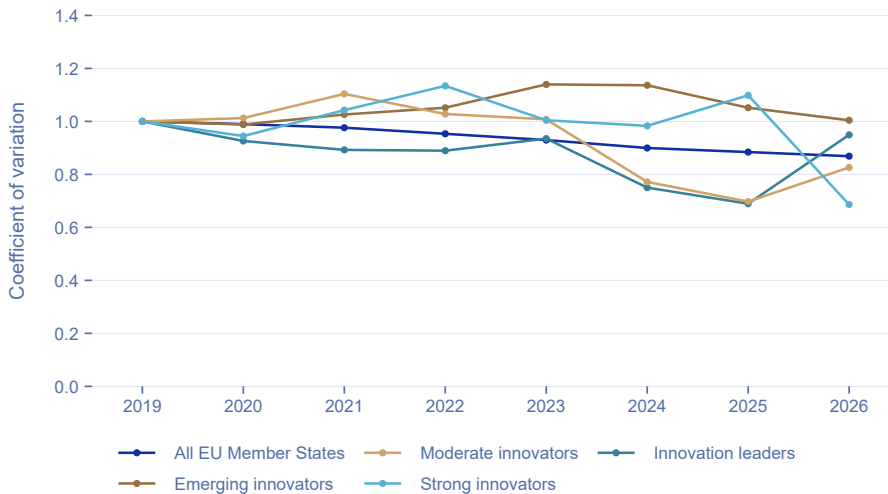


Figure 12: innovation performance divergence/convergence by performance group

¹³ The coefficient of variation for each group is indexed to its 2019 value to enable comparison across groups with different baseline levels of internal variation.

Nevertheless, there are clear differences in trends across the performance groups:

- **Innovation Leaders:** this group displays the highest level of internal divergence. After a phase of convergence between 2023 and 2025, the group has experienced a sharp increase in disparities in the most recent year. This growing divergence is mainly driven by the continued strong performance of Sweden, which is pulling ahead of the other Innovation Leaders, Denmark and the Netherlands. Given the small size of the group, greater volatility over time is to be expected compared to other performance groups.
- **Strong Innovators:** Strong Innovators exhibit the most consistent convergence trend over the period as a whole, with a sharp decline in divergence in the most recent year. While the group had seen divergence increase up to 2022 and remain elevated through 2025, the coefficient of variation fell substantially in 2026. This recent shift is partly due to Malta's marked increase in performance, alongside continued gains by Ireland, France, and Estonia, narrowing the gap with the rest of the group.
- **Moderate Innovators:** This group shows a clear convergence pattern over the period, with the internal variation declining steadily from 2021 to 2025, before a moderate uptick in the 2026. This recent shift is partly due to above-average performance improvements in Italy and Cyprus, which are pulling ahead of the rest of the group.
- **Emerging Innovators:** This group has seen divergence increase for much of the period, peaking in 2023, before reversing course in the most recent years. While countries such as Poland, Slovakia, and Latvia have significantly improved their innovation performance, other likes Romania and Bulgaria have progressed at a much slower pace. Nonetheless, the internal performance gap has begun to narrow in the most recent period, pointing to renewed convergence within the group.

3.3 Performance by category and dimension

Despite overall progress, the 2026 data reveal persistent performance gaps across all dimensions of innovation performance groups. While all groups generally perform differently across dimensions, Emerging Innovators tend to have particularly wide gaps compared to other performance groups, especially in the *Attractive research systems*, *Innovators*, *Linkages*, and *Finance and support* dimensions. While the gaps between Moderate and Strong Innovators are narrower, they remain consistent across most dimensions. These gaps highlight the challenges facing lower-performing countries, especially in building robust research infrastructure, securing adequate innovation financing, and strengthening innovation linkages, areas where Emerging Innovators fall particularly far behind their peers.

In 2026, the average performance difference between the Innovation Leaders and Strong Innovators is 11%-points, 34%-points between the Strong and Moderate Innovators, and 30%-points between the Moderate and Emerging Innovators (see Figure 14). Within this overall pattern, two dimensions deviate from the expected hierarchy:

- In Trade impacts, Emerging Innovators score slightly higher (90%) than Moderate Innovators (88%).
- In Sales and Employment Impact, Moderate and Strong Innovators are tied at 116%, while Innovation Leaders score slightly higher at 117%.

While Innovation Leaders maintain an advantage across all dimensions, the gap with the Strong Innovators is relatively narrow in just two dimensions: *Sales and employment impacts* (1%-points) and *Innovators* (8%-points). In contrast, the gap between these two groups is highest in three dimensions: *Digitalisation* (25%-points), *Attractive research systems* (18%-points), and *Investment in information technologies* (18%-points)

Between Strong and Moderate Innovators, the smallest gap is seen in *Sales and employment impacts* (almost tied at 116), followed by *Innovators* (5%-points). However, much larger differences exist in: *Attractive research systems* (60%-points), *Finance and support* (53%-points), *Firm investments* (51%-points), and *Resource and Labour productivity* (40%-points). The Moderate Innovators group does not outperform Strong Innovators in any dimension.

Finally, Moderate versus Emerging Innovators shows consistently wide gaps. The only exception is Trade impacts, where Emerging Innovators score 2%-points higher. The next dimensions with the smallest gap between Emerging and Moderate Innovators are *Digitalisation* (11.2%-points), *Investments in information technologies* (13.8%-points), and *Intellectual assets* (15%.-points). The largest gaps are seen in *Innovators* (77.0%-points) and *Sales and employment impacts* (65.3%-points).

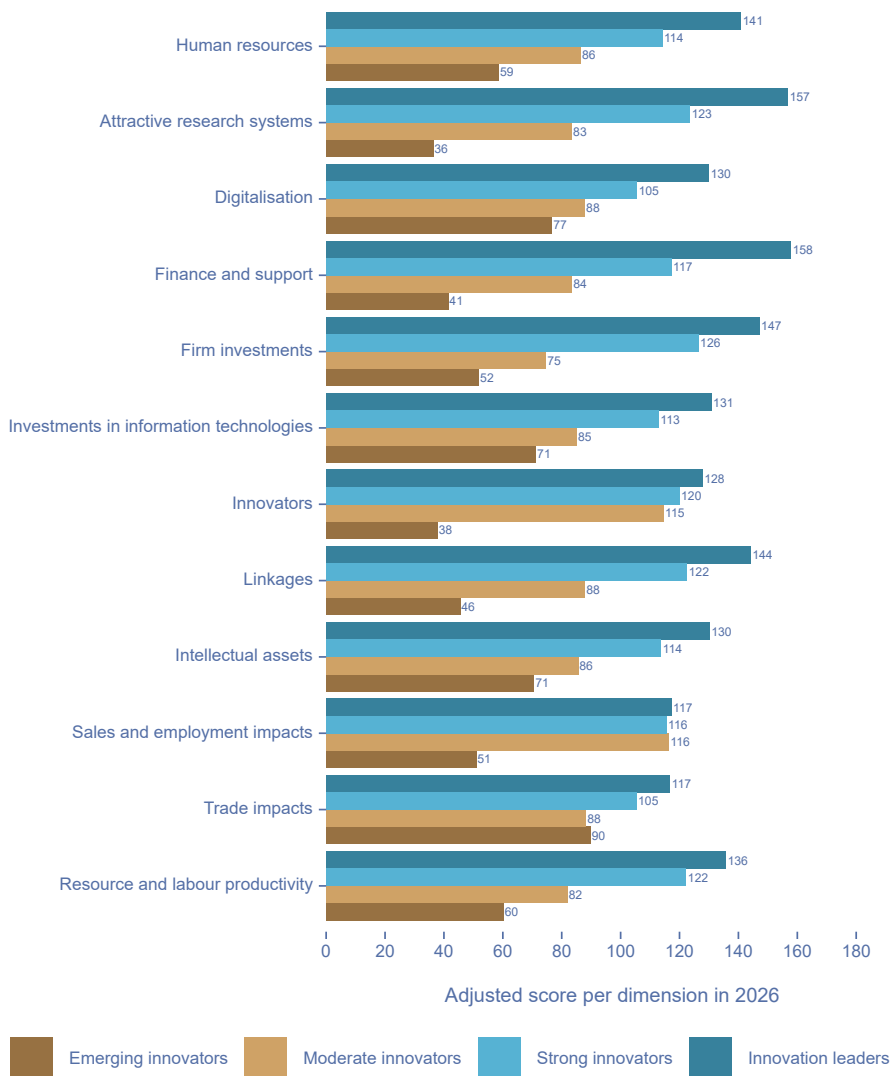


Figure 13: Innovation performance of the innovation groups per dimension

3.3.1 Performance on framework conditions

3.3.1.1 Human resources

The *Human resources* dimension measures the availability of a high skilled and educated *workforce* and includes three indicators: *New* doctorate graduates, *Population* with tertiary education and *Population involved in lifelong learning*. For this dimension, the best-performing Member States are three Innovation Leaders (Sweden, Denmark and the Netherlands) and two Strong Innovators (Luxembourg and France). The top position is held by Sweden. The bottom five in the Human resources dimension consist of two Moderate Innovators (Italy and Hungary) and three Emerging Innovators (Poland, Bulgaria and Romania). Of the bottom five, four improved their performance since 2025. The strongest increase among the bottom five countries was recorded by Bulgaria (+7.4%-points).

All Innovation Leaders and Strong Innovators except for Austria, Germany and Malta exceed the EU average in 2026 on the Human resources dimension. Moderate Innovators are unevenly split, with four above the EU average (Spain, Slovenia, Cyprus and Lithuania) and five below it (Portugal, Czechia, Greece, Italy, and Hungary). Overall, the EU average is approximately in the middle of the distribution with 13 Member States scoring higher and 14 scoring lower than the EU average.

Compared to 2025 the EU average for the Human resources improved by +6.8%-points driven by increased performance by 18 Member States. The strongest improvement was experienced by Belgium (+16.8%-points), followed by France (+15.5%-points) and Czechia (+10.5%-points). Performance decreased for nine Member States with strongest declines in Ireland (-5.0%-points), Austria (-4.8%-points) and Luxembourg (-4.8%-points).

Compared to 2019 the EU average improved by +13.8%-points driven by increased performance by 20 Member States. The strongest improvement was experienced by France (+37.3%-points), followed by Croatia (+29.0%-points) and Luxembourg (+28.6%-points). Performance decreased for seven Member States with strongest declines in Slovenia (-22.7%-points), Denmark (-17.5%-points) and Finland (-15.9%-points).

Human resources

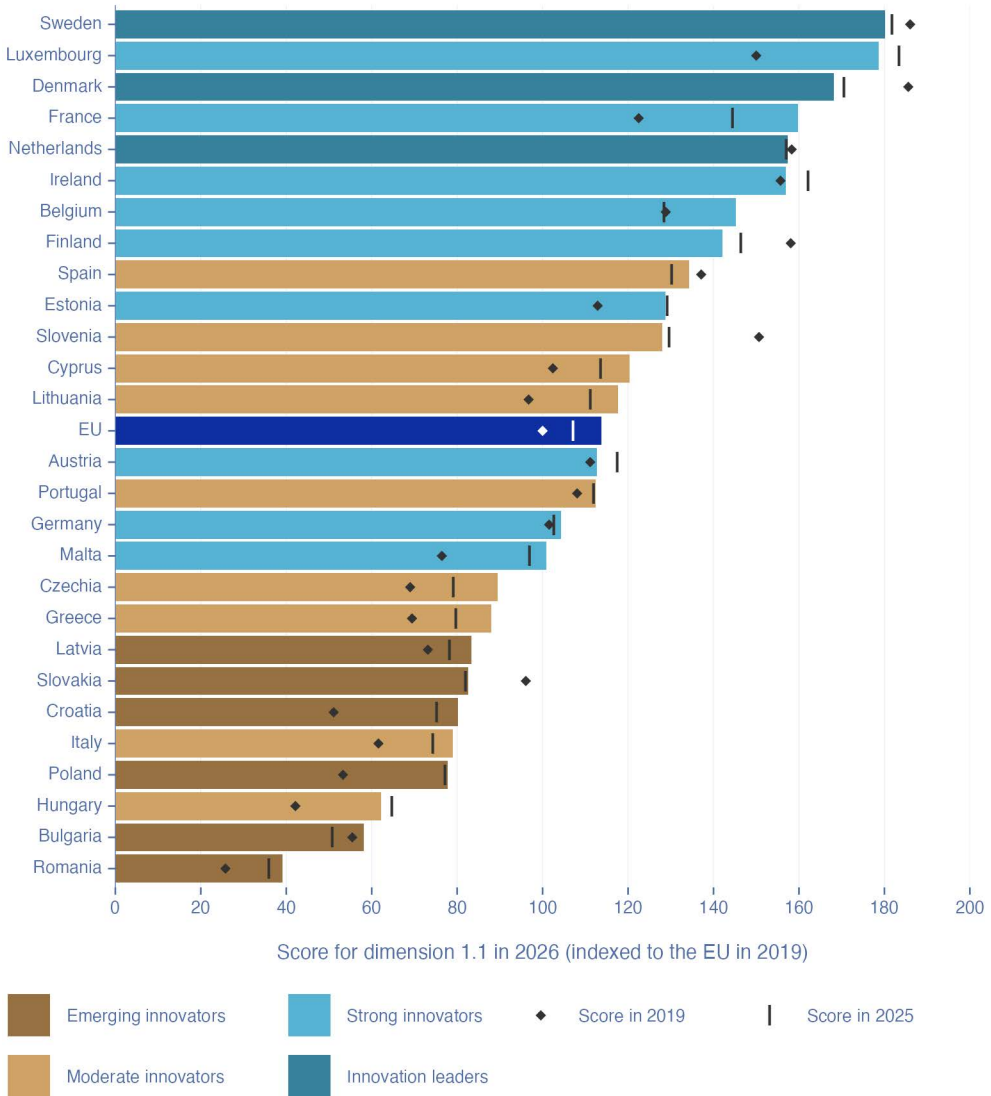


Figure 14: Innovation performance of the EU Member States in the Human resources dimension

3.3.1.2 Attractive research systems

The *Attractive research systems* dimension measures the attractiveness and quality of the research system and includes three indicators: *International scientific co-publications*, *Scientific publications among the top 10% most cited* and *Foreign doctorate students as a % of all doctorate students*.

For this dimension, the best-performing Member States are three Innovation Leaders (Denmark, the Netherlands and Sweden) and one Strong Innovator (Luxembourg) and one Moderate Innovator (Cyprus). The top position is held by Luxembourg. The bottom five in the Attractive research systems dimension consist of five Emerging Innovators (Croatia, Latvia, Romania, Poland and Bulgaria). Of the bottom five, two improved their performance since 2025. The strongest increase among the bottom five was recorded by Romania (+2.6%-points).

All Innovation Leaders and Strong Innovators exceed the EU average in 2026 on the Attractive research systems dimension. Moderate Innovators are unevenly split, with three above the EU average (Cyprus, Portugal and Slovenia) and six below it (Italy, Spain, Czechia, Hungary, Greece and Lithuania). Overall, the EU average stands approximately in the middle of the distribution with 15 Member States scoring higher and 12 scoring lower than the EU average.

Compared to 2025 the EU average for the *Attractive research systems* improved by +0.3%-points driven by increased performance by 17 Member States. The strongest improvement was in Malta (+8.2%-points), followed by Cyprus (+5.7%-points) and Finland (+4.9%-points). Performance decreased for eight Member States with strongest declines in Belgium (-14.7%-points), Luxembourg (-4.9%-points), the Netherlands and Slovenia (both at -4.4%-points).

Compared to 2019 the EU average improved by +10.8%-points driven by increased performance of 25 Member States. The strongest improvement was in Cyprus (+72.4%-points), followed by Estonia (+49.2%-points) and Hungary (+35.6%-points). Performance decreased for two Member States: France (-11.3%-points) and Belgium (-7.0%-points).

Attractive research systems

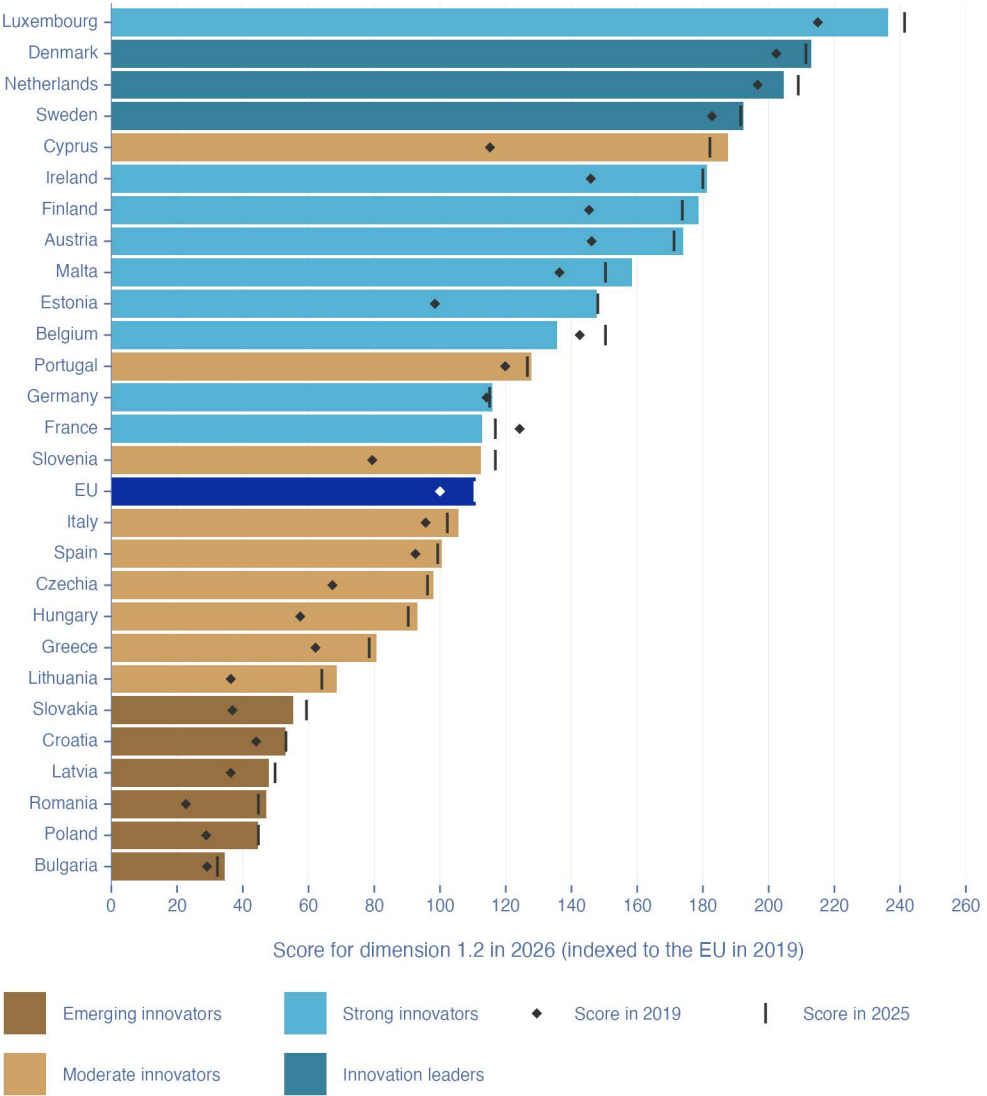


Figure 15: Innovation performance of the EU Member States in the Attractive research systems dimension

3.3.1.3 Digitalisation

The *Digitalisation* dimension measures the digitalisation of the economy and society and includes two indicators: *High speed internet access* and *Individuals with above basic overall digital skills*.

For this dimension, the best-performing Member States are two Innovation Leaders (the Netherlands and Denmark) and three Strong Innovators (Ireland, Finland and Malta). The top position is held by the Netherlands. The bottom five in the *Digitalisation* dimension consists of two Moderate Innovators (Slovenia and Greece) and three Emerging Innovators (Bulgaria, Slovakia and Latvia). Nevertheless, all five improved their performance since 2025. Greece stands out with an increase of +30.0%-points.

All Innovation Leaders and Strong Innovators, except for Austria, Germany and Estonia, exceed the EU average in 2026 on the *Digitalisation* dimension. Moderate Innovators are split, with three above the EU average (Spain, Portugal and Hungary) and six below it (Lithuania, Italy, Cyprus, Czechia, Slovenia and Greece). The EU average is approximately in the middle of the distribution with 12 Member States scoring higher and 15 scoring lower than the EU average.

Compared to 2025 the EU average for *Digitalisation* improved by +16.0%-points driven by increased performance by 25 Member States. The strongest improvement was by Italy (+39.8%-points), followed by Ireland (+32.9%-points) and Denmark (+30.5%-points). Performance decreased for two Member States: Estonia (-4.0%-points) and Spain (-1.4%-points).

Compared to 2019 the EU average improved by +61.0%-points driven by increased performance by 26 Member States. The strongest improvement was experienced by Ireland (+108.1%-points), followed by Hungary (+96.7%-points) and Cyprus (+96.0%-points). Performance decreased for one Member State: Luxembourg (-2.4%-points).

Digitalisation

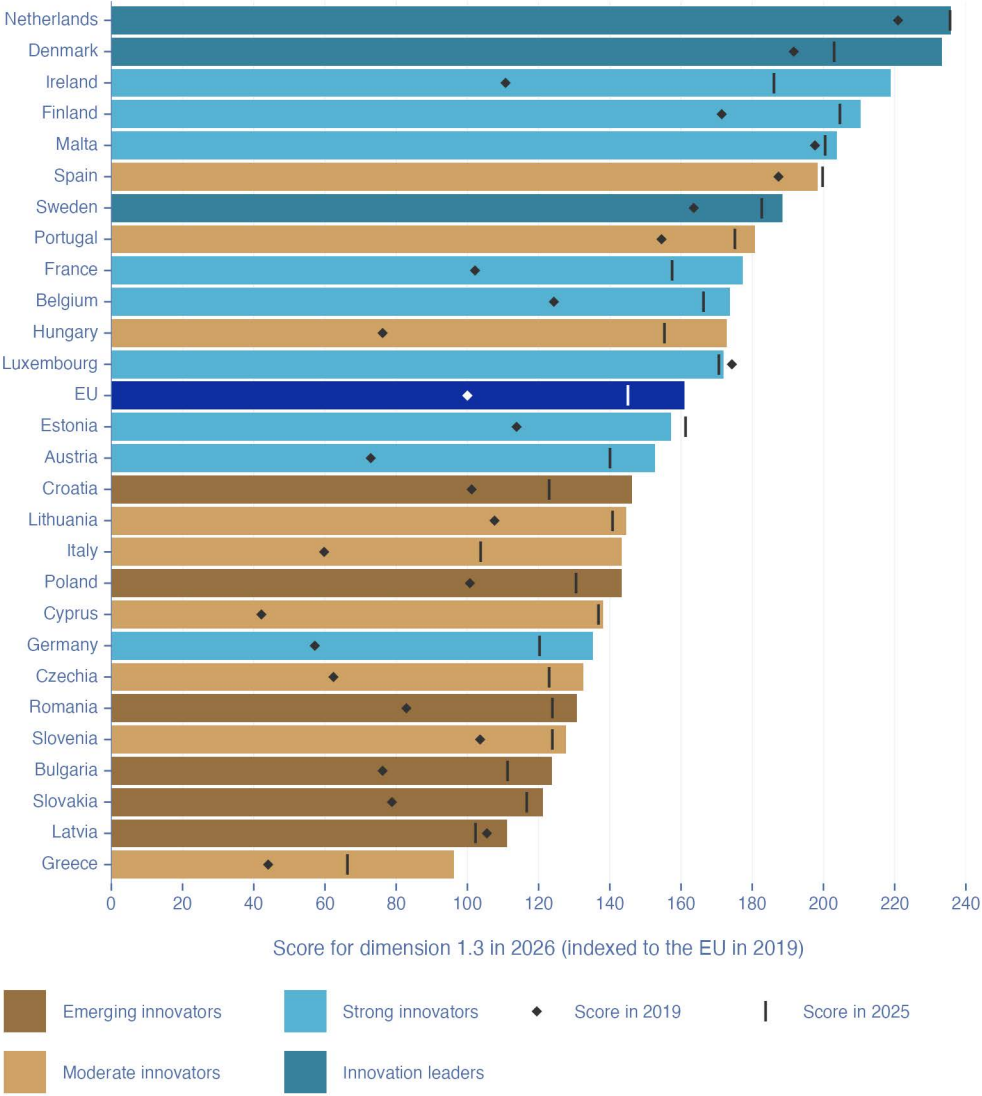


Figure 16: Innovation performance of the EU Member States in the Digitalisation dimension

3.3.2 Performance on investments

3.3.2.1 Finance and support

The *Finance and support* dimension measures the availability of finance and public support for innovation and includes three indicators: *R&D expenditure in the public sector*, *Venture capital expenditures* and *Direct and indirect government support of business R&D*.

For this dimension, the best-performing Member States are two Innovation Leaders (Sweden and Denmark) and three Strong Innovators (France, Belgium and Finland). The top position is held by France. The bottom five in the Finance and support dimension consist of one Strong Innovator (Malta), one Moderate Innovator (Cyprus) and three Emerging Innovators (Slovakia, Bulgaria and Romania). None of the bottom five improved their performance since 2025.

All Innovation Leaders and almost half Strong Innovators exceed the EU average in 2026 for *Finance and support*. Moderate Innovators are unevenly split, with two above the EU average (Portugal and Spain) and seven below (Slovenia, Lithuania, Greece, Italy, Czechia, Hungary and Cyprus). The EU average is above the median of the distribution with 10 Member States scoring higher and 17 scoring lower than the EU average.

Compared to 2025 the EU average for the *Finance and support* dimension decreased by -2.5%-points, with only seven Member States showing improved performance. The strongest improvement was experienced by Ireland (+12.0%-points), followed by Latvia (+9.1%-points) and Portugal (+3.8%-points). Performance decreased for 20 Member States with strongest declines in Croatia (-38.5%-points), Hungary (-24.9%-points) and Luxembourg (-18.7%-points).

Compared to 2019 the EU average improved by +10.9%-points driven by increased performance of 19 Member States. The strongest improvement was by Denmark (+47.9%-points), followed by Estonia (+44.8%-points) and Sweden (+43.4%-points). Performance decreased for eight Member States with strongest declines in Malta (-71.3%-points), Hungary (-43.2%-points) and Luxembourg (-39.9%-points). The scale of Malta's decline may reflect a higher volatility typical of small economies.

Finance and support

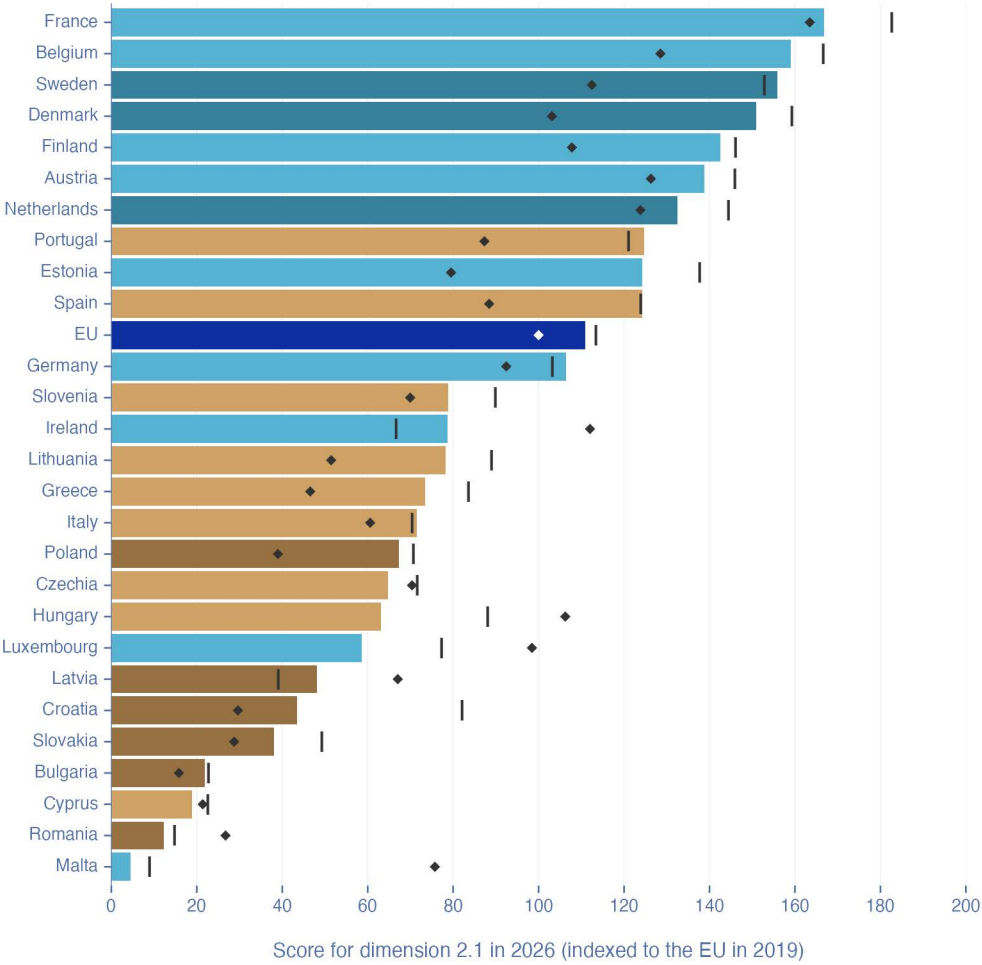


Figure 17: Innovation performance of the EU Member States in the Finance and support dimension

3.3.2.2 Firm investments

The *Firm investments* dimension measures private sector investments in R&I and includes three indicators: *R&D expenditure in the business sector*, *Non-R&D innovation expenditures* and *Innovation expenditures per person employed*.

For this dimension, the best-performing Member States are one Innovation Leader (Sweden) and four Strong Innovators (Belgium, Germany, Malta and Finland). The top position is held by Sweden. The bottom five in the *Firm investments* dimension consist of one Strong Innovator (Luxembourg), one Moderate Innovator (Cyprus) and three Emerging Innovators (Bulgaria, Latvia and Romania). None of the bottom five improved their performance since 2025.

Most Innovation Leaders and Strong Innovators exceed the EU average in 2026 for Firm investments. All nine Moderate Innovators fall below the EU average (Cyprus, Portugal, Italy, Spain, Hungary, Slovenia, Lithuania, Greece and Czechia). The EU average is above the median of the distribution with eight Member States scoring higher and 19 scoring lower than the EU average.

Compared to 2025 the EU average for the *Firm investments* dimension decreased by -3.3%-points. Eight Member States increased their performance. The strongest improvement was experienced by Malta (+87.1%-points), followed by Croatia (+35.1%-points) and Sweden (+10.4%-points). Performance decreased for 19 Member States with strongest declines in Czechia (-34.0%-points), Lithuania (-16.7%-points) and Italy (-12.7%-points).

Compared to 2019 the EU average decreased by -0.2%-points despite increased performance by 10 Member States. The strongest improvement was experienced by Malta (+75.3%-points), followed by Croatia (+17.3%-points) and Belgium (+14.2%-points). However, performance decreased for 17 Member States with strongest declines in Hungary (-14.7%-points), Slovenia (-14.0%-points) and Italy (-13.8%-points).

Firm investments

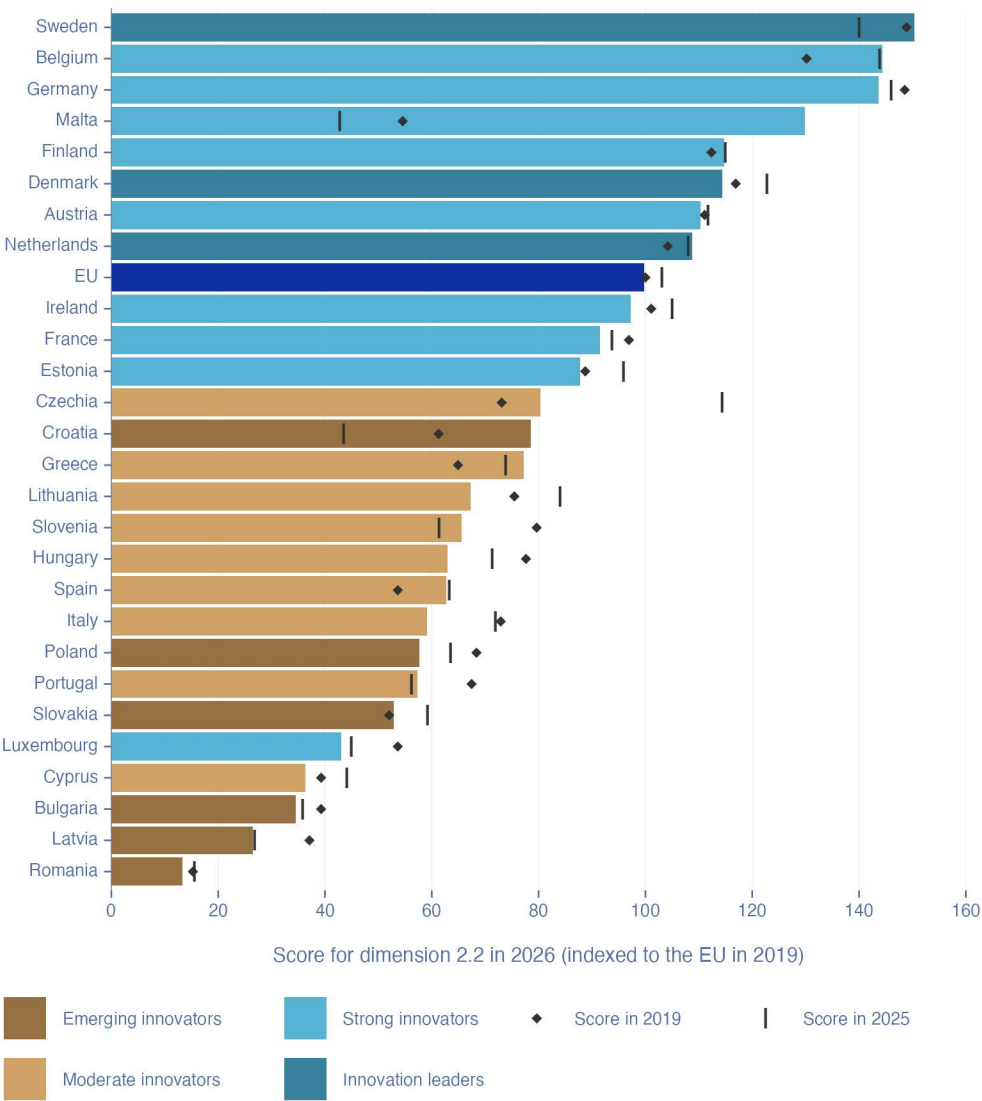


Figure 18: Innovation performance of the EU Member States in the Firm investments dimension

3.3.2.3 *Investments in information technologies*

The Investments in information technologies dimension measures the use of information and communication technologies (ICT) and includes two indicators: Cloud Computing and Employed ICT specialists.

For this dimension, the best-performing Member States are two Innovation Leaders (Sweden and the Netherlands) and three Strong Innovators (Finland, Ireland and Estonia). The top position is held by Finland. The bottom five in the *Investments in information technologies* dimension consist of one Moderate Innovator (Greece) and four Emerging Innovators (Latvia, Slovakia, Bulgaria and Romania). Of the bottom five, four improved their performance since 2025. The strongest increase was recorded by Romania (+8.4%-points).

All Innovation Leaders and Strong Innovators except for France exceed the EU average in 2026 for *Investments in information technologies*. Moderate Innovators are split, with two above the EU average (Lithuania and Italy) and seven below it (Czechia, Cyprus, Hungary, Portugal, Slovenia, Spain and Greece). The EU average is approximately in the middle of the distribution with 13 Member States scoring higher and 14 scoring lower than the EU average.

Compared to 2025 the EU average for the *Investments in information technologies* improved by +13.7%-points driven by increased performance by 20 Member States. The strongest improvement was by Lithuania (+38.6%-points), followed by France (+23.6%-points) and Belgium (+19.5%-points). Performance decreased for six Member States with strongest declines in Cyprus (-4.3%-points), Estonia (-3.9%-points) and Denmark (-2.7%-points).

Compared to 2019 the EU average improved by +55.2%-points driven by increased performance by 27 Member States. The strongest improvement was experienced by Lithuania (+91.3%-points), followed by Italy (+84.8%-points) and Poland (+83.6%-points). No Member State recorded a decline.

Investments in information technologies

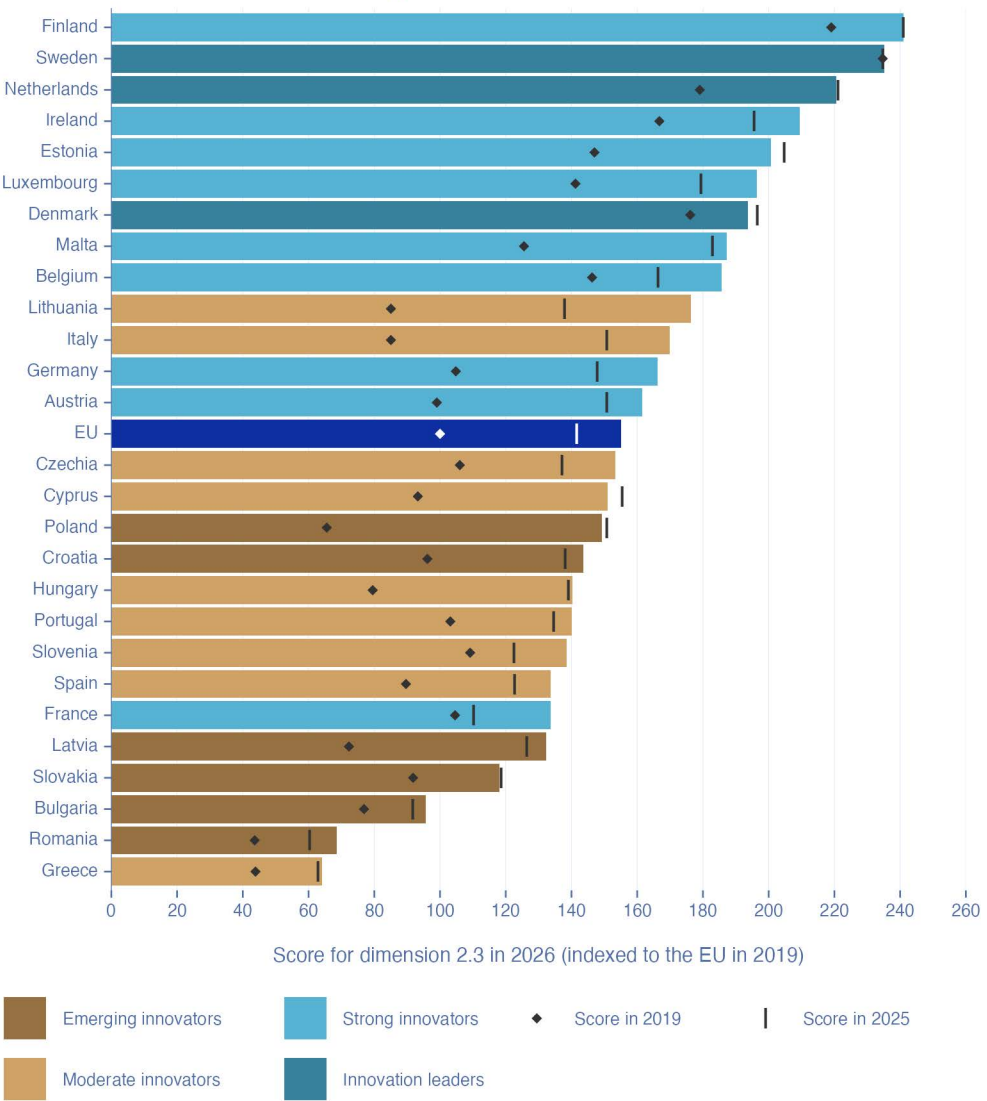


Figure 19: Innovation performance of the EU Member States in the Investments in information technologies dimension

3.3.3 Performance on innovation activities

3.3.3.1 Innovators

The *Innovators* dimension measures the innovation activity of firms, in particular SMEs, and includes two indicators: *SMEs introducing product innovations* and *SMEs introducing business process innovations*. The innovators dimension is based on data collected via the Community Innovation Survey (CIS) which this year was updated for these indicators with CIS 2024 fast-track data provided by 20 Member States¹⁴. CIS fast-track is an early data submission process for several indicators collected on a voluntary basis and are considered preliminary.

For this dimension, the best-performing Member States are one Innovation Leader (Sweden), two Strong Innovators (Belgium and Estonia) and two Moderate Innovators (Cyprus and Greece). The top position is held by Cyprus. The bottom five in the *Innovators* dimension consist of five Emerging Innovators (Croatia, Latvia, Poland, Bulgaria and Romania). None among the bottom five improved their performance since 2025.

All Innovation Leaders and Strong Innovators except for Ireland and Luxembourg exceed the EU average in 2026 on the *Innovators* dimension. Moderate Innovators are split, with four above the EU average (Cyprus, Greece, Italy and Lithuania) and five below it (Portugal, Slovenia, Czechia, Spain and Hungary). The EU average is approximately in the middle of the distribution with 14 Member States scoring higher and 13 scoring lower than the EU average.

Compared to 2025 the EU average for the *Innovators* dimension improved by +3.5%-points driven by increased performance by 10 Member States. The strongest improvement was experienced by Cyprus (+90.6%-points), followed by Estonia (+47.3%-points) and Malta (+37.5%-points). Performance decreased for 10 Member States with strongest declines in Slovenia (-32.8%-points), Croatia (-29.1%-points) and Czechia (-11.3%-points).

Compared to 2019 the EU average improved by +3.5%-points driven by increased performance by 12 Member States. The strongest improvement was experienced by Sweden (+25.4%-points), followed by Belgium (+24.8%-points) and Spain (+22.3%-points). Performance decreased for 14 Member States with strongest declines in Croatia (-83.4%-points), Germany (-31.2%-points) and Slovenia (-25.2%-points).

14 The EU Member States that provided fast track CIS 2024 data are: BG, CY, CZ, DE, EE, EL, ES, FI, HR, HU, IT, LU, LV, LT, MT, PT, RO, SE, SI and SK

Innovators

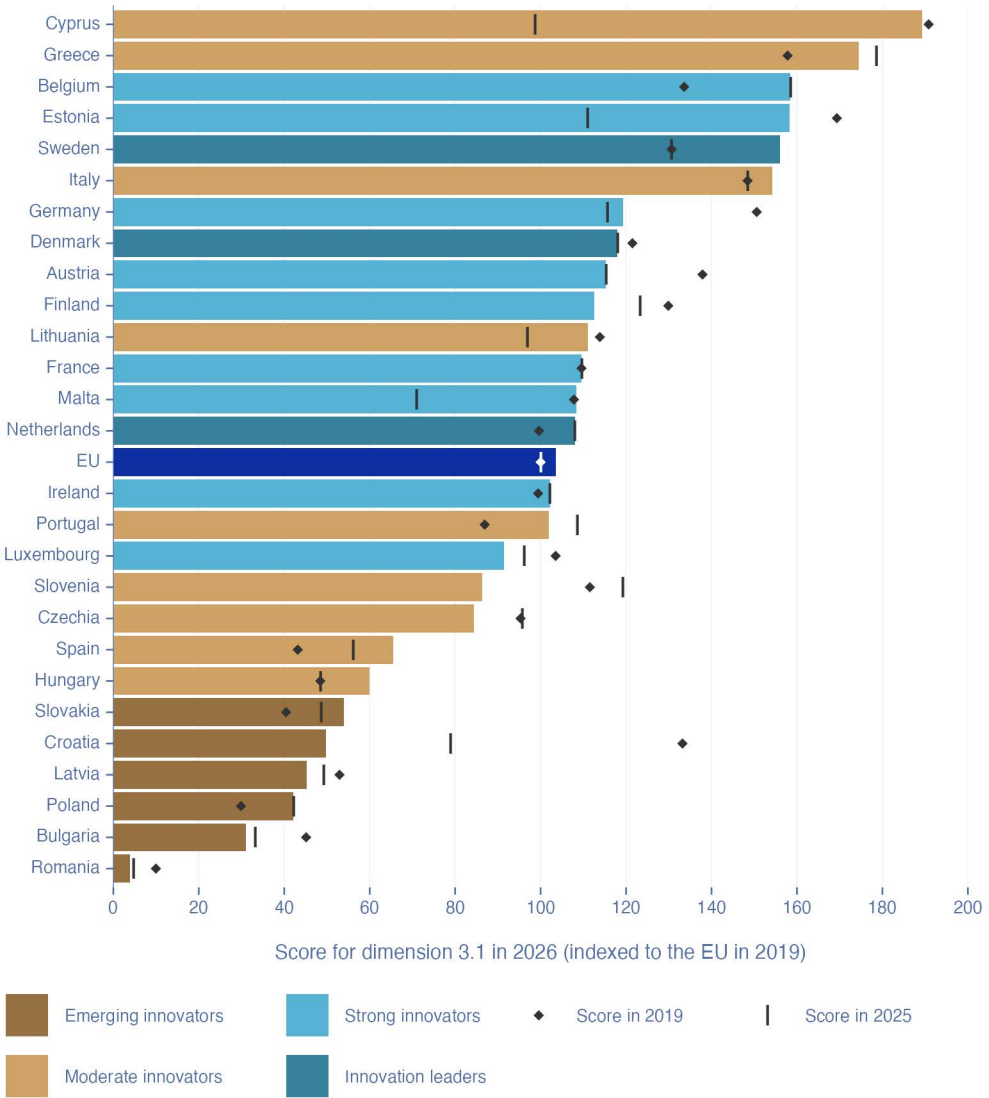


Figure 20: Innovation performance of the EU Member States in the Innovators dimension

3.3.3.2 Linkages

The *Linkages* dimension measures the collaborations and knowledge exchange between innovators and includes three indicators: *Innovative SMEs collaborating with others*, *Public-private co-publications* and *Job-to-job mobility of HRST*.

For this dimension, the best-performing Member States are two Innovation Leaders (Denmark and Sweden), two Strong Innovators (Luxembourg and Finland) and one Moderate Innovator (Cyprus). The top position is held by Denmark. The bottom five in the dimension are five Emerging Innovators (Latvia, Poland, Slovakia, Bulgaria and Romania). Of the bottom five, three improved their performance since 2025. The strongest increase was recorded by Latvia (+14.3%-points).

All Innovation Leaders and Strong Innovators exceed the EU average in 2026 for Linkages. Moderate Innovators are split, with four above the EU average (Cyprus, Lithuania, Slovenia and Portugal) and five below it (Spain, Greece, Hungary, Italy and Czechia). The EU average is below the median of the distribution with 17 Member States scoring higher and 10 scoring lower than the EU average.

Compared to 2025 the EU average for *Linkages* decreased by -9.2%-points, with only 10 Member States showing improved performance. The strongest improvement was experienced by Cyprus (+32.7%-points), followed by Latvia (+14.3%-points) and Slovenia (+7.1%-points). Performance decreased for 15 Member States with the strongest declines in Sweden (-16.7%-points), Austria (-15.3%-points) and the Netherlands (-14.3%-points).

Compared to 2019 the EU average improved by +20.4%-points driven by increased performance by 23 Member States. The strongest improvement was experienced by Lithuania and Portugal, (both +54.8%-points), followed by Spain (+42.5%-points). Performance decreased for four Member States with strongest declines in Denmark (-23.5%-points), Germany (-5.1%-points) and Sweden (-3.4%-points).

Linkages

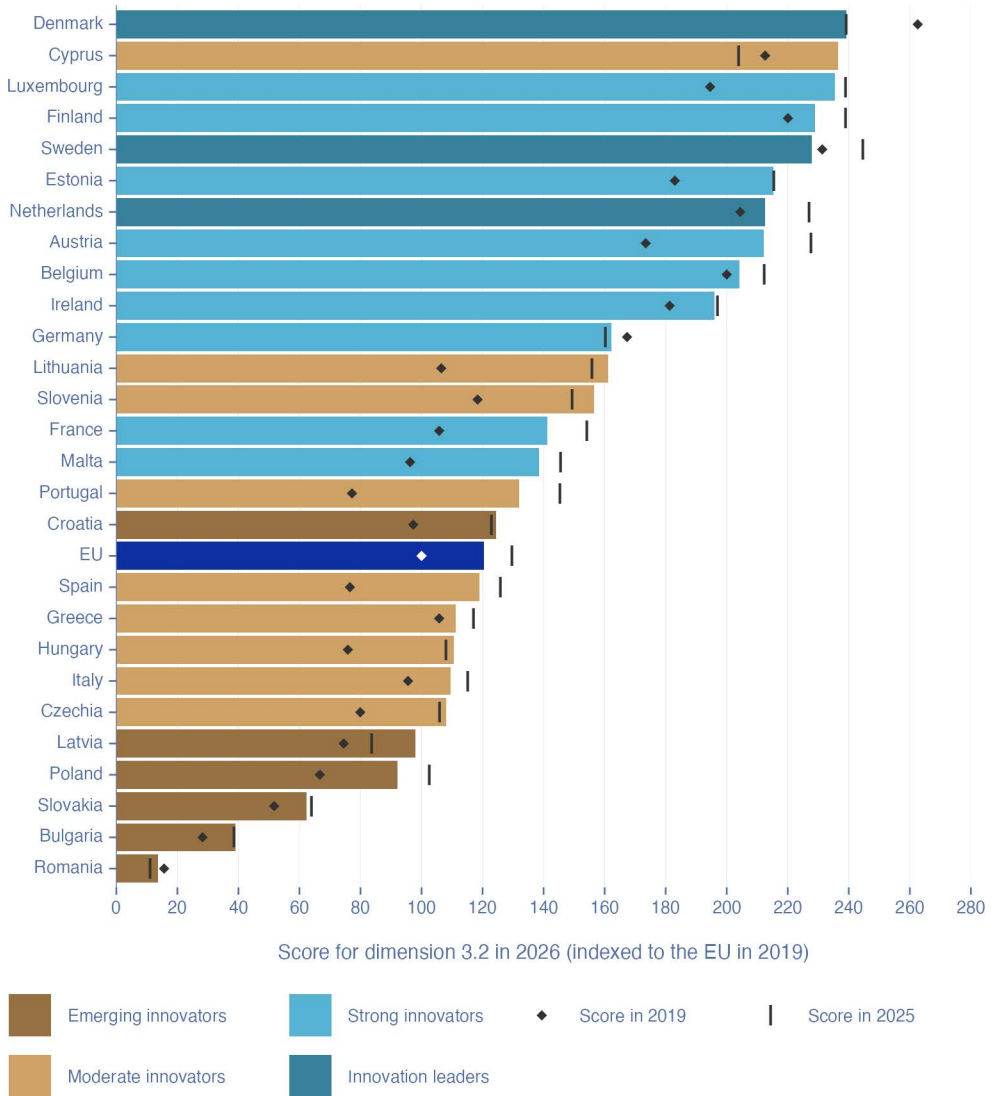


Figure 21: Innovation performance of the EU Member States in the Linkages dimension

3.3.3.3 Intellectual assets

The *Intellectual assets* dimension measures the intellectual property output of the innovation system and includes three indicators: *PCT patent applications*, *Trademark applications* and *Design applications*. For this dimension, the best-performing Member States are two Innovation Leaders (Sweden and Denmark) and three Strong Innovators (Malta, Austria and Estonia). The top position is held by Malta. The bottom five in the dimension consist of one Strong Innovator (Ireland), two Moderate Innovators (Hungary and Greece) and two Emerging Innovators (Croatia and Romania). Four of the bottom five improved their performance since 2025. The strongest increase was recorded by Romania (+1.8%-points).

All Innovation Leaders and most Strong Innovators, except for Belgium, France and Ireland, exceed the EU average in 2026 on this dimension. Moderate Innovators are unevenly split, with two above the EU average (Italy and Cyprus) and seven below (Lithuania, Slovenia, Spain, Portugal, Czechia, Hungary and Greece). The EU average is above the median of the distribution with 11 Member States scoring higher and 16 scoring lower than the EU average.

Compared to 2025 the EU average for the *Intellectual assets* dimension decreased by -2.2%-points despite the increased performance of 11 Member States. Malta recorded the strongest improvement (+19.7%-points), followed by Cyprus (+10.1%-points) and Slovakia (+9.8%-points). Performance decreased for 16 Member States with strongest declines in Bulgaria (-15.4%-points), Slovenia (-9.5%-points) and Austria (-6.1%-points).

Compared to 2019 the EU average decreased by -19.4%-points driven by a decrease in 22 Member States. Lithuania improved most (+17.9%-points), followed by Latvia (+12.3%-points) and Romania (+4.0%-points). Performance decreased for 22 Member States with largest drops in Luxembourg (-43.8%-points), Denmark (-36.4%-points) and Germany (-33.0%-points).

Intellectual assets

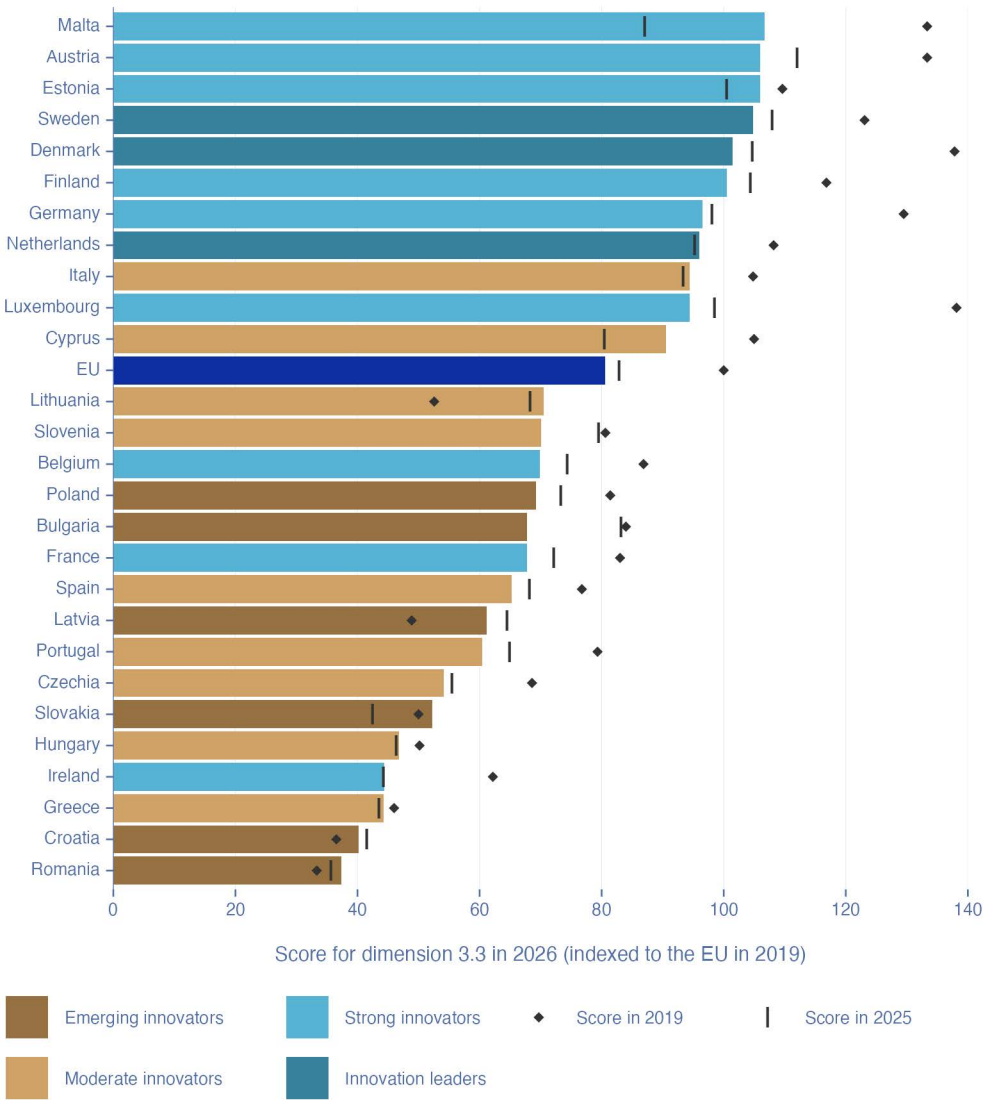


Figure 22: Innovation performance of the EU Member States in the Intellectual assets dimension

3.3.4 Performance on impacts

3.3.4.1 Impact on Sales and Employment

The *Sales and employment impacts* dimension includes two indicators: *Sales of new-to-market and new-to-firm innovations* and *Employment in innovative enterprises*. For this dimension, the best-performing Member States are three Strong Innovators (Ireland, Germany and Finland) and two Moderate Innovators (Greece and Italy). The bottom five in the dimension are a Moderate Innovator (Hungary) and four Emerging Innovators (Poland, Latvia, Bulgaria and Romania), of which only Hungary improved performance since 2025 (+0.2%-points).

All Innovation Leaders and Strong Innovators except for Austria, France, Luxembourg, Malta and the Netherlands exceed the EU average in 2026 for Sales and employment impacts. Moderate Innovators are split, with five above the EU average (Greece, Italy, Spain, Portugal and Slovenia) and four below it (Hungary, Cyprus, Czechia and Lithuania). The EU average is approximately in the middle of the distribution with 12 Member States scoring higher and 15 scoring lower than the EU average.

Compared to 2025 the EU average for the *Sales and employment impacts* dimension decreased by -4.4%-points driven by increased performance by six Member States. The strongest improvement was experienced by Italy (+20.7%-points), followed by Spain (+9.6%-points) and France (+8.1%-points). Performance decreased for 21 Member States with strongest declines in Cyprus (-52.5%-points), Bulgaria (-31.6%-points) and Finland (-29.0%-points).

Compared to 2019 the EU average improved by +1.5%-points driven by increased performance by 15 Member States. The strongest improvement was experienced by Slovenia (+36.4%-points), followed by Italy (+26.1%-points) and Sweden (+22.4%-points). Performance decreased for 12 Member States with strongest declines in Luxembourg (-35.3%-points), Slovakia (-24.6%-points) and Austria (-20.5%-points).

Sales and employment impacts

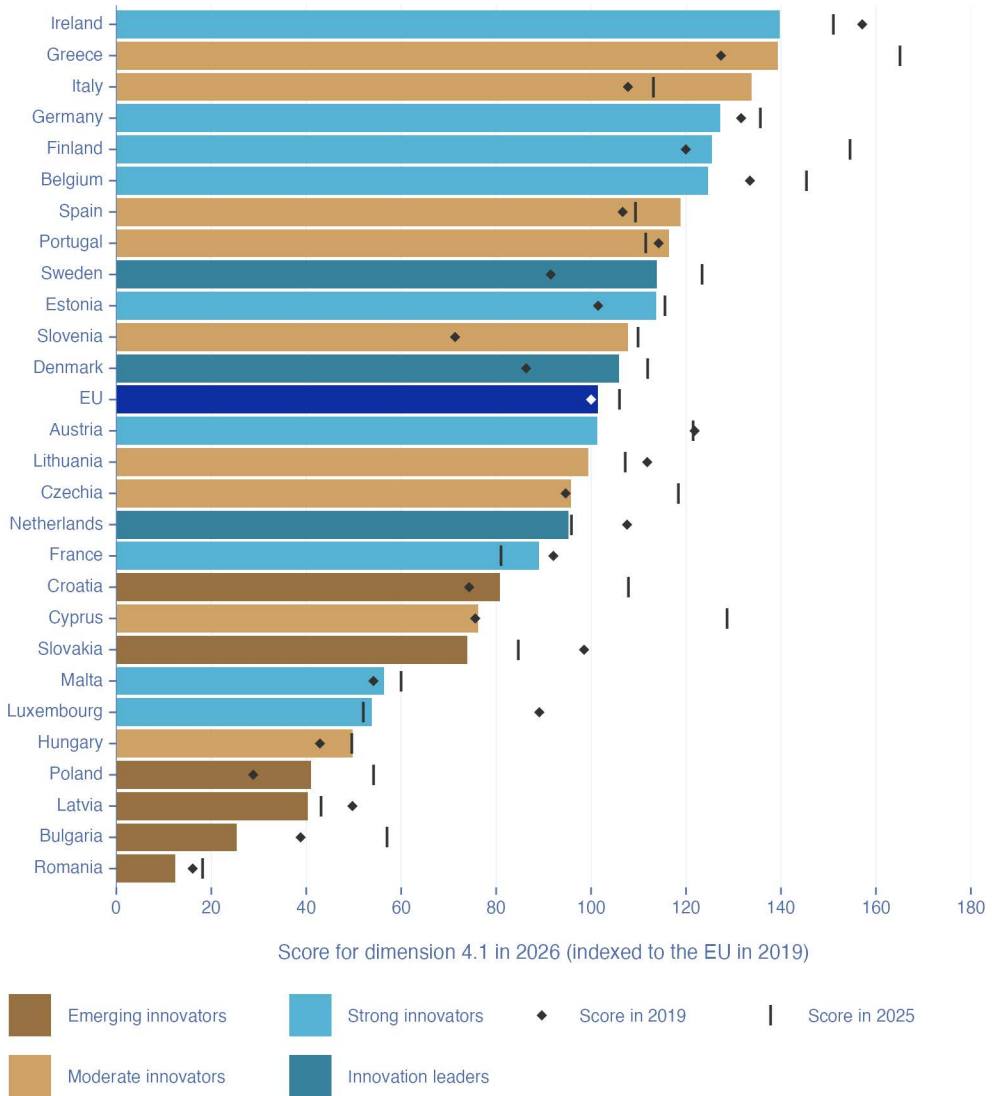


Figure 23: Innovation performance of the EU Member States in the Sales and employment impacts dimension

3.3.4.2 Trade impacts

The *Trade impacts* dimension measures trade competitiveness in innovation-intensive products and services and includes three indicators: *Exports of medium and high-tech products*, *Knowledge-intensive services exports* and *High-tech imports from outside the EU*.

For this dimension, the best-performing Member States are two Innovation Leaders (Sweden and Denmark) and three Strong Innovators (Germany, France and Luxembourg). The top position is held by Sweden. The bottom five in the dimension consist of one Strong Innovator (Estonia), two Moderate Innovators (Greece and Cyprus) and two Emerging Innovators (Slovakia and Croatia). Of the bottom five, four improved their performance since 2025. The strongest increase was recorded by Slovakia (+8.8%-points).

All Innovation Leaders and Strong Innovators except for Germany, Denmark and Sweden are below the EU average in 2026 for Trade impacts. All nine Moderate Innovators fall below the EU average (Cyprus, Greece, Lithuania, Spain, Slovenia, Portugal, Czechia, Hungary and Italy). Overall, the EU average stands towards the top of the distribution with three Member States scoring higher and 24 scoring lower than the EU average.

Compared to 2025 the EU average for the *Trade impacts* dimension improved by +2.3%-points driven by increased performance by 24 Member States. The strongest improvement was experienced by Slovenia (+19.2%-points), followed by Slovakia (+8.8%-points) and Bulgaria (+6.5%-points). Performance decreased for three Member States: Cyprus (-6.3%-points), Belgium (-2.3%-points) and Austria (-0.4%-points).

Compared to 2019 the EU average improved by +3.9%-points driven by increased performance by 22 Member States. The strongest improvement was experienced by Slovakia (+16.5%-points), followed by Lithuania (+10.4%-points) and Bulgaria (+9.3%-points). Performance decreased for five Member States with strongest declines in Cyprus (-10.9%-points), Belgium (-2.1%-points) and Sweden (-2.0%-points).

Trade impacts

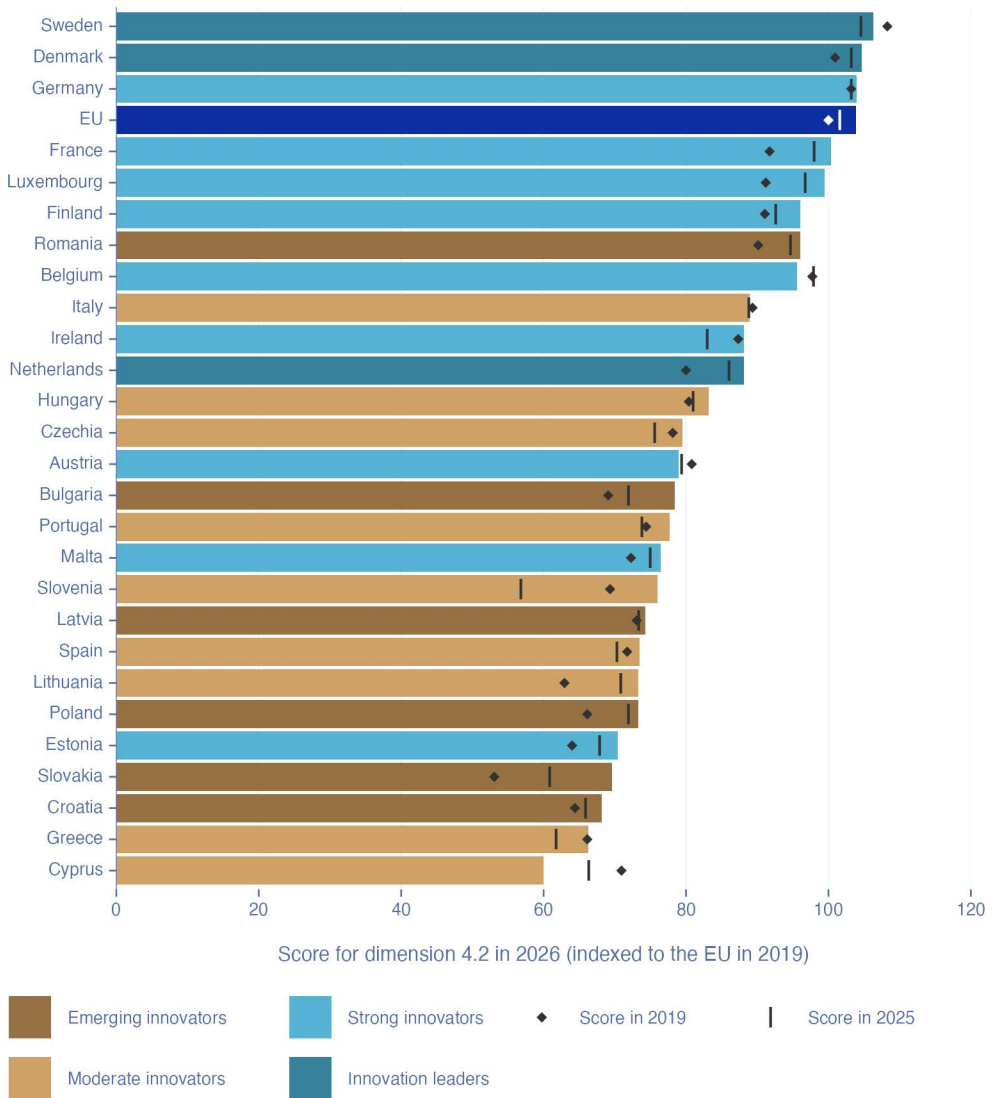


Figure 24: Innovation performance of the EU Member States in the Trade impacts dimension

3.3.4.3 *Resource and labour productivity*

The *Resource and labour productivity* dimension measures the environmental sustainability and productivity performance and includes three indicators: *Resource productivity*, *Production-based CO2 productivity* and *Labour productivity*.

For this dimension, the best-performing Member States are two Innovation Leaders (Denmark and the Netherlands) and three Strong Innovators (Ireland, Luxembourg and France). The top position is held by Ireland. The bottom five in the dimension consist of one Strong Innovator (Estonia) and one Moderate Innovator (Cyprus) and three Emerging Innovators (Romania, Poland and Bulgaria). Of the bottom five, four improved their performance since 2025. The strongest increase was recorded by Bulgaria (+8.1%-points).

All Innovation Leaders and Strong Innovators except for Estonia and Finland exceed the EU average in 2026 for Resource and labour productivity. Moderate Innovators are unevenly split, with two above the EU average (Italy and Spain) and seven below it (Cyprus, Greece, Czechia, Lithuania, Hungary, Slovenia and Portugal). The EU average is approximately in the middle of the distribution with 12 Member States scoring higher and 15 scoring lower than the EU average.

Compared to 2025 the EU average for the *Resource and labour productivity* dimension improved by +7.6%-points driven by increased performance by 25 Member States. The strongest improvement was experienced by Germany (+15.7%-points), followed by Malta (+13.9%-points) and Czechia (+13.1%-points). Performance decreased for one Member State, namely Cyprus (-1.3%-points).

Compared to 2019 the EU average improved by +34.1%-points driven by increased performance by 27 Member States. The strongest improvement was experienced by Ireland (+71.2%-points), followed by Portugal (+52.3%-points) and Denmark (+50.5%-points). No Member State recorded a decline.

Resource and labour productivity

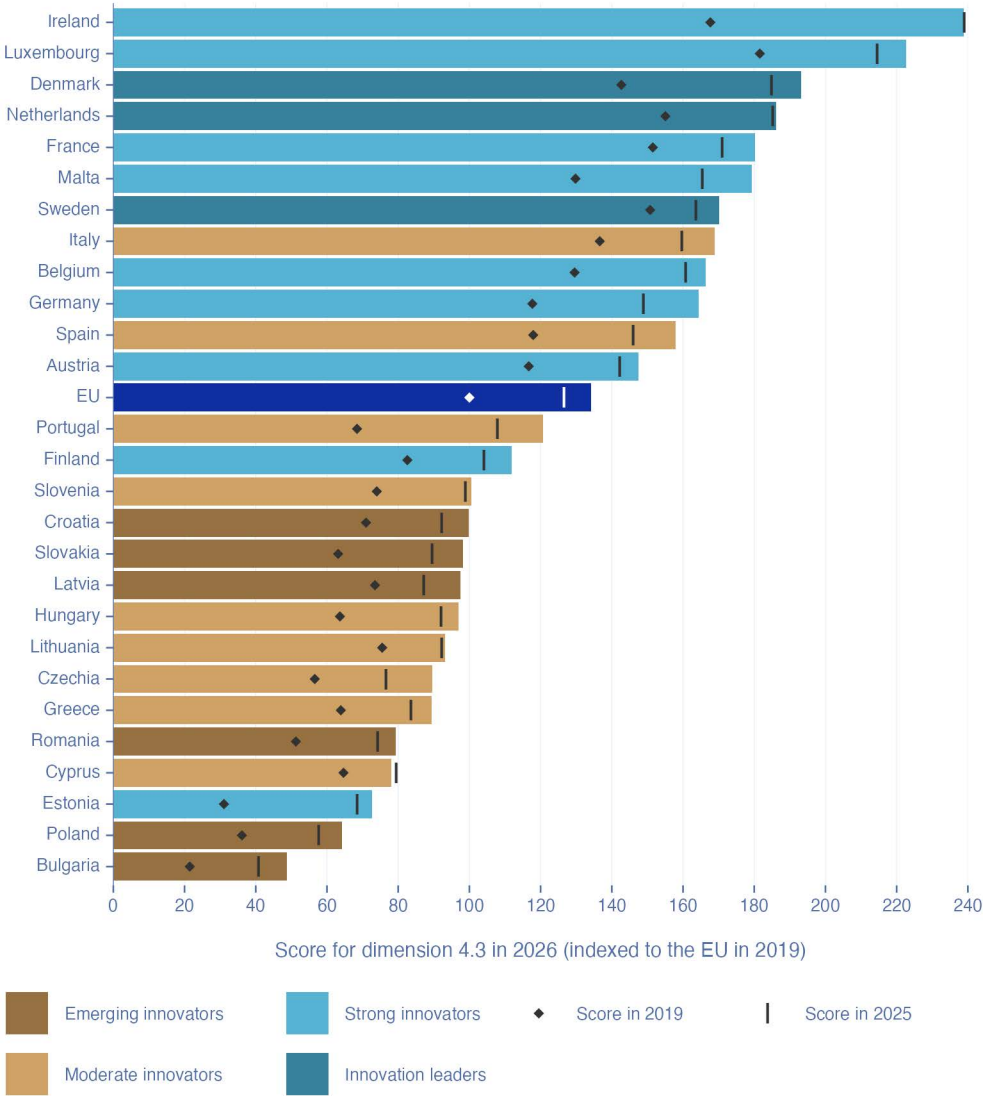


Figure 25: Innovation performance of the EU Member States in the Resource and Labour productivity dimension

4. THE EU'S NEIGHBOURS' PERFORMANCE

The innovation performance of the 13 neighbouring (non-EU) European countries (Albania, Bosnia and Herzegovina, Georgia, Iceland, Moldova, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Türkiye, Ukraine and the United Kingdom) compared with that of the EU Member States is examined in this section. Georgia features in the EIS for the first time in 2026. The neighbouring countries are strategic partners for the EU, with a mix of highly advanced economies and economies in transition. The performance progress concerns only the indicators for which data is available as data availability varies across countries.

4.1 The wider European comparison picture

All EU neighbouring countries have recorded growth in EIS performance from 2019 to 2026 except for Moldova (-2.2%-point). Compared to 2019, the United Kingdom registers the largest growth of 16.3%-points, followed by Iceland at 14.4%-points and Türkiye with 12.6%-points. Serbia records a growth of 8%-points followed by Norway with a +7.4%-points increase in performance. Among Emerging Innovators, the progress from 2019-2026 varies between a 7.5%-point increase for North Macedonia and Albania with +2.9%-points. The most modest growth was recorded by Switzerland and Ukraine (both a +1.5%-points improvement) and Georgia (+1.3%-points improvement) compared to 2019.

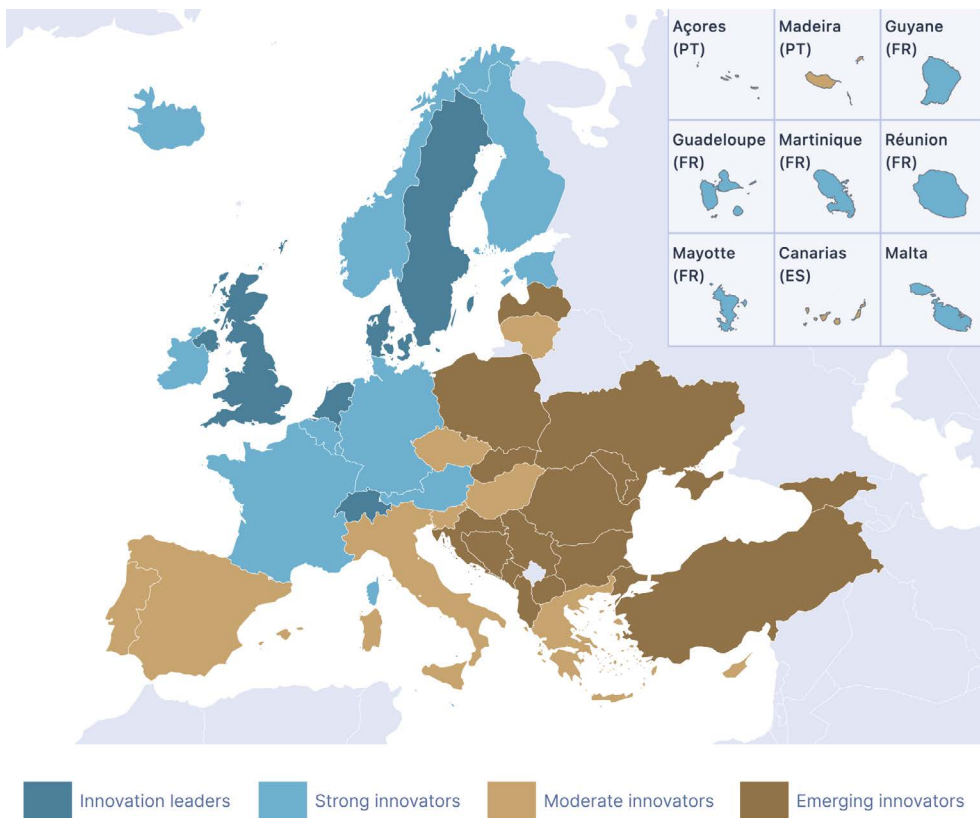


Figure 26: Innovation performance of the EU Member States and neighbouring countries in 2026

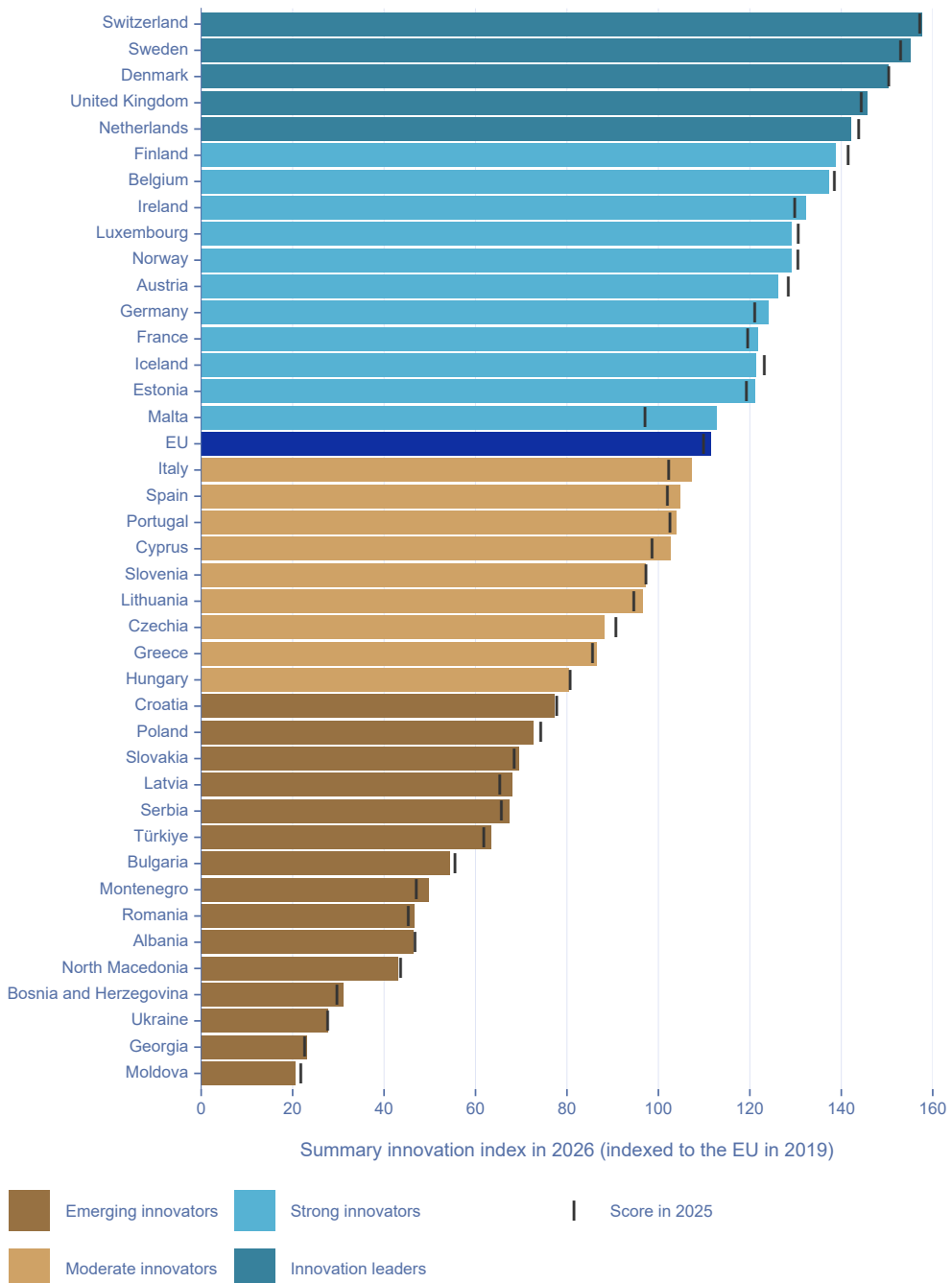


Figure 27: Innovation performance rank of the EU Member States and neighbouring countries (2026 vs 2025)

Four of the EU neighbouring countries score above the EU average in 2026, namely Switzerland, United Kingdom, Norway and Iceland. Switzerland ranks 1st in the enlarged ranking outperforming all EU Member States, performing at 141.3% of the EU average in 2026. Since 2025, the country has recorded a +0.5%-points increase and shows an overall +1.5%-points increase in performance since 2019. The United Kingdom ranks 4th and outperforms all the EU Member States except Sweden and Denmark, building on a positive trend of a +16.3%-points increase in performance since 2019. The UK is an Innovation Leader and registers a +1.2%-points increase compared to 2025. Performing at 115.7% of the EU average in 2026, Norway outperforms 20 of the EU Member States but registers a decline of -1.5%-points in 2026 compared to 2025. The country remains among Strong Innovators building on the +7.4%-points increase in performance since 2019. Finally, Iceland performs at 108.9% of the EU average in 2026 and ranks 9th among the Strong Innovators. It outperforms Estonia and Malta in the group despite a -1.8%-points decrease compared to 2025.

The other nine neighbouring countries are in the group of Emerging Innovators. Four EU Member States top the rankings of the group (Croatia, Poland, Slovakia and Latvia). Serbia ranks 5th in the group, performing at 60.4% of the EU average in 2026 and registering a +1.7%-points increase compared to 2025. Montenegro and Serbia have registered the highest growth since 2025 in the Emerging Innovators group while Georgia and Ukraine displayed the lowest growth with a +0.5% and +0.1%-points increase compared to 2025.

Türkiye displays the strongest growth among EU neighbouring countries in its performance group with a +12.6%-points increase since 2019. It ranks 6th in Emerging Innovators group and outperforms two EU Member States. The performance of the remaining neighbouring countries in 2026 declined compared to 2025 with Moldova recording the largest drop of -1.1%-points, followed by North Macedonia with -0.7%-points and Albania with -0.4%-points.

Georgia joined the EIS for the first time in 2026 as an Emerging Innovator, with an innovation performance of 20.7% of the EU average in 2026, ranking 39th out of 40 EIS countries. The change in SII performance since 2019 is +1.3%-points and only +0.5%- points since 2025.

On the plus side, several upward performance trends stand out. The *Attractive research systems* dimension has improved markedly, driven by *Scientific publications among the top 10% most cited*, which increased by +28.1%-points over 2019–2026 reaching 42% of the EU average. *Resource and labour productivity* is among Georgia's best-performing areas: *Production-based CO₂ productivity* is at 63.1% of the EU average in 2026, ranking 29th and showing a +16.4%-point gain since 2019. *Investments in information technologies* also show some progress, with *Cloud computing usage* rising by almost 40%-points since 2019, even if the overall dimension score remains low at 13.4% of the EU average. Within *Innovation activities*, *SMEs introducing business process innovations* increased strongly, by +19.6%-points since 2019 and +22.3%-points between 2025 and 2026. In *Trade impacts*, *knowledge-intensive services exports* increased by +25.6%-points over 2019–2026.

Despite these advances, Georgia's innovation system remains constrained by significant structural weaknesses. *Human resources* performance is modest at 36.3% of the EU average (rank 34) due to the very low scores in the *Participation in lifelong learning* and *New doctorate graduates*. *Digitalisation* is weak, at 21.6% of the EU average (rank 33), despite a +55.8%-point increase in *High-speed internet access* since 2019, with a limited share of individuals having above basic digital skills. *Finance and support* scores are very low, at 5% of the EU average (rank 36th), reflecting minimal *Venture capital investment* and modest *R&D expenditure in the public sector*. *Intellectual assets* and *Trade impacts* remain low too at 11% and 20.5% of the EU average, respectively, with patent and trademark applications declining and design applications at just 0.5% of the EU average (rank 39). Finally, the innovation system has a weak impact on *Employment in innovative enterprises* (19.9% of the EU average), recording a -31.7%-points decline since 2019.

Box 8: Spotlight on Georgia

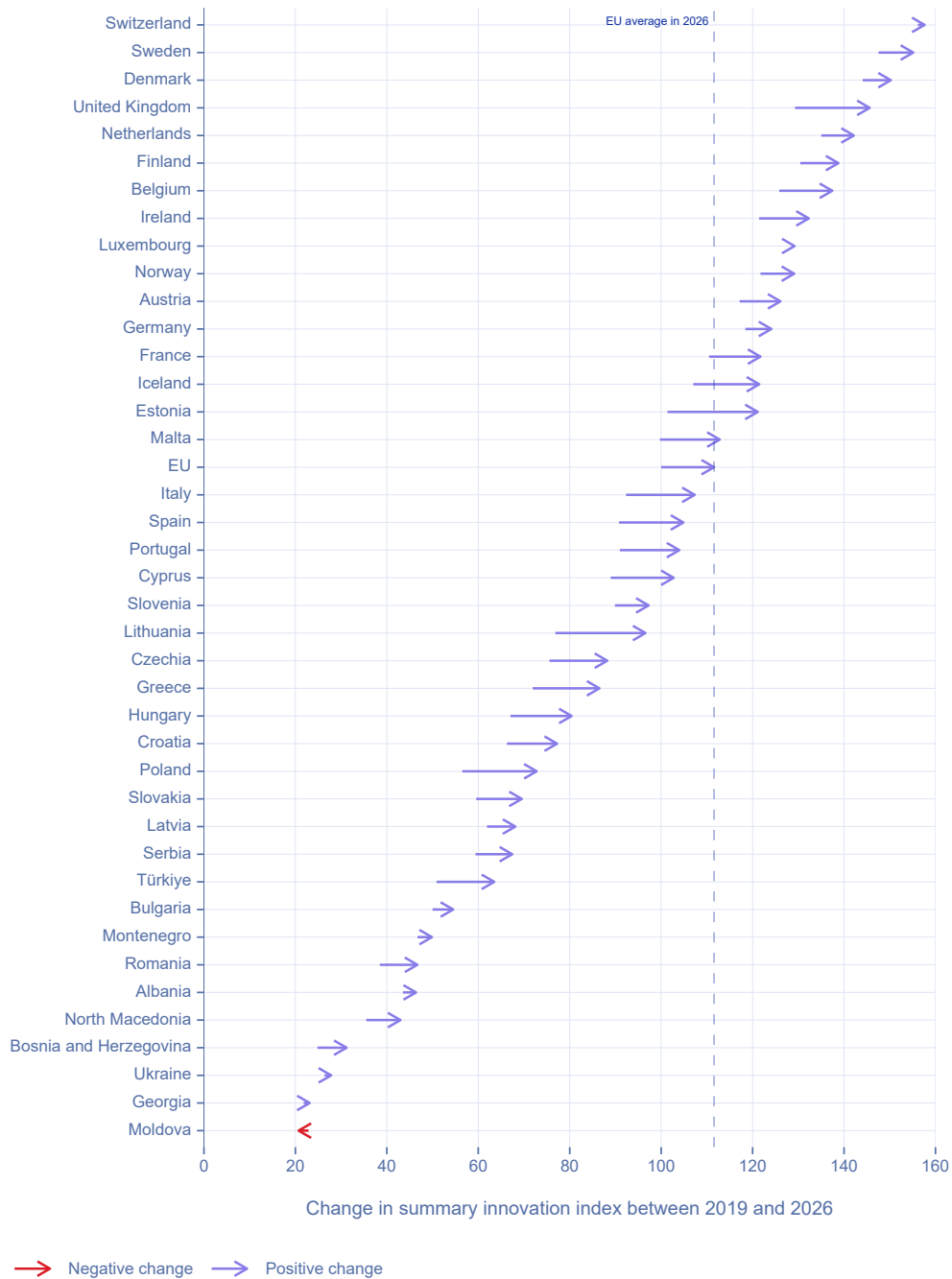


Figure 28: Innovation performance change of the EU and neighbouring countries (2026 vs 2019)

Data availability is a critical element for a country's participation in the EIS with a minimum threshold of data available for 75% of EIS indicators. Data gaps which result from missing data, non-updated data or data comparability issues (different statistical methods, questions or practices) have been a persistent barrier for a full assessment of EU neighbouring countries' performance in the EIS. The data availability of EIS indicators per neighbouring country ranges from 100% for Norway and Serbia, 94% Iceland and Türkiye, Montenegro 91%, Switzerland and the UK 88%, Albania, Bosnia and Herzegovina and North Macedonia 84%, Moldova 81%, Georgia 75% and Ukraine 72%¹⁵.

In the case of the nine countries which are candidates for EU accession¹⁶, the alignment of statistical systems with those of Eurostat is one of the obligations to be met. However, the pace at which each country adapts their national systems to produce reliable, timely, and high-quality official data aligned with Eurostat standards varies.

In the case of Iceland, Switzerland and the United Kingdom, the issue is that they do not always collect data in the way required by the EIS. The United Kingdom presents a specific challenge, as it no longer transmits data to Eurostat, even though it continues to collect most of the required information, including that needed for CIS-based indicators¹⁷.

While the set of missing indicators differs across neighbouring countries, some indicators are systematically more difficult to collect than others. Labour productivity has the lowest data coverage among the 13 countries, with data missing for nine of them, mainly because these national statistical systems record productivity per person rather than per hour. High-speed internet access (missing in seven countries) has also been reported as challenging to provide by several statistical agencies, as the question required is not included in national ICT questionnaires. Data for high-tech imports from partners outside the EU are missing for five neighbouring countries because these indicators draw on the FIGARO multi-region input-output database, which does not cover all of them, although coverage improved in the 2025 edition with the addition of Montenegro, North Macedonia, Albania, Serbia and Türkiye.

The seven indicators derived from the CIS also pose challenges. For example, indicators such as innovation expenditure per person employed and innovative SMEs collaborating with others are missing for five countries. Moreover, overall statistical availability can mask issues of timeliness: in some cases, the latest CIS available is from 2016, with subsequent years of the time series based on imputations rather than new survey results.

Improving data availability for the neighbouring countries is critical to sustain their participation in the EIS and the benefits derived from international benchmarking of innovation performance. Upgrading and alignment of national statistical systems in the context of the EU accession process should improve the representation of the candidate countries in the EIS.

Box 9: Reinforcing statistical availability across neighbouring countries.

¹⁵ In the case of Ukraine, an exception to the 75% threshold has been made due to the challenges of data collection during wartime and given the ongoing efforts of the State Statistical Service to align methodologies for data collection and indicator composition with the Eurostat Oslo Manual.

¹⁶ https://enlargement.ec.europa.eu/enlargement-policy/candidate-countries-and-potential-candidates_en

¹⁷ For EIS 2026, data for the UK have been sourced from the OECD wherever possible, which has improved the timeliness of UK data. However, gaps remain, particularly for indicators based on the UK innovation survey, as the OECD business innovation statistics only publish a subset of the indicators required for the EIS.

4.2 Performance of neighbouring countries in 2026

Nine out of 13 of the EU neighbouring countries perform below 70% of the EU average, while the remaining four are above 100% of the EU average in 2026. This highlights the gap between the few countries at the top of the scale and the majority concentrated at the bottom of the scale relative to the EU performance¹⁸. While this gap has a rather systematic character given previous result of the EIS, the EU neighbouring countries performing below 70% of EU average have nonetheless demonstrated visible improvements over the 2019–2026 period in several dimension. These include *Attractive research systems*, *Investments in information technologies*, and to some extent on *Resource and labour productivity*. Figure 30 illustrates the performance of EU Member States and neighbouring countries in 2026 for all EIS indicators, relative to the EU average performance in the same year. Additional information on trends in performance change as compared to 2019 and 2025 can be found in Figure 40. The overview of differences in structural indicators for neighbouring countries and the EU Member States is in Figure 41. This section presents the main developments across the 12 dimensions of the EIS 2026.

The EU neighbouring countries continue to perform predominantly below 70% of the EU average on *Finance and support* and *Firm investments* dimensions. On *Direct and indirect government support of business R&D* all EU neighbouring countries, except for the UK, Iceland, Norway and Türkiye perform below 70% of the EU average, and only Türkiye records an improvement on this indicator compared to 2025. Switzerland records a performance of 19% of the EU average in 2026 on this indicator, the lowest performance among the Innovation leaders.

R&D expenditure in the business sector across the nine EU neighbouring countries in the Emerging Innovators group is below 70% of the EU average in 2026 even if Serbia, Türkiye, Albania, North Macedonia and Ukraine have seen improvements since 2019. At the same time, *Non-R&D innovation expenditures of enterprises* have been exceptionally high in Serbia and North Macedonia which perform at 255% and 138% of the EU average on this indicator, ahead of all other countries in the Emerging innovators group. *Firm innovation expenditures per person employed* remain below 70% of EU average in 2026 across the Emerging Innovators group which is joined by Strong Innovator Iceland performing at 46% of the EU average.

Despite challenges across *Finance and support* and *Firm investments* dimensions, the EU neighbouring countries perform relatively well on the *Innovators* dimension with Switzerland, Norway, Serbia, Montenegro, North Macedonia performing above 125% of EU average on *SMEs introducing product innovations*. Albania and Iceland perform at above 110% of the EU average on this indicator, followed by the United Kingdom with 106.2%. The results on *SMEs introducing business process innovations* point to a fragmented performance as Georgia and Switzerland perform below 70% of EU average while Montenegro leads for this indicator among EU neighbouring countries with 125.3% of EU performance. Iceland, Serbia, Türkiye, Albania and Bosnia and Herzegovina demonstrate a moderate performance in between 70% and 100% of the EU average in 2026.

Investments in information technologies have increased both in the EU and the neighbouring countries since 2019. Serbia, Türkiye, Montenegro, Albania and Bosnia and Herzegovina registered improvement in *Cloud computing* usage since 2025 even if their performance remains below 70% of the EU average on this indicator. Norway and the United Kingdom lead EU neighbouring countries in this area with 126.3% and 100.6%.

¹⁸ Comparisons with neighbouring countries have limitations as data availability is lower compared to the EU Member States. Furthermore, the performance of some countries on specific indicators may be more volatile due to their smaller size and should, therefore, be interpreted with caution

Dimensions that require continued improvement for the majority of the nine EU neighbouring countries in the Emerging Innovators group include *Attractive research systems*, *Intellectual assets*, *Linkages* and *Resource and Labour Productivity*. There is a common need for sustained effort by EU neighbouring countries across performance groups in the *Human Resources* and *Trade Impacts* dimensions.

On *Human resources*, 11 out of 13 EU neighbouring countries lag the EU Member States with performance below 70% of EU average on *New doctorate graduates* indicator. In 2026, only Switzerland and United Kingdom had 125% or higher performance compared to EU average. Among Emerging innovators, Ukraine performs best on *Population with tertiary education* at 171% of the EU average in 2026, while Georgia, Albania, Montenegro and Türkiye show moderate results.

When it comes to *Attractive research systems*, Norway, Switzerland, United Kingdom and Iceland lead the way on *Scientific publications among the top 10% most cited* with 125% of EU average performance. The EU neighbours in the Emerging Innovators group perform below 70% of the EU average on this and the remaining two indicators in the dimension except for North Macedonia and Moldova registering 156.8% and 98.3% of the EU performance in 2026, respectively.

On the *Linkages* dimension, the nine EU neighbouring countries in the Emerging innovators group perform below 70% of the EU average in 2026. *Public-private co-publications* pose a challenge across the board. On the *Job-to-job mobility of HRST*, Türkiye leads the way with 106% of EU performance in 2026 but has registered a sharp decline of 73.5%-points since 2024. *Public-private co-publications* continue to be a weak point for EU neighbouring countries in this group despite improvement on this indicator since 2019 across the board.

On *Intellectual assets*, United Kingdom performs the lowest in the Innovation Leaders' group across all three indicators of *Patent* (104.2% of EU average), *Trademarks* and *Design applications* (67.1% and 39.8% of EU average respectively). Iceland and Norway perform similarly to the rest of the Strong Innovators, and the nine Emerging Innovator neighbouring countries all register a performance below 70% despite some improvements on *Trademark applications* since 2019. Only Switzerland outperforms the EU Member States on all three indicators in the Innovation Leaders' group with 138.2% of EU average across the dimension.

When it comes to *Trade Impacts*, all 13 EU neighbouring countries display different weaknesses across the indicators. Switzerland performs below 70% of EU average in 2026 on both *Exports of medium and high-tech products* and *High-tech imports from outside the EU*. Norway records similar performance on *Exports of medium and high-tech products* joined by eight EU neighbouring countries from the Emerging innovators group. Among the latter emerging innovators, only Ukraine performs at 82% of the EU average on *Knowledge-intensive services exports* in 2026, while Iceland from the Strong innovators group performs at below 70% of EU average on this indicator.

Finally, most of the EU neighbouring countries, except for Iceland, Norway, Switzerland and United Kingdom, demonstrate substantial gaps with the EU Member States in *Resource and Labour productivity*. Available data on *Resource productivity* shows that Albania, Bosnia and Herzegovina, Georgia, North Macedonia and Serbia perform below 70% of the EU average in 2026 on this indicator, while Türkiye registers 80.1% of the EU average in 2026. *Production-based CO2 productivity* is below 70% of the EU average for eight Emerging Innovators with only Albania reaching 86.8% of the EU level in 2026.

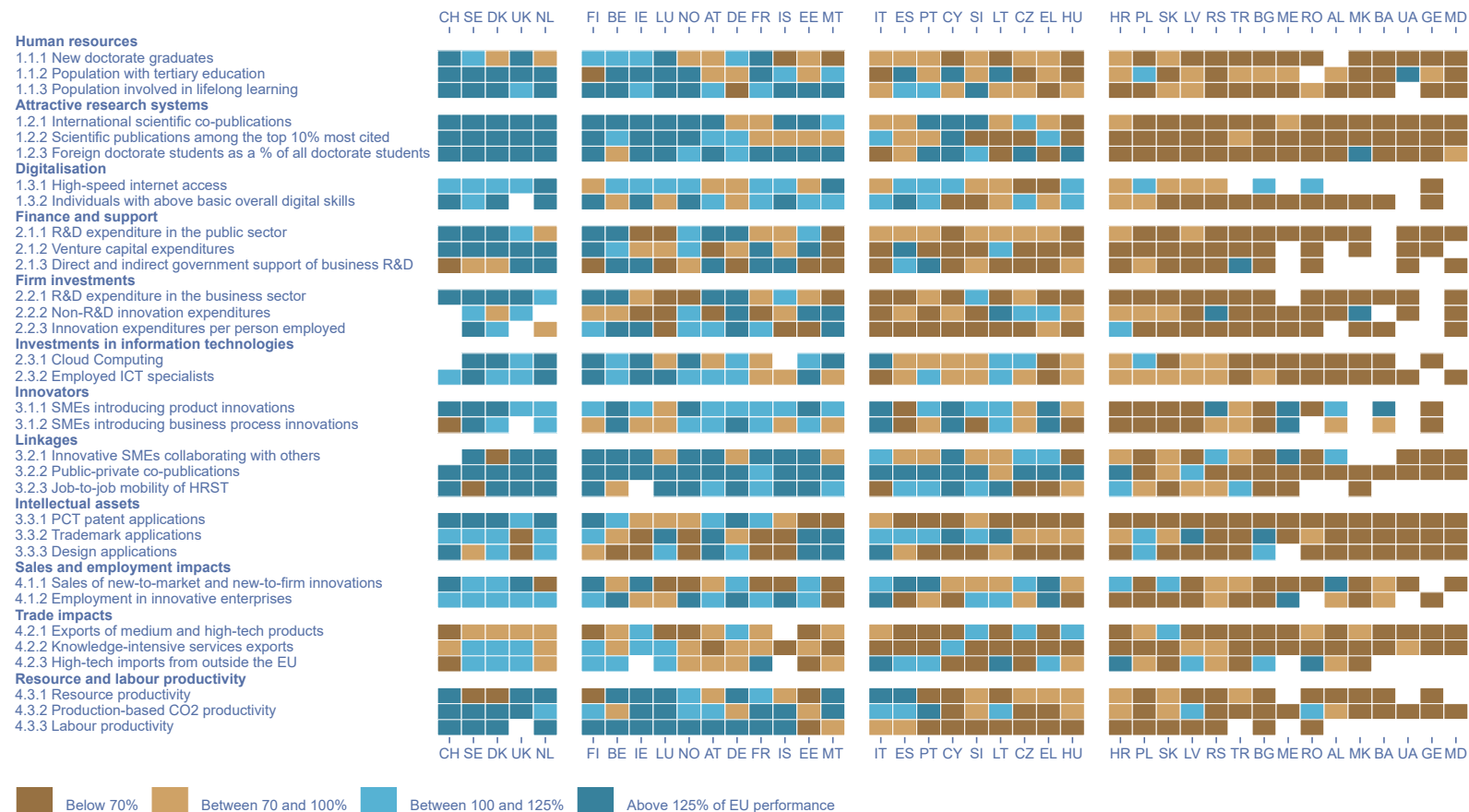


Figure 29: Performance of EU Member States and neighbouring countries per indicator in 2026, compared to the EU average in 2026

5. HOW DOES EUROPE COMPARE GLOBALLY?

This section highlights the key changes in the innovation performance of the EU as a whole and compares this performance to that of the main global economic competitors.

5.1 The EU's overall performance .

- The EU's innovation performance has continued to rise steadily since 2019, reaching 111.6% of its 2019 level in 2026.
- Progress is broad-based but uneven: seven out of 12 dimensions improved between 2025 and 2026, with particularly strong gains in *Digitalisation*, *Investments in information technologies*, and *Resource and labour productivity*, while *Linkages* and *Sales and employment impacts* deteriorated
- The EU's strongest gains since 2019 are in digital and ICT uptake: *High-speed internet access* and *Cloud Computing* have more than doubled relative to 2019 levels, and the number of *Employed ICT specialists* has also increased, indicating that the EU is building the infrastructure and skills base for the digital transition.
- At the same time, the innovation networks that connect actors and translate ideas into market outcomes are under strain: *Linkages* have declined since 2025, driven by a sharp drop in *Job-to-job mobility of HRTS* and weakening *Public-private co-publications*, while *Employment in innovative enterprises* and *Sales of new-to-market and new-to-firm innovations* have declined.
- *Firm investments* and *Intellectual assets* remain medium-term weak spots: over 2019–2026, the *Firm investments* dimension has essentially stagnated and *Intellectual assets* have declined markedly, reflecting sustained falls in design, patent and trademark applications as well as Non-R&D innovation expenditures.
- The productivity-related indicators (resource productivity, production-based CO₂ productivity and labour productivity) show sizeable improvements since 2019, suggesting that innovation and structural change are supporting more efficient and greener production, even if this has not yet translated into stronger sales and employment impacts across the board.
- Overall, the scoreboard points to an EU innovation system that is becoming more digital, more skills-intensive and more resource-efficient, but struggles to convert these strengths into new intellectual assets, strong firm-level investment and dense innovation linkages—areas where targeted EU and national policies may need to be reinforced.

Box 10: Key takeaways: how the EU is performing

The EU innovation performance for 2026 is equal to 111.6% of the EU average in 2019, which means that it has improved by +11.6%-points between 2019 and 2026. **Year-on-year the EU has achieved steady and consistent performance growth.** With the exception of the strong increase from 2021 to 2022 (+4.3%-points), annual improvements have ranged between +0.4%-points and +1.7%-points, and the latest increase from 2025 to 2026 (+1.7%-points) is the highest since 2022, pointing to a strengthening of the upward trend.

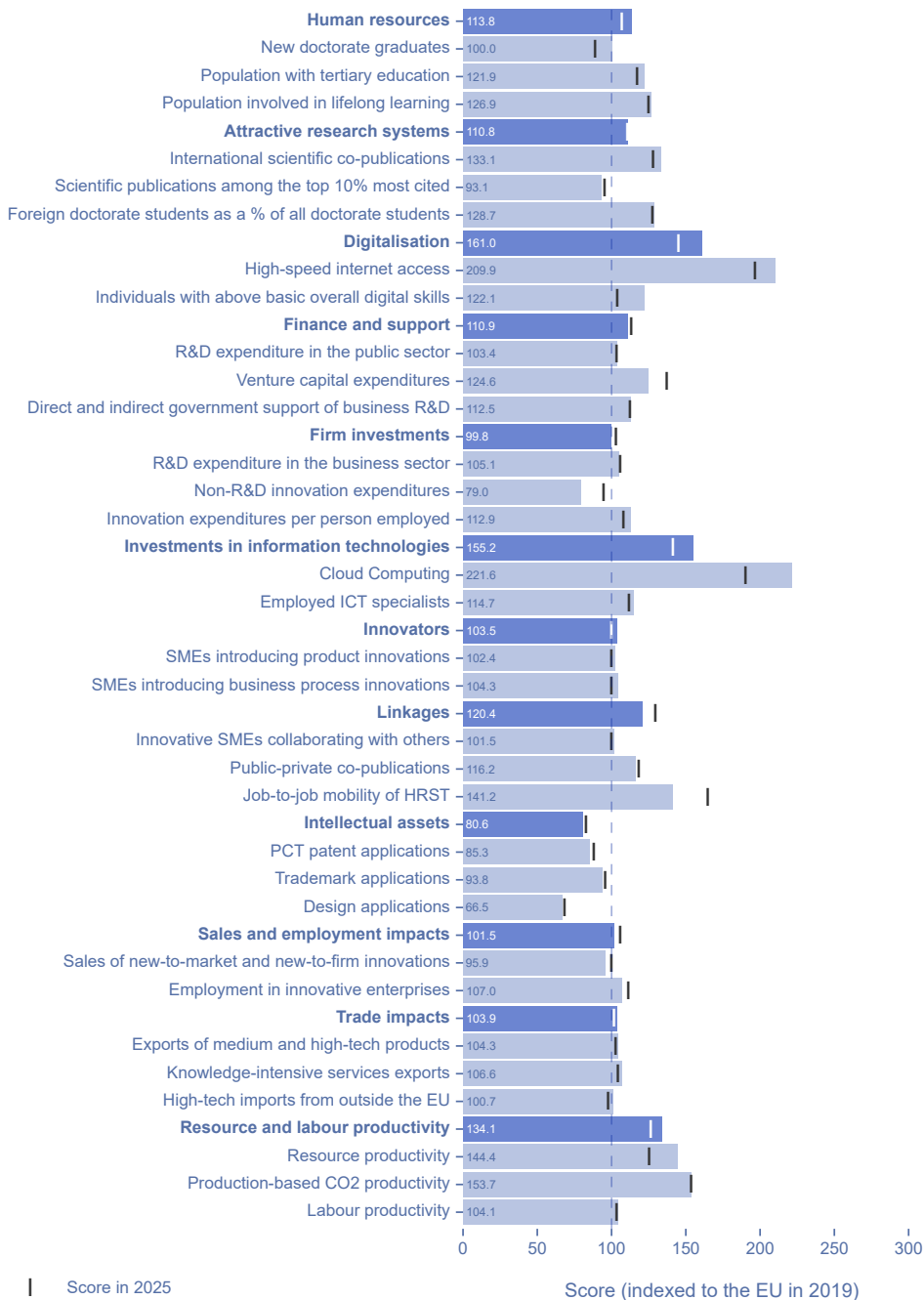


Figure 30: Innovation performance of the EU per dimension and indicator

Note: Scores are indexed to the score of the EU in 2019 for each indicator. Dimensions are shown in dark blue while indicators are displayed in light blue.

Since 2025, the EU score has improved in most dimensions and most indicators.

Between 2025 and 2026, performance for the EU has improved in seven dimensions and declined in the remaining five. The most significant performance **increases** are observed in *Digitalisation* (+16.0%-points), *Investments in information technologies* (+13.7%-points) and *Resource and labour productivity* (+7.6%-points).

The growth in the *Digitalisation* dimension was largely driven by *Individuals with above basic overall digital skills* (+18.3%-points) and *High-speed internet access* (+13.3%-points). The growth in *Investments in information technologies* was driven by *Cloud Computing* (+31.3%-points) and *Employed ICT specialists* (+2.9%-points). The growth in the *Resource and labour productivity* performance was largely driven by *Resource productivity* (+19.1%-points).

On the other hand, the EU performance recorded a significant downturn in the *Linkages* dimension (-9.2%-points) since 2025. This was mostly driven by the drop in *Job-to-job mobility of HRST* (-23.5%-points). *Public-private co-publications* also fell by -2.2%-points; however *Innovative SMEs collaborating with others* increased by +1.5%-points in this timeframe. EU performance also declined since 2025 in the *Sales and employment impacts* dimension (-4.4%-points) driven by a drop in both *Employment in innovative enterprises* (-4.4%-points) and *Sales of new-to-market and new-to-firm innovations* (-4.1%-points).

EU performance has increased since 2025 for 18 indicators, remained stable for three, declined for eight indicators by less than 10.0%-points and three indicators declined by more than 10.0%-points. The largest year-on-year (2025–2026) increases were observed in *Cloud Computing* (+31.3%-points), *Resource productivity* (+19.1%-points) and *Individuals with above basic overall digital skills* (+18.3%-points), *High speed internet access* (+13.3%-points) and *New doctorate graduates* (+11.1%-points), all of which grew by more than 10%-points. The largest declines were recorded in *Job-to-job mobility of HRST* (-23.5%-points), *Non-R&D innovation expenditures* (-15.6%-points) and *Venture capital expenditures* (-12.6%-points).

Compared to 2019, performance for the EU has improved in all dimensions, except Intellectual assets and Firm investments.

From 2019 to 2026, the *Intellectual assets* dimension fell by -19.4%-points, mainly driven by *Design applications* (-33.5%-points), while *PCT patent applications* fell by -14.7%-points, and *Trademark applications* fell by -6.2%-points. The *Firm investments* dimension over the 2019–2026 period fell by -0.2%-points due to a drop in *Non-R&D innovation expenditures* (-21.0%-points). More positively, *R&D expenditure* in the business sector increased by +5.1%-points, and *Innovation expenditures per person employed* increased by +12.9%-points.

Between 2019 and 2026, the EU has improved the most in the Digitalisation and Investments in information technologies dimensions.

In *Digitalisation*, performance grew by +61.0%-points driven, notably, by *High speed internet access* (+109.9%-points). In *Investments in information technologies*, performance increased by +55.2%-points mainly due to very strong uptake of *Cloud Computing* (+121.6%-points)

EU performance increased since 2019 for 25 individual indicators and decreased for six.

In addition to the digitalisation indicators, the most significant increases since 2019 were observed in: *Production-based CO2 productivity* (+53.7%-points), *Resource productivity* (+44.4%-points) and *Job-to-job mobility of HRT* (+41.2%-points), which all grew by more than 35%-points. A second group of indicators, including *International scientific co-publications* (+33.1%-points), *Foreign doctorate students as a % of all doctorate students* (+28.7%-points), *Population involved in lifelong learning* (+26.9%-points), *Venture capital expenditures* (+24.6%-points), *Individuals with above basic overall digital skills* (+22.1%-points) and *Population with tertiary education* (+21.9%-points) all grew by over 20%-points. The largest declines were in *Design applications* (-33.5%-points), *Non-R&D innovation expenditures* (-21.0%-points) and *PCT patent applications* (-14.7%-points). Smaller decreases were recorded in *Scientific publications among the top 10% most cited* (-6.9%-points), *Trademark applications* (-6.2%-points) and *Sales of new-to-market and new-to-firm innovations* (-4.1%-points).

5.2 The EU's performance versus global competitors

The EIS benchmarks the EU's innovation performance against 11 'global competitors' from North and South America (Brazil, Canada, Chile, Mexico, and the United States), Asia (China, India, Japan, and South Korea), Oceania (Australia), and Africa (South Africa). Due to data availability for the global competitors, a set of 19 indicators is used for calculating the SII (see methodology report).

In 2026, South Korea is the most innovative global competitor, with a SII of 121.9% (relative to the EU in 2026). The country has topped the ranking every year since 2019, (except in 2022 when Canada led). As well as South Korea, China (107.4%), Canada (107.2%), Australia (105.8%) and the United States (100.9%) have an innovation performance between 100% and 125% of the 2026 EU average and are classified as Strong Innovators. The EU outperforms Japan (a Moderate Innovator at 94.0% of the EU average), India, Brazil, South Africa, Chile and Mexico (Emerging Innovators, with scores below 70% of the EU average).

Applying the performance group categories, Figure 31 shows the 2026 SII scores for the global competitors, relative to the EU in 2019 and compares them to their SII score in 2025.

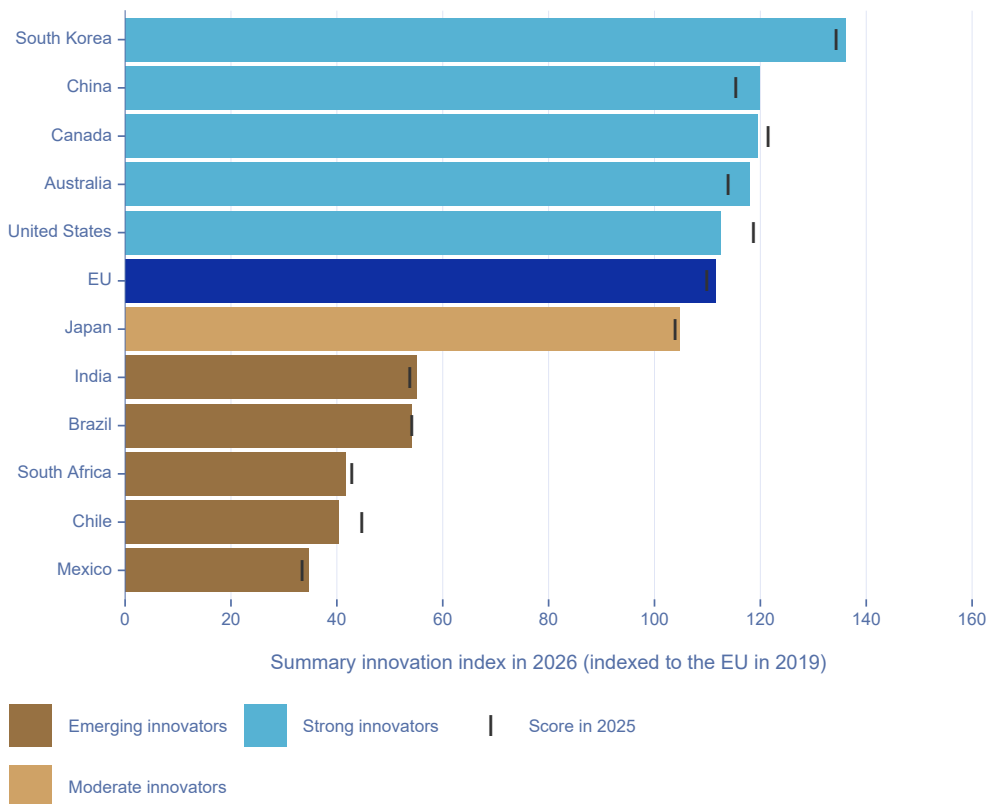


Figure 31: Innovation performance of the EU and its global competitors in 2026 (indexed to the EU in 2019).

Compared to 2025, China (+4.5%-points), Australia (+4.0%-points), South Korea (+1.7%-points), Mexico (+1.1%-points), India (+1.4%-points), Japan (+0.9%-points) have improved their innovation performance, while the United States (−6.1%-points), Chile (−4.4%-points), Canada (−1.9%-points), South Africa (−1.2%-points), and Brazil (−0.1%-points) have declined.

The EU's performance between 2025 and 2026 grew by 1.7%-points to 111.6% in 2026 hence the EU has lost ground to China, Australia and South Korea but gained ground on the US (which is now only one point ahead of the EU) as well as Canada from the Strong Innovators group and has moved slightly further ahead of Japan and all other competitors.

All global competitors improved their innovation performance between 2019 and 2026 (Figure 32). Among the five countries outperforming the EU, China (+37.6%-points), South Korea (+21.7%-points) and Australia (+16.0%-points) have recorded faster growth than the EU since 2019. Among the six countries lagging the EU, only Japan increased its performance at a marginally higher rate (+11.59%-points) than the EU (+11.57%-points) since 2019.

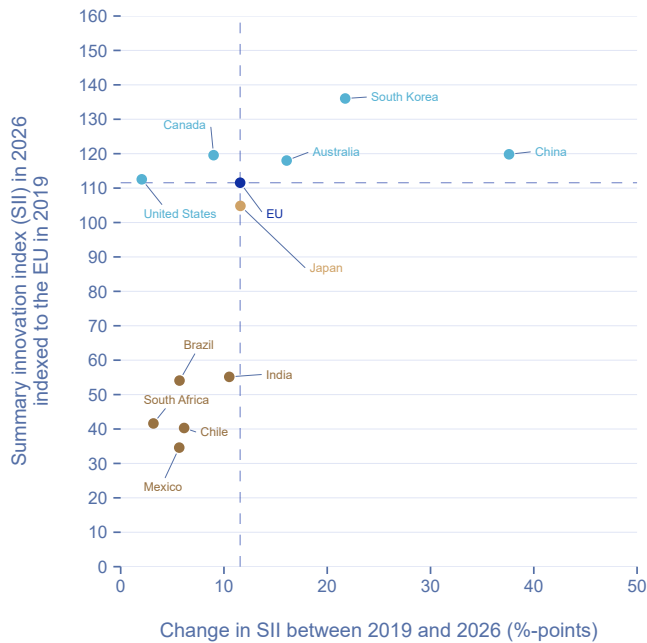


Figure 32: The EU versus its global competitors – performance change 2019-2026

5.3 How the EU performs per dimension against global competitors

In 2026, the EU demonstrates strong performance in six out of 19 indicators across the four categories (framework conditions, investments, innovation activities, and impacts). This section provides a detailed analysis of how the EU competes with the selected global competitors illustrating both EU strengths and areas for improvement.

Overall, the EU shows strong performance, ranking in the top four globally for the following indicators:

- Production-based CO2 productivity (1st)
- Employed ICT specialists (2nd)
- Labour productivity (3rd)
- New doctorate graduates (3rd)
- SMEs introducing business process innovations (3rd)
- SMEs introducing product innovations (4th)
- Exports of medium and high-tech products (4th)
- Knowledge-intensive services exports (4th)

The EU performs slightly better or in line with its SII ranking (6th) for the following indicators:

- International scientific co-publications (5th)
- Scientific publications among the top 10% most cited (5th)
- R&D expenditure in the public sector (5th)
- Direct and indirect government support of business R&D (5th)
- R&D expenditure in the business sector (5th)
- Public-private co-publications (5th)
- PCT patent applications (5th)
- Design applications (5th).
- Population with tertiary education (6th)

Finally, for the following indicators, the EU ranks between 9th and 12th, highlighting a weaker performance compared to global competitors:

- Innovative SMEs collaborating with others (9th)
- Trademark applications (10th).

The EU has been overtaken since 2025 by South Korea in *International scientific co-publications*, dropping one place to 5th; by Japan in *R&D expenditure in the public sector*, dropping one place to 5th; and the EU has been overtaken by Australia in *Design applications*, now ranking 5th. In contrast, since 2025, the EU has improved by one rank for *Innovative SMEs collaborating with others* (overtaking Chile) and one rank for *Knowledge-intensive services exports* (overtaking Brazil).

In Figure 33 to Figure 36, the EU's performance is plotted against that of the global competitors in terms of performance in 2026 (vertical axis) and performance change from 2019 to 2026 (horizontal axis). Performance scores (vertical axis) represent a percentage relative to the EU in 2019. For example, a score of 110 means that the country, in 2026, is performing 10% above the EU average in 2019. Performance change (horizontal axis) is measured as the difference between 2026 and 2019 scores, relative to that of the EU in 2019. The horizontal and vertical dashed lines show the performance of the EU and define four quadrants on the graphs.

- Top-right quadrant: Competitor performs better than the EU in 2026 and has improved at a faster pace than the EU since 2019.
- Top-left quadrant: Competitor performs better than the EU in 2026 but has improved at a slower pace than the EU since 2019.

- Bottom-right quadrant: Competitor performs worse than the EU in 2026 but has improved at a faster pace than the EU since 2019.
- Bottom-left quadrant: Competitor performs worse than the EU in 2026 and has improved at a slower pace than the EU since 2019.

Framework conditions (Figure 33)

The EU has a high rate of *New doctoral graduates* relative to its population ranking 3rd among global competitors, just behind Australia and South Korea, which have performed better than the EU since 2019. All other countries, except Canada (-14.9%-points) and Japan, have improved since 2019, albeit at different paces and in most cases from a much lower level.

The EU performs moderately in terms of the share of *Population with tertiary education* compared to global competitors, ranking 6th. The EU has improved since 2019, but at the 8th slowest pace, ahead of Brazil, China, India and South Africa

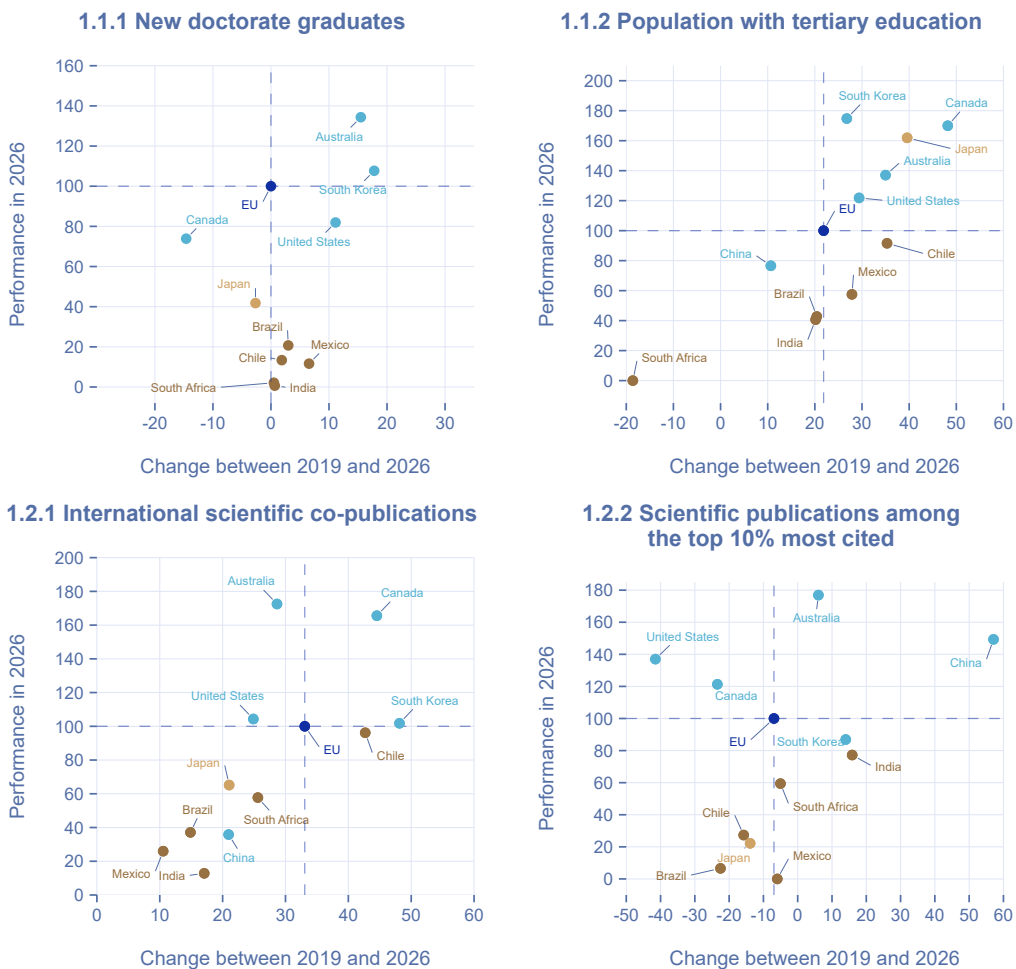


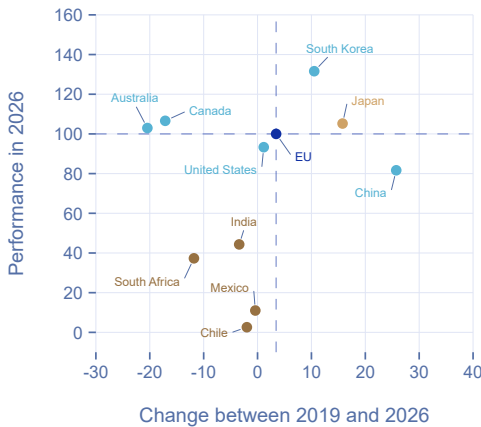
Figure 33: The EU versus its global competitors in framework conditions

The EU's strong performance in *Scientific co-publications* has been largely consolidated since 2019 (+33.0%-points), with only Canada, Chile and South Korea recording a higher growth in performance. For *Scientific publications among the top 10% most cited*, most countries, recorded a decline since 2019. However, the EU's decline (-6.9%-points) is smaller than that of Brazil, Canada, Chile, Japan and United States. In contrast, China (+57.4%-points), India (+16.1%-points), South Korea (+13.0%-points) and Australia (+5.8%-points) have achieved notable improvement compared to other competitors.

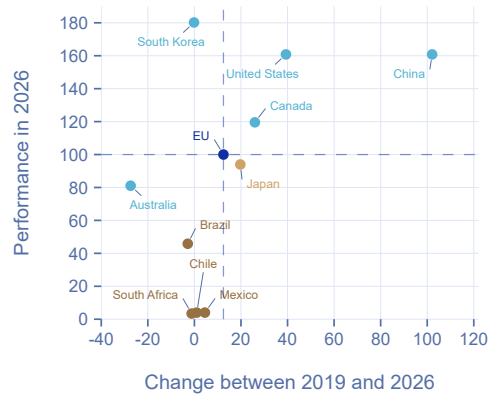
Investments (Figure 34)

The EU has a strong overall performance for the four indicators for funding and investments. The EU ranks 5th for *R&D expenditure in the public sector*, with only South Korea and Japan surpassing the EU in both performance level and rate of increase since 2019. China's performance growth (+25.7%-points) has been much fast than that of the EU (+3.5%-points), and all other competitors, since 2019, though it still trails the EU in performance.

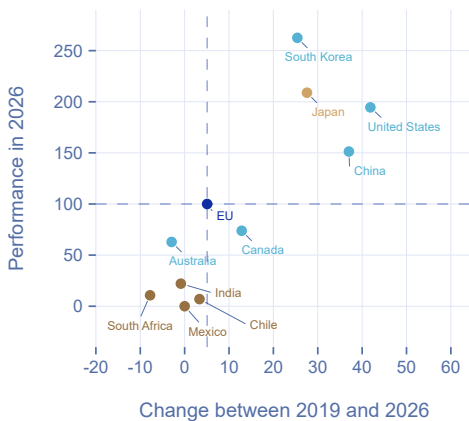
2.1.1 R&D expenditure in the public sector



2.1.3 Direct and indirect government support of business R&D



2.2.1 R&D expenditure in the business sector



2.3.2 Employed ICT specialists

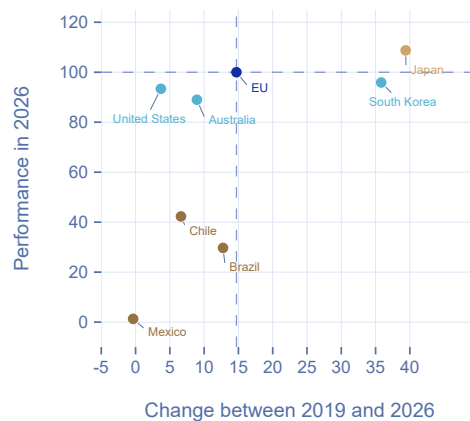


Figure 34: The EU versus its global competitors in investments

Regarding Government support of business R&D, the EU ranks 5th behind South Korea, China, United States and Canada. Among the top four only South Korea, has recorded a marginally weaker performance since 2019. Chinese government support for business R&D has exploded by over 102%-points; while the Canadian, US and Japanese administrations also increased significantly support for business R&D, underlining the significant efforts to increase competitiveness of 'national businesses'.

Regarding *R&D expenditure in the business sector*, the EU ranks 5th, with only moderate improvement (+5.0%-points) since 2019 compared to other global competitors. The United States has relatively stronger progress on this indicator (+41.9%), possibly due to the boom in investment in artificial intelligence, followed by China, Japan, South Korea and Canada.

In terms of *Employed ICT specialists*, the EU performs well, ranking 2nd among global competitors, just behind Japan. Only Japan and South Korea are growing at a faster pace than the EU for this indicator.

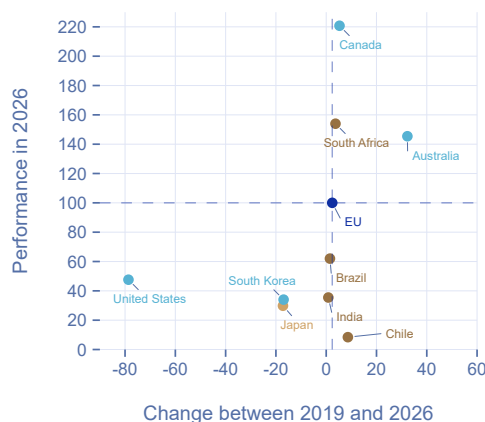
Innovation activities (Figure 35)

The EU has a significant percentage of SMEs introducing products and business processes, ranking 4th and 3rd respectively; and has shown a moderate increase for both indicators (+2.4%-points and +4.3%-points respectively) since 2019. Australia has improved the most in both product and process innovations (+32.4%-points and +44.89%-points), while South Korea recorded the largest decline in business process innovations (-64.1%-points) and the US performance fell sharply for both indicators (-78.6%-points and -58.3%-points) since 2019.

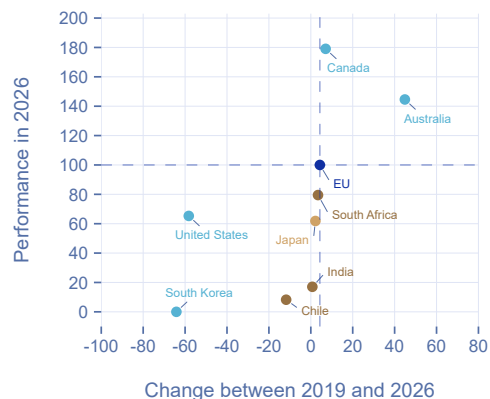
The EU has a weak performance in *Innovative SME collaborating with others*, ranking 9th among global competitors. However, the EU has improved since 2019 (+1.5%-points) together with Australia, Brazil, India and South Africa, while all other countries are collaborating less than in 2019, especially the United States with a significant decrease.

The EU had moderate *Public-private co-publications*, ranking 5th among global competitors and 5th in terms of improvement (+16.2%-points) since 2019. However, Australia, Canada and South Korea continued to improve much faster, as did China, albeit from a less strong position.

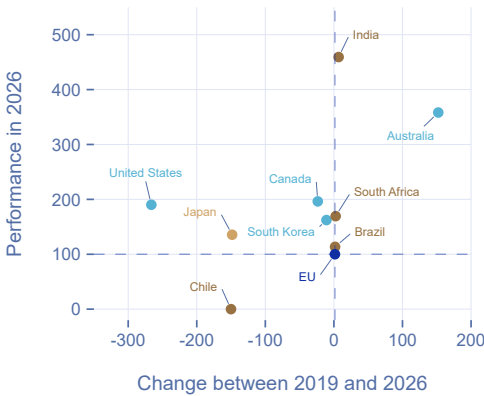
3.1.1 SMEs introducing product innovations



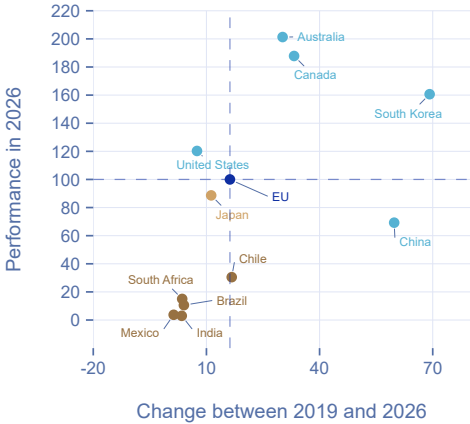
3.1.2 SMEs introducing business process innovations



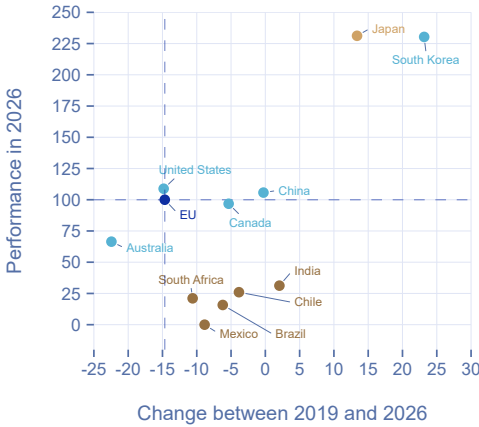
3.2.1 Innovative SMEs collaborating with others



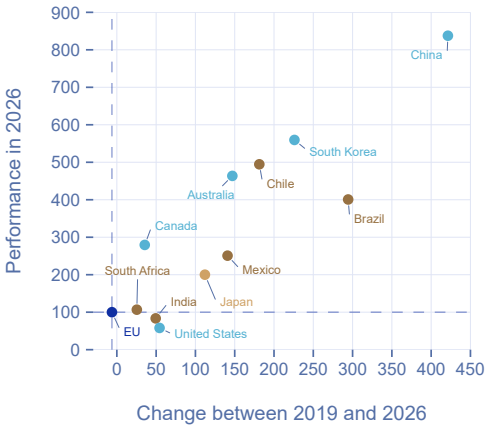
3.2.2 Public-private co-publications



3.3.1 PCT patent applications



3.3.2 Trademark applications



3.3.3 Design applications

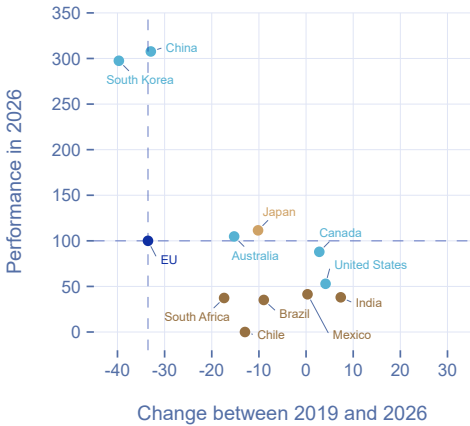


Figure 35: The EU versus its global competitors in innovation activities

In intellectual property, the EU demonstrates moderate performance in *PCT patent applications* (5th) and *Design applications* (5th). *Trademark applications* remains the weakest aspect of the EU's profile (10th). Moreover, the EU has shown limited progress across all three types of intellectual assets since 2019.

Impacts (Figure 36)

The EU performs strongly (ranked 4th) in the *Export of medium and high technology products* (as a share of total product exports) and the *Export of knowledge-intensive services as a share of total service exports* (ranked 3rd). For the export of medium and high technology products, the EU has the 3rd highest performance growth since 2019 (Mexico and India recording faster growth); but for knowledge intensive services the EU's performance growth is lower than that of six other countries (notably losing ground to China (+33.7%-points) and South Korea (+25.6%-points)).

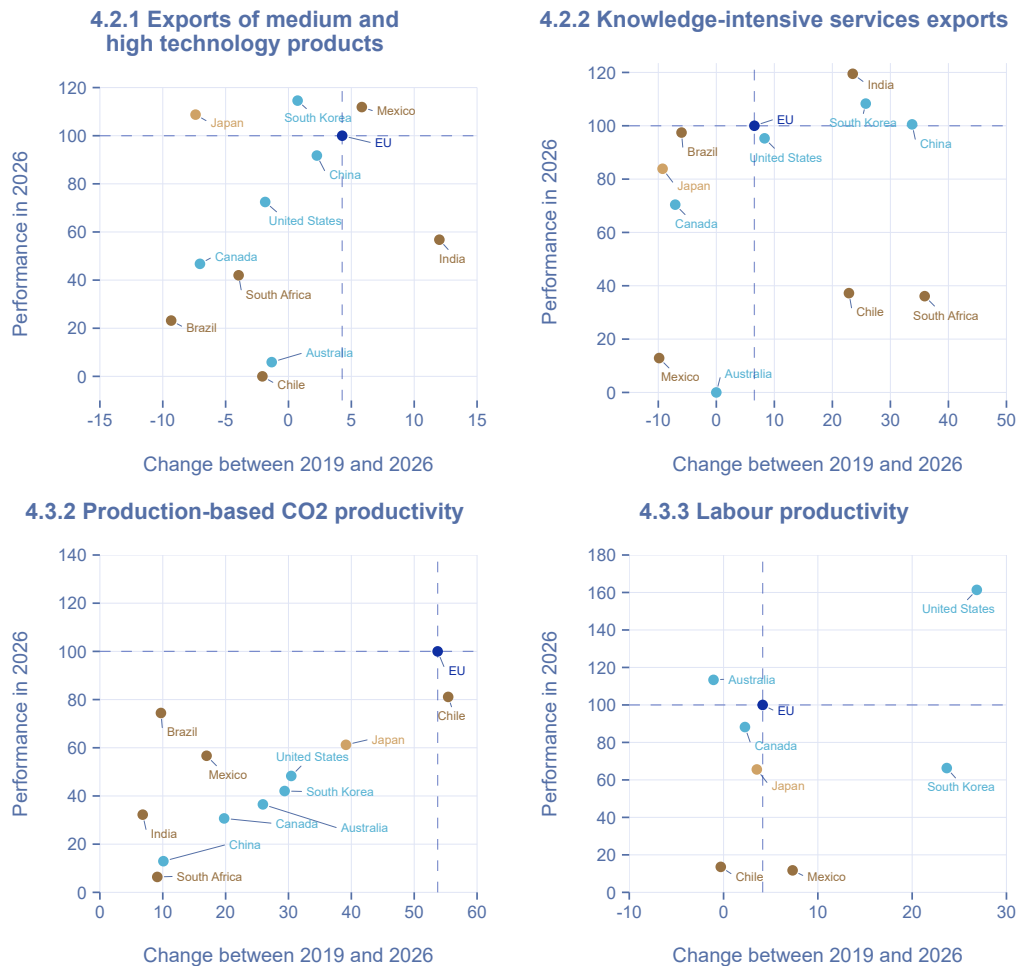


Figure 36: The EU versus its global competitors in impacts

For Production-based CO₂ productivity, the EU's leading performance has been comforted over the period since 2019, as it has outperformed all global competitors except Chile which performs lower than the EU, underlining the significant competitive advantage built up through decarbonisation of the economy. The situation is less positive for Labour Productivity, where the EU ranks 3rd but where the United States and South Korea have achieved much higher performance growth since 2019, while Mexico has also made-up ground.

The influence of socio-economic structures: the EU versus its global competitors

Data for structural indicators highlight that the EU operates in a markedly different economic and demographic context from most of its global competitors. In demographic terms, the EU has the third largest population (behind China and India), with the fifth most densely concentrated population. This points to a relatively large market potential, concentrated in metropolitan areas but with potential challenges in terms of slowing demographic growth. The EU combines a relatively high GDP per capita with moderate average growth, whereas competitors such as the United States, Australia and Canada enjoy higher incomes and faster growing economies, and emerging competitors like China and India grow more rapidly from a much lower income base.

Labour-market structures also differ significantly. In the EU, services account for around three-quarters of employment and knowledge-intensive services for a relatively high share, while agriculture employs a modest share of the workforce; by contrast, China and India retain very large agricultural sectors, and South Korea stands out with a much higher share of employment in knowledge-intensive services than the EU. These structural differences help to explain both the EU's strengths in skills-intensive activities and the faster catch-up dynamics observed in some competitors.

Business and entrepreneurship indicators underline that the EU's corporate innovation landscape remains less concentrated in very large, R&D intensive firms than in the United States or Japan. The United States has roughly three times as many top global R&D spenders per 10 million inhabitants as the EU and vastly more unicorns, while South Korea combines high density of major R&D investors with very strong buyer sophistication, contributing to its position as the leading global innovator. At the same time, foreign direct investment inflows and the share of foreign controlled value added are higher in the EU than in some key competitors, pointing to both openness and structural dependence on multinational firms' strategies

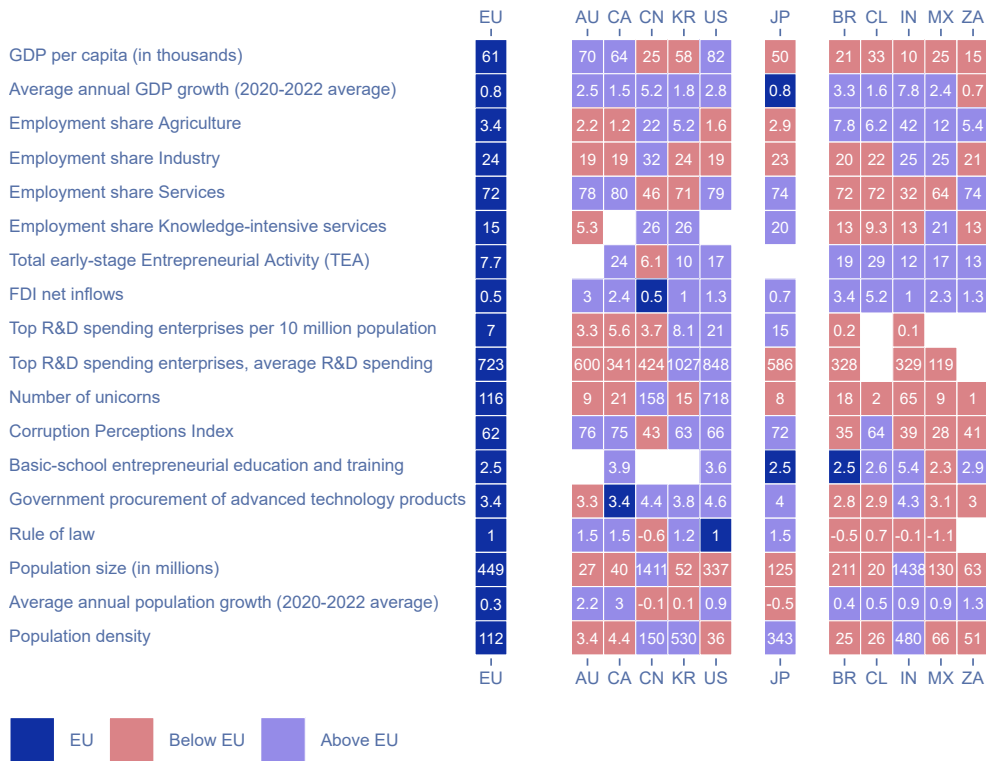


Figure 37: The EU versus its global competitors: influence of structural indicators

Entrepreneurial dynamics and governance conditions also shape innovation outcomes. Total early-stage entrepreneurial activity is much higher in countries such as the United States, Brazil, Chile and India than in the EU, which may support faster experimentation and firm growth in those ecosystems. Governance-related indicators, including the rule of law and corruption perceptions, generally place the EU in the upper tier globally, but several competitors (for example Canada, Australia and Japan) combine similar or better institutional quality with stronger entrepreneurial intensity, while emerging innovators like Brazil, India, South Africa and Mexico face persistent governance challenges that weigh on their innovation potential.

Overall, the structural indicators suggest that EIS results for the EU should be interpreted in the context of a large, mature and institutionally robust economy which nonetheless underperforms top competitors in terms of entrepreneurial dynamism, large-scale corporate R&D investment and the pace of structural transformation towards high-growth, knowledge-intensive activities.

6. COMPARING NATIONAL INNOVATION SYSTEM AND STARTUP AND SCALEUP PERFORMANCE

National innovation systems influence the potential for firms of all sizes to conduct R&D, innovate and compete on domestic and global markets. Within this broader system, start-up ecosystems form a relatively small but strategically important layer, shaping how promising young firms can grow into successful scale-ups by accessing the right mix of knowledge, talent, finance, infrastructure and markets. Start-ups and scale-ups therefore operate as part of – not separate from – the national innovation system, and their performance needs to be interpreted in that context.

Start-ups and scale-ups are engines of disruptive innovation: they help develop new technologies and markets, provide innovative solutions to societal challenges and help strengthen Europe's technological sovereignty. A thriving start-up and scale-up ecosystem translates into higher productivity, quality job creation, and stronger capacity to attract talent and investment. Recognising this, the European Commission adopted the 2025 EU Startup and Scaleup Strategy¹⁹ with the goal of making Europe the best place in the world to launch and grow global technology-driven companies. The Strategy integrates regulatory and financial initiatives, such as EUInc, allowing companies to operate across the Single Market under a single set of rules, or the Scaleup Europe fund to leverage private investments for large-scale funding rounds in European scaleups. On talent and market access, it targets stronger international recruitment and faster cross-border expansion. The strategy's progress is measured by three headline key performance indicators: growth in the number of start-ups, centaurs, and unicorns in the EU.

As Europe's innovation policy agenda has evolved in recent years, so too has the need for complementary scoreboards that capture dimensions the EIS was not designed to measure. These scoreboards include the thematically focused Eco-Innovation Index, the territorially focused Regional Innovation Scoreboard or the R&D Industrial Scoreboard, which recognises large enterprises represent only a small fraction of all firms but typically account for about three quarters of business R&D expenditure.

Similarly, the European Startup and Scaleup Scoreboard (ESSS)²⁰, launched in June 2026, has been developed as the primary tool for tracking the performance of national startup and scaleup ecosystems and measuring the impact of the EU Startup and Scaleup Strategy over time. It responds to a gap that the Strategy acknowledges: the absence of a harmonised, comparable framework specifically focused on whether innovation is being converted into new companies²¹ that grow, scale, and compete globally.

The ESSS is structured around the five policy priorities of the Startup and Scaleup Strategy, while maintaining a similar impact logic as the EIS. It contains 36 indicators grouped in six dimensions, used to generate a composite index. The first three dimensions of innovation-friendly regulation, best talent, and access to infrastructure, networks and services make up the framework conditions. The better finance dimension measures startup ecosystem inputs, the fast market uptake and expansion dimension measures ecosystem activities, and a sixth captures ecosystem impact.

19 European Commission (2025). The EU Startup and Scaleup Strategy — Choose Europe to Start and Scale. Communication COM(2025) 270 final, 28 May 2025. Publications Office of the European Union.

20 https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-startup-scaleup-scoreboard/#?compare_year=2024

21 A key element of the ESSS is the introduction of harmonised statistical concepts of startups, scaleups and innovative companies. European Commission (2026). Commission Recommendation (EU) 2026/720 of 18 March 2026 on the definition of innovative enterprises, innovative startups and innovative scaleups. Official Journal of the European Union. <https://eur-lex.europa.eu/eli/reco/2026/720/oj>

While the EIS provides the broader picture of national innovation system performance, the ESSS focuses on the conditions for creating, financing and scaling innovative firms. A country may perform well in the EIS but less well in the ESSS, depending on the structure of its economy or if promising firms face bottlenecks related to finance, talent, market access, or regulation. Conversely, a country may rank higher in the ESSS than its EIS score would suggest if it has a strong entrepreneurial ecosystem that supports the creation and scaling of new firms, despite being only moderately strong in research, knowledge generation, technology transfer, and broader innovation capacity. A comparison of EIS and ESSS results helps identify whether weaknesses are systemic, entrepreneurial, or both.

The scatterplot (Figure 38) compares EIS and ESSS scores and is designed to prompt reflection on how well countries' startup and scaleup ecosystems are aligned with their broader innovation systems. Countries lying close to the diagonal have broadly consistent results across the two indices, while those above or below the diagonal have relatively stronger ESSS or EIS performance, respectively. Where startup and scaling performance is weaker than overall system performance, the chart provides a starting point for judging whether constraints are mainly policy-related, market-related or structural, and for deciding whether reforms should initially prioritise the wider innovation system or specific scale-up bottlenecks. It also encourages comparison not only against the EU average, but against peers with similar innovation performance, scaling conditions or gaps between the two indices.

Most countries sit close to the diagonal, reflecting broadly consistent performance across both indices. However, smaller Member States, particularly in the Nordic and Baltic regions, tend to record stronger relative ESSS performance, while larger economies more frequently exhibit the opposite.

Estonia stands out as the most pronounced positive outlier, with an ESSS score considerably above its EIS position. This is indicative of an unusually dynamic entrepreneurial layer built on a highly digitalised regulatory environment, rather than a broad-based innovation system.

France outperforms on the startup and scaleup dimension relative to its EIS standing, as one of the only large EU countries that is stronger in the ESSS than in the EIS. Conversely, Italy and Germany sit below the diagonal, pointing to bottlenecks in the translation of innovation capacity into firm creation and growth. This may reflect innovation systems oriented towards large-firm industrial R&D and incremental innovation, with less systemic support for early-stage ventures.

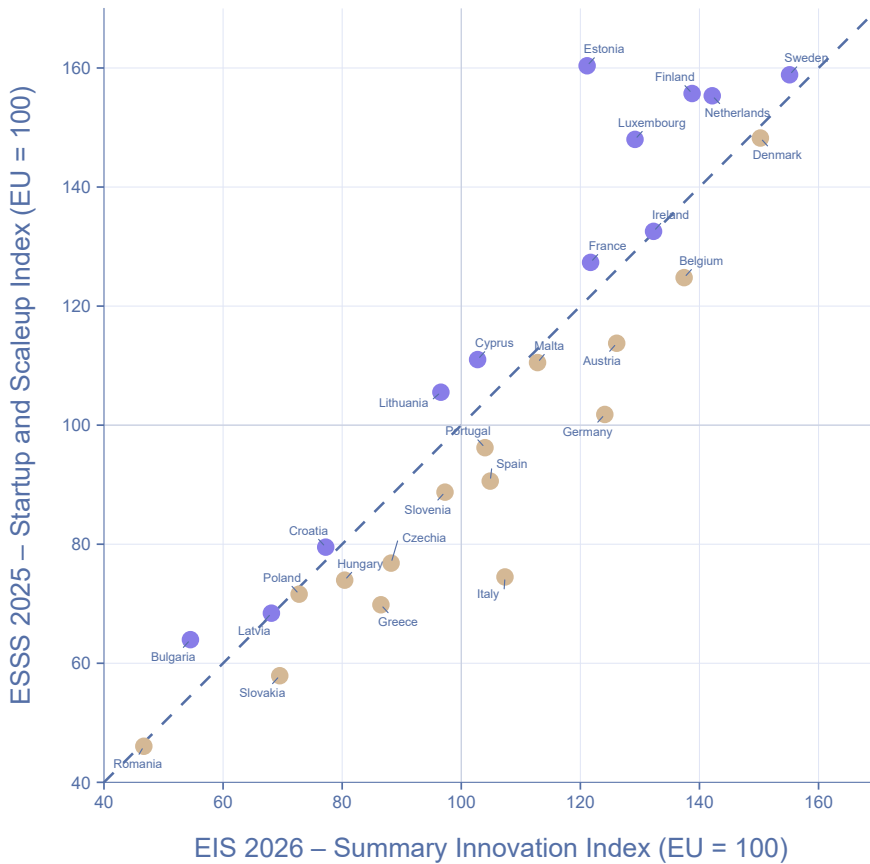


Figure 38: Relative performance of the EU Member States on the ESSS versus EIS

For policymakers, the combination of insights from the two scoreboards is useful for designing targeted reforms, for example where broad innovation strengths coexist with weak financing, weak talent attraction or slow market expansion

7. COUNTRY PAGES



ALBANIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **41.6**

Change vs 2019: ▲ +2.9 Change vs 2025: ▼ -0.4

It ranks 35th among the EU and neighbouring countries.

Relative strengths

- Sales of new-to-market and new-to-firm innovations
- Innovative SMEs collaborating with others
- SMEs introducing product innovations

Relative weaknesses

- New doctorate graduates
- Venture capital expenditures
- Exports of medium and high-tech products

Highest ranked indicators among EU Member States

- Sales of new-to-market and new-to-firm innovations
- Innovative SMEs collaborating with others
- SMEs introducing product innovations

Lowest ranked indicators among EU Member States

- New doctorate graduates
- Public-private co-publications
- Knowledge-intensive services exports

Strong increases since 2019

- Cloud Computing
- Resource productivity
- Population with tertiary education

Strong decreases since 2019

- Foreign doctorate students as a % of all doctorate students
- High-tech imports from outside the EU
- Knowledge-intensive services exports

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	41.6	35	+2.9	-0.4
Human resources	26.7	38	+3.7	-9.6
New doctorate graduates	0	40	-11.1	-22.2
Population with tertiary education	75	29	+20.8	0
Population involved in lifelong learning	8.6	38	+9.0	0
Attractive research systems	20	39	-1.0	-4.1
International scientific co-publications	14.5	38	+19.2	+12.9
Scientific publications among the top 10% most cited	28.7	37	+11.5	-11.0
Foreign doctorate students as a % of all doctorate students	11.9	37	-46.2	-5.1
Digitalisation	12.6	37	+20.2	+1.4
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	14.8	35	+18.1	+1.3
Finance and support	1	39	0	0
R&D expenditure in the public sector	1.7	39	0	0
Venture capital expenditures	0	37	0	0
Direct and indirect government support of business R&D	N/A	N/A		
Firm investments	5.1	38	+0.4	0
R&D expenditure in the business sector	2.1	36	+0.7	0
Non-R&D innovation expenditures	11.1	36	0	0
Innovation expenditures per person employed	N/A	N/A		
Investments in information technologies	39.1	35	+25.3	+21.7
Cloud Computing	63.7	28	+57.2	+57.2
Employed ICT specialists	10.3	39	+5.9	0
Innovators	94	23	0	0
SMEs introducing product innovations	110.5	18	0	0
SMEs introducing business process innovations	81.2	22	0	0
Linkages	59.6	32	+3.1	+1.4
Innovative SMEs collaborating with others	112.6	15	0	0
Public-private co-publications	10.2	40	+11.0	+4.9
Job-to-job mobility of HRST	N/A	N/A		
Intellectual assets	20.3	37	+3.2	+3.2
PCT patent applications	25.6	37	+1.4	+0.5
Trademark applications	20.3	36	-0.5	+12.1
Design applications	13	32	+7.8	0
Sales and employment impacts	136.8	3	0	0
Sales of new-to-market and new-to-firm innovations	195.4	1	0	0
Employment in innovative enterprises	85.6	21	0	0
Trade impacts	28.6	37	-12.8	-5.2
Exports of medium and high-tech products	0.7	39	-2.2	+0.8
Knowledge-intensive services exports	1.3	40	-15.3	-0.8
High-tech imports from outside the EU	91.7	18	-21.8	-16.4
Resource and labour productivity	79.1	19	+30.6	-2.0
Resource productivity	56.4	28	+50.9	+8.9
Production-based CO2 productivity	86.8	24	+3.4	-16.1
Labour productivity	N/A	N/A		



AUSTRIA

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **113.0**

Change vs 2019: ▲ +8.9 Change vs 2025: ▼ -2.3

It ranks 8th among EU Member States, and 11th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	113	8	+8.9	-2.3
Human resources	99	14	+1.5	-4.8
New doctorate graduates	88.9	13	-11.1	0
Population with tertiary education	94	15	+8.6	-2.6
Population involved in lifelong learning	118.2	11	+14.4	-14.4
Attractive research systems	157	8	+27.8	+2.8
International scientific co-publications	184.9	8	+63.1	+10.1
Scientific publications among the top 10% most cited	115.5	9	-8.2	-2.0
Foreign doctorate students as a % of all doctorate students	194.5	5	+72.6	+7.1
Digitalisation	94.8	14	+79.8	+12.6
High-speed internet access	83.3	23	+174.7	+15.7
Individuals with above basic overall digital skills	110.3	10	+4.4	+9.9
Finance and support	125.1	6	+12.5	-7.1
R&D expenditure in the public sector	146.7	3	+15.5	+3.4
Venture capital expenditures	47.9	15	+14.4	+7.2
Direct and indirect government support of business R&D	148.7	4	+7.3	-28.3
Firm investments	110.6	7	-0.7	-1.3
R&D expenditure in the business sector	152.4	3	+7.2	+2.2
Non-R&D innovation expenditures	60.5	20	-28.0	-13.9
Innovation expenditures per person employed	101.5	10	+14.5	+6.1
Investments in information technologies	104	13	+62.4	+10.8
Cloud Computing	98.7	14	+121.4	+23.6
Employed ICT specialists	110.3	11	+26.5	+2.9
Innovators	111.3	9	-22.7	0
SMEs introducing product innovations	111	12	-24.4	0
SMEs introducing business process innovations	111.7	8	-21.2	0
Linkages	176.3	8	+38.8	-15.3
Innovative SMEs collaborating with others	144.9	7	+16.8	0
Public-private co-publications	392.7	3	+94.8	-11.6
Job-to-job mobility of HRST	110.4	11	+32.4	-32.4
Intellectual assets	131.4	2	-27.4	-6.1
PCT patent applications	124.6	6	-16.8	-2.1
Trademark applications	126.8	8	-11.1	-5.7
Design applications	145.5	2	-49.7	-10.4
Sales and employment impacts	99.8	13	-20.5	-20.1
Sales of new-to-market and new-to-firm innovations	79.2	17	-20.4	-23.6
Employment in innovative enterprises	117.8	9	-20.7	-16.7
Trade impacts	76	14	-1.9	-0.4
Exports of medium and high-tech products	87.6	8	-0.6	-2.1
Knowledge-intensive services exports	51.2	21	+5.1	-0.4
High-tech imports from outside the EU	90.2	17	-10.5	+1.4
Resource and labour productivity	110	12	+30.8	+5.3
Resource productivity	97.9	10	+41.9	+14.6
Production-based CO2 productivity	102.6	15	+42.8	-1.1
Labour productivity	139.5	9	+6.4	+0.3

Relative strengths

- Public-private co-publications
- Foreign doctorate students as a % of all doctorate students
- International scientific co-publications

Relative weaknesses

- Venture capital expenditures
- Knowledge-intensive services exports
- Non-R&D innovation expenditures

Highest ranked indicators among EU Member States

- Design applications
- R&D expenditure in the public sector
- R&D expenditure in the business sector

Lowest ranked indicators among EU Member States

- High-speed internet access
- Knowledge-intensive services exports
- Non-R&D innovation expenditures

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Public-private co-publications

Strong decreases since 2019

- Design applications
- Non-R&D innovation expenditures
- SMEs introducing product innovations

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



BOSNIA AND HERZEGOVINA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **28.0**

Change vs 2019: ▲ +6.4 Change vs 2025: ▲ +1.5

It ranks 37th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	28	37	+6.4	+1.5
Human resources	10.7	40	+1.1	+2.2
New doctorate graduates	15.4	37	+2.3	0
Population with tertiary education	6	39	+2.6	+5.3
Population involved in lifelong learning	9.8	37	-2.9	+1.9
Attractive research systems	32.3	35	+3.9	+2.1
International scientific co-publications	22.5	35	+16.1	0
Scientific publications among the top 10% most cited	31.6	36	+0.3	+4.0
Foreign doctorate students as a % of all doctorate students	42.8	31	0	0
Digitalisation	17.8	36	+21.9	+14.3
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	20.9	34	+19.6	+12.8
Finance and support	0	40	0	0
R&D expenditure in the public sector	0	40	0	0
Venture capital expenditures	0	37	0	0
Direct and indirect government support of business R&D	0	36	0	0
Firm investments	0.9	39	0	0
R&D expenditure in the business sector	2.1	36	0	0
Non-R&D innovation expenditures	0	37	0	0
Innovation expenditures per person employed	0.5	34	0	0
Investments in information technologies	41.5	33	+44.1	+9.6
Cloud Computing	54.8	30	+87.3	+35.1
Employed ICT specialists	25.6	36	+17.6	-5.9
Innovators	112.8	12	0	0
SMEs introducing product innovations	161.8	8	0	0
SMEs introducing business process innovations	75.4	25	0	0
Linkages	18.6	37	+9.5	0
Innovative SMEs collaborating with others	N/A	N/A		
Public-private co-publications	32.5	35	+16.2	0
Job-to-job mobility of HRST	N/A	N/A		
Intellectual assets	7.4	40	-4.2	-2.4
PCT patent applications	15.1	40	-12.8	-7.6
Trademark applications	2.3	40	+2.1	+1.8
Design applications	1.6	37	+0.4	0
Sales and employment impacts	73.6	28	0	0
Sales of new-to-market and new-to-firm innovations	70.6	24	0	0
Employment in innovative enterprises	76.1	25	0	0
Trade impacts	21.1	38	+11.3	0
Exports of medium and high-tech products	34.2	32	+15.7	-0.1
Knowledge-intensive services exports	5.7	39	+6.0	+0.2
High-tech imports from outside the EU	N/A	N/A		
Resource and labour productivity	29.9	38	+25.0	+5.8
Resource productivity	39.6	31	+30.4	+10.6
Production-based CO2 productivity	11.1	39	+17.0	-0.4
Labour productivity	N/A	N/A		

Relative strengths

- SMEs introducing product innovations
- Employment in innovative enterprises
- SMEs introducing business process innovations

Relative weaknesses

- R&D expenditure in the public sector
- Venture capital expenditures
- Direct and indirect government support of business R&D

Highest ranked indicators among EU Member States

- SMEs introducing product innovations
- Sales of new-to-market and new-to-firm innovations
- SMEs introducing business process innovations

Lowest ranked indicators among EU Member States

- R&D expenditure in the public sector
- PCT patent applications
- Trademark applications

Strong increases since 2019

- Cloud Computing
- Resource productivity
- Individuals with above basic overall digital skills

Strong decreases since 2019

- PCT patent applications
- Population involved in lifelong learning
- Foreign doctorate students as a % of all doctorate students

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



BELGIUM

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **123.2**

Change vs 2019: ▲ **+11.6** Change vs 2025: ▼ **-1.1**

It ranks 5th among EU Member States, and 7th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	123.2	5	+11.6	-1.1
Human resources	127.6	7	+16.4	+16.8
New doctorate graduates	111.1	5	+11.1	+11.1
Population with tertiary education	142.9	8	+11.9	+13.2
Population involved in lifelong learning	132.6	8	+29.8	+29.8
Attractive research systems	122.3	11	-7.0	-14.7
International scientific co-publications	177.9	9	+43.9	+9.0
Scientific publications among the top 10% most cited	120.9	8	-19.1	-5.2
Foreign doctorate students as a % of all doctorate students	70.8	18	-28.2	-57.4
Digitalisation	108	10	+49.5	+7.6
High-speed internet access	118.4	8	+93.2	+8.9
Individuals with above basic overall digital skills	93.7	15	+14.9	+6.4
Finance and support	143.4	2	+30.5	-7.6
R&D expenditure in the public sector	131.7	6	+22.4	+3.4
Venture capital expenditures	123.5	8	+23.3	-31.2
Direct and indirect government support of business R&D	169.5	3	+45.2	-7.9
Firm investments	144.6	2	+14.2	+0.5
R&D expenditure in the business sector	164.8	1	+39.9	+6.5
Non-R&D innovation expenditures	97.1	8	-1.9	-6.1
Innovation expenditures per person employed	154	1	+2.1	0
Investments in information technologies	119.7	9	+39.5	+19.5
Cloud Computing	116.9	8	+90.1	+41.9
Employed ICT specialists	123.1	7	+8.8	+5.9
Innovators	153	3	+24.8	0
SMEs introducing product innovations	155	5	+41.9	0
SMEs introducing business process innovations	151.5	2	+11.4	0
Linkages	169.5	9	+4.1	-8.2
Innovative SMEs collaborating with others	216.4	2	+2.4	0
Public-private co-publications	273.5	8	+39.5	-6.2
Job-to-job mobility of HRST	93.8	18	-11.8	-17.6
Intellectual assets	86.7	14	-17.0	-4.5
PCT patent applications	106	8	-17.2	-4.3
Trademark applications	88.1	22	-15.6	-4.6
Design applications	59.3	19	-17.7	-4.4
Sales and employment impacts	122.8	6	-8.9	-20.7
Sales of new-to-market and new-to-firm innovations	83.1	16	-25.1	-36.7
Employment in innovative enterprises	157.1	1	+7.0	-5.1
Trade impacts	92	8	-2.1	-2.3
Exports of medium and high-tech products	77.7	14	+7.0	+0.4
Knowledge-intensive services exports	93.6	9	+2.7	+0.9
High-tech imports from outside the EU	107.1	14	-17.5	-8.3
Resource and labour productivity	124.1	9	+36.9	+5.8
Resource productivity	131.8	7	+59.0	+18.9
Production-based CO2 productivity	87.1	19	+40.9	-4.2
Labour productivity	161.8	4	+7.0	-0.1

Relative strengths

- Public-private co-publications
- Innovative SMEs collaborating with others
- International scientific co-publications

Relative weaknesses

- Design applications
- Foreign doctorate students as a % of all doctorate students
- Exports of medium and high-tech products

Highest ranked indicators among EU Member States

- R&D expenditure in the business sector
- Innovation expenditures per person employed
- Employment in innovative enterprises

Lowest ranked indicators among EU Member States

- Trademark applications
- Design applications
- Production-based CO2 productivity

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Resource productivity

Strong decreases since 2019

- Foreign doctorate students as a % of all doctorate students
- Sales of new-to-market and new-to-firm innovations
- Scientific publications among the top 10% most cited

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



BULGARIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **48.9**

Change vs 2019: ▲ +4.5

Change vs 2025: ▼ -1.1

It ranks 26th among EU Member States, and 32nd among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	48.9	26	+4.5	-1.1
Human resources	51.1	26	+2.6	+7.4
New doctorate graduates	33.3	25	-22.2	-11.1
Population with tertiary education	80.4	20	+4.6	+4.6
Population involved in lifelong learning	42.4	26	+41.3	+41.3
Attractive research systems	31.2	27	+5.4	+2.3
International scientific co-publications	29.7	26	+13.2	+1.0
Scientific publications among the top 10% most cited	22.7	27	+4.6	+4.1
Foreign doctorate students as a % of all doctorate students	45.9	21	0	0
Digitalisation	76.9	24	+47.6	+12.6
High-speed internet access	112.8	9	+86.0	+6.1
Individuals with above basic overall digital skills	28.3	26	+17.6	+18.0
Finance and support	19.7	24	+6.0	-0.9
R&D expenditure in the public sector	25	23	+10.3	-1.7
Venture capital expenditures	37.3	18	+13.1	-1.3
Direct and indirect government support of business R&D	2.2	26	-3.4	0
Firm investments	34.6	25	-4.7	-1.3
R&D expenditure in the business sector	31.7	21	-1.4	-0.7
Non-R&D innovation expenditures	65.8	19	-18.2	-7.8
Innovation expenditures per person employed	18.2	25	+3.6	+3.6
Investments in information technologies	61.6	25	+18.8	+4.1
Cloud Computing	33.6	27	+40.0	+1.4
Employed ICT specialists	94.9	16	+5.9	+5.9
Innovators	30	26	-14.1	-2.1
SMEs introducing product innovations	41	24	-21.6	-6.0
SMEs introducing business process innovations	21.6	26	-8.1	+0.9
Linkages	32.5	26	+10.9	+0.7
Innovative SMEs collaborating with others	44.8	26	+14.2	+1.5
Public-private co-publications	50.4	26	+26.6	+0.9
Job-to-job mobility of HRST	16.7	25	0	0
Intellectual assets	84.1	16	-16.2	-15.4
PCT patent applications	36.7	26	-6.3	-2.3
Trademark applications	131.3	7	+17.6	+0.7
Design applications	102.2	10	-50.0	-40.6
Sales and employment impacts	25	26	-13.5	-31.6
Sales of new-to-market and new-to-firm innovations	26.2	25	-17.6	-29.4
Employment in innovative enterprises	24	26	-9.2	-33.5
Trade impacts	75.5	15	+9.3	+6.5
Exports of medium and high-tech products	46.8	24	+2.5	+3.1
Knowledge-intensive services exports	69.1	13	+29.1	+8.1
High-tech imports from outside the EU	115.8	9	-4.0	+8.7
Resource and labour productivity	36.3	27	+27.3	+8.1
Resource productivity	29.6	25	+18.8	+9.9
Production-based CO2 productivity	61.6	24	+61.2	+13.8
Labour productivity	13.1	27	+6.4	+0.9

Relative strengths

- Trademark applications
- High-tech imports from outside the EU
- High-speed internet access

Relative weaknesses

- Direct and indirect government support of business R&D
- Labour productivity
- Job-to-job mobility of HRST

Highest ranked indicators among EU Member States

- Trademark applications
- High-speed internet access
- High-tech imports from outside the EU

Lowest ranked indicators among EU Member States

- Scientific publications among the top 10% most cited
- Cloud Computing
- Labour productivity

Strong increases since 2019

- High-speed internet access
- Production-based CO2 productivity
- Population involved in lifelong learning

Strong decreases since 2019

- Design applications
- New doctorate graduates
- SMEs introducing product innovations

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SWITZERLAND

Innovation Leader ●

Summary innovation index (indexed to EU in 2026): **141.3**

Change vs 2019: ▲ +1.5 Change vs 2025: ▲ +0.5

It ranks 1st among the EU and neighbouring countries.

Relative strengths

- Public-private co-publications
- International scientific co-publications
- Foreign doctorate students as a % of all doctorate students

Relative weaknesses

- Direct and indirect government support of business R&D
- Exports of medium and high-tech products
- High-tech imports from outside the EU

Highest ranked indicators among EU Member States

- New doctorate graduates
- International scientific co-publications
- Foreign doctorate students as a % of all doctorate students

Lowest ranked indicators among EU Member States

- Direct and indirect government support of business R&D
- SMEs introducing business process innovations
- High-tech imports from outside the EU

Strong increases since 2019

- Sales of new-to-market and new-to-firm innovations
- High-speed internet access
- Population involved in lifelong learning

Strong decreases since 2019

- Employment in innovative enterprises
- Design applications
- Exports of medium and high-tech products

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	141.3	1	+1.5	+0.5
Human resources	163.9	1	+5.5	-1.1
New doctorate graduates	167.3	1	0	0
Population with tertiary education	131.5	14	-11.3	-2.6
Population involved in lifelong learning	195.5	5	+33.7	-1.0
Attractive research systems	222.8	1	+0.5	-0.3
International scientific co-publications	283.5	1	0	0
Scientific publications among the top 10% most cited	153.8	3	-8.7	-1.8
Foreign doctorate students as a % of all doctorate students	271.3	1	+21.7	+3.5
Digitalisation	130.9	6	+32.4	+11.4
High-speed internet access	115.8	11	+43.7	+9.9
Individuals with above basic overall digital skills	151.2	6	+23.2	+12.4
Finance and support	91.2	15	+0.4	-1.1
R&D expenditure in the public sector	131.7	6	-1.7	0
Venture capital expenditures	131.2	9	+3.5	-7.7
Direct and indirect government support of business R&D	19.1	26	+1.4	+0.9
Firm investments	160.8	1	+9.1	0
R&D expenditure in the business sector	145.5	5	+8.7	0
Non-R&D innovation expenditures	N/A	N/A		
Innovation expenditures per person employed	N/A	N/A		
Investments in information technologies	112.9	12	+14.5	+7.2
Cloud Computing	N/A	N/A		
Employed ICT specialists	123.1	7	+11.8	+5.9
Innovators	108.9	14	+8.6	0
SMEs introducing product innovations	161.3	9	+19.3	0
SMEs introducing business process innovations	68.6	26	0	0
Linkages	261.9	1	+16.0	+3.4
Innovative SMEs collaborating with others	N/A	N/A		
Public-private co-publications	489.3	1	0	0
Job-to-job mobility of HRST	170.8	5	+26.5	+5.9
Intellectual assets	138.2	1	-22.9	+0.3
PCT patent applications	160.3	3	-2.2	-2.2
Trademark applications	120	10	-21.2	-5.2
Design applications	126.1	5	-45.9	+7.0
Sales and employment impacts	136.6	4	-4.3	0
Sales of new-to-market and new-to-firm innovations	171.8	4	+54.2	0
Employment in innovative enterprises	105.9	17	-61.0	0
Trade impacts	71.9	20	-3.3	-2.8
Exports of medium and high-tech products	57.4	23	-22.8	-12.5
Knowledge-intensive services exports	93.2	12	-1.0	+1.4
High-tech imports from outside the EU	65	26	+16.0	+3.5
Resource and labour productivity	183.8	1	+8.3	+0.5
Resource productivity	153.7	1	+8.6	0
Production-based CO2 productivity	183.7	1	+3.1	0
Labour productivity	232.6	3	+12.3	+1.1



CYPRUS

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **92.1**

Change vs 2019: ▲ +13.8 Change vs 2025: ▲ +4.1

It ranks 16th among EU Member States, and 20th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	92.1	16	+13.8	+4.1
Human resources	105.8	12	+17.9	+6.8
New doctorate graduates	55.6	20	+22.2	+11.1
Population with tertiary education	182.6	4	+7.9	-0.7
Population involved in lifelong learning	87.1	15	+22.1	+7.7
Attractive research systems	169.3	5	+72.4	+5.7
International scientific co-publications	263.9	3	+173.5	+33.7
Scientific publications among the top 10% most cited	135.4	6	+24.6	+16.8
Foreign doctorate students as a % of all doctorate students	131.3	13	+81.7	-43.2
Digitalisation	85.8	19	+96.0	+1.4
High-speed internet access	110.7	11	+232.4	+41.0
Individuals with above basic overall digital skills	52	25	-12.0	-29.8
Finance and support	17.1	25	-2.5	-3.6
R&D expenditure in the public sector	23.3	24	-1.7	-5.2
Venture capital expenditures	9.2	26	-31.7	-5.9
Direct and indirect government support of business R&D	14.7	22	+13.3	-0.2
Firm investments	36.4	24	-2.9	-7.6
R&D expenditure in the business sector	17.2	26	+6.5	+0.7
Non-R&D innovation expenditures	83.1	12	-19.3	-19.6
Innovation expenditures per person employed	25.9	24	+1.4	-5.8
Investments in information technologies	97.4	15	+57.8	-4.3
Cloud Computing	97.4	15	+104.5	-6.5
Employed ICT specialists	97.4	13	+29.4	-2.9
Innovators	182.8	1	-1.6	+90.6
SMEs introducing product innovations	207.1	1	-0.5	+104.6
SMEs introducing business process innovations	164.5	1	-2.3	+79.8
Linkages	196.3	2	+23.8	+32.7
Innovative SMEs collaborating with others	136.6	8	-145.9	+63.1
Public-private co-publications	349.3	5	+211.0	+20.3
Job-to-job mobility of HRST	177.1	3	+100.0	+8.8
Intellectual assets	112.3	11	-14.4	+10.1
PCT patent applications	67.2	13	+12.1	+9.5
Trademark applications	227.2	1	0	0
Design applications	62.1	17	-52.3	+17.4
Sales and employment impacts	75	19	+0.6	-52.5
Sales of new-to-market and new-to-firm innovations	84.2	15	-12.8	-25.5
Employment in innovative enterprises	67	18	+13.6	-78.8
Trade impacts	57.8	27	-10.9	-6.3
Exports of medium and high-tech products	38.1	26	-56.5	-35.7
Knowledge-intensive services exports	113.5	3	+20.2	+1.6
High-tech imports from outside the EU	18.7	26	+7.4	+18.8
Resource and labour productivity	58.2	24	+13.4	-1.3
Resource productivity	59.8	21	+13.2	+1.5
Production-based CO2 productivity	49.9	27	+15.7	-7.8
Labour productivity	66.5	14	+11.2	+0.9

Relative strengths

- Public-private co-publications
- International scientific co-publications
- Trademark applications

Relative weaknesses

- Venture capital expenditures
- Direct and indirect government support of business R&D
- R&D expenditure in the business sector

Highest ranked indicators among EU Member States

- SMEs introducing product innovations
- SMEs introducing business process innovations
- Trademark applications

Lowest ranked indicators among EU Member States

- Production-based CO2 productivity
- Venture capital expenditures
- R&D expenditure in the business sector

Strong increases since 2019

- High-speed internet access
- Public-private co-publications
- International scientific co-publications

Strong decreases since 2019

- Innovative SMEs collaborating with others
- Exports of medium and high-tech products
- Design applications

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CZECHIA

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **79.1**

Change vs 2019: ▲ +12.6 Change vs 2025: ▼ -2.5

It ranks 19th among EU Member States, and 23rd among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	79.1	19	+12.6	-2.5
Human resources	78.7	18	+20.5	+10.5
New doctorate graduates	100	8	+11.1	+11.1
Population with tertiary education	52.2	24	+7.3	+16.6
Population involved in lifelong learning	80.3	18	+51.0	+2.9
Attractive research systems	88.4	18	+30.7	+1.8
International scientific co-publications	101.1	14	+37.2	+2.4
Scientific publications among the top 10% most cited	55.5	22	+11.6	+0.6
Foreign doctorate students as a % of all doctorate students	126.8	14	+65.5	+4.0
Digitalisation	82.4	21	+70.2	+9.8
High-speed internet access	53.5	26	+84.0	+11.6
Individuals with above basic overall digital skills	121.6	8	+59.2	+8.3
Finance and support	58.4	18	-5.6	-6.7
R&D expenditure in the public sector	85	13	-1.7	+1.7
Venture capital expenditures	12.6	24	+7.8	-29.2
Direct and indirect government support of business R&D	56.7	14	-18.0	-4.2
Firm investments	80.5	12	+7.3	-34.0
R&D expenditure in the business sector	78.6	11	+5.8	0
Non-R&D innovation expenditures	105	7	-8.9	-68.9
Innovation expenditures per person employed	67.4	13	+22.6	-38.1
Investments in information technologies	98.8	14	+47.2	+16.1
Cloud Computing	104.1	11	+119.8	+32.7
Employed ICT specialists	92.3	19	+2.9	+5.9
Innovators	81.5	19	-10.9	-11.3
SMEs introducing product innovations	84.1	19	-14.2	-15.5
SMEs introducing business process innovations	79.7	18	-8.2	-7.8
Linkages	89.8	22	+28.2	+2.4
Innovative SMEs collaborating with others	122.7	10	+30.3	+16.7
Public-private co-publications	135.1	18	+26.7	+1.8
Job-to-job mobility of HRST	47.9	22	+26.5	-11.8
Intellectual assets	67.2	21	-14.4	-1.3
PCT patent applications	55.4	20	-4.3	-0.6
Trademark applications	98.3	20	+18.1	+5.5
Design applications	52.9	21	-47.8	-6.7
Sales and employment impacts	94.4	15	+1.1	-22.6
Sales of new-to-market and new-to-firm innovations	109.9	9	+6.1	-5.8
Employment in innovative enterprises	80.5	16	-4.0	-38.7
Trade impacts	76.5	13	+1.3	+3.9
Exports of medium and high-tech products	110.6	4	+4.2	+0.1
Knowledge-intensive services exports	57	19	+13.2	0
High-tech imports from outside the EU	58.5	24	-14.7	+12.2
Resource and labour productivity	66.9	21	+33.1	+13.1
Resource productivity	85.8	12	+49.2	+24.2
Production-based CO2 productivity	58.8	25	+46.1	+11.5
Labour productivity	46.6	18	+1.8	+1.1

Relative strengths

- Public-private co-publications
- Foreign doctorate students as a % of all doctorate students
- Innovative SMEs collaborating with others

Relative weaknesses

- Venture capital expenditures
- Labour productivity
- Job-to-job mobility of HRST

Highest ranked indicators among EU Member States

- Exports of medium and high-tech products
- Non-R&D innovation expenditures
- New doctorate graduates

Lowest ranked indicators among EU Member States

- High-speed internet access
- Production-based CO2 productivity
- Population with tertiary education

Strong increases since 2019

- Cloud Computing
- High-speed internet access
- Foreign doctorate students as a % of all doctorate students

Strong decreases since 2019

- Design applications
- Direct and indirect government support of business R&D
- High-tech imports from outside the EU

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DENMARK

Innovation Leader ●

Summary innovation index (indexed to EU in 2026): **134.7**

Change vs 2019: ▲ +6.2

Change vs 2025: ▼ -0.2

It ranks 2nd among EU Member States, and 3rd among the EU and neighbouring countries.

Relative strengths

- Public-private co-publications
- International scientific co-publications
- Population involved in lifelong learning

Relative weaknesses

- Innovative SMEs collaborating with others
- Resource productivity
- Direct and indirect government support of business R&D

Highest ranked indicators among EU Member States

- Population involved in lifelong learning
- International scientific co-publications
- Individuals with above basic overall digital skills

Lowest ranked indicators among EU Member States

- Innovative SMEs collaborating with others
- Resource productivity
- Non-R&D innovation expenditures

Strong increases since 2019

- Venture capital expenditures
- Production-based CO₂ productivity
- International scientific co-publications

Strong decreases since 2019

- Design applications
- New doctorate graduates
- Innovative SMEs collaborating with others

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	134.7	2	+6.2	-0.2
Human resources	147.8	3	-17.5	-2.4
New doctorate graduates	100	8	-55.6	-11.1
Population with tertiary education	141.8	9	+22.5	+8.6
Population involved in lifelong learning	216.7	1	0	0
Attractive research systems	192.1	2	+10.6	+1.5
International scientific co-publications	283.5	1	+65.9	0
Scientific publications among the top 10% most cited	142.7	2	-20.6	-1.9
Foreign doctorate students as a % of all doctorate students	180.4	6	+25.4	+9.7
Digitalisation	145	2	+41.7	+30.5
High-speed internet access	123.3	3	+13.0	-1.4
Individuals with above basic overall digital skills	174.2	1	+64.1	+55.2
Finance and support	136.1	4	+47.9	-8.2
R&D expenditure in the public sector	161.7	1	+3.4	0
Venture capital expenditures	185.4	5	+159.8	-41.1
Direct and indirect government support of business R&D	75.9	12	+40.4	0
Firm investments	114.6	6	-2.5	-8.4
R&D expenditure in the business sector	127.6	6	+2.2	-1.4
Non-R&D innovation expenditures	77.1	15	+1.3	-36.3
Innovation expenditures per person employed	124.8	6	-10.4	+9.0
Investments in information technologies	124.8	7	+17.6	-2.7
Cloud Computing	130.7	6	+55.9	-2.5
Employed ICT specialists	117.9	8	-5.9	-2.9
Innovators	114	8	-3.5	0
SMEs introducing product innovations	128.1	7	0	0
SMEs introducing business process innovations	103.4	11	-6.0	0
Linkages	198.6	1	-23.5	0
Innovative SMEs collaborating with others	56.6	24	-52.2	0
Public-private co-publications	489.3	1	+39.7	0
Job-to-job mobility of HRST	181.2	2	-26.5	0
Intellectual assets	125.8	5	-36.4	-3.2
PCT patent applications	151.2	3	-7.1	+1.6
Trademark applications	111.6	11	-23.5	-2.8
Design applications	105.4	9	-76.4	-8.6
Sales and employment impacts	104.4	12	+19.6	-5.9
Sales of new-to-market and new-to-firm innovations	103.7	12	+19.9	-16.4
Employment in innovative enterprises	104.6	13	+19.1	+4.0
Trade impacts	100.8	2	+3.7	+1.5
Exports of medium and high-tech products	79.2	12	+7.1	+1.3
Knowledge-intensive services exports	103.1	5	+12.4	+1.0
High-tech imports from outside the EU	123.1	7	-9.1	+2.0
Resource and labour productivity	144.1	3	+50.5	+8.3
Resource productivity	70	17	+33.4	+11.6
Production-based CO ₂ productivity	183.7	1	+109.9	+6.9
Labour productivity	210.7	3	+15.5	+6.1



GERMANY

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **111.2**

Change vs 2019: ▲ +5.7 Change vs 2025: ▲ +3.0

It ranks 9th among EU Member States, and 12th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	111.2	9	+5.7	+3.0
Human resources	91.7	16	+2.8	+1.7
New doctorate graduates	122.2	3	-11.1	0
Population with tertiary education	78.8	21	+26.5	+6.6
Population involved in lifelong learning	66.7	23	-1.0	-1.0
Attractive research systems	104.7	13	+1.8	+1.0
International scientific co-publications	91.3	18	+22.2	+3.8
Scientific publications among the top 10% most cited	108.1	11	-10.7	-3.3
Foreign doctorate students as a % of all doctorate students	112.2	15	+10.2	+8.2
Digitalisation	84	20	+78.1	+15.0
High-speed internet access	91.7	20	+146.8	+9.2
Individuals with above basic overall digital skills	73.7	20	+23.9	+19.7
Finance and support	96	11	+14.0	+3.3
R&D expenditure in the public sector	133.3	5	0	0
Venture capital expenditures	95.9	10	+35.9	-9.2
Direct and indirect government support of business R&D	53	15	+19.1	+14.8
Firm investments	143.9	3	-4.9	-2.4
R&D expenditure in the business sector	144.8	5	0	0
Non-R&D innovation expenditures	140.9	3	-15.9	-16.4
Innovation expenditures per person employed	144.8	5	0	+7.7
Investments in information technologies	107.1	12	+61.4	+18.6
Cloud Computing	102.2	13	+132.7	+29.1
Employed ICT specialists	112.8	10	+17.6	+11.8
Innovators	115.3	7	-31.2	+3.7
SMEs introducing product innovations	102.5	17	-61.0	+1.3
SMEs introducing business process innovations	125.2	6	-8.0	+5.5
Linkages	134.7	11	-5.1	+2.0
Innovative SMEs collaborating with others	93	14	-25.5	+5.6
Public-private co-publications	191.7	12	+26.3	-0.5
Job-to-job mobility of HRST	141.7	6	0	0
Intellectual assets	119.7	7	-33.0	-1.6
PCT patent applications	133.4	4	-19.5	-4.0
Trademark applications	99.3	19	-11.9	-4.5
Design applications	121.3	6	-61.7	+3.1
Sales and employment impacts	125.3	4	-4.4	-8.5
Sales of new-to-market and new-to-firm innovations	105.3	10	-7.1	-7.2
Employment in innovative enterprises	142.7	2	-1.7	-9.7
Trade impacts	100.1	3	+0.8	+0.8
Exports of medium and high-tech products	105.4	6	-2.8	-1.3
Knowledge-intensive services exports	96.4	8	+1.9	+1.0
High-tech imports from outside the EU	98.2	16	+3.7	+3.2
Resource and labour productivity	122.6	10	+46.7	+15.7
Resource productivity	132.3	6	+75.0	+30.7
Production-based CO2 productivity	94.4	18	+56.6	+11.5
Labour productivity	144.8	7	+4.1	+1.2

Relative strengths

- Public-private co-publications
- R&D expenditure in the business sector
- Innovation expenditures per person employed

Relative weaknesses

- Direct and indirect government support of business R&D
- Population involved in lifelong learning
- Individuals with above basic overall digital skills

Highest ranked indicators among EU Member States

- Employment in innovative enterprises
- New doctorate graduates
- Non-R&D innovation expenditures

Lowest ranked indicators among EU Member States

- Population involved in lifelong learning
- Population with tertiary education
- High-speed internet access

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Resource productivity

Strong decreases since 2019

- Design applications
- SMEs introducing product innovations
- Innovative SMEs collaborating with others

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



GREECE

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **77.5**

Change vs 2019: ▲ +14.6 Change vs 2025: ▲ +0.9

It ranks 20th among EU Member States, and 24th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	77.5	20	+14.6	+0.9
Human resources	77.4	19	+18.6	+8.3
New doctorate graduates	100	8	+44.4	+22.2
Population with tertiary education	89.1	16	-9.3	-11.3
Population involved in lifelong learning	35.6	27	+7.7	+7.7
Attractive research systems	72.8	20	+18.6	+2.3
International scientific co-publications	95.1	15	+42.7	+5.5
Scientific publications among the top 10% most cited	103.5	12	+16.3	+4.1
Foreign doctorate students as a % of all doctorate students	3.8	27	+0.8	-4.9
Digitalisation	59.8	27	+52.1	+30.0
High-speed internet access	40.8	27	+85.7	+26.3
Individuals with above basic overall digital skills	85.6	18	+25.7	+33.2
Finance and support	66.3	15	+26.9	-10.0
R&D expenditure in the public sector	95	9	+19.0	-12.1
Venture capital expenditures	26.7	20	+13.4	-15.7
Direct and indirect government support of business R&D	58.1	13	+44.7	-3.8
Firm investments	77.4	14	+12.4	+3.5
R&D expenditure in the business sector	55.9	16	+21.0	+8.0
Non-R&D innovation expenditures	112.7	6	-13.2	-13.4
Innovation expenditures per person employed	76.1	12	+26.0	+13.6
Investments in information technologies	41.3	27	+20.2	+1.2
Cloud Computing	46	26	+48.5	+3.1
Employed ICT specialists	35.9	27	+2.9	0
Innovators	168.5	2	+16.6	-4.1
SMEs introducing product innovations	194.7	3	+18.0	-2.7
SMEs introducing business process innovations	148.6	4	+15.6	-5.1
Linkages	92.4	19	+5.4	-5.8
Innovative SMEs collaborating with others	100.3	12	-67.1	-1.8
Public-private co-publications	161.5	14	+65.0	+3.3
Job-to-job mobility of HRST	58.3	20	+47.1	-14.7
Intellectual assets	54.9	25	-1.8	+0.8
PCT patent applications	49.1	21	-1.3	+0.4
Trademark applications	94.6	21	+9.8	+0.4
Design applications	24	26	-10.3	+1.2
Sales and employment impacts	137.3	2	+12.0	-25.7
Sales of new-to-market and new-to-firm innovations	140.8	3	+4.8	-24.2
Employment in innovative enterprises	134.1	4	+19.0	-27.2
Trade impacts	63.8	26	+0.1	+4.5
Exports of medium and high-tech products	27.5	27	+8.4	+2.1
Knowledge-intensive services exports	61.4	15	+0.4	-0.6
High-tech imports from outside the EU	108.6	12	-9.5	+12.6
Resource and labour productivity	66.7	22	+25.5	+5.8
Resource productivity	85.5	13	+25.6	+13.1
Production-based CO2 productivity	69.9	23	+51.4	+1.9
Labour productivity	31.2	24	+1.3	+0.6

Relative strengths

- SMEs introducing product innovations
- Public-private co-publications
- SMEs introducing business process innovations

Relative weaknesses

- Foreign doctorate students as a % of all doctorate students
- Design applications
- Venture capital expenditures

Highest ranked indicators among EU Member States

- SMEs introducing product innovations
- Sales of new-to-market and new-to-firm innovations
- SMEs introducing business process innovations

Lowest ranked indicators among EU Member States

- Population involved in lifelong learning
- Foreign doctorate students as a % of all doctorate students
- High-speed internet access

Strong increases since 2019

- High-speed internet access
- Public-private co-publications
- Production-based CO2 productivity

Strong decreases since 2019

- Innovative SMEs collaborating with others
- Non-R&D innovation expenditures
- Design applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



SPAIN

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **94.0**

Change vs 2019: ▲ +14.1 Change vs 2025: ▲ +2.9

It ranks 14th among EU Member States, and 18th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	94	14	+14.1	+2.9
Human resources	118	9	-2.8	+4.1
New doctorate graduates	100	8	-33.3	+11.1
Population with tertiary education	141.8	9	+26.5	-0.7
Population involved in lifelong learning	115.9	12	+14.4	-1.9
Attractive research systems	90.7	17	+8.0	+1.3
International scientific co-publications	91.9	17	+32.1	+5.8
Scientific publications among the top 10% most cited	89.9	14	-4.6	+0.3
Foreign doctorate students as a % of all doctorate students	90.3	17	+12.7	-0.8
Digitalisation	123.2	6	+11.0	-1.4
High-speed internet access	120.3	6	+20.5	-4.4
Individuals with above basic overall digital skills	127.1	5	+3.6	+0.9
Finance and support	112	9	+35.9	+0.4
R&D expenditure in the public sector	90	11	+20.7	+1.7
Venture capital expenditures	144	7	+71.7	-3.1
Direct and indirect government support of business R&D	117.2	7	+34.5	+0.9
Firm investments	62.8	18	+9.1	-0.5
R&D expenditure in the business sector	55.2	17	+13.0	0
Non-R&D innovation expenditures	85.2	10	+1.4	-10.5
Innovation expenditures per person employed	56.2	16	+11.8	+7.2
Investments in information technologies	86.2	21	+44.1	+11.1
Cloud Computing	78.9	21	+82.9	+24.5
Employed ICT specialists	94.9	16	+20.6	+2.9
Innovators	63.2	20	+22.3	+9.4
SMEs introducing product innovations	69.7	21	+26.8	+10.2
SMEs introducing business process innovations	58.4	20	+18.9	+8.8
Linkages	98.9	18	+42.5	-6.8
Innovative SMEs collaborating with others	77	20	+23.8	+7.2
Public-private co-publications	128.9	19	+46.7	+4.7
Job-to-job mobility of HRST	102.1	14	+58.8	-26.5
Intellectual assets	80.9	18	-11.5	-2.9
PCT patent applications	65.9	15	-8.8	-1.8
Trademark applications	110.7	12	-9.7	-1.7
Design applications	72.1	14	-15.9	-5.2
Sales and employment impacts	117.1	7	+12.2	+9.6
Sales of new-to-market and new-to-firm innovations	191.1	2	+32.3	+12.7
Employment in innovative enterprises	52.6	21	-7.2	+6.5
Trade impacts	70.7	20	+1.7	+3.2
Exports of medium and high-tech products	63.6	19	-1.7	+0.5
Knowledge-intensive services exports	48.2	23	+11.5	-1.0
High-tech imports from outside the EU	104.4	15	-4.5	+11.0
Resource and labour productivity	117.7	11	+39.9	+11.9
Resource productivity	146	5	+54.1	+28.5
Production-based CO2 productivity	109.2	12	+62.3	+4.2
Labour productivity	83	12	+2.4	-0.3

Relative strengths

- Sales of new-to-market and new-to-firm innovations
- Resource productivity
- Venture capital expenditures

Relative weaknesses

- Knowledge-intensive services exports
- Employment in innovative enterprises
- R&D expenditure in the business sector

Highest ranked indicators among EU Member States

- Sales of new-to-market and new-to-firm innovations
- Individuals with above basic overall digital skills
- Resource productivity

Lowest ranked indicators among EU Member States

- Knowledge-intensive services exports
- Cloud Computing
- SMEs introducing product innovations

Strong increases since 2019

- Cloud Computing
- Venture capital expenditures
- Production-based CO2 productivity

Strong decreases since 2019

- New doctorate graduates
- Design applications
- Trademark applications

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ESTONIA

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **108.6**

Change vs 2019: ▲ +19.8 Change vs 2025: ▲ +1.9

It ranks 11th among EU Member States, and 15th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	108.6	11	+19.8	+1.9
Human resources	113.2	10	+15.9	-0.2
New doctorate graduates	77.8	16	0	-11.1
Population with tertiary education	97.3	14	+7.3	+10.6
Population involved in lifelong learning	176.5	5	+51.9	+4.8
Attractive research systems	133.3	10	+49.2	-0.3
International scientific co-publications	162.6	10	+61.7	+5.1
Scientific publications among the top 10% most cited	98.3	13	+9.7	-6.4
Foreign doctorate students as a % of all doctorate students	158.8	9	+122.5	+8.2
Digitalisation	97.6	13	+43.3	-4.0
High-speed internet access	89.9	21	+64.5	-2.0
Individuals with above basic overall digital skills	108.1	12	+26.6	-5.3
Finance and support	112	9	+44.8	-13.4
R&D expenditure in the public sector	110	7	+22.4	+3.4
Venture capital expenditures	227.4	3	+150.1	-85.5
Direct and indirect government support of business R&D	42.1	17	+13.2	+7.0
Firm investments	88	11	-0.9	-8.0
R&D expenditure in the business sector	79.3	10	+43.5	+9.4
Non-R&D innovation expenditures	138	4	-46.2	-30.1
Innovation expenditures per person employed	65.6	14	-6.4	-6.6
Investments in information technologies	129.3	5	+53.7	-3.9
Cloud Computing	115.1	9	+112.7	+8.8
Employed ICT specialists	146.2	5	+17.6	-11.8
Innovators	152.8	4	-11.1	+47.3
SMEs introducing product innovations	197.9	2	-13.1	+82.5
SMEs introducing business process innovations	118.4	7	-9.8	+19.6
Linkages	178.8	6	+32.3	0
Innovative SMEs collaborating with others	174.1	4	-46.1	+14.4
Public-private co-publications	242.9	11	+100.5	+35.6
Job-to-job mobility of HRST	156.2	4	+76.5	-32.4
Intellectual assets	131.4	2	-3.7	+5.4
PCT patent applications	66.7	14	-5.8	+11.0
Trademark applications	214.4	3	+38.7	-2.9
Design applications	138.4	3	-30.9	+5.2
Sales and employment impacts	112	10	+12.2	-1.8
Sales of new-to-market and new-to-firm innovations	105.2	11	+16.2	+22.2
Employment in innovative enterprises	117.8	8	+8.3	-25.5
Trade impacts	67.8	23	+6.4	+2.5
Exports of medium and high-tech products	56.5	21	+4.8	-2.0
Knowledge-intensive services exports	84.2	10	+29.9	+0.6
High-tech imports from outside the EU	62.8	23	-16.2	+10.0
Resource and labour productivity	54.2	25	+41.7	+4.3
Resource productivity	36.6	24	+22.3	+6.9
Production-based CO2 productivity	80.5	20	+109.4	+4.8
Labour productivity	47	17	+1.7	+1.0

Relative strengths

- Public-private co-publications
- Venture capital expenditures
- Trademark applications

Relative weaknesses

- Resource productivity
- Direct and indirect government support of business R&D
- Labour productivity

Highest ranked indicators among EU Member States

- SMEs introducing product innovations
- Venture capital expenditures
- Trademark applications

Lowest ranked indicators among EU Member States

- Resource productivity
- High-tech imports from outside the EU
- High-speed internet access

Strong increases since 2019

- Venture capital expenditures
- Foreign doctorate students as a % of all doctorate students
- Cloud Computing

Strong decreases since 2019

- Non-R&D innovation expenditures
- Innovative SMEs collaborating with others
- Design applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



FINLAND

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **124.4**

Change vs 2019: ▲ +8.3 Change vs 2025: ▼ -2.7

It ranks 4th among EU Member States, and 6th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	124.4	4	+8.3	-2.7
Human resources	125	8	-15.9	-4.1
New doctorate graduates	111.1	5	-22.2	0
Population with tertiary education	64.1	22	-12.6	-6.0
Population involved in lifelong learning	209.1	3	-9.6	-9.6
Attractive research systems	161.2	7	+33.2	+4.9
International scientific co-publications	220.9	5	+71.6	+9.5
Scientific publications among the top 10% most cited	139.7	4	+9.7	+0.2
Foreign doctorate students as a % of all doctorate students	137.1	11	+47.9	+10.6
Digitalisation	130.8	4	+39.0	+6.0
High-speed internet access	98.7	16	+67.9	+13.7
Individuals with above basic overall digital skills	174.2	1	+16.2	0
Finance and support	128.5	5	+34.7	-3.6
R&D expenditure in the public sector	150	2	+15.5	+6.9
Venture capital expenditures	242	2	+149.5	-22.8
Direct and indirect government support of business R&D	32.2	19	-6.8	-6.1
Firm investments	114.9	5	+2.4	-0.2
R&D expenditure in the business sector	148.3	4	+29.0	+7.2
Non-R&D innovation expenditures	74	16	-33.0	-11.2
Innovation expenditures per person employed	108.1	8	+5.8	+1.7
Investments in information technologies	155.3	1	+21.9	0
Cloud Computing	143.5	1	+43.6	0
Employed ICT specialists	169.2	1	+8.8	0
Innovators	108.7	10	-17.4	-10.7
SMEs introducing product innovations	122.4	8	-23.9	-15.2
SMEs introducing business process innovations	98.4	14	-12.2	-7.3
Linkages	190.1	4	+8.8	-9.9
Innovative SMEs collaborating with others	188	3	-36.5	-16.9
Public-private co-publications	333.2	6	+46.1	-4.8
Job-to-job mobility of HRST	133.3	8	+35.3	-5.9
Intellectual assets	124.7	6	-16.3	-3.8
PCT patent applications	162.8	1	0	0
Trademark applications	104.9	15	-26.7	-4.9
Design applications	92.2	12	-26.4	-7.3
Sales and employment impacts	123.7	5	+5.5	-29.0
Sales of new-to-market and new-to-firm innovations	125.3	5	+34.3	-30.8
Employment in innovative enterprises	122	5	-22.7	-27.4
Trade impacts	92.4	6	+4.9	+3.5
Exports of medium and high-tech products	67	17	+5.4	+0.8
Knowledge-intensive services exports	102.2	6	+8.1	+5.5
High-tech imports from outside the EU	111.3	10	+1.4	+4.4
Resource and labour productivity	83.4	14	+29.3	+7.8
Resource productivity	27	27	+14.8	+7.5
Production-based CO2 productivity	108.7	14	+78.2	+16.3
Labour productivity	140.9	8	+0.8	+0.5

Relative strengths

- Public-private co-publications
- Venture capital expenditures
- International scientific co-publications

Relative weaknesses

- Resource productivity
- Direct and indirect government support of business R&D
- Population with tertiary education

Highest ranked indicators among EU Member States

- Individuals with above basic overall digital skills
- Cloud Computing
- Employed ICT specialists

Lowest ranked indicators among EU Member States

- Resource productivity
- Population with tertiary education
- Direct and indirect government support of business R&D

Strong increases since 2019

- Venture capital expenditures
- Production-based CO2 productivity
- International scientific co-publications

Strong decreases since 2019

- Innovative SMEs collaborating with others
- Non-R&D innovation expenditures
- Trademark applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **109.1**

Change vs 2019: ▲ **+11.2** Change vs 2025: ▲ **+2.2**

It ranks 10th among EU Member States, and 13th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	109.1	10	+11.2	+2.2
Human resources	140.5	4	+37.3	+15.5
New doctorate graduates	144.4	1	+33.3	+22.2
Population with tertiary education	160.9	6	+37.7	+17.2
Population involved in lifelong learning	113.6	13	+43.3	+2.9
Attractive research systems	101.9	14	-11.3	-3.9
International scientific co-publications	72.1	21	+6.3	+1.7
Scientific publications among the top 10% most cited	81.7	16	-21.0	-4.9
Foreign doctorate students as a % of all doctorate students	161.5	8	-6.9	-6.9
Digitalisation	110.2	9	+75.2	+20.0
High-speed internet access	108.1	12	+149.1	+20.8
Individuals with above basic overall digital skills	113	9	+16.7	+19.5
Finance and support	150.4	1	+3.3	-15.8
R&D expenditure in the public sector	96.7	8	-3.4	0
Venture capital expenditures	192.3	4	+23.9	-78.9
Direct and indirect government support of business R&D	185.9	1	0	0
Firm investments	91.6	10	-5.5	-2.2
R&D expenditure in the business sector	96.6	9	0	0
Non-R&D innovation expenditures	47.8	22	-36.0	-9.0
Innovation expenditures per person employed	113.1	7	+15.4	+1.2
Investments in information technologies	86.2	21	+29.2	+23.6
Cloud Computing	76.5	22	+57.5	+57.5
Employed ICT specialists	97.4	13	+11.8	+2.9
Innovators	105.8	12	0	0
SMEs introducing product innovations	105.1	16	-24.8	0
SMEs introducing business process innovations	106.6	10	+19.4	0
Linkages	117.2	14	+35.4	-12.9
Innovative SMEs collaborating with others	127.8	9	+22.4	0
Public-private co-publications	110.3	21	+2.3	-1.0
Job-to-job mobility of HRST	112.5	10	+64.7	-32.4
Intellectual assets	84.1	16	-15.2	-4.3
PCT patent applications	111.9	7	-9.2	-2.1
Trademark applications	69.9	26	-9.4	-3.3
Design applications	60.7	18	-25.4	-7.1
Sales and employment impacts	87.8	17	-3.0	+8.1
Sales of new-to-market and new-to-firm innovations	52.1	21	-24.1	+5.4
Employment in innovative enterprises	118.6	7	+17.4	+10.8
Trade impacts	96.7	4	+8.7	+2.4
Exports of medium and high-tech products	84.7	11	-5.0	+2.1
Knowledge-intensive services exports	82.5	11	+7.6	+2.0
High-tech imports from outside the EU	126.5	4	+25.4	+3.2
Resource and labour productivity	134.5	5	+28.8	+9.3
Resource productivity	115.3	9	+23.7	+13.9
Production-based CO2 productivity	154.5	5	+70.0	+12.8
Labour productivity	137.9	10	-3.5	+0.7

Relative strengths

- Venture capital expenditures
- Direct and indirect government support of business R&D
- Foreign doctorate students as a % of all doctorate students

Relative weaknesses

- Non-R&D innovation expenditures
- Sales of new-to-market and new-to-firm innovations
- Design applications

Highest ranked indicators among EU Member States

- New doctorate graduates
- Direct and indirect government support of business R&D
- Venture capital expenditures

Lowest ranked indicators among EU Member States

- Trademark applications
- Non-R&D innovation expenditures
- Cloud Computing

Strong increases since 2019

- High-speed internet access
- Production-based CO2 productivity
- Job-to-job mobility of HRST

Strong decreases since 2019

- Non-R&D innovation expenditures
- Design applications
- SMEs introducing product innovations

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



GEORGIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **20.7**

Change vs 2019: ▲ +1.3 Change vs 2025: ▲ +0.5

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	20.7	39	+1.3	+0.5
Human resources	36.3	34	-0.9	-3.1
New doctorate graduates	28.6	33	-0.6	-7.0
Population with tertiary education	71.5	30	-5.9	0
Population involved in lifelong learning	8.1	39	+5.0	0
Attractive research systems	24.2	38	+16.5	+8.5
International scientific co-publications	18.4	36	+12.7	+1.3
Scientific publications among the top 10% most cited	42	31	+28.1	+14.8
Foreign doctorate students as a % of all doctorate students	2.2	40	-4.6	+1.1
Digitalisation	21.6	33	+23.6	-11.0
High-speed internet access	28.4	33	+55.8	+5.3
Individuals with above basic overall digital skills	12.2	36	-2.0	-23.7
Finance and support	5	36	-7.1	-1.3
R&D expenditure in the public sector	7.3	35	-11.6	-1.9
Venture capital expenditures	1.6	36	+2.0	0
Direct and indirect government support of business R&D	N/A	N/A		
Firm investments	N/A	N/A		
R&D expenditure in the business sector	N/A	N/A		
Non-R&D innovation expenditures	N/A	N/A		
Innovation expenditures per person employed	N/A	N/A		
Investments in information technologies	13.4	40	+5.5	0
Cloud Computing	24.8	36	+38.6	0
Employed ICT specialists	0	40	-14.7	0
Innovators	24.7	36	-4.1	+14.6
SMEs introducing product innovations	27	35	-34.2	+4.8
SMEs introducing business process innovations	23.1	34	+19.6	+22.3
Linkages	7.9	40	-1.0	-1.4
Innovative SMEs collaborating with others	5.1	37	-7.4	-1.9
Public-private co-publications	18.9	37	+11.8	+0.2
Job-to-job mobility of HRST	N/A	N/A		
Intellectual assets	11.1	39	-7.4	-0.2
PCT patent applications	23.5	39	-16.8	-1.1
Trademark applications	5.1	39	-3.6	+1.3
Design applications	0.5	39	0	0
Sales and employment impacts	21.3	37	-32.2	-4.4
Sales of new-to-market and new-to-firm innovations	N/A	N/A		
Employment in innovative enterprises	19.9	37	-31.7	-4.4
Trade impacts	20.5	39	+4.9	-1.9
Exports of medium and high-tech products	15.5	36	-14.8	-5.8
Knowledge-intensive services exports	24	36	+25.6	+2.4
High-tech imports from outside the EU	N/A	N/A		
Resource and labour productivity	34.8	36	+9.8	+1.5
Resource productivity	4	37	+4.0	+3.4
Production-based CO2 productivity	63.1	29	+16.4	-1.1
Labour productivity	N/A	N/A		

It ranks 39th among the EU and neighbouring countries.

Relative strengths

- Population with tertiary education
- Production-based CO2 productivity
- Scientific publications among the top 10% most cited

Relative weaknesses

- Employed ICT specialists
- Design applications
- Venture capital expenditures

Highest ranked indicators among EU Member States

- Production-based CO2 productivity
- Population with tertiary education
- Scientific publications among the top 10% most cited

Lowest ranked indicators among EU Member States

- Foreign doctorate students as a % of all doctorate students
- Employed ICT specialists
- Population involved in lifelong learning

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Scientific publications among the top 10% most cited

Strong decreases since 2019

- SMEs introducing product innovations
- Employment in innovative enterprises
- PCT patent applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



CROATIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **69.2**

Change vs 2019: ▲ +11.0 Change vs 2025: ▼ -0.6

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	69.2	22	+11.0	-0.6
Human resources	70.4	22	+29.0	+5.0
New doctorate graduates	77.8	16	+33.3	0
Population with tertiary education	84.8	19	+38.4	+17.2
Population involved in lifelong learning	45.5	25	+11.5	-1.0
Attractive research systems	47.9	23	+9.0	0
International scientific co-publications	81.4	20	+38.1	+5.0
Scientific publications among the top 10% most cited	36.5	25	+4.2	-0.9
Foreign doctorate students as a % of all doctorate students	33.7	23	-7.6	-2.1
Digitalisation	90.8	15	+45.0	+23.3
High-speed internet access	94.1	18	+121.8	+37.9
Individuals with above basic overall digital skills	86.3	17	-15.7	+11.8
Finance and support	39.2	22	+13.8	-38.5
R&D expenditure in the public sector	81.7	14	+29.3	0
Venture capital expenditures	10.7	25	-10.3	-192.2
Direct and indirect government support of business R&D	7.9	24	+7.6	+0.1
Firm investments	78.7	13	+17.3	+35.1
R&D expenditure in the business sector	48.3	19	+23.9	-0.7
Non-R&D innovation expenditures	80.2	13	-66.2	+3.4
Innovation expenditures per person employed	106.2	9	+83.0	+98.5
Investments in information technologies	92.5	17	+47.5	+5.5
Cloud Computing	88.3	19	+67.0	+19.4
Employed ICT specialists	97.4	13	+35.3	-2.9
Innovators	48.1	23	-83.4	-29.1
SMEs introducing product innovations	53.6	23	-106.7	-12.6
SMEs introducing business process innovations	43.9	25	-65.5	-42.1
Linkages	103.4	17	+27.2	+1.7
Innovative SMEs collaborating with others	78.8	19	-21.1	-12.1
Public-private co-publications	149.7	17	+42.8	+1.9
Job-to-job mobility of HRST	102.1	14	+67.6	+14.7
Intellectual assets	49.9	26	+3.7	-1.3
PCT patent applications	43.5	24	-8.6	-3.3
Trademark applications	77.4	25	+22.4	-0.4
Design applications	31.9	24	+3.8	+0.2
Sales and employment impacts	79.6	18	+6.5	-27.0
Sales of new-to-market and new-to-firm innovations	102.1	13	+38.5	-2.5
Employment in innovative enterprises	59.9	20	-24.6	-50.6
Trade impacts	65.6	25	+3.7	+2.3
Exports of medium and high-tech products	54.4	22	+1.0	+2.3
Knowledge-intensive services exports	14.6	27	+7.1	+1.6
High-tech imports from outside the EU	135.4	1	+3.5	+3.1
Resource and labour productivity	74.4	16	+28.8	+7.6
Resource productivity	80.4	15	+34.2	+8.6
Production-based CO2 productivity	98.8	17	+45.7	+13.8
Labour productivity	31.2	23	+7.2	+0.8

It ranks 22nd among EU Member States, and 26th among the EU and neighbouring countries.

Relative strengths

- Public-private co-publications
- High-tech imports from outside the EU
- Innovation expenditures per person employed

Relative weaknesses

- Direct and indirect government support of business R&D
- Venture capital expenditures
- Knowledge-intensive services exports

Highest ranked indicators among EU Member States

- High-tech imports from outside the EU
- Innovation expenditures per person employed
- Non-R&D innovation expenditures

Lowest ranked indicators among EU Member States

- Knowledge-intensive services exports
- Population involved in lifelong learning
- Scientific publications among the top 10% most cited

Strong increases since 2019

- High-speed internet access
- Innovation expenditures per person employed
- Job-to-job mobility of HRST

Strong decreases since 2019

- SMEs introducing product innovations
- Non-R&D innovation expenditures
- SMEs introducing business process innovations

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HUNGARY

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **72.1**

Change vs 2019: ▲ **+13.4** Change vs 2025: ▼ **-0.3**

It ranks 21st among EU Member States, and 25th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	72.1	21	+13.4	-0.3
Human resources	54.7	25	+20.1	-2.4
New doctorate graduates	55.6	20	+22.2	0
Population with tertiary education	33.7	25	-5.3	+2.0
Population involved in lifelong learning	76.5	20	+45.2	-11.5
Attractive research systems	84	19	+35.6	+2.8
International scientific co-publications	67.5	22	+38.2	+7.9
Scientific publications among the top 10% most cited	63.1	19	+11.4	+3.5
Foreign doctorate students as a % of all doctorate students	131.8	12	+85.4	-3.2
Digitalisation	107.4	11	+96.7	+17.6
High-speed internet access	105.7	14	+148.1	+6.5
Individuals with above basic overall digital skills	109.6	11	+55.7	+26.4
Finance and support	56.8	19	-43.2	-24.9
R&D expenditure in the public sector	31.7	22	-6.9	-10.3
Venture capital expenditures	40.8	17	-22.8	-19.1
Direct and indirect government support of business R&D	95.7	8	-100.1	-46.3
Firm investments	63	17	-14.7	-8.4
R&D expenditure in the business sector	65.5	14	-10.9	-1.4
Non-R&D innovation expenditures	77.6	14	-41.9	-23.3
Innovation expenditures per person employed	51.9	19	+4.9	-2.5
Investments in information technologies	90.4	18	+60.7	+1.2
Cloud Computing	90.9	17	+126.2	-1.6
Employed ICT specialists	89.7	20	+20.6	+2.9
Innovators	57.9	21	+11.5	+11.5
SMEs introducing product innovations	70.4	20	+8.9	+8.9
SMEs introducing business process innovations	48.3	23	+13.6	+13.6
Linkages	91.8	20	+34.7	+2.7
Innovative SMEs collaborating with others	62.5	22	-10.9	-10.9
Public-private co-publications	128.5	20	+53.0	+11.8
Job-to-job mobility of HRST	97.9	17	+70.6	+11.8
Intellectual assets	58.1	23	-3.4	+0.5
PCT patent applications	65.3	16	-10.5	-5.6
Trademark applications	78	24	+10.7	+6.6
Design applications	28.7	25	-5.9	+2.3
Sales and employment impacts	49	23	+6.8	+0.2
Sales of new-to-market and new-to-firm innovations	70.5	19	+11.3	+10.5
Employment in innovative enterprises	30.2	25	+2.7	-9.9
Trade impacts	80.1	12	+2.8	+2.3
Exports of medium and high-tech products	105.9	5	+1.6	-2.2
Knowledge-intensive services exports	61	16	+3.5	+0.2
High-tech imports from outside the EU	71.2	21	+3.4	+9.5
Resource and labour productivity	72.3	19	+33.3	+5.1
Resource productivity	74.8	16	+35.5	+9.5
Production-based CO2 productivity	99	16	+61.0	+4.2
Labour productivity	31.7	21	+5.0	+0.8

Relative strengths

- Foreign doctorate students as a % of all doctorate students
- Public-private co-publications
- Individuals with above basic overall digital skills

Relative weaknesses

- Design applications
- Employment in innovative enterprises
- R&D expenditure in the public sector

Highest ranked indicators among EU Member States

- Exports of medium and high-tech products
- Direct and indirect government support of business R&D
- Individuals with above basic overall digital skills

Lowest ranked indicators among EU Member States

- Population with tertiary education
- Design applications
- Employment in innovative enterprises

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Foreign doctorate students as a % of all doctorate students

Strong decreases since 2019

- Direct and indirect government support of business R&D
- Non-R&D innovation expenditures
- Venture capital expenditures

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IRELAND

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **118.6**

Change vs 2019: ▲ +10.9 Change vs 2025: ▲ +2.4

It ranks 6th among EU Member States, and 8th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	118.6	6	+10.9	+2.4
Human resources	138	6	+1.3	-5.0
New doctorate graduates	111.1	5	0	-11.1
Population with tertiary education	198.9	1	+5.3	0
Population involved in lifelong learning	106.8	14	-1.0	-1.0
Attractive research systems	163.5	6	+35.3	+1.3
International scientific co-publications	187.3	7	+73.3	+8.1
Scientific publications among the top 10% most cited	128.5	7	-2.1	-5.4
Foreign doctorate students as a % of all doctorate students	194.5	4	+80.5	+9.5
Digitalisation	135.9	3	+108.1	+32.9
High-speed internet access	107.6	13	+176.8	+29.7
Individuals with above basic overall digital skills	174.2	1	+53.8	+35.4
Finance and support	70.9	13	-33.4	+12.0
R&D expenditure in the public sector	13.3	25	-19.0	0
Venture capital expenditures	72	12	-68.7	+0.7
Direct and indirect government support of business R&D	136.1	5	-31.8	+33.3
Firm investments	97.4	9	-3.8	-7.6
R&D expenditure in the business sector	77.9	12	-12.3	-11.6
Non-R&D innovation expenditures	33.3	24	-46.4	-11.9
Innovation expenditures per person employed	154	1	+41.1	0
Investments in information technologies	134.9	4	+42.7	+14.0
Cloud Computing	138.6	4	+117.4	+41.9
Employed ICT specialists	130.8	6	-2.9	-2.9
Innovators	98.7	15	+2.7	0
SMEs introducing product innovations	116.2	9	+5.2	0
SMEs introducing business process innovations	85.4	16	+0.7	0
Linkages	162.7	10	+14.6	-1.0
Innovative SMEs collaborating with others	171.5	5	-2.2	0
Public-private co-publications	264.3	9	+52.8	-3.6
Job-to-job mobility of HRST	N/A	N/A		
Intellectual assets	55.1	24	-17.8	+0.2
PCT patent applications	72.2	12	-18.2	+0.2
Trademark applications	66.4	27	-21.5	+1.7
Design applications	20.8	27	-14.8	-0.9
Sales and employment impacts	137.7	1	-17.4	-11.3
Sales of new-to-market and new-to-firm innovations	195.4	1	0	0
Employment in innovative enterprises	87.1	15	-34.2	-22.3
Trade impacts	84.9	10	+0.8	+5.2
Exports of medium and high-tech products	120.6	1	+36.0	+12.8
Knowledge-intensive services exports	123.8	1	+6.2	+2.0
High-tech imports from outside the EU	0	27	-44.5	0
Resource and labour productivity	178.2	1	+71.2	0
Resource productivity	128.8	8	+79.2	+0.2
Production-based CO2 productivity	183.7	1	+106.7	0
Labour productivity	250.9	1	+28.9	0

Relative strengths

- Public-private co-publications
- Labour productivity
- Population with tertiary education

Relative weaknesses

- High-tech imports from outside the EU
- R&D expenditure in the public sector
- Design applications

Highest ranked indicators among EU Member States

- Population with tertiary education
- Individuals with above basic overall digital skills
- Innovation expenditures per person employed

Lowest ranked indicators among EU Member States

- Trademark applications
- Design applications
- High-tech imports from outside the EU

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Production-based CO2 productivity

Strong decreases since 2019

- Venture capital expenditures
- Non-R&D innovation expenditures
- High-tech imports from outside the EU

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



ICELAND

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **108.9**

Change vs 2019: ▲ +14.4 Change vs 2025: ▼ -1.8

It ranks 14th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	108.9	14	+14.4	-1.8
Human resources	116.3	13	+13.8	0
New doctorate graduates	55.6	23	-11.1	0
Population with tertiary education	110.9	16	+35.1	0
Population involved in lifelong learning	201.5	4	+30.8	0
Attractive research systems	179.5	5	+25.8	-13.4
International scientific co-publications	283.5	1	0	0
Scientific publications among the top 10% most cited	97.2	17	+2.8	-25.8
Foreign doctorate students as a % of all doctorate students	206.7	5	+99.0	0
Digitalisation	132.7	5	+20.0	+4.0
High-speed internet access	120.8	6	+45.4	+9.2
Individuals with above basic overall digital skills	148.7	7	0	0
Finance and support	125.7	7	+53.5	+0.7
R&D expenditure in the public sector	96.7	11	-6.9	+6.9
Venture capital expenditures	82.6	14	+61.1	-12.6
Direct and indirect government support of business R&D	185.9	1	+124.1	0
Firm investments	85.4	15	+11.3	-4.9
R&D expenditure in the business sector	119.3	9	+32.6	-13.8
Non-R&D innovation expenditures	98.6	12	0	0
Innovation expenditures per person employed	45.8	23	0	0
Investments in information technologies	73	29	+7.5	0
Cloud Computing	N/A	N/A		
Employed ICT specialists	79.5	28	+5.9	0
Innovators	102.3	20	0	0
SMEs introducing product innovations	110.1	19	0	0
SMEs introducing business process innovations	96.5	17	0	0
Linkages	221.5	4	+3.1	0
Innovative SMEs collaborating with others	177.8	6	0	0
Public-private co-publications	489.3	1	+16.1	0
Job-to-job mobility of HRST	143.8	9	0	0
Intellectual assets	63.8	25	+3.5	-0.8
PCT patent applications	93.2	11	-1.0	-2.1
Trademark applications	66	30	+0.3	0
Design applications	22	29	+10.5	0
Sales and employment impacts	87.1	23	+1.8	0
Sales of new-to-market and new-to-firm innovations	40.9	32	0	0
Employment in innovative enterprises	127.2	7	+3.9	0
Trade impacts	29	36	+0.3	-0.8
Exports of medium and high-tech products	0	40	0	0
Knowledge-intensive services exports	57	24	+0.6	-1.6
High-tech imports from outside the EU	N/A	N/A		
Resource and labour productivity	135.4	8	+32.1	-2.8
Resource productivity	82.4	17	+27.8	-1.9
Production-based CO2 productivity	161.7	6	+57.7	-9.9
Labour productivity	185.5	6	+13.4	+2.4

Relative strengths

- Public-private co-publications
- International scientific co-publications
- Foreign doctorate students as a % of all doctorate students

Relative weaknesses

- Exports of medium and high-tech products
- Design applications
- Sales of new-to-market and new-to-firm innovations

Highest ranked indicators among EU Member States

- International scientific co-publications
- Direct and indirect government support of business R&D
- Public-private co-publications

Lowest ranked indicators among EU Member States

- Exports of medium and high-tech products
- Sales of new-to-market and new-to-firm innovations
- Trademark applications

Strong increases since 2019

- Direct and indirect government support of business R&D
- Foreign doctorate students as a % of all doctorate students
- Venture capital expenditures

Strong decreases since 2019

- New doctorate graduates
- R&D expenditure in the public sector
- PCT patent applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



ITALY

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **96.2**

Change vs 2019: ▲ +15.0 Change vs 2025: ▲ +5.0

It ranks 13th among EU Member States, and 17th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	96.2	13	+15.0	+5.0
Human resources	69.5	23	+17.5	+4.8
New doctorate graduates	100	8	+22.2	+11.1
Population with tertiary education	25.5	26	+18.5	-3.3
Population involved in lifelong learning	78	19	+8.7	+3.8
Attractive research systems	95.3	16	+10.1	+3.6
International scientific co-publications	92.3	16	+40.7	+6.9
Scientific publications among the top 10% most cited	115.2	10	+0.5	-0.1
Foreign doctorate students as a % of all doctorate students	67.5	19	+2.0	+8.7
Digitalisation	89.1	17	+83.6	+39.8
High-speed internet access	80.8	24	+138.9	+37.9
Individuals with above basic overall digital skills	100.3	14	+40.0	+41.4
Finance and support	64.5	16	+10.9	+1.1
R&D expenditure in the public sector	75	18	+13.8	+5.2
Venture capital expenditures	66.6	13	+23.7	+5.7
Direct and indirect government support of business R&D	51.1	16	+0.1	-6.6
Firm investments	59.2	19	-13.8	-12.7
R&D expenditure in the business sector	51.7	18	-4.3	-0.7
Non-R&D innovation expenditures	67.1	18	-34.8	-29.2
Innovation expenditures per person employed	61.2	15	-5.6	-10.8
Investments in information technologies	109.5	11	+84.8	+19.3
Cloud Computing	143.5	1	+223.7	+59.9
Employed ICT specialists	69.2	25	0	-5.9
Innovators	149.1	6	+5.9	+5.9
SMEs introducing product innovations	147.5	6	-1.5	-1.5
SMEs introducing business process innovations	150.2	3	+11.5	+11.5
Linkages	91	21	+13.9	-5.4
Innovative SMEs collaborating with others	105.7	11	-15.0	-15.0
Public-private co-publications	166.2	13	+64.8	+2.9
Job-to-job mobility of HRST	50	21	+17.6	0
Intellectual assets	117.1	9	-10.4	+1.1
PCT patent applications	79.1	10	-10.3	-1.4
Trademark applications	102.2	17	-7.1	-3.3
Design applications	183.3	1	-12.8	+7.0
Sales and employment impacts	131.9	3	+26.1	+20.7
Sales of new-to-market and new-to-firm innovations	124.8	6	+24.9	+16.1
Employment in innovative enterprises	137.9	3	+27.2	+25.1
Trade impacts	85.6	9	-0.4	+0.1
Exports of medium and high-tech products	77.8	13	-0.5	+1.3
Knowledge-intensive services exports	57.4	18	+0.1	-0.9
High-tech imports from outside the EU	126.2	5	-0.6	+0.1
Resource and labour productivity	126	8	+32.3	+9.3
Resource productivity	153.7	1	+47.1	+12.7
Production-based CO2 productivity	114.4	9	+50.5	+15.1
Labour productivity	96.1	11	-2.1	+0.2

Relative strengths

- Design applications
- Public-private co-publications
- Resource productivity

Relative weaknesses

- Population with tertiary education
- Job-to-job mobility of HRST
- Direct and indirect government support of business R&D

Highest ranked indicators among EU Member States

- Cloud Computing
- Design applications
- Resource productivity

Lowest ranked indicators among EU Member States

- Population with tertiary education
- Employed ICT specialists
- High-speed internet access

Strong increases since 2019

- Cloud Computing
- High-speed internet access
- Public-private co-publications

Strong decreases since 2019

- Non-R&D innovation expenditures
- Innovative SMEs collaborating with others
- Design applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



LITHUANIA

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **86.6**

Change vs 2019: ▲ +19.7 Change vs 2025: ▲ +1.9

It ranks 18th among EU Member States, and 22nd among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	86.6	18	+19.7	+1.9
Human resources	103.5	13	+21.0	+6.5
New doctorate graduates	55.6	20	+22.2	0
Population with tertiary education	187	3	+21.9	+17.2
Population involved in lifelong learning	75	21	+18.3	+5.8
Attractive research systems	61.9	21	+32.2	+4.6
International scientific co-publications	85.1	19	+52.2	+16.7
Scientific publications among the top 10% most cited	58	21	+21.5	+3.9
Foreign doctorate students as a % of all doctorate students	45.5	22	+36.5	-5.2
Digitalisation	89.8	16	+36.9	+3.8
High-speed internet access	93.2	19	+59.0	+0.7
Individuals with above basic overall digital skills	85	19	+19.2	+6.4
Finance and support	70.5	14	+26.7	-10.7
R&D expenditure in the public sector	81.7	14	+6.9	0
Venture capital expenditures	114.7	9	+91.1	-46.5
Direct and indirect government support of business R&D	29.9	20	+15.0	-3.4
Firm investments	67.4	15	-8.2	-16.7
R&D expenditure in the business sector	26.9	23	+7.2	0
Non-R&D innovation expenditures	156.9	2	-35.1	-39.3
Innovation expenditures per person employed	50.9	20	-0.9	-14.2
Investments in information technologies	113.7	10	+91.3	+38.6
Cloud Computing	110.1	10	+149.6	+82.9
Employed ICT specialists	117.9	8	+55.9	+11.8
Innovators	107.4	11	-2.7	+14.3
SMEs introducing product innovations	106.3	14	-16.8	+20.9
SMEs introducing business process innovations	108.3	9	+8.5	+9.1
Linkages	133.9	12	+54.8	+5.4
Innovative SMEs collaborating with others	91.8	16	-16.2	+0.1
Public-private co-publications	87.3	23	+29.1	+15.7
Job-to-job mobility of HRST	183.3	1	+138.2	+5.9
Intellectual assets	87.5	12	+17.9	+2.2
PCT patent applications	40.4	25	-7.8	+0.1
Trademark applications	156.9	5	+56.1	+6.3
Design applications	84	13	+18.8	+1.8
Sales and employment impacts	98	14	-12.4	-7.8
Sales of new-to-market and new-to-firm innovations	74.1	18	-42.5	-16.7
Employment in innovative enterprises	118.8	6	+16.9	+1.1
Trade impacts	70.6	21	+10.4	+2.5
Exports of medium and high-tech products	47.8	23	-0.6	-0.3
Knowledge-intensive services exports	40	26	+27.6	+0.1
High-tech imports from outside the EU	131.1	2	+4.7	+8.3
Resource and labour productivity	69.5	20	+17.7	+1.0
Resource productivity	52.7	23	+16.1	+4.1
Production-based CO2 productivity	113.8	10	+31.7	-4.2
Labour productivity	36	20	+6.4	+1.8

Relative strengths

- Population with tertiary education
- Job-to-job mobility of HRST
- Trademark applications

Relative weaknesses

- R&D expenditure in the business sector
- Direct and indirect government support of business R&D
- Labour productivity

Highest ranked indicators among EU Member States

- Job-to-job mobility of HRST
- Non-R&D innovation expenditures
- High-tech imports from outside the EU

Lowest ranked indicators among EU Member States

- Knowledge-intensive services exports
- PCT patent applications
- R&D expenditure in the business sector

Strong increases since 2019

- Cloud Computing
- Job-to-job mobility of HRST
- Venture capital expenditures

Strong decreases since 2019

- Sales of new-to-market and new-to-firm innovations
- Non-R&D innovation expenditures
- SMEs introducing product innovations

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



LUXEMBOURG

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **115.8**

Change vs 2019: ▲ +0.5 Change vs 2025: ▼ -1.5

It ranks 7th among EU Member States, and 9th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	115.8	7	+0.5	-1.5
Human resources	157	2	+28.6	-4.8
New doctorate graduates	144.4	1	+66.7	-11.1
Population with tertiary education	198.9	1	+2.6	0
Population involved in lifelong learning	128	9	-4.8	0
Attractive research systems	213.3	1	+21.4	-4.9
International scientific co-publications	268.5	2	+90.3	+4.5
Scientific publications among the top 10% most cited	141.4	3	+1.5	-10.9
Foreign doctorate students as a % of all doctorate students	271.3	1	0	0
Digitalisation	106.8	12	-2.4	+1.4
High-speed internet access	120.7	5	+15.4	+1.7
Individuals with above basic overall digital skills	87.9	16	-16.4	+1.2
Finance and support	52.8	20	-39.9	-18.7
R&D expenditure in the public sector	70	19	-1.7	-3.4
Venture capital expenditures	72	11	-186.3	-83.8
Direct and indirect government support of business R&D	20.9	21	-4.4	-1.0
Firm investments	43.2	23	-10.5	-1.8
R&D expenditure in the business sector	28.3	22	-17.4	-2.9
Non-R&D innovation expenditures	46.9	23	-8.2	-10.4
Innovation expenditures per person employed	54.9	17	-5.4	+7.0
Investments in information technologies	126.6	6	+55.2	+17.1
Cloud Computing	90.4	18	+97.6	+44.9
Employed ICT specialists	169.2	1	+29.4	0
Innovators	88.3	17	-12.1	-4.7
SMEs introducing product innovations	92.5	18	-22.8	-10.0
SMEs introducing business process innovations	85	17	-3.9	-0.6
Linkages	195.5	3	+40.8	-3.4
Innovative SMEs collaborating with others	95.4	13	+2.0	-20.1
Public-private co-publications	471.5	2	+169.5	+57.4
Job-to-job mobility of HRST	154.2	5	+14.7	-17.6
Intellectual assets	117.1	9	-43.8	-4.0
PCT patent applications	79.8	9	-20.0	-2.4
Trademark applications	164.9	4	-58.4	-7.8
Design applications	121.3	7	-58.7	-3.3
Sales and employment impacts	53	22	-35.3	+1.8
Sales of new-to-market and new-to-firm innovations	25.9	27	-8.5	+0.2
Employment in innovative enterprises	76.6	17	-61.3	+3.3
Trade impacts	95.8	5	+8.3	+2.8
Exports of medium and high-tech products	65.8	18	+4.0	+5.0
Knowledge-intensive services exports	113.8	2	-8.8	+0.3
High-tech imports from outside the EU	110.5	11	+30.8	+2.9
Resource and labour productivity	166.1	2	+41.2	+8.3
Resource productivity	153.7	1	+52.7	+20.8
Production-based CO2 productivity	130.6	7	+80.7	+0.2
Labour productivity	234.7	2	-9.0	+1.0

Relative strengths

- Public-private co-publications
- Foreign doctorate students as a % of all doctorate students
- International scientific co-publications

Relative weaknesses

- Direct and indirect government support of business R&D
- Sales of new-to-market and new-to-firm innovations
- R&D expenditure in the business sector

Highest ranked indicators among EU Member States

- New doctorate graduates
- Population with tertiary education
- Foreign doctorate students as a % of all doctorate students

Lowest ranked indicators among EU Member States

- Sales of new-to-market and new-to-firm innovations
- Non-R&D innovation expenditures
- R&D expenditure in the business sector

Strong increases since 2019

- Public-private co-publications
- Cloud Computing
- International scientific co-publications

Strong decreases since 2019

- Venture capital expenditures
- Employment in innovative enterprises
- Design applications

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LATVIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **61.0**

Change vs 2019: ▲ +6.2 Change vs 2025: ▲ +2.8

It ranks 25th among EU Member States, and 29th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	61	25	+6.2	+2.8
Human resources	73.3	20	+10.3	+5.2
New doctorate graduates	44.4	23	+11.1	+11.1
Population with tertiary education	99.5	13	-5.3	-2.0
Population involved in lifelong learning	82.6	17	+26.9	+3.8
Attractive research systems	43.3	24	+11.6	-1.8
International scientific co-publications	65.2	23	+42.3	+2.7
Scientific publications among the top 10% most cited	38.5	24	+11.8	-3.1
Foreign doctorate students as a % of all doctorate students	29.3	24	-16.9	-3.0
Digitalisation	69.1	26	+5.7	+9.0
High-speed internet access	76.6	25	+33.4	+0.3
Individuals with above basic overall digital skills	58.8	23	-16.3	+16.0
Finance and support	43.4	21	-18.9	+9.1
R&D expenditure in the public sector	78.3	17	+34.5	+12.1
Venture capital expenditures	41.8	16	-172.8	+17.3
Direct and indirect government support of business R&D	4.4	25	+2.0	+1.1
Firm investments	26.6	26	-10.5	-0.2
R&D expenditure in the business sector	20	25	+13.8	+2.2
Non-R&D innovation expenditures	58.6	21	-46.3	-8.2
Innovation expenditures per person employed	13.1	26	-4.4	+4.3
Investments in information technologies	85.2	23	+60.0	+6.0
Cloud Computing	83.5	20	+124.5	+35.1
Employed ICT specialists	87.2	21	+20.6	-11.8
Innovators	43.8	24	-7.6	-3.9
SMEs introducing product innovations	38.2	25	-19.2	-5.2
SMEs introducing business process innovations	48.1	24	+1.7	-2.8
Linkages	81.4	23	+23.5	+14.3
Innovative SMEs collaborating with others	61	23	+13.5	+8.2
Public-private co-publications	101.8	22	+48.6	-11.0
Job-to-job mobility of HRST	87.5	19	+20.6	+32.4
Intellectual assets	75.9	19	+12.3	-3.2
PCT patent applications	48.7	22	-2.8	-11.6
Trademark applications	133.4	6	+39.6	+10.7
Design applications	57	20	+9.6	-3.8
Sales and employment impacts	39.7	25	-9.4	-2.8
Sales of new-to-market and new-to-firm innovations	43.6	23	-17.4	-3.9
Employment in innovative enterprises	36.3	24	-1.8	-1.8
Trade impacts	71.5	19	+1.2	+0.9
Exports of medium and high-tech products	40.2	25	-3.5	0
Knowledge-intensive services exports	71.2	12	+12.7	-0.8
High-tech imports from outside the EU	108.3	13	-5.8	+3.7
Resource and labour productivity	72.7	18	+24.0	+10.4
Resource productivity	64	20	+23.1	+25.8
Production-based CO2 productivity	112.9	11	+42.8	+0.4
Labour productivity	31.5	22	+7.2	+1.3

Relative strengths

- Trademark applications
- Production-based CO2 productivity
- High-tech imports from outside the EU

Relative weaknesses

- Direct and indirect government support of business R&D
- Innovation expenditures per person employed
- R&D expenditure in the business sector

Highest ranked indicators among EU Member States

- Trademark applications
- Production-based CO2 productivity
- Knowledge-intensive services exports

Lowest ranked indicators among EU Member States

- Innovation expenditures per person employed
- High-speed internet access
- Direct and indirect government support of business R&D

Strong increases since 2019

- Cloud Computing
- Public-private co-publications
- Production-based CO2 productivity

Strong decreases since 2019

- Venture capital expenditures
- Non-R&D innovation expenditures
- SMEs introducing product innovations

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



MOLDOVA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **18.6**

Change vs 2019: ▼ -2.2 Change vs 2025: ▼ -1.1

It ranks 40th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	18.6	40	-2.2	-1.1
Human resources	27.6	37	+14.4	+12.4
New doctorate graduates	15.4	36	-2.8	+3.9
Population with tertiary education	48.9	36	+35.8	+19.9
Population involved in lifelong learning	20.5	34	+18.9	+18.7
Attractive research systems	30.2	37	+6.4	-6.2
International scientific co-publications	7.4	39	+9.8	+1.2
Scientific publications among the top 10% most cited	0.3	40	-18.5	-7.2
Foreign doctorate students as a % of all doctorate students	98.3	22	+57.0	-10.8
Digitalisation	N/A	N/A		
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	N/A	N/A		
Finance and support	4.4	37	-2.5	0
R&D expenditure in the public sector	9.8	34	-5.2	0
Venture capital expenditures	0	37	0	0
Direct and indirect government support of business R&D	0.9	35	-0.7	0
Firm investments	14.2	36	-6.2	-2.7
R&D expenditure in the business sector	0.1	38	-0.6	0
Non-R&D innovation expenditures	58.9	26	-19.6	-9.0
Innovation expenditures per person employed	0.3	35	-0.6	-0.3
Investments in information technologies	20	38	+14.9	+1.7
Cloud Computing	0	37	0	0
Employed ICT specialists	43.6	32	+24.2	+2.7
Innovators	0	38	-8.8	-21.1
SMEs introducing product innovations	0	38	-12.4	-22.7
SMEs introducing business process innovations	0	36	-5.8	-19.7
Linkages	25.4	36	-5.1	+5.1
Innovative SMEs collaborating with others	44.8	33	-13.3	+5.5
Public-private co-publications	10.3	39	+10.3	+6.1
Job-to-job mobility of HRST	N/A	N/A		
Intellectual assets	18.3	38	-6.6	+1.3
PCT patent applications	28.1	36	-18.3	+1.6
Trademark applications	20.6	35	+10.1	+2.6
Design applications	3.1	35	-5.5	0
Sales and employment impacts	2.7	40	-36.2	-0.7
Sales of new-to-market and new-to-firm innovations	5.7	38	-14.0	-1.7
Employment in innovative enterprises	0	38	-58.0	0
Trade impacts	37.4	35	+6.8	-0.3
Exports of medium and high-tech products	21.1	35	-1.9	-3.4
Knowledge-intensive services exports	51.3	27	+15.7	+3.3
High-tech imports from outside the EU	N/A	N/A		
Resource and labour productivity	29.6	39	-2.5	-9.6
Resource productivity	N/A	N/A		
Production-based CO2 productivity	28.9	38	-2.7	-10.7
Labour productivity	N/A	N/A		

Relative strengths

- Foreign doctorate students as a % of all doctorate students
- Non-R&D innovation expenditures
- Knowledge-intensive services exports

Relative weaknesses

- Venture capital expenditures
- Cloud Computing
- SMEs introducing product innovations

Highest ranked indicators among EU Member States

- Foreign doctorate students as a % of all doctorate students
- Non-R&D innovation expenditures
- Knowledge-intensive services exports

Lowest ranked indicators among EU Member States

- Scientific publications among the top 10% most cited
- International scientific co-publications
- Public-private co-publications

Strong increases since 2019

- Foreign doctorate students as a % of all doctorate students
- Population with tertiary education
- Employed ICT specialists

Strong decreases since 2019

- Employment in innovative enterprises
- Non-R&D innovation expenditures
- Scientific publications among the top 10% most cited

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



MONTENEGRO

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **44.7**

Change vs 2019: ▲ +3.2 Change vs 2025: ▲ +2.8

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	44.7	33	+3.2	+2.8
Human resources	33.6	36	+15.7	+4.8
New doctorate graduates	11.1	38	+11.1	+11.1
Population with tertiary education	76.1	28	+41.1	0
Population involved in lifelong learning	16.7	35	-4.8	0
Attractive research systems	48.6	29	+9.8	+1.3
International scientific co-publications	73.8	25	+59.7	+16.2
Scientific publications among the top 10% most cited	32.4	35	+14.5	-4.3
Foreign doctorate students as a % of all doctorate students	49.6	27	-45.9	0
Digitalisation	20.7	34	+7.9	+0.7
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	24.5	32	+7.0	+0.8
Finance and support	9	35	-2.2	+6.0
R&D expenditure in the public sector	21.7	32	-5.2	+13.8
Venture capital expenditures	0	37	0	-0.6
Direct and indirect government support of business R&D	0	36	0	0
Firm investments	20.4	34	-0.7	-3.3
R&D expenditure in the business sector	0	39	-2.2	-9.4
Non-R&D innovation expenditures	42	31	0	0
Innovation expenditures per person employed	26.2	27	0	0
Investments in information technologies	50.6	31	+35.4	+2.7
Cloud Computing	63.1	29	+64.7	+7.2
Employed ICT specialists	35.9	34	+17.6	0
Innovators	165.3	3	0	0
SMEs introducing product innovations	217.6	1	0	0
SMEs introducing business process innovations	125.3	6	0	0
Linkages	71.8	31	-12.9	+3.1
Innovative SMEs collaborating with others	141.5	11	0	0
Public-private co-publications	55	31	+24.0	+26.9
Job-to-job mobility of HRST	29.2	31	-44.1	-5.9
Intellectual assets	29	32	+2.1	+12.0
PCT patent applications	58.3	22	+9.3	+28.0
Trademark applications	18.2	37	-5.9	+5.0
Design applications	0	40	0	0
Sales and employment impacts	98.7	17	0	0
Sales of new-to-market and new-to-firm innovations	54.5	27	0	0
Employment in innovative enterprises	137	4	0	0
Trade impacts	12.5	40	-4.4	-0.1
Exports of medium and high-tech products	23.5	34	+13.6	-2.7
Knowledge-intensive services exports	12.1	38	+6.8	+2.3
High-tech imports from outside the EU	0	34	-36.1	0
Resource and labour productivity	49.7	32	+0.3	+2.8
Resource productivity	N/A	N/A		
Production-based CO2 productivity	48.5	34	+0.2	+3.2
Labour productivity	N/A	N/A		

It ranks 33rd among the EU and neighbouring countries.

Relative strengths

- SMEs introducing product innovations
- Innovative SMEs collaborating with others
- Employment in innovative enterprises

Relative weaknesses

- Venture capital expenditures
- Direct and indirect government support of business R&D
- R&D expenditure in the business sector

Highest ranked indicators among EU Member States

- SMEs introducing product innovations
- Employment in innovative enterprises
- SMEs introducing business process innovations

Lowest ranked indicators among EU Member States

- Design applications
- R&D expenditure in the business sector
- New doctorate graduates

Strong increases since 2019

- Cloud Computing
- International scientific co-publications
- Population with tertiary education

Strong decreases since 2019

- Foreign doctorate students as a % of all doctorate students
- Job-to-job mobility of HRST
- High-tech imports from outside the EU

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



NORTH MACEDONIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **38.5**

Change vs 2019: ▲ +7.5 Change vs 2025: ▼ -0.7

It ranks 36th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	38.5	36	+7.5	-0.7
Human resources	25.5	39	+4.1	-4.6
New doctorate graduates	11.1	38	0	-11.1
Population with tertiary education	51.6	35	+10.6	+2.6
Population involved in lifelong learning	15.9	36	+3.8	-1.9
Attractive research systems	71.4	25	+9.3	-6.4
International scientific co-publications	28.8	33	+24.4	+7.5
Scientific publications among the top 10% most cited	42.1	30	+19.1	-4.4
Foreign doctorate students as a % of all doctorate students	156.8	13	-26.5	-24.4
Digitalisation	6.7	38	-10.0	-10.0
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	7.8	37	-9.0	-9.0
Finance and support	10	34	-1.8	-2.5
R&D expenditure in the public sector	23.3	30	0	0
Venture capital expenditures	2.1	35	-8.8	-0.3
Direct and indirect government support of business R&D	0	36	0	-6.1
Firm investments	40.1	30	+0.2	0
R&D expenditure in the business sector	4.1	35	+0.7	0
Non-R&D innovation expenditures	138.6	5	0	0
Innovation expenditures per person employed	14.2	31	0	0
Investments in information technologies	38.5	36	+8.0	-1.7
Cloud Computing	25.4	35	-3.5	0
Employed ICT specialists	53.8	31	+14.7	-2.9
Innovators	N/A	N/A		
SMEs introducing product innovations	N/A	N/A		
SMEs introducing business process innovations	N/A	N/A		
Linkages	53.7	33	+56.1	-22.4
Innovative SMEs collaborating with others	N/A	N/A		
Public-private co-publications	32.9	34	+21.2	+7.3
Job-to-job mobility of HRST	62.5	26	+82.4	-41.2
Intellectual assets	22.5	36	+4.6	+0.5
PCT patent applications	29.2	35	+9.6	+1.2
Trademark applications	34.5	33	+5.4	0
Design applications	1.7	36	-1.2	0
Sales and employment impacts	36.2	35	0	0
Sales of new-to-market and new-to-firm innovations	23.8	37	0	0
Employment in innovative enterprises	46.9	32	0	0
Trade impacts	57.5	32	+11.2	+9.5
Exports of medium and high-tech products	92.6	7	-1.8	-0.2
Knowledge-intensive services exports	47.1	31	+25.2	+1.7
High-tech imports from outside the EU	28.2	32	+11.2	+28.4
Resource and labour productivity	46.3	34	+18.2	+6.1
Resource productivity	44.2	30	+25.0	+2.9
Production-based CO2 productivity	37.6	35	+8.8	+10.1
Labour productivity	N/A	N/A		

Relative strengths

- Foreign doctorate students as a % of all doctorate students
- Non-R&D innovation expenditures
- Exports of medium and high-tech products

Relative weaknesses

- Direct and indirect government support of business R&D
- Design applications
- Venture capital expenditures

Highest ranked indicators among EU Member States

- Non-R&D innovation expenditures
- Exports of medium and high-tech products
- Foreign doctorate students as a % of all doctorate students

Lowest ranked indicators among EU Member States

- New doctorate graduates
- Individuals with above basic overall digital skills
- Sales of new-to-market and new-to-firm innovations

Strong increases since 2019

- Job-to-job mobility of HRST
- Knowledge-intensive services exports
- Resource productivity

Strong decreases since 2019

- Foreign doctorate students as a % of all doctorate students
- Individuals with above basic overall digital skills
- Venture capital expenditures

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MALTA

Strong Innovator ●Summary innovation index (indexed to EU in 2026): **101.1**

Change vs 2019: ▲ +13.1 Change vs 2025: ▲ +15.7

It ranks 12th among EU Member States, and 16th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	101.1	12	+13.1	+15.7
Human resources	88.7	17	+24.5	+3.9
New doctorate graduates	22.2	27	0	0
Population with tertiary education	115.8	11	+31.8	+4.0
Population involved in lifelong learning	145.5	7	+56.7	+10.6
Attractive research systems	143	9	+22.2	+8.2
International scientific co-publications	114	13	+48.2	+5.0
Scientific publications among the top 10% most cited	77.7	17	+21.4	+13.5
Foreign doctorate students as a % of all doctorate students	271.3	1	0	0
Digitalisation	126.6	5	+6.2	+3.3
High-speed internet access	128.5	1	0	0
Individuals with above basic overall digital skills	124.1	7	+11.4	+6.1
Finance and support	4	27	-71.3	-4.5
R&D expenditure in the public sector	6.7	26	-3.4	-8.6
Venture capital expenditures	4.1	27	-316.9	-2.7
Direct and indirect government support of business R&D	1.2	27	-16.3	-0.3
Firm investments	130.1	4	+75.3	+87.1
R&D expenditure in the business sector	23.4	24	+2.9	+0.7
Non-R&D innovation expenditures	254.9	1	+96.1	+132.4
Innovation expenditures per person employed	154	1	+130.4	+134.9
Investments in information technologies	120.7	8	+61.7	+4.3
Cloud Computing	142.5	3	+162.4	+35.1
Employed ICT specialists	94.9	16	0	-14.7
Innovators	104.7	13	+0.6	+37.5
SMEs introducing product innovations	112.5	11	-10.5	+47.7
SMEs introducing business process innovations	99	13	+9.5	+29.7
Linkages	115	15	+42.2	-7.1
Innovative SMEs collaborating with others	86.9	18	+23.5	+33.4
Public-private co-publications	160.6	16	+82.1	-19.4
Job-to-job mobility of HRST	116.7	9	+41.2	-41.2
Intellectual assets	132.4	1	-26.6	+19.7
PCT patent applications	61.6	17	-16.3	-1.9
Trademark applications	227.2	1	0	0
Design applications	136.3	4	-55.8	+55.7
Sales and employment impacts	55.6	21	+2.2	-3.5
Sales of new-to-market and new-to-firm innovations	46.3	22	-16.4	-2.7
Employment in innovative enterprises	63.4	19	+20.1	-4.3
Trade impacts	73.6	17	+4.1	+1.5
Exports of medium and high-tech products	87.3	9	+9.3	-2.1
Knowledge-intensive services exports	50.4	22	+2.3	-0.1
High-tech imports from outside the EU	83.3	18	0	+7.0
Resource and labour productivity	133.7	6	+49.5	+13.9
Resource productivity	147	4	+110.6	+30.1
Production-based CO2 productivity	163.2	4	+9.4	+6.9
Labour productivity	71.3	13	+14.4	+0.8

Relative strengths

- Foreign doctorate students as a % of all doctorate students
- Non-R&D innovation expenditures
- Trademark applications

Relative weaknesses

- Direct and indirect government support of business R&D
- Venture capital expenditures
- R&D expenditure in the public sector

Highest ranked indicators among EU Member States

- Foreign doctorate students as a % of all doctorate students
- High-speed internet access
- Non-R&D innovation expenditures

Lowest ranked indicators among EU Member States

- New doctorate graduates
- Venture capital expenditures
- Direct and indirect government support of business R&D

Strong increases since 2019

- Cloud Computing
- Innovation expenditures per person employed
- Resource productivity

Strong decreases since 2019

- Venture capital expenditures
- Design applications
- Sales of new-to-market and new-to-firm innovations

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NETHERLANDS

Innovation Leader ●

Summary innovation index (indexed to EU in 2026): **127.4**

Change vs 2019: ▲ **+7.1** Change vs 2025: ▼ **-1.7**

It ranks 3rd among EU Member States, and 5th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	127.4	3	+7.1	-1.7
Human resources	138.4	5	-0.9	+0.4
New doctorate graduates	77.8	16	0	0
Population with tertiary education	161.4	5	+3.3	+6.6
Population involved in lifelong learning	192.4	4	-6.7	-5.8
Attractive research systems	184.7	3	+8.0	-4.4
International scientific co-publications	191.6	6	+43.7	+8.1
Scientific publications among the top 10% most cited	156.1	1	-18.3	-12.0
Foreign doctorate students as a % of all doctorate students	221.9	3	+31.1	0
Digitalisation	146.4	1	+14.8	+0.2
High-speed internet access	125.9	2	+33.4	+0.3
Individuals with above basic overall digital skills	174.2	1	0	0
Finance and support	119.5	7	+8.7	-11.8
R&D expenditure in the public sector	91.7	10	-1.7	-6.9
Venture capital expenditures	161.1	6	+34.4	-21.7
Direct and indirect government support of business R&D	125.3	6	+7.4	-12.0
Firm investments	108.9	8	+4.5	+0.7
R&D expenditure in the business sector	108.3	7	+8.7	+1.4
Non-R&D innovation expenditures	N/A	N/A		
Innovation expenditures per person employed	83.1	11	0	0
Investments in information technologies	142.1	3	+41.4	-0.5
Cloud Computing	130	7	+85.3	-10.7
Employed ICT specialists	156.4	4	+14.7	+5.9
Innovators	104.3	14	+8.4	0
SMEs introducing product innovations	110	13	+4.7	0
SMEs introducing business process innovations	100.3	12	+11.6	0
Linkages	176.6	7	+8.2	-14.3
Innovative SMEs collaborating with others	149	6	+39.0	0
Public-private co-publications	316.6	7	+28.4	-5.9
Job-to-job mobility of HRST	139.6	7	-32.4	-32.4
Intellectual assets	119.1	8	-12.2	+0.8
PCT patent applications	128.8	5	-16.8	-1.0
Trademark applications	106	14	-10.3	-2.6
Design applications	119	8	-8.4	+5.3
Sales and employment impacts	93.8	16	-12.4	-0.6
Sales of new-to-market and new-to-firm innovations	67.5	20	-13.9	-2.1
Employment in innovative enterprises	116.8	10	-10.8	+1.1
Trade impacts	84.9	10	+8.1	+2.1
Exports of medium and high-tech products	77.4	15	+3.6	+2.2
Knowledge-intensive services exports	98.6	7	-3.0	-0.9
High-tech imports from outside the EU	78.5	20	+25.2	+5.2
Resource and labour productivity	138.8	4	+31.1	+1.0
Resource productivity	153.7	1	+14.6	0
Production-based CO2 productivity	109	13	+79.3	+4.0
Labour productivity	154.9	5	+5.7	-0.7

Relative strengths

- Public-private co-publications
- Foreign doctorate students as a % of all doctorate students
- Population involved in lifelong learning

Relative weaknesses

- Sales of new-to-market and new-to-firm innovations
- Exports of medium and high-tech products
- New doctorate graduates

Highest ranked indicators among EU Member States

- Scientific publications among the top 10% most cited
- Individuals with above basic overall digital skills
- Resource productivity

Lowest ranked indicators among EU Member States

- Sales of new-to-market and new-to-firm innovations
- High-tech imports from outside the EU
- New doctorate graduates

Strong increases since 2019

- Cloud Computing
- Production-based CO2 productivity
- International scientific co-publications

Strong decreases since 2019

- Job-to-job mobility of HRST
- Scientific publications among the top 10% most cited
- PCT patent applications

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NORWAY

Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **115.7**

Change vs 2019: ▲ **+7.4** Change vs 2025: ▼ **-1.5**

It ranks 10th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	115.7	10	+7.4	-1.5
Human resources	134.2	9	+9.6	-0.9
New doctorate graduates	88.9	15	0	0
Population with tertiary education	165.2	7	+14.6	+3.3
Population involved in lifelong learning	159.1	9	+19.2	-7.7
Attractive research systems	162.6	9	+25.8	+2.3
International scientific co-publications	258.2	6	+82.9	+9.2
Scientific publications among the top 10% most cited	130.9	9	-1.8	-5.6
Foreign doctorate students as a % of all doctorate students	119.5	19	+31.8	+12.5
Digitalisation	142.6	3	+57.4	+4.5
High-speed internet access	121	5	+81.9	+7.8
Individuals with above basic overall digital skills	172	5	+38.2	+2.0
Finance and support	99.6	13	-13.1	-15.6
R&D expenditure in the public sector	106.7	10	-34.5	-1.7
Venture capital expenditures	111	12	+43.6	-22.8
Direct and indirect government support of business R&D	84.3	13	-18.6	-28.5
Firm investments	90.5	13	+7.8	+8.4
R&D expenditure in the business sector	64.8	18	-5.8	-2.2
Non-R&D innovation expenditures	113.7	9	+2.4	+4.4
Innovation expenditures per person employed	100.3	11	+26.1	+22.2
Investments in information technologies	124.8	7	+34.7	-0.2
Cloud Computing	126.3	8	+66.9	-20.2
Employed ICT specialists	123.1	7	+14.7	+11.8
Innovators	132.3	8	-22.1	0
SMEs introducing product innovations	163.2	7	-28.7	0
SMEs introducing business process innovations	108.7	10	-17.1	0
Linkages	236.7	2	+21.4	-7.8
Innovative SMEs collaborating with others	228.3	3	+0.5	0
Public-private co-publications	464.6	5	+82.3	-9.1
Job-to-job mobility of HRST	150	8	+11.8	-14.7
Intellectual assets	49.1	30	-15.4	+1.4
PCT patent applications	81	12	-32.0	+1.0
Trademark applications	41.8	31	-10.0	+1.1
Design applications	13.3	31	-1.3	+2.2
Sales and employment impacts	92.7	21	-13.3	-6.1
Sales of new-to-market and new-to-firm innovations	47.8	29	-7.2	+2.7
Employment in innovative enterprises	131.9	6	-19.0	-14.6
Trade impacts	60.6	30	-4.1	-1.6
Exports of medium and high-tech products	2.6	38	-1.1	+2.7
Knowledge-intensive services exports	96.5	9	-3.5	-8.4
High-tech imports from outside the EU	88	20	-8.1	+0.5
Resource and labour productivity	139	6	+46.7	-4.8
Resource productivity	113.8	12	+86.1	-14.4
Production-based CO2 productivity	111.7	15	+40.0	+0.8
Labour productivity	216.8	4	+6.5	+1.0

Relative strengths

- Public-private co-publications
- International scientific co-publications
- Innovative SMEs collaborating with others

Relative weaknesses

- Exports of medium and high-tech products
- Design applications
- Trademark applications

Highest ranked indicators among EU Member States

- Innovative SMEs collaborating with others
- Labour productivity
- High-speed internet access

Lowest ranked indicators among EU Member States

- Exports of medium and high-tech products
- Trademark applications
- Design applications

Strong increases since 2019

- Resource productivity
- International scientific co-publications
- Public-private co-publications

Strong decreases since 2019

- R&D expenditure in the public sector
- PCT patent applications
- SMEs introducing product innovations

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POLAND

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **65.2**

Change vs 2019: ▲ +16.3 Change vs 2025: ▼ -1.5

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	65.2	23	+16.3	-1.5
Human resources	68.3	24	+24.5	+0.7
New doctorate graduates	44.4	23	+22.2	+11.1
Population with tertiary education	102.2	12	+22.5	-3.3
Population involved in lifelong learning	62.9	24	+30.8	-11.5
Attractive research systems	40.2	26	+15.7	0
International scientific co-publications	47.1	25	+30.6	+3.1
Scientific publications among the top 10% most cited	53.8	23	+13.0	+0.8
Foreign doctorate students as a % of all doctorate students	12.3	26	+7.0	-5.5
Digitalisation	89.1	17	+42.6	+12.9
High-speed internet access	102.1	15	+80.2	+9.2
Individuals with above basic overall digital skills	71.3	21	+13.0	+15.6
Finance and support	60.6	17	+28.3	-3.3
R&D expenditure in the public sector	65	20	+25.9	-6.9
Venture capital expenditures	27.1	19	-18.1	+5.3
Direct and indirect government support of business R&D	76.4	11	+57.4	-4.1
Firm investments	57.7	20	-10.7	-5.8
R&D expenditure in the business sector	58.6	15	+16.7	-8.0
Non-R&D innovation expenditures	84.6	11	-48.5	-12.1
Innovation expenditures per person employed	40.4	22	-5.9	+1.4
Investments in information technologies	96.1	16	+83.6	-1.4
Cloud Computing	103.7	12	+182.2	-4.0
Employed ICT specialists	87.2	21	+23.5	0
Innovators	40.8	25	+12.3	0
SMEs introducing product innovations	26.6	26	-9.5	0
SMEs introducing business process innovations	51.5	21	+29.2	0
Linkages	76.6	24	+25.5	-10.2
Innovative SMEs collaborating with others	50.1	25	+22.2	0
Public-private co-publications	66.1	25	+29.9	+2.7
Job-to-job mobility of HRST	100	16	+26.5	-26.5
Intellectual assets	85.9	15	-12.2	-4.0
PCT patent applications	44.2	23	-2.9	+1.3
Trademark applications	103.6	16	+13.7	+1.2
Design applications	124.9	5	-39.7	-13.2
Sales and employment impacts	40.4	24	+12.2	-13.1
Sales of new-to-market and new-to-firm innovations	28.7	24	-17.6	-27.5
Employment in innovative enterprises	50.7	22	+41.4	+1.0
Trade impacts	70.6	21	+7.2	+1.5
Exports of medium and high-tech products	71.8	16	+0.4	-1.1
Knowledge-intensive services exports	60.4	17	+19.3	+3.8
High-tech imports from outside the EU	80.4	19	+1.8	+1.8
Resource and labour productivity	47.8	26	+28.0	+6.6
Resource productivity	56.8	22	+33.6	+9.9
Production-based CO2 productivity	50.2	26	+41.7	+6.9
Labour productivity	29.9	25	+9.3	+2.1

It ranks 23rd among EU Member States, and 27th among the EU and neighbouring countries.

Relative strengths

- Design applications
- Cloud Computing
- Trademark applications

Relative weaknesses

- Foreign doctorate students as a % of all doctorate students
- SMEs introducing product innovations
- Venture capital expenditures

Highest ranked indicators among EU Member States

- Design applications
- Direct and indirect government support of business R&D
- Non-R&D innovation expenditures

Lowest ranked indicators among EU Member States

- Foreign doctorate students as a % of all doctorate students
- SMEs introducing product innovations
- Production-based CO2 productivity

Strong increases since 2019

- Cloud Computing
- High-speed internet access
- Direct and indirect government support of business R&D

Strong decreases since 2019

- Non-R&D innovation expenditures
- Design applications
- Venture capital expenditures

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PORTUGAL

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **93.2**

Change vs 2019: ▲ +13.0 Change vs 2025: ▲ +1.4

It ranks 15th among EU Member States, and 19th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	93.2	15	+13.0	+1.4
Human resources	98.8	15	+4.4	+0.7
New doctorate graduates	88.9	13	0	0
Population with tertiary education	87.5	18	-22.5	-4.6
Population involved in lifelong learning	124.2	10	+42.3	+7.7
Attractive research systems	115.3	12	+8.0	+1.3
International scientific co-publications	134.7	12	+53.0	+7.7
Scientific publications among the top 10% most cited	83.5	15	-20.8	+1.0
Foreign doctorate students as a % of all doctorate students	145.6	10	+28.1	-4.1
Digitalisation	112.3	8	+26.2	+5.7
High-speed internet access	119.7	7	+39.6	+1.4
Individuals with above basic overall digital skills	102	13	+15.3	+9.1
Finance and support	112.4	8	+37.4	+3.8
R&D expenditure in the public sector	80	16	-5.2	+1.7
Venture capital expenditures	54.6	14	-17.6	+14.7
Direct and indirect government support of business R&D	185.9	1	+121.8	0
Firm investments	57.4	21	-10.2	+1.1
R&D expenditure in the business sector	72.4	13	+30.4	+2.9
Non-R&D innovation expenditures	69.1	17	-55.3	-6.9
Innovation expenditures per person employed	36.1	23	-12.0	+6.1
Investments in information technologies	90.2	19	+36.9	+5.5
Cloud Computing	73.3	23	+59.1	+5.1
Employed ICT specialists	110.3	11	+23.5	+5.9
Innovators	98.5	16	+15.0	-6.6
SMEs introducing product innovations	114.7	10	+7.6	+10.8
SMEs introducing business process innovations	86	15	+20.8	-20.4
Linkages	109.6	16	+54.8	-13.3
Innovative SMEs collaborating with others	87.6	17	+33.6	+20.1
Public-private co-publications	161.2	15	+76.3	+17.6
Job-to-job mobility of HRST	104.2	13	+64.7	-61.8
Intellectual assets	75	20	-18.9	-4.5
PCT patent applications	55.8	18	-5.4	-4.0
Trademark applications	108.7	13	-5.7	+2.9
Design applications	68.3	15	-42.2	-9.9
Sales and employment impacts	114.8	8	+2.2	+5.0
Sales of new-to-market and new-to-firm innovations	133	4	+54.1	+15.7
Employment in innovative enterprises	98.8	14	-48.0	-5.2
Trade impacts	74.8	16	+3.3	+4.0
Exports of medium and high-tech products	62.7	20	+7.6	+5.0
Knowledge-intensive services exports	42.7	24	+6.4	+1.3
High-tech imports from outside the EU	124.6	6	-4.8	+5.5
Resource and labour productivity	90	13	+52.3	+12.9
Resource productivity	68	18	+32.7	+10.4
Production-based CO2 productivity	150.5	6	+132.5	+30.0
Labour productivity	43.5	19	+1.6	+0.7

Relative strengths

- Direct and indirect government support of business R&D
- Public-private co-publications
- Production-based CO2 productivity

Relative weaknesses

- Innovation expenditures per person employed
- Knowledge-intensive services exports
- Labour productivity

Highest ranked indicators among EU Member States

- Direct and indirect government support of business R&D
- Sales of new-to-market and new-to-firm innovations
- High-tech imports from outside the EU

Lowest ranked indicators among EU Member States

- Knowledge-intensive services exports
- Innovation expenditures per person employed
- Cloud Computing

Strong increases since 2019

- Production-based CO2 productivity
- Direct and indirect government support of business R&D
- Public-private co-publications

Strong decreases since 2019

- Non-R&D innovation expenditures
- Employment in innovative enterprises
- Design applications

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



ROMANIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **41.8**

Change vs 2019: ▲ +8.2 Change vs 2025: ▲ +1.4

It ranks 27th among EU Member States, and 34th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	41.8	27	+8.2	+1.4
Human resources	34.4	27	+13.3	+3.3
New doctorate graduates	33.3	25	0	0
Population with tertiary education	0	27	0	0
Population involved in lifelong learning	73.5	22	+51.0	+12.5
Attractive research systems	42.6	25	+24.5	+2.6
International scientific co-publications	26.8	27	+18.7	+3.9
Scientific publications among the top 10% most cited	68.8	18	+38.3	+2.5
Foreign doctorate students as a % of all doctorate students	17.4	25	+0.5	+2.2
Digitalisation	81.2	22	+47.9	+6.9
High-speed internet access	121.8	4	+94.9	+3.1
Individuals with above basic overall digital skills	26	27	+10.7	+9.6
Finance and support	11	26	-14.5	-2.5
R&D expenditure in the public sector	6.7	26	-8.6	-6.9
Venture capital expenditures	16	23	-43.4	+2.6
Direct and indirect government support of business R&D	13.2	23	-5.0	+0.4
Firm investments	13.3	27	-2.0	-2.2
R&D expenditure in the business sector	17.2	26	0	-2.2
Non-R&D innovation expenditures	15.5	26	-14.2	-0.9
Innovation expenditures per person employed	8.2	27	+6.7	-3.1
Investments in information technologies	44.3	26	+25.1	+8.4
Cloud Computing	47.1	25	+61.7	+27.6
Employed ICT specialists	41	26	+2.9	-2.9
Innovators	3.8	27	-6.1	-0.8
SMEs introducing product innovations	8.8	27	-13.9	-1.5
SMEs introducing business process innovations	0	27	0	0
Linkages	11.3	27	-2.0	+2.7
Innovative SMEs collaborating with others	11.1	27	+0.4	+6.1
Public-private co-publications	39.8	27	+13.8	+1.9
Job-to-job mobility of HRST	0	26	-11.8	0
Intellectual assets	46.3	27	+4.0	+1.8
PCT patent applications	25.6	27	-6.3	-0.9
Trademark applications	80.3	23	+25.2	+4.9
Design applications	41.5	23	+0.1	+2.3
Sales and employment impacts	12.2	27	-3.7	-5.7
Sales of new-to-market and new-to-firm innovations	26.1	26	-7.6	-11.6
Employment in innovative enterprises	0	27	0	0
Trade impacts	92.4	6	+5.9	+1.3
Exports of medium and high-tech products	87.7	7	-0.1	-1.8
Knowledge-intensive services exports	64	14	+18.2	+2.4
High-tech imports from outside the EU	129.4	3	-0.6	+3.7
Resource and labour productivity	59.1	23	+28.0	+5.1
Resource productivity	29.5	26	+19.2	+8.9
Production-based CO2 productivity	122.1	8	+64.2	+5.4
Labour productivity	21.3	26	+4.7	+0.3

Relative strengths

- High-tech imports from outside the EU
- Production-based CO2 productivity
- High-speed internet access

Relative weaknesses

- Population with tertiary education
- SMEs introducing business process innovations
- Job-to-job mobility of HRST

Highest ranked indicators among EU Member States

- High-tech imports from outside the EU
- High-speed internet access
- Exports of medium and high-tech products

Lowest ranked indicators among EU Member States

- Population with tertiary education
- International scientific co-publications
- Individuals with above basic overall digital skills

Strong increases since 2019

- High-speed internet access
- Production-based CO2 productivity
- Cloud Computing

Strong decreases since 2019

- Venture capital expenditures
- Non-R&D innovation expenditures
- SMEs introducing product innovations

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



SERBIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **60.4**

Change vs 2019: ▲ +8.0 Change vs 2025: ▲ +1.7

It ranks 30th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	60.4	30	+8.0	+1.7
Human resources	50.5	33	+6.3	+3.9
New doctorate graduates	55.6	23	0	+11.1
Population with tertiary education	58.2	32	+17.9	-0.7
Population involved in lifelong learning	35.6	32	+3.8	-2.9
Attractive research systems	46	31	+12.6	+3.4
International scientific co-publications	56.5	30	+32.1	+5.3
Scientific publications among the top 10% most cited	52.5	29	+12.2	+3.6
Foreign doctorate students as a % of all doctorate students	25.9	34	-4.9	+0.6
Digitalisation	62.6	31	+22.6	+7.1
High-speed internet access	84.8	26	+48.1	+7.6
Individuals with above basic overall digital skills	32.2	29	+2.3	+6.8
Finance and support	31.9	29	-1.3	-0.7
R&D expenditure in the public sector	63.3	26	-5.2	+1.7
Venture capital expenditures	8	33	+5.2	-6.6
Direct and indirect government support of business R&D	10.9	30	0	0
Firm investments	76.5	19	+3.1	+1.3
R&D expenditure in the business sector	26.9	28	+8.7	+3.6
Non-R&D innovation expenditures	254.9	1	0	0
Innovation expenditures per person employed	15	30	0	0
Investments in information technologies	79	27	+54.7	+5.3
Cloud Computing	78.6	24	+110.3	+19.0
Employed ICT specialists	79.5	28	+20.6	-2.9
Innovators	131.1	9	0	0
SMEs introducing product innovations	187.1	5	0	0
SMEs introducing business process innovations	88.4	18	0	0
Linkages	84.2	28	+25.2	-4.1
Innovative SMEs collaborating with others	105.5	17	0	0
Public-private co-publications	64.8	30	+26.1	+3.4
Job-to-job mobility of HRST	77.1	25	+50.0	-11.8
Intellectual assets	25.6	35	-0.3	-1.1
PCT patent applications	38.5	32	-2.3	-6.5
Trademark applications	30.8	34	+3.3	+5.5
Design applications	3.6	34	-0.6	+0.3
Sales and employment impacts	85.4	24	0	0
Sales of new-to-market and new-to-firm innovations	94	19	0	0
Employment in innovative enterprises	77.7	23	0	0
Trade impacts	71.8	21	+2.5	+5.2
Exports of medium and high-tech products	56.1	25	+6.2	+2.5
Knowledge-intensive services exports	78.1	16	+21.7	+2.6
High-tech imports from outside the EU	82.9	22	-21.7	+10.9
Resource and labour productivity	11.3	40	+4.8	0
Resource productivity	17.5	36	+4.6	+0.6
Production-based CO2 productivity	8.6	40	+5.0	-0.8
Labour productivity	5.2	31	+5.4	0

Relative strengths

- Non-R&D innovation expenditures
- SMEs introducing product innovations
- Innovative SMEs collaborating with others

Relative weaknesses

- Design applications
- Labour productivity
- Venture capital expenditures

Highest ranked indicators among EU Member States

- Non-R&D innovation expenditures
- SMEs introducing product innovations
- Knowledge-intensive services exports

Lowest ranked indicators among EU Member States

- Production-based CO2 productivity
- Resource productivity
- Foreign doctorate students as a % of all doctorate students

Strong increases since 2019

- Cloud Computing
- Job-to-job mobility of HRST
- High-speed internet access

Strong decreases since 2019

- High-tech imports from outside the EU
- R&D expenditure in the public sector
- Foreign doctorate students as a % of all doctorate students

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SWEDEN

Innovation Leader ●

Summary innovation index (indexed to EU in 2026): **139.0**

Change vs 2019: ▲ +7.6 Change vs 2025: ▲ +2.1

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	139	1	+7.6	+2.1
Human resources	158.3	1	-5.9	-1.5
New doctorate graduates	122.2	3	-33.3	0
Population with tertiary education	147.8	7	+28.5	-5.3
Population involved in lifelong learning	216.7	1	0	0
Attractive research systems	173.5	4	+9.5	+0.8
International scientific co-publications	237	4	+55.9	+13.6
Scientific publications among the top 10% most cited	138	5	-10.1	-6.2
Foreign doctorate students as a % of all doctorate students	167.4	7	+9.1	+3.6
Digitalisation	117.2	7	+25.0	+6.0
High-speed internet access	111.7	10	+43.0	+4.1
Individuals with above basic overall digital skills	124.3	6	+10.8	+7.1
Finance and support	140.6	3	+43.4	+3.1
R&D expenditure in the public sector	136.7	4	-3.4	+1.7
Venture capital expenditures	242.9	1	+207.9	-10.9
Direct and indirect government support of business R&D	80.5	10	+8.9	+12.5
Firm investments	150.6	1	+1.5	+10.4
R&D expenditure in the business sector	164.8	1	0	0
Non-R&D innovation expenditures	122.8	5	+2.9	+27.5
Innovation expenditures per person employed	154	1	+1.6	+6.2
Investments in information technologies	151.6	2	+0.5	+0.5
Cloud Computing	136.6	5	+1.6	+1.6
Employed ICT specialists	169.2	1	0	0
Innovators	150.8	5	+25.4	+25.4
SMEs introducing product innovations	168.4	4	+16.9	+16.9
SMEs introducing business process innovations	137.5	5	+32.3	+32.3
Linkages	189.3	5	-3.4	-16.7
Innovative SMEs collaborating with others	280.4	1	+33.3	+33.3
Public-private co-publications	392.4	4	+41.3	-8.0
Job-to-job mobility of HRST	41.7	23	-61.8	-70.6
Intellectual assets	130	4	-18.3	-3.0
PCT patent applications	162.8	1	0	0
Trademark applications	115.9	10	-17.3	-5.8
Design applications	99.7	11	-38.3	-4.1
Sales and employment impacts	112.2	9	+22.4	-9.4
Sales of new-to-market and new-to-firm innovations	111.9	8	+42.5	+9.8
Employment in innovative enterprises	112.4	12	+2.9	-28.2
Trade impacts	102.3	1	-2.0	+1.7
Exports of medium and high-tech products	85.7	10	+2.8	-0.7
Knowledge-intensive services exports	106.5	4	+3.5	+3.8
High-tech imports from outside the EU	117.1	8	-12.9	+2.3
Resource and labour productivity	126.9	7	+19.4	+6.6
Resource productivity	64.8	19	+25.6	+14.9
Production-based CO2 productivity	183.7	1	+23.3	0
Labour productivity	150.6	6	+8.9	+2.8

It ranks 1st among EU Member States, and 2nd among the EU and neighbouring countries.

Relative strengths

- Public-private co-publications
- Innovative SMEs collaborating with others
- Venture capital expenditures

Relative weaknesses

- Job-to-job mobility of HRST
- Resource productivity
- Direct and indirect government support of business R&D

Highest ranked indicators among EU Member States

- Population involved in lifelong learning
- Venture capital expenditures
- R&D expenditure in the business sector

Lowest ranked indicators among EU Member States

- Job-to-job mobility of HRST
- Resource productivity
- Employment in innovative enterprises

Strong increases since 2019

- Venture capital expenditures
- International scientific co-publications
- High-speed internet access

Strong decreases since 2019

- Job-to-job mobility of HRST
- Design applications
- New doctorate graduates

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SLOVENIA

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **87.2**

Change vs 2019: ▲ +7.4 Change vs 2025: ▼ -0.0

It ranks 17th among EU Member States, and 21st among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	87.2	17	+7.4	0
Human resources	112.5	11	-22.7	-1.5
New doctorate graduates	88.9	13	-78.4	0
Population with tertiary education	89.1	16	+13.9	-2.0
Population involved in lifelong learning	168.9	6	+27.9	-2.9
Attractive research systems	101.4	15	+33.0	-4.4
International scientific co-publications	158.9	11	+55.2	-4.1
Scientific publications among the top 10% most cited	61.9	20	-2.9	-8.1
Foreign doctorate students as a % of all doctorate students	107.5	16	+89.1	+3.7
Digitalisation	79.3	23	+24.0	+3.8
High-speed internet access	95.3	17	+53.9	+3.8
Individuals with above basic overall digital skills	57.6	24	+0.4	+4.1
Finance and support	71.1	12	+8.9	-10.9
R&D expenditure in the public sector	86.7	12	+29.3	0
Venture capital expenditures	21.1	21	+19.8	-11.0
Direct and indirect government support of business R&D	84.4	9	-22.9	-24.7
Firm investments	65.8	16	-14.0	+4.4
R&D expenditure in the business sector	100.7	8	+6.5	+2.2
Non-R&D innovation expenditures	32	25	-63.0	-0.5
Innovation expenditures per person employed	53.3	18	+7.6	+10.5
Investments in information technologies	89.3	20	+29.4	+16.1
Cloud Computing	91.1	16	+91.7	+33.0
Employed ICT specialists	87.2	21	-8.8	+5.9
Innovators	83.4	18	-25.2	-32.8
SMEs introducing product innovations	105.6	15	-41.0	-43.9
SMEs introducing business process innovations	66.5	19	-12.8	-24.2
Linkages	129.9	13	+38.1	+7.1
Innovative SMEs collaborating with others	92.3	15	-8.8	-4.0
Public-private co-publications	243.4	10	+54.2	+0.7
Job-to-job mobility of HRST	110.4	11	+76.5	+20.6
Intellectual assets	86.9	13	-10.6	-9.5
PCT patent applications	77.2	11	-10.3	-6.6
Trademark applications	120.8	9	+4.0	-3.3
Design applications	67	16	-21.2	-17.0
Sales and employment impacts	106.2	11	+36.4	-2.0
Sales of new-to-market and new-to-firm innovations	96.6	14	+28.0	-1.3
Employment in innovative enterprises	114.4	11	+44.4	-2.8
Trade impacts	73.2	18	+6.7	+19.2
Exports of medium and high-tech products	110.8	3	+23.8	-1.5
Knowledge-intensive services exports	41.6	25	+9.3	+2.9
High-tech imports from outside the EU	64.6	22	-15.1	+59.6
Resource and labour productivity	75	15	+26.5	+1.8
Resource productivity	81.7	14	+32.0	+11.7
Production-based CO2 productivity	74.5	21	+41.1	-11.5
Labour productivity	64.2	15	+6.1	+1.7

Relative strengths

- Public-private co-publications
- Population involved in lifelong learning
- International scientific co-publications

Relative weaknesses

- Venture capital expenditures
- Non-R&D innovation expenditures
- Knowledge-intensive services exports

Highest ranked indicators among EU Member States

- Exports of medium and high-tech products
- Population involved in lifelong learning
- R&D expenditure in the business sector

Lowest ranked indicators among EU Member States

- Non-R&D innovation expenditures
- Knowledge-intensive services exports
- Individuals with above basic overall digital skills

Strong increases since 2019

- Cloud Computing
- Foreign doctorate students as a % of all doctorate students
- Job-to-job mobility of HRST

Strong decreases since 2019

- New doctorate graduates
- Non-R&D innovation expenditures
- SMEs introducing product innovations

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SLOVAKIA

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **62.3**

Change vs 2019: ▲ +10.0 Change vs 2025: ▲ +1.0

It ranks 24th among EU Member States, and 28th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among EU Member States	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	62.3	24	+10.0	+1.0
Human resources	72.6	21	-13.5	+0.7
New doctorate graduates	77.8	16	-11.1	+11.1
Population with tertiary education	53.8	23	-21.2	-6.0
Population involved in lifelong learning	86.4	16	-8.7	-8.7
Attractive research systems	50	22	+18.6	-3.9
International scientific co-publications	62.1	24	+23.0	-5.3
Scientific publications among the top 10% most cited	34.3	26	+12.9	-4.6
Foreign doctorate students as a % of all doctorate students	62.9	20	+27.1	-0.7
Digitalisation	75.3	25	+42.4	+4.5
High-speed internet access	84.6	22	+93.9	+13.3
Individuals with above basic overall digital skills	62.5	22	+1.5	-2.4
Finance and support	34.3	23	+9.4	-11.1
R&D expenditure in the public sector	45	21	-1.7	-10.3
Venture capital expenditures	17.4	22	+10.8	-5.8
Direct and indirect government support of business R&D	32.5	18	+22.0	-15.7
Firm investments	53	22	+0.9	-6.2
R&D expenditure in the business sector	37.9	20	+8.0	+0.7
Non-R&D innovation expenditures	94.5	9	-17.8	-20.6
Innovation expenditures per person employed	41.8	21	+10.0	-0.7
Investments in information technologies	76.1	24	+26.3	-0.5
Cloud Computing	69	24	+64.5	+8.5
Employed ICT specialists	84.6	24	+2.9	-5.9
Innovators	52.1	22	+13.5	+5.3
SMEs introducing product innovations	55.2	22	+10.9	+4.7
SMEs introducing business process innovations	49.6	22	+15.4	+5.8
Linkages	51.7	25	+10.5	-1.7
Innovative SMEs collaborating with others	70	21	+6.5	-1.6
Public-private co-publications	75.2	24	+4.9	-10.6
Job-to-job mobility of HRST	29.2	24	+17.6	+2.9
Intellectual assets	64.8	22	+2.2	+9.8
PCT patent applications	55.4	19	-2.4	+7.3
Trademark applications	99.4	18	+21.4	+12.4
Design applications	44	22	-5.8	+10.4
Sales and employment impacts	72.9	20	-24.6	-10.7
Sales of new-to-market and new-to-firm innovations	113.3	7	-50.0	-6.8
Employment in innovative enterprises	37.5	23	+0.2	-14.6
Trade impacts	67	24	+16.5	+8.8
Exports of medium and high-tech products	112	2	+4.2	+2.1
Knowledge-intensive services exports	51.8	20	+15.2	+3.3
High-tech imports from outside the EU	31.6	25	+31.8	+22.1
Resource and labour productivity	73.3	17	+35.1	+8.8
Resource productivity	88.3	11	+49.8	+15.2
Production-based CO2 productivity	71.1	22	+43.6	+9.4
Labour productivity	51.7	16	+10.1	+0.8

Relative strengths

- Sales of new-to-market and new-to-firm innovations
- Exports of medium and high-tech products
- Trademark applications

Relative weaknesses

- Venture capital expenditures
- Job-to-job mobility of HRST
- High-tech imports from outside the EU

Highest ranked indicators among EU Member States

- Exports of medium and high-tech products
- Sales of new-to-market and new-to-firm innovations
- Non-R&D innovation expenditures

Lowest ranked indicators among EU Member States

- Scientific publications among the top 10% most cited
- High-tech imports from outside the EU
- International scientific co-publications

Strong increases since 2019

- High-speed internet access
- Cloud Computing
- Resource productivity

Strong decreases since 2019

- Sales of new-to-market and new-to-firm innovations
- Population with tertiary education
- Non-R&D innovation expenditures

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



TÜRKİYE

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **56.9**

Change vs 2019: ▲ +12.6 Change vs 2025: ▲ +1.6

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	56.9	31	+12.6	+1.6
Human resources	60.7	30	+19.9	+1.7
New doctorate graduates	33.3	30	+11.1	0
Population with tertiary education	100	18	+41.1	+9.9
Population involved in lifelong learning	53	29	+9.6	-4.8
Attractive research systems	50.7	27	+18.3	+7.0
International scientific co-publications	16.6	37	+19.6	+4.1
Scientific publications among the top 10% most cited	76.4	22	+21.4	+2.8
Foreign doctorate students as a % of all doctorate students	43.8	30	+10.6	+19.1
Digitalisation	18.3	35	+0.2	-3.3
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	21.5	33	+0.2	-3.1
Finance and support	84.1	16	+37.4	+14.3
R&D expenditure in the public sector	65	24	-12.1	+3.4
Venture capital expenditures	22	26	+27.0	+25.6
Direct and indirect government support of business R&D	145.2	7	+105.3	+21.7
Firm investments	55.2	27	+8.5	+3.6
R&D expenditure in the business sector	62.8	19	+26.8	+2.9
Non-R&D innovation expenditures	56	28	-14.6	-4.1
Innovation expenditures per person employed	47.4	22	+10.3	+11.0
Investments in information technologies	26.6	37	+20.0	+8.0
Cloud Computing	38.3	33	+43.0	+16.5
Employed ICT specialists	12.8	38	+5.9	+2.9
Innovators	81.3	28	+17.6	+10.2
SMEs introducing product innovations	87.3	27	+12.9	+18.9
SMEs introducing business process innovations	76.9	24	+21.4	+3.4
Linkages	85.6	27	+7.1	-5.8
Innovative SMEs collaborating with others	95.2	20	+52.6	+22.3
Public-private co-publications	19.2	36	+15.1	+3.7
Job-to-job mobility of HRST	106.2	17	-41.2	-38.2
Intellectual assets	27.8	33	+1.1	-1.0
PCT patent applications	54.9	26	+0.6	-1.3
Trademark applications	17.3	38	+5.7	-2.1
Design applications	1.6	38	-1.3	0
Sales and employment impacts	76	26	+17.0	-11.5
Sales of new-to-market and new-to-firm innovations	98.9	17	+19.5	-29.3
Employment in innovative enterprises	55.7	29	+14.5	+5.7
Trade impacts	54.3	33	-3.5	+1.6
Exports of medium and high-tech products	55.5	26	-0.1	+1.5
Knowledge-intensive services exports	46.4	32	+3.6	0
High-tech imports from outside the EU	61.7	29	-14.9	+3.4
Resource and labour productivity	65.7	28	+20.5	-15.2
Resource productivity	80.1	20	+51.6	+13.0
Production-based CO2 productivity	32.5	36	-19.7	-50.3
Labour productivity	N/A	N/A		

It ranks 31st among the EU and neighbouring countries.

Relative strengths

- Direct and indirect government support of business R&D
- Job-to-job mobility of HRST
- Population with tertiary education

Relative weaknesses

- Design applications
- Employed ICT specialists
- International scientific co-publications

Highest ranked indicators among EU Member States

- Direct and indirect government support of business R&D
- Job-to-job mobility of HRST
- Sales of new-to-market and new-to-firm innovations

Lowest ranked indicators among EU Member States

- Employed ICT specialists
- Trademark applications
- Design applications

Strong increases since 2019

- Direct and indirect government support of business R&D
- Innovative SMEs collaborating with others
- Resource productivity

Strong decreases since 2019

- Job-to-job mobility of HRST
- Production-based CO2 productivity
- High-tech imports from outside the EU

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



UKRAINE

Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **24.9**

Change vs 2019: ▲ +1.5 Change vs 2025: ▲ +0.1

It ranks 38th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	24.9	38	+1.5	+0.1
Human resources	65.6	29	-2.6	0
New doctorate graduates	27.7	34	-5.9	0
Population with tertiary education	171.2	6	0	0
Population involved in lifelong learning	0	40	0	0
Attractive research systems	13.7	40	+10.1	+4.6
International scientific co-publications	4.1	40	+4.4	0
Scientific publications among the top 10% most cited	21.8	39	+16.0	+8.8
Foreign doctorate students as a % of all doctorate students	10.2	38	+2.4	0
Digitalisation	N/A	N/A		
High-speed internet access	N/A	N/A		
Individuals with above basic overall digital skills	N/A	N/A		
Finance and support	11.2	32	+0.4	+1.6
R&D expenditure in the public sector	5	38	-3.4	+3.4
Venture capital expenditures	23.2	25	+10.4	0
Direct and indirect government support of business R&D	11.1	29	0	0
Firm investments	19.9	35	-10.2	-9.3
R&D expenditure in the business sector	12.4	34	+0.7	+2.2
Non-R&D innovation expenditures	36.5	32	-23.1	-23.1
Innovation expenditures per person employed	N/A	N/A		
Investments in information technologies	18.8	39	+7.2	0
Cloud Computing	N/A	N/A		
Employed ICT specialists	20.5	37	+5.9	0
Innovators	0	38	0	0
SMEs introducing product innovations	0	38	0	0
SMEs introducing business process innovations	0	36	0	0
Linkages	10.5	39	-10.5	0
Innovative SMEs collaborating with others	12.3	35	-22.7	0
Public-private co-publications	14.4	38	+10.0	0
Job-to-job mobility of HRST	N/A	N/A		
Intellectual assets	26	34	+2.2	+2.7
PCT patent applications	34.4	34	-8.5	-0.2
Trademark applications	34.7	32	+26.0	+6.1
Design applications	6.1	33	-3.0	+3.3
Sales and employment impacts	3.1	39	+3.1	0
Sales of new-to-market and new-to-firm innovations	3.2	39	+3.1	0
Employment in innovative enterprises	N/A	N/A		
Trade impacts	47.1	34	+5.3	-0.7
Exports of medium and high-tech products	10.2	37	-20.4	0
Knowledge-intensive services exports	81.8	15	+32.5	-1.3
High-tech imports from outside the EU	N/A	N/A		
Resource and labour productivity	32.8	37	+19.9	0
Resource productivity	N/A	N/A		
Production-based CO2 productivity	32	37	+22.4	0
Labour productivity	N/A	N/A		

Relative strengths

- Population with tertiary education
- Knowledge-intensive services exports
- Non-R&D innovation expenditures

Relative weaknesses

- Population involved in lifelong learning
- SMEs introducing product innovations
- SMEs introducing business process innovations

Highest ranked indicators among EU Member States

- Population with tertiary education
- Knowledge-intensive services exports
- Venture capital expenditures

Lowest ranked indicators among EU Member States

- Population involved in lifelong learning
- International scientific co-publications
- Scientific publications among the top 10% most cited

Strong increases since 2019

- Knowledge-intensive services exports
- Trademark applications
- Production-based CO2 productivity

Strong decreases since 2019

- Non-R&D innovation expenditures
- Innovative SMEs collaborating with others
- Exports of medium and high-tech products

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



UNITED KINGDOM

Innovation Leader ●

Summary innovation index (indexed to EU in 2026): **130.5**

Change vs 2019: ▲ +16.3 Change vs 2025: ▲ +1.2

It ranks 4th among the EU and neighbouring countries.

Indicator	Performance indexed to the EU in 2026	Rank among the EU and neighbouring countries	Performance change 2019-2026	Performance change 2025-2026
SUMMARY INNOVATION INDEX	130.5	4	+16.3	+1.2
Human resources	150.3	4	+16.6	+1.1
New doctorate graduates	154.3	2	-6.8	+2.4
Population with tertiary education	184.4	4	+63.4	0
Population involved in lifelong learning	108.3	17	+1.9	0
Attractive research systems	162.3	10	+1.3	-2.8
International scientific co-publications	148.1	15	+36.9	0
Scientific publications among the top 10% most cited	153.8	2	-11.3	-5.4
Foreign doctorate students as a % of all doctorate students	188.4	8	-5.6	0
Digitalisation	116	11	+186.7	+24.8
High-speed internet access	100.7	19	+211.3	+28.0
Individuals with above basic overall digital skills	N/A	N/A		
Finance and support	167.7	1	+42.1	0
R&D expenditure in the public sector	109.9	9	+49.3	0
Venture capital expenditures	244.2	1	+100.8	0
Direct and indirect government support of business R&D	185.9	1	0	0
Firm investments	115.1	6	+22.4	-0.4
R&D expenditure in the business sector	129.9	7	+10.4	-0.6
Non-R&D innovation expenditures	121.3	8	+37.5	0
Innovation expenditures per person employed	N/A	N/A		
Investments in information technologies	100.9	16	+36.6	0
Cloud Computing	100.6	15	+47.1	0
Employed ICT specialists	101.5	15	+30.4	0
Innovators	92.1	24	+8.0	0
SMEs introducing product innovations	106.2	22	+9.3	0
SMEs introducing business process innovations	N/A	N/A		
Linkages	227.7	3	+17.0	0
Innovative SMEs collaborating with others	280.4	1	0	0
Public-private co-publications	219.4	15	+37.9	0
Job-to-job mobility of HRST	193.8	1	+23.5	0
Intellectual assets	74	22	-24.7	-0.3
PCT patent applications	104.2	10	-7.7	+0.6
Trademark applications	67.1	28	-27.2	-4.0
Design applications	39.8	25	-40.8	+1.1
Sales and employment impacts	133	5	+7.2	0
Sales of new-to-market and new-to-firm innovations	147.1	5	+20.9	0
Employment in innovative enterprises	120.4	9	-6.0	0
Trade impacts	98.3	4	-2.8	+1.6
Exports of medium and high-tech products	79.8	13	0	0
Knowledge-intensive services exports	110.4	4	+5.7	-0.2
High-tech imports from outside the EU	106.4	15	-15.2	+5.0
Resource and labour productivity	157.8	4	+41.7	+7.3
Resource productivity	139.9	7	+13.7	0
Production-based CO2 productivity	140.8	9	+75.7	+16.4
Labour productivity	N/A	N/A		

Relative strengths

- Innovative SMEs collaborating with others
- Venture capital expenditures
- Public-private co-publications

Relative weaknesses

- Design applications
- Trademark applications
- Exports of medium and high-tech products

Highest ranked indicators among EU Member States

- Venture capital expenditures
- Direct and indirect government support of business R&D
- Innovative SMEs collaborating with others

Lowest ranked indicators among EU Member States

- Trademark applications
- Design applications
- SMEs introducing product innovations

Strong increases since 2019

- High-speed internet access
- Venture capital expenditures
- Production-based CO2 productivity

Strong decreases since 2019

- Design applications
- Trademark applications
- High-tech imports from outside the EU

Footnote: Performance changes are indexed to the EU average in 2019. Since the reference years differ between the first column (2026) and the last two columns (2019), scores cannot be directly compared or subtracted across columns. For a complete overview, refer to the published country profiles.



AUSTRALIA

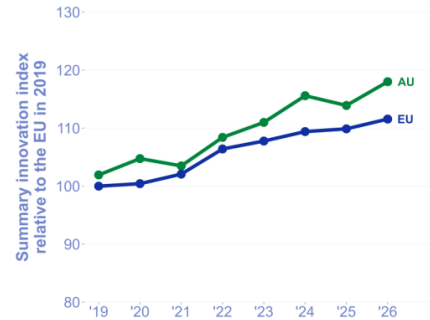
Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **105.8**

Change vs 2019: ▲ +16.1 Change vs 2025: ▲ +4.1

Australia is a Strong Innovator, performing at 105.8% of the EU average in 2026. Its performance is below the average of Strong Innovators in the EU and neighbouring countries (105.8% vs 112.5% of the EU average in 2026). The country's relative strengths are Trademark applications, Innovative SMEs collaborating with others, and Public-private co-publications. Its relative weaknesses are Knowledge-intensive services exports, Exports of medium and high-tech products, and Production-based CO2 productivity.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	105.8	+16.1
New doctorate graduates	134.4	+15.5
Population with tertiary education	137.0	+35.0
International scientific co-publications	172.5	+28.7
Scientific publications among the top 10% most cited	176.9	+6.0
R&D expenditure in the public sector	103.0	-20.4
Direct and indirect government support of business R&D	81.1	-27.4
R&D expenditure in the business sector	62.9	-2.9
Employed ICT specialists	89.0	+8.9
SMEs introducing product innovations	145.4	+32.3
SMEs introducing business process innovations	144.6	+44.9
Innovative SMEs collaborating with others	358.2	+152.1
Public-private co-publications	201.3	+30.2
PCT patent applications	66.5	-22.4
Trademark applications	463.6	+147.0
Design applications	104.8	-15.3
Exports of medium and high-tech products	5.9	-1.3
Knowledge-intensive services exports	0.0	0
Production-based CO2 productivity	36.5	+25.9
Labour productivity	113.4	-1.1



	AU	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	70162.4	61145.7
Average annual GDP growth (2022-2024 average)	2.5	0.8
Employment share Agriculture (2023-2025 average)	2.2	3.4
Employment share Industry (2023-2025 average)	19.4	24.1
Employment share Services (2023-2025 average)	78.4	72.5
Employment share Knowledge-intensive services (2022-2024 average)	5.3	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	N/A	7.7
FDI net inflows (2022-2024 average)	3	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	3.3	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	599.8	722.8
Number of unicorns (March 2026)	9	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	76	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	N/A	2.5
Government procurement of advanced technology products (2015-2017 average)	3.3	3.4
Rule of law (2022-2024 average)	1.5	1
Demography		
Population size (2022-2024 average, in millions)	26.6	448.8
Average annual population growth (2022-2024 average)	2.2	0.3
Population density (2021-2023 average)	3.4	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.



BRAZIL

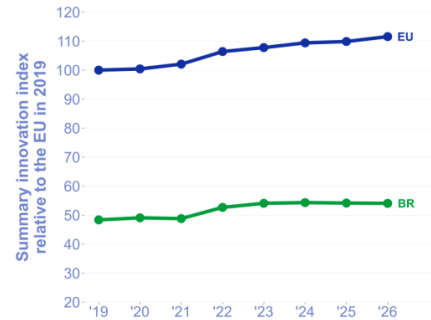
Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **48.5**

Change vs 2019: ▲ **+5.7** Change vs 2025: ▼ **-0.1**

Brazil is an Emerging Innovator, performing at 48.5% of the EU average in 2026. Its performance is above the average of Emerging Innovators in the EU and neighbouring countries (48.5% vs 45.5% of the EU average in 2026). The country's relative strengths are Trademark applications, Innovative SMEs collaborating with others, and Knowledge-intensive services exports. Its relative weaknesses are Scientific publications among the top 10% most cited, Public-private co-publications, and PCT patent applications.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	48.5	+5.7
New doctorate graduates	20.7	+3.0
Population with tertiary education	42.7	+20.4
International scientific co-publications	37.1	+14.9
Scientific publications among the top 10% most cited	6.6	-22.5
R&D expenditure in the public sector	N/A	
Direct and indirect government support of business R&D	45.8	-2.9
R&D expenditure in the business sector	N/A	
Employed ICT specialists	29.7	+12.8
SMEs introducing product innovations	62.0	+1.5
SMEs introducing business process innovations	N/A	
Innovative SMEs collaborating with others	113.5	+1.7
Public-private co-publications	10.6	+4.0
PCT patent applications	15.8	-6.2
Trademark applications	400.7	+294.4
Design applications	35.2	-9.0
Exports of medium and high-tech products	23.2	-9.3
Knowledge-intensive services exports	97.4	-6.0
Production-based CO2 productivity	74.4	+9.7
Labour productivity	N/A	



	BR	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	21130.3	61145.7
Average annual GDP growth (2022-2024 average)	3.3	0.8
Employment share Agriculture (2023-2025 average)	7.8	3.4
Employment share Industry (2023-2025 average)	20.2	24.1
Employment share Services (2023-2025 average)	71.9	72.5
Employment share Knowledge-intensive services (2022-2024 average)	12.8	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	19.4	7.7
FDI net inflows (2022-2024 average)	3.4	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	0.2	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	328.2	722.8
Number of unicorns (March 2026)	18	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	35	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	2.5	2.5
Government procurement of advanced technology products (2015-2017 average)	2.8	3.4
Rule of law (2022-2024 average)	-0.5	1
Demography		
Population size (2022-2024 average, in millions)	211.1	448.8
Average annual population growth (2022-2024 average)	0.4	0.3
Population density (2021-2023 average)	25.2	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.



CANADA

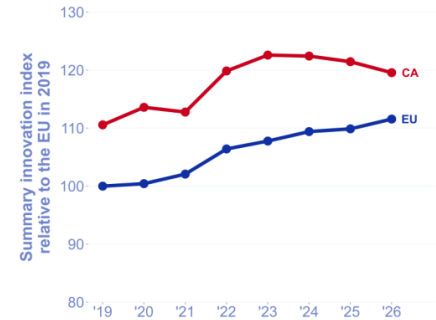
Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **107.2**

Change vs 2019: ▲ +9.0 Change vs 2025: ▼ -1.9

Canada is a Strong Innovator, performing at 107.2% of the EU average in 2026. Its performance is below the average of Strong Innovators in the EU and neighbouring countries (107.2% vs 112.5% of the EU average in 2026). The country's relative strengths are Trademark applications, SMEs introducing product innovations, and Innovative SMEs collaborating with others. Its relative weaknesses are Production-based CO2 productivity, Exports of medium and high-tech products, and Knowledge-intensive services exports..

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	107.2	+9.0
New doctorate graduates	73.9	-14.6
Population with tertiary education	170.0	+48.2
International scientific co-publications	165.6	+44.5
Scientific publications among the top 10% most cited	121.3	-23.4
R&D expenditure in the public sector	106.6	-17.1
Direct and indirect government support of business R&D	119.6	+26.0
R&D expenditure in the business sector	73.8	+12.9
Employed ICT specialists	N/A	
SMEs introducing product innovations	220.7	+5.3
SMEs introducing business process innovations	179.0	+7.1
Innovative SMEs collaborating with others	196.3	-23.5
Public-private co-publications	187.8	+33.2
PCT patent applications	96.8	-5.4
Trademark applications	279.5	+35.5
Design applications	88.0	+2.8
Exports of medium and high-tech products	46.8	-7.0
Knowledge-intensive services exports	70.4	-7.1
Production-based CO2 productivity	30.7	+19.8
Labour productivity	88.2	+2.3



	CA	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	64257.9	61145.7
Average annual GDP growth (2022-2024 average)	1.5	0.8
Employment share Agriculture (2023-2025 average)	1.2	3.4
Employment share Industry (2023-2025 average)	19	24.1
Employment share Services (2023-2025 average)	79.9	72.5
Employment share Knowledge-intensive services (2022-2024 average)	N/A	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	24.2	7.7
FDI net inflows (2022-2024 average)	2.4	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	5.6	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	341.1	722.8
Number of unicorns (March 2026)	21	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	75.3	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	3.9	2.5
Government procurement of advanced technology products (2015-2017 average)	3.4	3.4
Rule of law (2022-2024 average)	1.5	1
Demography		
Population size (2022-2024 average, in millions)	40.1	448.8
Average annual population growth (2022-2024 average)	3	0.3
Population density (2021-2023 average)	4.4	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.



CHILE

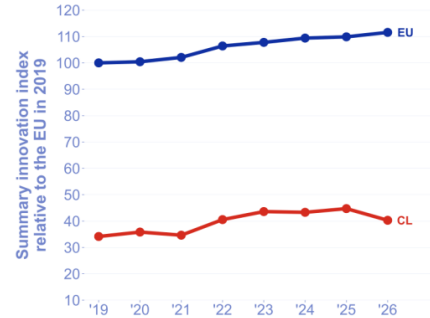
Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **36.1**

Change vs 2019: ▲ +6.1 Change vs 2025: ▼ -4.4

Chile is an Emerging Innovator, performing at 36.1% of the EU average in 2026. Its performance is below the average of Emerging Innovators in the EU and neighbouring countries (36.1% vs 45.5% of the EU average in 2026). The country's relative strengths are Trademark applications, International scientific co-publications, and Population with tertiary education. Its relative weaknesses are Innovative SMEs collaborating with others, Design applications, and Exports of medium and high-tech products.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	36.1	+6.1
New doctorate graduates	13.4	+1.9
Population with tertiary education	91.6	+35.3
International scientific co-publications	96.2	+42.7
Scientific publications among the top 10% most cited	27.4	-15.8
R&D expenditure in the public sector	2.6	-2.0
Direct and indirect government support of business R&D	4.0	+1.0
R&D expenditure in the business sector	7.0	+3.3
Employed ICT specialists	42.3	+6.6
SMEs introducing product innovations	8.4	+8.6
SMEs introducing business process innovations	8.2	-11.8
Innovative SMEs collaborating with others	0.0	-150.1
Public-private co-publications	30.5	+16.7
PCT patent applications	26.0	-3.8
Trademark applications	494.6	+181.3
Design applications	0.0	-13.0
Exports of medium and high-tech products	0.0	-2.1
Knowledge-intensive services exports	37.2	+22.9
Production-based CO2 productivity	81.1	+55.4
Labour productivity	13.6	-0.3



	CL	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	33419.5	61145.7
Average annual GDP growth (2022-2024 average)	1.6	0.8
Employment share Agriculture (2023-2025 average)	6.2	3.4
Employment share Industry (2023-2025 average)	21.8	24.1
Employment share Services (2023-2025 average)	72.1	72.5
Employment share Knowledge-intensive services (2022-2024 average)	9.3	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	29.2	7.7
FDI net inflows (2022-2024 average)	5.2	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	N/A	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	N/A	722.8
Number of unicorns (March 2026)	2	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	64	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	2.6	2.5
Government procurement of advanced technology products (2015-2017 average)	2.9	3.4
Rule of law (2022-2024 average)	0.7	1
Demography		
Population size (2022-2024 average, in millions)	19.7	448.8
Average annual population growth (2022-2024 average)	0.5	0.3
Population density (2021-2023 average)	26.3	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.



CHINA

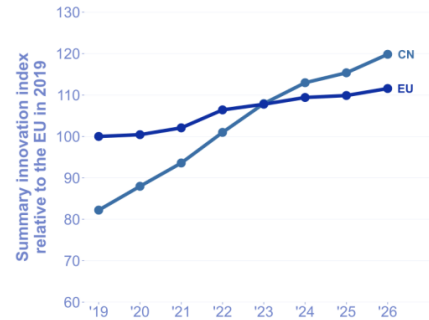
Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **107.4**

Change vs 2019: ▲ +37.6 Change vs 2025: ▲ +4.5

China (except Hong Kong) is a Strong Innovator, performing at 107.4% of the EU average in 2026. Its performance is below the average of Strong Innovators in the EU and neighbouring countries (107.4% vs 112.5% of the EU average in 2026). The country's relative strengths are Trademark applications, Design applications, and Direct and indirect government support of business R&D. Its relative weaknesses are Production-based CO₂ productivity, International scientific co-publications, and Public-private co-publications.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	107.4	+37.6
New doctorate graduates	N/A	
Population with tertiary education	76.6	+10.7
International scientific co-publications	35.8	+21.0
Scientific publications among the top 10% most cited	149.3	+57.1
R&D expenditure in the public sector	81.7	+25.7
Direct and indirect government support of business R&D	160.8	+102.1
R&D expenditure in the business sector	151.3	+37.0
Employed ICT specialists	N/A	
SMEs introducing product innovations	N/A	
SMEs introducing business process innovations	N/A	
Innovative SMEs collaborating with others	N/A	
Public-private co-publications	69.2	+59.8
PCT patent applications	105.7	-0.3
Trademark applications	837.6	+421.3
Design applications	307.7	-32.9
Exports of medium and high-tech products	91.8	+2.3
Knowledge-intensive services exports	100.5	+33.7
Production-based CO ₂ productivity	12.9	+10.1
Labour productivity	N/A	



	CN	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	25105.4	61145.7
Average annual GDP growth (2022-2024 average)	5.2	0.8
Employment share Agriculture (2023-2025 average)	22.2	3.4
Employment share Industry (2023-2025 average)	31.6	24.1
Employment share Services (2023-2025 average)	46.2	72.5
Employment share Knowledge-intensive services (2022-2024 average)	25.6	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	6.1	7.7
FDI net inflows (2022-2024 average)	0.5	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	3.7	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	424.3	722.8
Number of unicorns (March 2026)	158	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	42.7	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	N/A	2.5
Government procurement of advanced technology products (2015-2017 average)	4.4	3.4
Rule of law (2022-2024 average)	-0.6	1
Demography		
Population size (2022-2024 average, in millions)	1410.6	448.8
Average annual population growth (2022-2024 average)	-0.1	0.3
Population density (2021-2023 average)	150.4	111.8

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INDIA

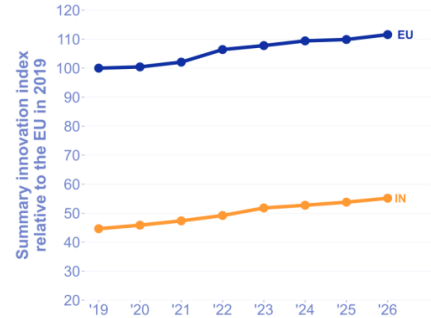
Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **49.4**

Change vs 2019: ▲ +10.5 Change vs 2025: ▲ +1.4

India is an Emerging Innovator, performing at 49.4% of the EU average in 2026. Its performance is above the average of Emerging Innovators in the EU and neighbouring countries (49.4% vs 45.5% of the EU average in 2026). The country's relative strengths are Innovative SMEs collaborating with others, Knowledge-intensive services exports, and Trademark applications. Its relative weaknesses are New doctorate graduates, Public-private co-publications, and International scientific co-publications.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	49.4	+10.5
New doctorate graduates	0.7	+0.7
Population with tertiary education	40.6	+20.2
International scientific co-publications	12.8	+17.1
Scientific publications among the top 10% most cited	77.2	+15.9
R&D expenditure in the public sector	44.3	-3.4
Direct and indirect government support of business R&D	N/A	
R&D expenditure in the business sector	22.1	-0.9
Employed ICT specialists	N/A	
SMEs introducing product innovations	35.4	+0.8
SMEs introducing business process innovations	17.0	+0.7
Innovative SMEs collaborating with others	459.3	+6.8
Public-private co-publications	3.0	+3.5
PCT patent applications	31.3	+2.1
Trademark applications	83.5	+49.4
Design applications	38.0	+7.4
Exports of medium and high-tech products	56.8	+12.0
Knowledge-intensive services exports	119.5	+23.5
Production-based CO2 productivity	32.2	+6.8
Labour productivity	N/A	



	IN	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	10230.2	61145.7
Average annual GDP growth (2022-2024 average)	7.8	0.8
Employment share Agriculture (2023-2025 average)	42.5	3.4
Employment share Industry (2023-2025 average)	25.4	24.1
Employment share Services (2023-2025 average)	32.1	72.5
Employment share Knowledge-intensive services (2022-2024 average)	12.9	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	12.2	7.7
FDI net inflows (2022-2024 average)	1	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	0.1	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	328.6	722.8
Number of unicorns (March 2026)	65	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	38.7	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	5.4	2.5
Government procurement of advanced technology products (2015-2017 average)	4.3	3.4
Rule of law (2022-2024 average)	-0.1	1
Demography		
Population size (2022-2024 average, in millions)	1438.1	448.8
Average annual population growth (2022-2024 average)	0.9	0.3
Population density (2021-2023 average)	479.6	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.



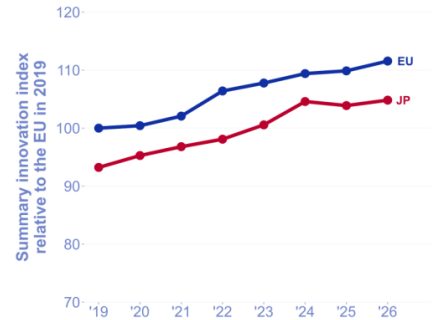
JAPAN

Moderate Innovator ●

Summary innovation index (indexed to EU in 2026): **94.0**Change vs 2019: ▲ **+11.6** Change vs 2025: ▲ **+0.9**

Japan is a Moderate Innovator, performing at 94.0% of the EU average in 2026. Its performance is above the average of Moderate Innovators in the EU and neighbouring countries (94.0% vs 86.4% of the EU average in 2026). The country's relative strengths are PCT patent applications, R&D expenditure in the business sector, and Trademark applications. Its relative weaknesses are Scientific publications among the top 10% most cited, SMEs introducing product innovations, and New doctorate graduates.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	94.0	+11.6
New doctorate graduates	41.8	-2.7
Population with tertiary education	161.9	+39.6
International scientific co-publications	65.2	+21.0
Scientific publications among the top 10% most cited	22.2	-13.9
R&D expenditure in the public sector	105.2	+15.8
Direct and indirect government support of business R&D	94.0	+19.7
R&D expenditure in the business sector	208.8	+27.6
Employed ICT specialists	108.7	+39.4
SMEs introducing product innovations	29.8	-17.2
SMEs introducing business process innovations	61.8	+2.2
Innovative SMEs collaborating with others	135.6	-148.4
Public-private co-publications	88.7	+11.3
PCT patent applications	231.2	+13.4
Trademark applications	200.0	+112.1
Design applications	111.5	-10.2
Exports of medium and high-tech products	108.8	-7.4
Knowledge-intensive services exports	83.9	-9.3
Production-based CO2 productivity	61.2	+39.1
Labour productivity	65.6	+3.5



	JP	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	49964.3	61145.7
Average annual GDP growth (2022-2024 average)	0.8	0.8
Employment share Agriculture (2023-2025 average)	2.9	3.4
Employment share Industry (2023-2025 average)	23.4	24.1
Employment share Services (2023-2025 average)	73.7	72.5
Employment share Knowledge-intensive services (2022-2024 average)	20.2	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	N/A	7.7
FDI net inflows (2022-2024 average)	0.7	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	15.1	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	585.5	722.8
Number of unicorns (March 2026)	8	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	71.7	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	2.5	2.5
Government procurement of advanced technology products (2015-2017 average)	4	3.4
Rule of law (2022-2024 average)	1.5	1
Demography		
Population size (2022-2024 average, in millions)	124.5	448.8
Average annual population growth (2022-2024 average)	-0.5	0.3
Population density (2021-2023 average)	343.2	111.8

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SOUTH KOREA

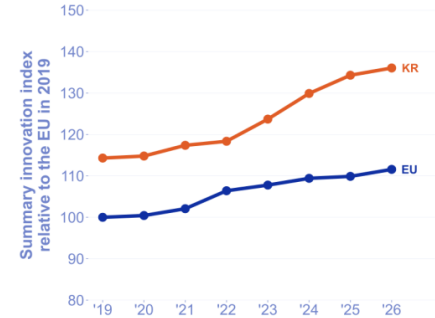
Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **121.9**

Change vs 2019: ▲ **+21.7** Change vs 2025: ▲ **+1.7**

South Korea is a Strong Innovator, performing at 121.9% of the EU average in 2026. Its performance is above the average of Strong Innovators in the EU and neighbouring countries (121.9% vs 112.5% of the EU average in 2026). The country's relative strengths are Trademark applications, Design applications, and R&D expenditure in the business sector. Its relative weaknesses are SMEs introducing business process innovations, and Production-based CO2 productivity.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	121.9	+21.7
New doctorate graduates	107.7	+17.8
Population with tertiary education	174.8	+26.8
International scientific co-publications	101.8	+48.1
Scientific publications among the top 10% most cited	86.9	+14.0
R&D expenditure in the public sector	131.6	+10.5
Direct and indirect government support of business R&D	180.2	-0.2
R&D expenditure in the business sector	262.5	+25.4
Employed ICT specialists	95.9	+35.8
SMEs introducing product innovations	34.0	-16.9
SMEs introducing business process innovations	0.0	-64.1
Innovative SMEs collaborating with others	162.3	-10.9
Public-private co-publications	160.7	+69.2
PCT patent applications	230.3	+23.2
Trademark applications	559.5	+226.0
Design applications	297.5	-39.7
Exports of medium and high-tech products	114.6	+0.7
Knowledge-intensive services exports	108.3	+25.8
Production-based CO2 productivity	42.0	+29.4
Labour productivity	66.3	+23.7



	KR	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	57996.8	61145.7
Average annual GDP growth (2022-2024 average)	1.8	0.8
Employment share Agriculture (2023-2025 average)	5.2	3.4
Employment share Industry (2023-2025 average)	23.7	24.1
Employment share Services (2023-2025 average)	71.1	72.5
Employment share Knowledge-intensive services (2022-2024 average)	26.2	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	10.3	7.7
FDI net inflows (2022-2024 average)	1	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	8.1	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	1027.3	722.8
Number of unicorns (March 2026)	15	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	63.3	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	N/A	2.5
Government procurement of advanced technology products (2015-2017 average)	3.8	3.4
Rule of law (2022-2024 average)	1.2	1
Demography		
Population size (2022-2024 average, in millions)	51.7	448.8
Average annual population growth (2022-2024 average)	0.1	0.3
Population density (2021-2023 average)	529.9	111.8

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MEXICO

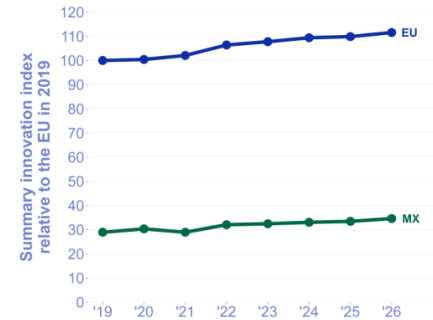
Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **31.0**

Change vs 2019: ▲ **+5.7** Change vs 2025: ▲ **+1.1**

Mexico is an Emerging Innovator, performing at 31.0% of the EU average in 2026. Its performance is below the average of Emerging Innovators in the EU and neighbouring countries (31.0% vs 45.5% of the EU average in 2026). The country's relative strengths are Trademark applications, Exports of medium and high-tech products, and Population with tertiary education. Its relative weaknesses are Scientific publications among the top 10% most cited, R&D expenditure in the business sector, and PCT patent applications.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	31.0	+5.7
New doctorate graduates	11.6	+6.6
Population with tertiary education	57.5	+27.9
International scientific co-publications	26.0	+10.5
Scientific publications among the top 10% most cited	0.0	-6.0
R&D expenditure in the public sector	11.0	-0.4
Direct and indirect government support of business R&D	4.0	+4.5
R&D expenditure in the business sector	0.0	0
Employed ICT specialists	1.3	-0.4
SMEs introducing product innovations	N/A	
SMEs introducing business process innovations	N/A	
Innovative SMEs collaborating with others	N/A	
Public-private co-publications	3.7	+1.3
PCT patent applications	0.0	-8.9
Trademark applications	250.8	+140.9
Design applications	41.4	+0.3
Exports of medium and high-tech products	111.9	+5.8
Knowledge-intensive services exports	12.9	-9.9
Production-based CO2 productivity	56.7	+17.0
Labour productivity	11.7	+7.3



	MX	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	24854.7	61145.7
Average annual GDP growth (2022-2024 average)	2.4	0.8
Employment share Agriculture (2023-2025 average)	11.7	3.4
Employment share Industry (2023-2025 average)	24.7	24.1
Employment share Services (2023-2025 average)	63.6	72.5
Employment share Knowledge-intensive services (2022-2024 average)	20.6	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	17.1	7.7
FDI net inflows (2022-2024 average)	2.3	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	N/A	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	118.6	722.8
Number of unicorns (March 2026)	9	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	28	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	2.3	2.5
Government procurement of advanced technology products (2015-2017 average)	3.1	3.4
Rule of law (2022-2024 average)	-1.1	1
Demography		
Population size (2022-2024 average, in millions)	129.7	448.8
Average annual population growth (2022-2024 average)	0.9	0.3
Population density (2021-2023 average)	66.2	111.8

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UNITED STATES

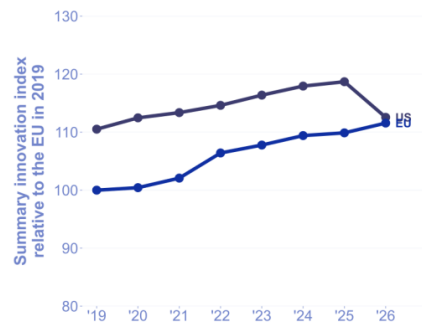
Strong Innovator ●

Summary innovation index (indexed to EU in 2026): **100.9**

Change vs 2019: ▲ +2.0 Change vs 2025: ▼ -6.1

United States is a Strong Innovator, performing at 100.9% of the EU average in 2026. Its performance is below the average of Strong Innovators in the EU and neighbouring countries (100.9% vs 112.5% of the EU average in 2026). The country's relative strengths are R&D expenditure in the business sector, Innovative SMEs collaborating with others, and Labour productivity. Its relative weaknesses are SMEs introducing product innovations, Production-based CO2 productivity, and Design applications.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	100.9	+2.0
New doctorate graduates	81.9	+11.1
Population with tertiary education	121.8	+29.4
International scientific co-publications	104.3	+24.9
Scientific publications among the top 10% most cited	137.0	-41.5
R&D expenditure in the public sector	93.3	+1.1
Direct and indirect government support of business R&D	160.8	+39.3
R&D expenditure in the business sector	194.5	+41.9
Employed ICT specialists	93.4	+3.7
SMEs introducing product innovations	47.6	-78.6
SMEs introducing business process innovations	65.3	-58.2
Innovative SMEs collaborating with others	190.2	-266.3
Public-private co-publications	120.3	+7.5
PCT patent applications	108.8	-14.8
Trademark applications	58.0	+54.4
Design applications	52.9	+4.1
Exports of medium and high-tech products	72.5	-1.9
Knowledge-intensive services exports	95.3	+8.3
Production-based CO2 productivity	48.3	+30.4
Labour productivity	161.4	+26.9



	US	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	81991.8	61145.7
Average annual GDP growth (2022-2024 average)	2.8	0.8
Employment share Agriculture (2023-2025 average)	1.6	3.4
Employment share Industry (2023-2025 average)	19.1	24.1
Employment share Services (2023-2025 average)	79.3	72.5
Employment share Knowledge-intensive services (2022-2024 average)	N/A	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	17.2	7.7
FDI net inflows (2022-2024 average)	1.3	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	20.9	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	847.8	722.8
Number of unicorns (March 2026)	718	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	66	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	3.6	2.5
Government procurement of advanced technology products (2015-2017 average)	4.6	3.4
Rule of law (2022-2024 average)	1	1
Demography		
Population size (2022-2024 average, in millions)	337	448.8
Average annual population growth (2022-2024 average)	0.9	0.3
Population density (2021-2023 average)	36.5	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.



SOUTH AFRICA

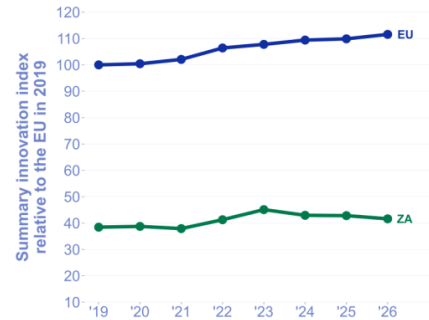
Emerging Innovator ●

Summary innovation index (indexed to EU in 2026): **37.3**

Change vs 2019: ▲ +3.2 Change vs 2025: ▼ -1.2

South Africa is an Emerging Innovator, performing at 37.3% of the EU average in 2026. Its performance is below the average of Emerging Innovators in the EU and neighbouring countries (37.3% vs 45.5% of the EU average in 2026). The country's relative strengths are Innovative SMEs collaborating with others, SMEs introducing product innovations, and Trademark applications. Its relative weaknesses are Population with tertiary education, New doctorate graduates, and Direct and indirect government support of business R&D.

Indicator	Performance indexed to the EU in 2026	Performance change 2019-2026
SUMMARY INNOVATION INDEX	37.3	+3.2
New doctorate graduates	2.1	+0.5
Population with tertiary education	0.0	-18.6
International scientific co-publications	57.7	+25.6
Scientific publications among the top 10% most cited	59.4	-5.0
R&D expenditure in the public sector	37.3	-11.8
Direct and indirect government support of business R&D	3.4	-1.2
R&D expenditure in the business sector	10.7	-7.8
Employed ICT specialists	N/A	
SMEs introducing product innovations	154.0	+3.7
SMEs introducing business process innovations	79.5	+3.4
Innovative SMEs collaborating with others	169.4	+2.5
Public-private co-publications	15.0	+3.6
PCT patent applications	21.1	-10.6
Trademark applications	106.7	+25.4
Design applications	37.3	-17.4
Exports of medium and high-tech products	42.0	-4.0
Knowledge-intensive services exports	36.1	+35.9
Production-based CO2 productivity	6.4	+9.1
Labour productivity	N/A	



	ZA	EU
Performance and structure of the economy		
GDP per capita (2022-2024 average)	15135	61145.7
Average annual GDP growth (2022-2024 average)	0.7	0.8
Employment share Agriculture (2023-2025 average)	5.4	3.4
Employment share Industry (2023-2025 average)	20.7	24.1
Employment share Services (2023-2025 average)	73.8	72.5
Employment share Knowledge-intensive services (2022-2024 average)	12.7	14.7
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (2023-2025 average)	12.9	7.7
FDI net inflows (2022-2024 average)	1.3	0.5
Top R&D spending enterprises per 10 million population (2022-2024 average)	N/A	7
Top R&D spending enterprises, average R&D spending (2023-2025 average)	N/A	722.8
Number of unicorns (March 2026)	1	116
Governance and policy frameworks		
Corruption Perceptions Index (2023-2025 average)	41	61.6
Basic-school entrepreneurial education and training (2023-2025 average)	2.9	2.5
Government procurement of advanced technology products (2015-2017 average)	3	3.4
Rule of law (2022-2024 average)	0	1
Demography		
Population size (2022-2024 average, in millions)	63.2	448.8
Average annual population growth (2022-2024 average)	1.3	0.3
Population density (2021-2023 average)	51.4	111.8

Footnote: Performance in 2026 is indexed to the EU in 2026. Performance change is indexed to the EU average in 2019. Since the reference years differ between columns, scores cannot be directly compared or subtracted. Relative strengths (purple) and weaknesses (red) refer to the three indicators where the country's scores are furthest above or below the EU average in 2026. These highlight the areas where the country stands out most positively or faces the greatest relative challenges compared to the EU.

8. EIS METHODOLOGY

8.1 Data sources and availability for EIS 2026

The EIS uses the most recent statistics from Eurostat and other internationally recognised sources, such as the OECD and the United Nations, available at the time of analysis, with the cut-off date set the first week of May 2026. International sources have been used to improve comparability between countries.

The data relates to the actual performance in 2026 for 1 indicator, 2025 for nine indicators, 2024 for 11 indicators, 2023 for five indicators, 2022 for five indicators, 2020 for 1 indicator (these are the most recent years for which data is available, see Annex E). Data availability is complete for 25 Member States. For Ireland, data is not available for Job-to-job mobility in Human resources in Science & Technology (indicator 3.2.3), while for the Netherlands, data is not available for Non-R&D innovation expenditures (indicator 2.2.2).

Breaks in the data series are reported for 13 indicators counting at least one break for each country, including EU, neighbouring and global competitors and 13 indicators for EU only. The top five indicators with the highest number of countries experiencing such breaks include:

- Lifelong learning (1.1.3)
- Percentage population aged 25-34 having completed tertiary education (1.1.2)
- Employed ICT specialists (2.3.2)
- Job-to-job mobility of Human Resources in Science and Technology (3.2.3)

To address the lack of comparability across years, performance changes over time for indicators impacted by breaks are based on the most recent data only. Performance changes for the Summary Innovation Index (SII), which measures Member States' average innovation performance, are, therefore, on average, smaller than what they would have been if there had been no breaks in series or new data series.

Comparisons with results from the EIS 2025 report are not possible, not even for the same years in both reports. Results for the same year, are different due to several reasons:

- By adding new data at the end of the time series for each indicator and removing data at the start of the time series, the highest and lowest data scores used for calculating normalised scores across all countries and all years for an indicator can change, directly impacting these normalised scores.
- Timeliness refers to the year for which the most recent data is available. For the EIS 2026, 26 indicators have been updated with at least one additional year of data compared to their availability in the EIS 2025.

Consequently, one should only use the results for all years in this report to compare performance over time. More details on data sources, timeliness and breaks are provided in the EIS Methodology Report 2026.

8.2 Methodology for calculating the summary innovation index

This section summarises the methodological process and procedures used to calculate the SII. The full EIS 2026 methodological report is available as a separate file and provides more details. The overall performance of each national innovation system is summarised by a composite indicator, the summary innovation index (SII). 'All countries' include all EU Member States, other European and global competitors.

Six steps to calculate performance

Step 1: Setting reference years

For each indicator, a reference year is identified based on data availability for all countries for which data availability is at least 75%. For most indicators, this reference year will be lagging one or two years behind the year to which the EIS refers (see Annex E).

Step 2: Imputing for missing values

If data for an intermediate year is not available, the missing values are replaced with the previous year's values. If data is unavailable at the beginning of the time series, the missing values are replaced with the next available year's values. If data is missing for all years, no data is imputed, and, hence, the indicator does not contribute to the SII.

Step 3: Identifying and replacing outliers

Positive outliers are identified as those country scores which are higher than the mean across all countries plus twice the standard deviation. Negative outliers are identified as those country scores which are smaller than the mean across all countries minus twice the standard deviation. These outliers are replaced by the respective maximum and minimum values observed over all the years and all countries.

Step 4: Transforming data if data is highly skewed

Most of the indicators are fractional indicators with values between 0% and 100%. Some indicators are unbound indicators, where values are not limited to an upper threshold. These indicators can be highly volatile and can have skewed data distributions (where most countries show low performance levels, and a few countries show exceptionally high levels of performance). For these indicators where the degree of skewness across the full eight-year period is above one, data has been transformed using a square root transformation. For the following indicators data has been transformed: *Non-R&D innovation expenditures*, *PCT patent applications* and *Trademark applications*. A square root transformation uses the square root of the indicator value instead of the original value.

Step 5: Determining Maximum and Minimum scores

The Maximum score is the highest score found for the eight-year period within all countries excluding positive outliers. Similarly, the Minimum score is the lowest score found for the eight-year period within all countries excluding negative outliers.

Step 6: Calculating re-scaled scores

Re-scaled scores of the country scores (after correcting for outliers and a possible transformation of the data) for all years are calculated by first subtracting the Minimum score and then dividing by the difference between the Maximum and Minimum score. The maximum re-scaled score is thus equal to 1, and the minimum re-scaled score is equal to 0. For positive and negative outliers, the re-scaled score is equal to 1 or 0, respectively.

Step 7: Calculating composite innovation indexes

For each year, a composite Summary Innovation Index is calculated as the unweighted average of the re-scaled scores for all indicators where all indicators receive the same weight (1/32 if data is available for all 32 indicators).

Step 8: Calculating relative to EU performance scores

Performance scores relative to the EU are then calculated as the SII of the respective country divided by the SII of the EU multiplied by 100. Relative performance scores are calculated for the full eight-year period compared to the performance of the EU in 2019 and for the latest year also to that of the EU in 2026. For the definition of the performance groups, only the performance scores relative to the EU in 2026 have been used.

Performance group membership

For determining performance group membership, the EIS uses the following classification scheme with corresponding values for EIS 2026:

- Innovation Leaders are all countries with a relative performance in 2026 above 125% of the EU average in 2026 (corresponding to a score of 139.5 when indexed to EU 2019).
- Strong Innovators are all countries with a relative performance in 2026 between 100% and 125% of the EU average in 2026 (corresponding to a range of scores from 111.6 to 139.5 when indexed to EU 2019).
- Moderate Innovators are all countries with a relative performance in 2026 between 70% and 100% of the EU average in 2026 (corresponding to a range of scores from 78.1 to 111.6 when indexed to EU 2019).
- Emerging Innovators are all countries with a relative performance in 2026 below 70% of the EU average in 2026 (corresponding to a score below 78.1 when indexed to EU 2019).

International benchmark

The methodology for calculating average innovation performance for the EU and its major global competitors is comparable to that used for calculating average innovation performance for the EU Member States but using a smaller set of countries and a smaller set of indicators.

Automation

The data collection and calculation process for the EIS has been automated since 2024, with the construction of the SSI performed using the COINr package adapted and extended to the EIS. The approach is summarised in the Figure below.

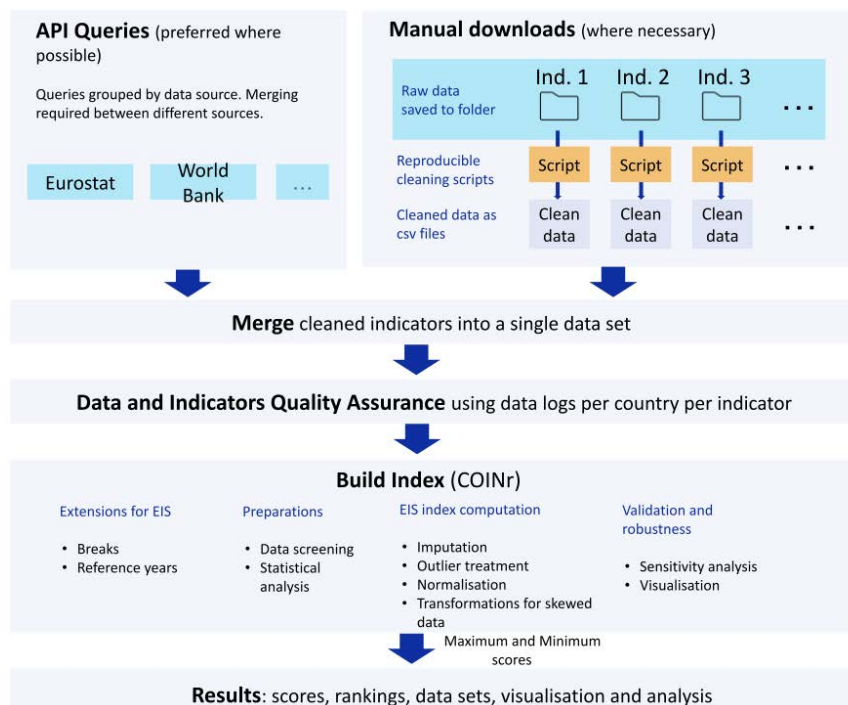


Figure 39: EIS automation process

COINr²² is an open-source R package developed by the European Commission's Competence Centre for Composite Indicators and Scoreboards²³, and implements international guidelines and best practices in composite indicator construction²⁴. It allows highly detailed and flexible construction and analysis of composite indicators, including imputation, normalisation, outlier treatment and sensitivity analysis.

This approach provides a highly replicable and easy to follow data pipeline which feeds into the COINr package and automatically provides the main outputs of the EIS. Since the data collection, processing and outputs are largely based on code (using the R software), all code is packaged together and hosted on GitHub which also facilitates the auditing process.

8.3 The impact of structural differences on innovation performance

To better understand the factors in the socio-economic context of each country that influence performance differences between the innovation indicators used in the main measurement

²² See: <https://bluefoxr.github.io/COINr/>

²³ See: <https://composite-indicators.jrc.ec.europa.eu/>

²⁴ Nardo M, Saisana M, Saltelli A, Tarantola S, Hoffmann A, Giovannini E. Handbook on Constructing Composite Indicators: Methodology and User Guide. Paris (France): OECD publishing; 2008. JRC47008. <https://publications.jrc.ec.europa.eu/repository/handle/JRC47008>

framework, a set of structural indicators is included in the country profiles available on the EIS website and online tool.

The following sections discuss the relevance of these structural aspects to provide a better understanding of differences between countries in the performance of individual indicators. Full definitions of all performance indicators and contextual indicators are provided in the EIS 2026 Methodology Report. The list of EIS 2026 contextual indicators, the years for which average performance has been calculated, and data sources used are listed in Table 1 below.

DIMENSION/INDICATOR	PERIOD	SOURCE
Performance and structure of the economy		
GDP per capital (PPS)	Average 2023-2025	Eurostat
Average annual GDP growth (%)	Average 2023-2025	Eurostat
Employment share Manufacturing (NACE C)(%)	Average 2023-2025	Eurostat
Employment share High and Medium high-tech (%)	Average 2023-2025	Eurostat
Employment share Services (NACE G-N) (%)	Average 2023-2025	Eurostat
Employment share Knowledge-intensive services (%)	Average 2023-2025	Eurostat
Turnover share SMEs (%)	Average 2022-2024	Eurostat
Turnover share large enterprises (%)	Average 2022-2024	Eurostat
Foreign-controlled enterprises – share of value added (%)	Average 2018-2020	Eurostat
Herfindahl-Hirschmann Index of high-tech goods	Average 2023-2025	COMEXT
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	Average 2021-2023	Eurostat
Total early-stage Entrepreneurial Activity (TEA) (%)	Average 2023-2025	Global Entrepreneurship Monitor
FDI net inflows (% GDP)	Average 2022-2024	World Bank: World Development Indicators
Top R&D spending enterprises per 10 million population	Average 2023-2025	EU Industrial R&D Investment Scoreboard
Digital Intensity Index	2024	Eurostat
Young High Growth Enterprises	2023	Eurostat

DIMENSION/INDICATOR	PERIOD	SOURCE
Innovation profiles		
In-house product innovators with market novelties	2022	Eurostat
In-house product innovators without market novelties	2022	Eurostat
In-house business process innovators	2022	Eurostat
Innovators that do not develop innovations themselves	2022	Eurostat
Innovation active non-innovators	2022	Eurostat
Non-innovators with potential to innovate	2022	Eurostat
Non-innovators without disposition to innovate	2022	Eurostat
Horizon Europe funding intensity per researcher	Average 2023-2024	Horizon Europe; Eurostat
Governance and policy framework		
Corruption Perceptions Index	Average 2023-2025	Transparency International
Basic-school entrepreneurial education and training (1 to 5 best)	Average 2023-2025	Global Entrepreneurship Monitor
Rule of law (-2.5 to 2.5 best)	Average 2022-2024	World Bank: Worldwide Governance Indicators
Innovation procurement as a share of total public procurement	2023	Tenders Electronic Daily and National Public Procurement data
Environment		
Circular material use rate	Average 2022-2024	Eurostat
Greenhouse gas emission footprint of consumption	Average 2021-2023	Eurostat
Eco-Innovation Index	2024	EC, DG Environment
Demography		
Population size (millions)	Average 2023-2025	Eurostat
Average annual population growth (%)	Average 2023-2025	Eurostat
Population density (inhabitants / km ²)	Average 2022-2024	Eurostat

Table 1: Structural indicators used in the EIS

Performance and structure of the economy

GDP per capita in purchasing power standards (PPS)²⁵ is a measure for interpreting real income differences between countries. Higher income can increase the demand for new innovative goods and services. Economic growth is captured by the average annual growth rate of GDP for 2022–2024. In economies that grow faster, increasing demand may provide more favourable conditions for enterprises to sell their goods and services.

Differences in economic structures are important. Differences in the share of manufacturing industry in GDP, and in high-tech activities in manufacturing and services, are important factors that explain why countries can perform better or worse on indicators like business R&D expenditures, PCT patents, and innovative enterprises. Medium-high and high-tech industries have higher technological intensities than other industries. These industries, on average, will have higher R&D expenditures, more patent applications, and higher shares of innovative enterprises. Countries with above-average shares of these industries are expected to perform better on several EIS indicators. For example, for the EU on average, 85% of R&D expenditures in manufacturing are accounted for by medium-high and high technology manufacturing industries^{26 27}. Also, the share of enterprises that introduced a product and/or business process innovation is higher in medium-high and high- technology manufacturing industries compared to all core industries covered in the Community Innovation Survey²⁸.

Foreign ownership, including ownership from both other EU Member States and non-Member States, is important as, on average, about 30% of business R&D expenditures in EU Member States is made by foreign affiliates, which is significantly higher compared to Japan and the United States and comparable to Australia and Canada²⁹. The share of foreign-controlled enterprises in value-added serves as a proxy for differences in the impact of foreign ownership on the economy.

²⁵ The purchasing power standard (PPS) is an artificial currency unit. Theoretically, one PPS can buy the same amount of goods and services in each country. However, price differences across borders mean that different amounts of national currency units are needed for the same goods and services depending on the country. PPS are derived by dividing any economic aggregate of a country in national currency by its respective purchasing power parities. PPS is the technical term used by Eurostat for the common currency in which national accounts aggregates are expressed when adjusted for price level differences using PPPs. Thus, PPPs can be interpreted as the exchange rate of the PPS against the Euro.

²⁶ Based on NACE Rev. 2 three-digit level, manufacturing industries can be classified into high-technology, medium-high technology, medium-low-technology, and low-technology. The high technology and medium-high technology industries include: Chemicals and chemical products (20); Basic pharmaceutical products and pharmaceutical preparations (21); Weapons and ammunition (25.4*); Computer, electronic and optical products (26); Electrical equipment (27); Machinery and equipment not elsewhere classified (28); Motor vehicles, trailers and semi-trailers (29); Other transport equipment (30) excluding Building of ships and boats (30.1); Air and spacecraft and related machinery (30.3); and Medical and dental instruments and supplies (32.5**). If data are only available at the NACE Rev. 2 two-digit level, industries identified with an * are classified as medium-low-technology, and industries identified with an ** are classified as low-technology, and thus excluded from the high-technology and medium-high technology industries (Source: http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:High-tech_classification_of_manufacturing_industries).

²⁷ Average results for 2015–2017 for 24 Member States for which data are available for at least one year. Data were extracted from Eurostat (Business enterprise R&D expenditure in high-tech sectors – NACE Rev. 2 [htec_sti_exp2]).

²⁸ In accordance with Commission Regulation No 995/2012, the following industries and services are included in the Core target population covered in the CIS: Core Industry (excluding construction): Mining and quarrying (B), Manufacturing (C) (10–12: Manufacture of food products, beverages and tobacco; 13–15: Manufacture of textiles, wearing apparel, leather and related products; 16–18: Manufacture of wood, paper, printing and reproduction; 20: Manufacture of chemicals and chemical products; 21: Manufacture of basic pharmaceutical products and pharmaceutical preparations; 19–22 Manufacture of petroleum, chemical, pharmaceutical, rubber and plastic products; 23: Manufacture of other non-metallic mineral products; 24: Manufacture of basic metals; 25: Manufacture of fabricated metal products, except machinery and equipment; 26: Manufacture of computer, electronic and optical products; 25–30: Manufacture of fabricated metal products (except machinery and equipment), computer, electronic and optical products, electrical equipment, motor vehicles and other transport equipment; 31–33: Manufacture of furniture; jewellery, musical instruments, toys; repair and installation of machinery and equipment, Electricity, gas, steam and air conditioning supply (D), Water supply, sewerage, waste management and remediation activities (E) (36: Water collection, treatment and supply; 37–39: Sewerage, waste management, remediation activities). Core Services: Wholesale trade, except of motor vehicles and motorcycles (46), Transport and storage (H) (49–51: Land transport and transport via pipelines, water transport and air transport; 52–53: Warehousing and support activities for transportation and postal and courier activities); Information and communication (J) (58: Publishing activities; 61: Telecommunications; 62: Computer programming, consultancy and related activities; 63: Information service activities), Financial and insurance activities (K) (64: Financial service activities, except insurance and pension funding; 65: Insurance, reinsurance and pension funding, except compulsory social security; 66: Activities auxiliary to financial services and insurance activities), Professional, scientific and technical activities (M) (71–73: Architectural and engineering activities; technical testing and analysis; Scientific research and development; Advertising and market research)

²⁹ Average results for 2010–2016 for 14 Member States for which data were available (Austria, Belgium, Czechia, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Slovenia Spain, and Sweden). Source of the data: OECD Main Science and Technology Indicators, Volume 2018 Issue 2.

In addition, structural vulnerabilities in trade dependencies are increasingly relevant for innovation and resilience. The Herfindahl-Hirschman Index (HHI), calculated specifically for high-tech goods, measures the concentration of trade value across export partners. Higher values indicate stronger reliance on a limited number of partners, highlighting exposure to potential supply chain disruptions. Conversely, lower values suggest greater diversification and reduced dependency. The HHI thus complements existing indicators, such as high-tech imports from outside the EU, by capturing the dispersion of trade relationships within countries' high-tech trade profiles.

Business and entrepreneurship

Entrepreneurship is important for introducing new innovations on the market. The degree of entrepreneurship is measured by two contextual indicators measuring the share of new enterprise births in the economy and total entrepreneurial activity. The former is measured by the share of new enterprise birth in the economy. The latter is measured by the adult population aged 18-64 years who are in the process of starting a business (a nascent entrepreneur) or who started a business which is not older than 42 months at the time of the respective survey (owner manager of a new business).

A complementary indicator is the share of young high-growth enterprises, which provides insights into the capacity of economies to support the scale-up of innovative firms. These 'Gazelles' are particularly important in high-tech sectors, where rapid firm expansion often reflects strong innovation dynamics and favourable ecosystem conditions.

The Digital Intensity Index (DII) is another relevant contextual indicator, capturing the extent to which businesses adopt digital technologies. Composed of 12 variables across four areas, digital skills, infrastructure, business digital transformation, and digital public services, the DII provides a composite view of digital uptake. Higher digital intensity is typically associated with increased innovation capacity and competitiveness, particularly among SMEs.

Inflows of new technologies are important as they add to a country's economic and technological capacities. Inward Foreign direct investment (FDI) can have a positive impact on innovation performance, although there are differences depending on the complexity of the receiving industry, political and economic framework conditions as well as the quality of the institutions of the receiving countries. Inward FDI flows are measured over a three-year period, as average net inflows of investments to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor.

Enterprise characteristics are important for explaining differences in R&D spending and innovation activities. Large enterprises, defined as enterprises with 250 or more employees, account for almost 80 percent of EU business R&D expenditures, whereas SMEs, defined as enterprises with 10 to 249 employees, account for only one-fifth. The presence of large R&D spending enterprises is captured by the EU Industrial R&D Investment Scoreboard, which provides economic and financial data and analysis of the top 1000 corporate R&D investors from the EU and top 2000 corporate R&D investors elsewhere in the world³⁰.

30 <https://ec.europa.eu/newsroom/rtd/items.813043/en>

Innovation profiles

Innovation is a highly diverse activity. Enterprises can innovate through product or business process innovation, with the latter including process, marketing and organisational innovation. Enterprises can adopt new technologies developed by other enterprises or they engage in intensive in-house R&I activities. The capabilities needed by enterprises to innovate are very different in kind and size. Building on earlier work by academics and the OECD, Eurostat, UNU-MERIT (Maastricht University), ZEW – Leibniz Centre for European Economic Research, in collaboration with national statistical offices, developed a taxonomy of innovating and non-innovating enterprises based on CIS micro data. The following characteristics were used to identify seven mutually exclusive detailed innovation profiles: The degree of novelty of product innovations, own in-house capacities to innovate, and R&D activities. Of these, four innovation profiles capture different types of enterprises that have introduced an innovation (product or business process) and three innovation profiles capture non-innovators, of which one profile captures non-innovators with innovation activities, one profile captures non-innovators with an interest in innovation, while the other captures non innovators without any innovation activities or interest:

- In-house product innovators with market novelties, including all enterprises that introduced a product innovation that was developed by the enterprise and that was not previously offered by competitors.
- In-house product innovators without market novelties, including all enterprises that introduced a product innovation that was developed by the enterprise but that is only new to the enterprise itself.
- In-house business process innovators, including all enterprises without a product innovation, but that did introduce a business process innovation that was developed by the enterprise.
- Innovators that do not develop innovations themselves, including all enterprises that introduced an innovation of any kind but did not develop it themselves (enterprises without significant own innovation capabilities).
- Innovation active non-innovators, including all enterprises that did not introduce any innovation but that either had ongoing or abandoned innovation activities.
- Non-innovators with potential to innovate, including all enterprises that did not introduce any innovation, and which had no ongoing or abandoned innovation activities but that did consider innovating.
- Non-innovators without disposition to innovate, including all other enterprises, those that neither introduced an innovation nor had any ongoing or abandoned innovation activities nor considered to innovate.

Data on Innovation profiles should not be interpreted as ‘more is better’ Instead, the data should be used to better understand differences in the composition of different types of enterprises in a country, thereby helping policy makers to design policies that better target different enterprises. To complement this view, Horizon Europe funding per researcher (FTE) is proposed as a new indicator. It measures the net EU contribution received under Horizon Europe per full-time equivalent

researcher. This provides insight into how effectively countries access and benefit from EU-level research programmes and reflects the intensity of competitive R&D funding per researcher.

Governance and policy framework

Institutional and legal differences between countries may make it more difficult to engage in business activities. The Corruption Perceptions Index is a composite index based on a combination of surveys and assessments of corruption from 13 different sources and scores, and ranks countries based on how corrupt a country's public sector is perceived to be, with a score of 0 representing a very high level of corruption and a score of 100 representing a low level of corruption. The CPI is published by Transparency International, and the data are included in the EU Sustainable Development Goals indicator set to monitor progress on SDG Goal 16 on Peace, justice and strong institutions.

Entrepreneurial skills are important for successfully transforming ideas and inventions into innovations. These skills can be acquired on the job but also by formal schooling. Basic-school entrepreneurial education and training measures the extent to which training in creating or managing SMEs is incorporated within the education and training system at primary and secondary levels.

Trust is important for creating a business environment for undertaking risky innovative activities. Measures of the rule of law capture differences in the extent to which people have confidence in and abide by the rules of society. The Rule of law Index measures differences in the quality of contract enforcement, property rights, the police, the judicial system, as well as the prevalence of crime and violence.

Innovation procurement as a share of total public procurement measures the proportion of public procurement spending directed toward innovative products, services and solutions. It captures the role of the public sector demand-side driver, reflecting the extent to which governments actively use their purchasing power to stimulate innovation activity. Higher values indicate a greater share of public procurement directed toward innovative goods and services.

Environment

As the natural environment increasingly suffers from the loss of biodiversity, pollution and climate change, the relationship between innovation performance and environment sustainability grows in importance. EU level policy developments, such as the European Green Deal and the Recovery plan for Europe, underline the need to take account of the pivotal role of R&I in contributing to societal challenges. Three indicators are included in the Contextual indicators relevant for measuring climate change and the role of innovation.

The circular material use rate measures, in percentages, the share of material recovered and fed back into the economy – thus saving extraction of primary raw materials – in overall material use. It covers households, the private and the public sector. A higher circular material use rate indicates more secondary materials substituting for primary raw materials, thereby avoiding the environmental impacts of extracting primary material.

Production-based greenhouse gas emissions per capita is an indicator sourced from Eurostat's FIGARO dataset. It measures green-house gas emissions generated by economic activity within a country's territory, expressed per head of population. By adopting the consumption perspective, the indicator captures the emissions embedded in goods and services consumed within a country, regardless of where they are produced. Lower values indicate better environmental performance.

Demography

Structural data also includes population size and the average annual growth rate of population for 2022-2024. Increasing demand following an increasing population may provide more favourable conditions for enterprises to sell their goods and services. Densely populated areas are more likely to be more innovative for several reasons. Firstly, knowledge diffuses more easily when people and enterprises are located closer to each other. Secondly, in more densely populated areas there tends to be a concentration of government and educational services. Densely populated areas provide better training opportunities and employ above-average shares of highly educated people. Furthermore, the amount of natural assets per capita tends to decline with population density. This positively impacts on the share of Medium and high-tech product exports and the share of employment in knowledge intensive activities.

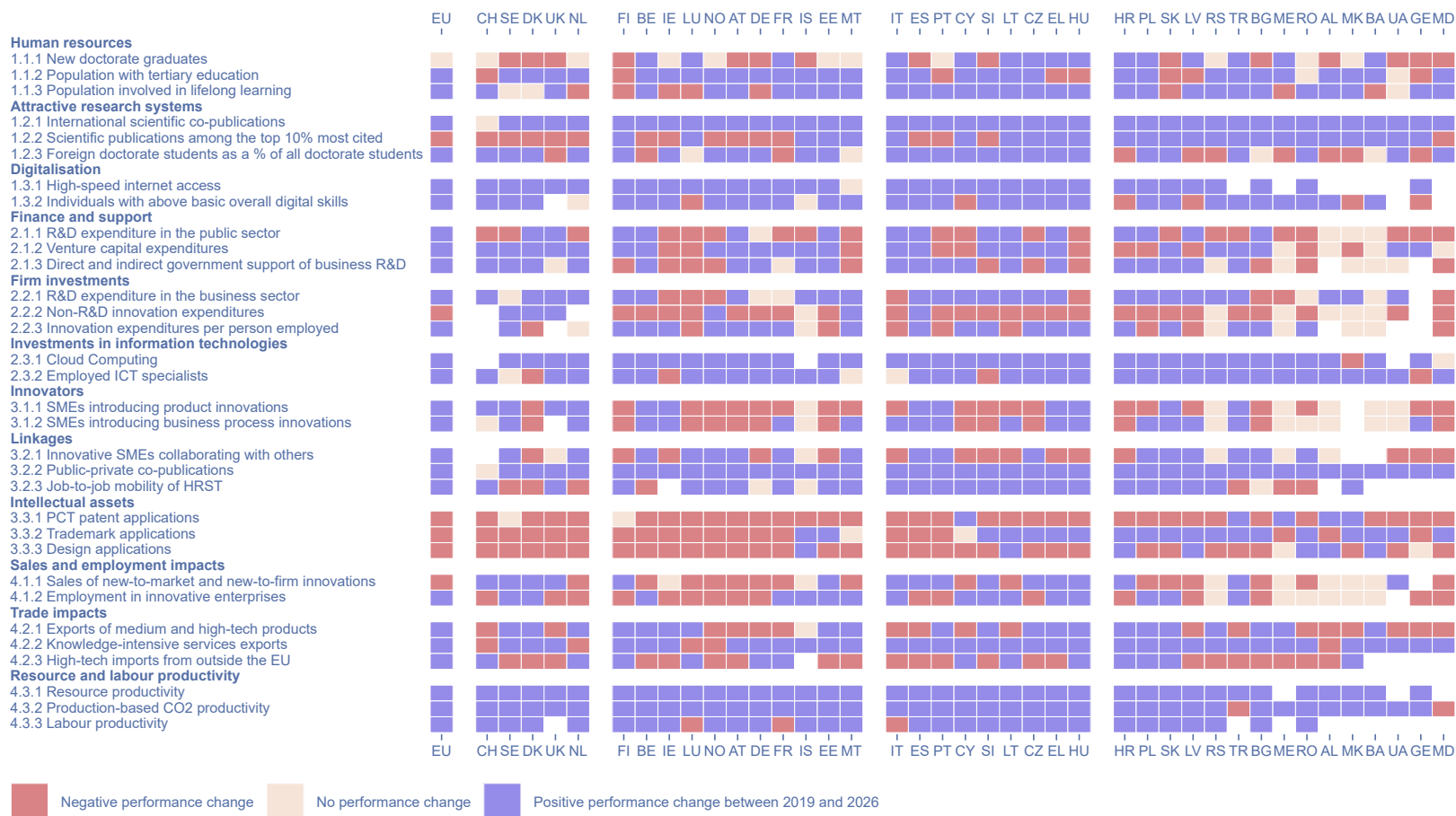


Figure 40: Performance change between 2019 and 2026 per indicator for EU Member States and neighbouring countries



Figure 41 Performance change between 2025 and 2026 per indicator for the EU and neighbouring countries

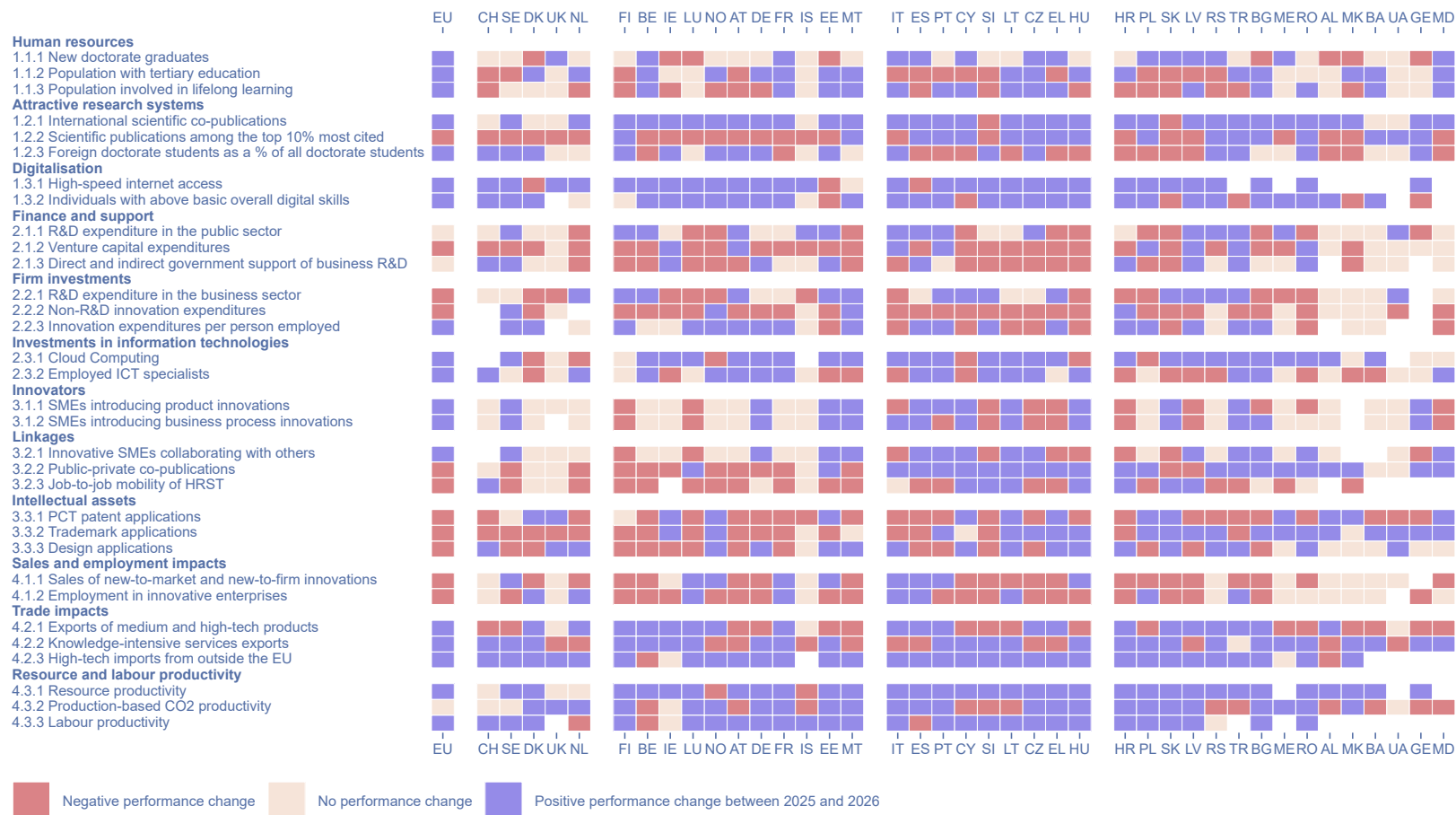


Figure 42: Differences in structural indicators between the EU and neighbouring countries

ANNEX A: COUNTRY ABBREVIATIONS

COUNTRY CODE	COUNTRY	COUNTRY CODE	COUNTRY
AL	Albania	IT	Italy
AT	Austria	JP	Japan
AU	Australia	KR	South Korea
BA	Bosnia and Herzegovina	LT	Lithuania
BE	Belgium	LU	Luxembourg
BG	Bulgaria	LV	Latvia
BR	Brazil	MD	Moldova
CA	Canada	ME	Montenegro
CH	Switzerland	MK	North Macedonia
CL	Chile	MT	Malta
CN	China	MX	Mexico
CY	Cyprus	NL	Netherlands
CZ	Czechia	NO	Norway
DE	Germany	PL	Poland
DK	Denmark	PT	Portugal
EE	Estonia	RO	Romania
EL	Greece	RS	Serbia
ES	Spain	SE	Sweden
FI	Finland	SI	Slovenia
FR	France	SK	Slovakia
GE	Georgia	TR	Turkey
HR	Croatia	UA	Ukraine
HU	Hungary	UK	United Kingdom
IE	Ireland	US	United States
IN	India	ZA	South Africa
IS	Iceland		

ANNEX B: PERFORMANCE PER INDICATOR

Available on the EIS website

ANNEX C: INDICATOR VALUES BY EUROPEAN COUNTRY IN 2026 - EU COUNTRIES

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Framework conditions																				
Human Resources																				
1.1.1 New doctorate graduates	0.8	1.0	0.3	0.5	0.9	1.1	0.9	0.7	0.9	0.9	0.9	1.0	1.3	0.7	0.5	1.0	0.9	0.5	1.3	0.4
1.1.2 Population completed tertiary education	43.7	52.7	41.2	60.0	36.0	40.9	52.5	44.3	42.8	52.5	44.8	38.2	56.0	42.0	32.6	66.8	31.1	60.8	65.0	44.7
1.1.3 Lifelong learning	16.1	18.0	6.1	12.0	11.1	9.3	31.0	23.8	5.2	15.8	13.7	28.1	15.5	6.5	10.6	14.6	10.8	10.4	17.4	11.4
Attractive research systems																				
1.2.1 In-ternational scientific co-publications	2468.1	2378.7	483.4	3478.2	1396.8	1272.0	3884.0	2183.2	1320.6	1279.2	1382.7	2928.7	1025.5	1144.5	967.7	2498.8	1284.7	1192.8	3536.8	937.4
1.2.2 Sci-entific pub-lications among top 10% most cited	10.7	11.1	3.1	12.3	5.7	10.1	12.9	9.2	9.7	8.6	9.4	12.6	7.9	4.2	6.4	11.7	10.6	6.0	12.8	4.3
1.2.3 Foreign doctorate students	42.4	15.9	10.6	28.9	27.9	24.8	39.4	34.8	1.5	20.1	22.2	30.1	35.4	7.9	29.0	42.5	15.2	10.5	88.7	7.0

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Digitalisation																				
1.3.1 High speed internet access	72.2	93.8	90.4	89.1	53.9	77.4	96.8	76.3	46.1	95.0	82.5	81.7	87.5	78.9	86.0	87.2	70.7	78.3	95.2	68.1
1.3.2 Individuals with above basic over-all digital skills	34.3	29.7	11.8	18.3	37.3	24.2	53.0	33.6	27.5	38.9	31.4	54.9	35.0	27.7	34.0	54.4	31.5	27.3	28.1	20.1
Investments																				
Finance and support																				
2.1.1 R&D expenditure in the public sector	1.0	0.9	0.3	0.3	0.6	0.9	1.1	0.8	0.7	0.7	0.7	1.0	0.7	0.6	0.3	0.2	0.6	0.6	0.5	0.6
2.1.2 Venture capital investments	0.1	0.2	0.1	0.0	0.0	0.1	0.2	0.3	0.0	0.2	0.1	0.3	0.3	0.0	0.1	0.1	0.1	0.1	0.1	0.1
2.1.3 Direct and indirect government support for business R&D	0.3	0.3	0.0	0.0	0.1	0.1	NA	0.1	0.1	0.2	NA	0.1	0.4	0.0	0.2	0.2	0.1	0.1	0.0	0.0

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Firm investments																				
2.2.1 R&D expenditure in the business sector	2.2	2.4	0.5	0.3	1.2	2.1	1.9	1.2	0.8	0.8	1.5	2.2	1.4	0.7	1.0	1.2	0.8	0.4	0.5	0.3
2.2.2 Non-R&D innovation expenditures	0.2	0.5	0.3	0.4	0.6	1.0	0.4	1.0	0.7	0.4	0.6	0.3	0.2	0.4	0.4	0.1	0.3	1.3	0.2	0.2
2.2.3 Innovation expenditures per person employed	7943.1	17062.4	1592.5	2174.6	5343.0	11246.8	9721.1	5206.6	6008.5	4485.1	7828.8	8448.3	8829.9	8298.2	4162.1	18866.2	4870.5	4080.6	4385.9	1202.6
Investments in information technologies																				
2.3.1 Cloud Computing	52.1	61.6	17.8	51.4	54.9	53.9	68.9	60.7	24.3	41.6	52.7	79.2	40.4	46.6	48.0	73.0	75.6	58.1	47.7	44.1
2.3.2 Employed ICT specialists	5.4	5.9	4.8	4.9	4.7	5.5	5.7	6.8	2.5	4.8	5.0	7.8	4.9	4.9	4.6	6.2	3.8	5.7	8.7	4.5
Innovation Activities																				
Innovators																				
3.1.1 SMEs introducing product innovations	27.9	37.2	13.3	48.1	22.3	26.2	31.5	46.2	45.5	19.3	25.6	30.4	26.7	15.9	19.4	29.0	35.6	27.0	24.1	12.7

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
3.1.2 SMEs introducing business process innovations	47.0	60.5	16.6	64.9	36.2	51.6	44.2	49.3	59.5	29.0	43.1	42.5	45.3	24.1	25.6	38.2	60.1	45.9	38.0	25.6
Linkages																				
3.2.1 Innovative SMEs collaborating with others	18.0	26.7	5.9	17.0	15.3	11.8	7.4	21.6	12.6	9.8	12.6	23.2	15.9	10.0	8.1	21.2	13.3	11.6	12.0	7.9
3.2.2 Public-private co-publications	525.2	368.1	74.1	468.0	185.8	260.3	727.4	327.7	220.6	177.6	139.5	446.8	153.0	204.9	177.1	356.1	226.7	122.8	629.1	141.9
3.2.3 Job-to-job mobility of Human Resources in Science & Technology	7.3	6.5	2.8	10.5	4.3	8.8	10.7	9.5	4.8	6.9	6.8	8.4	7.4	6.9	6.7	NA	4.4	10.8	9.4	6.2
Intellectual assets																				
3.3.1 PCT patent applications	4.4	3.2	0.4	1.3	0.9	5.1	6.5	1.3	0.7	1.2	2.9	9.1	3.6	0.5	1.2	1.5	1.8	0.5	1.8	0.7

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
3.3.2 Trademark applica- tions	8.6	4.8	9.1	33.6	5.7	5.8	7.0	21.4	5.3	6.9	5.8	6.3	3.4	3.9	4.0	3.1	6.0	12.3	13.4	9.4
3.3.3 Design ap- plications	4.5	1.9	3.2	1.9	1.6	3.8	3.3	4.3	0.8	2.2	3.1	2.9	1.9	1.0	0.9	0.7	5.7	2.6	3.8	1.8
Impacts																				
Sales and employment impacts																				
4.1.1 Sales of new- to-market and new- to-firm in- novations	10.1	10.5	3.8	10.7	13.7	13.2	13.0	13.2	17.4	23.3	12.5	15.5	6.9	12.8	9.1	28.1	15.5	9.5	3.8	5.9
4.1.2 Employ- ment in innovative enterprises	63.5	75.8	34.3	47.7	51.9	71.3	59.4	63.5	68.6	43.2	58.0	64.8	63.8	45.5	36.3	54.0	69.8	63.8	50.7	38.2
Trade impacts																				
4.2.1 Exports of me- dium and high-tech products	57.1	51.9	35.6	31.0	69.2	66.5	52.7	40.7	25.4	44.4	63.6	46.2	55.6	39.6	66.8	74.5	51.9	36.1	45.6	32.1

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
4.2.2 Knowl- edge- intensive services exports	46.8	73.0	57.9	85.4	50.4	74.8	78.9	67.2	53.1	44.9	77.0	78.4	66.2	24.2	52.9	91.7	50.6	39.9	85.5	59.2
4.2.3 High- tech im- ports from outside the EU	17.0	13.6	11.9	31.3	23.3	15.4	10.4	22.5	13.3	14.1	15.0	12.8	9.7	7.9	20.8	40.2	9.8	8.8	12.9	13.4
Resource and labour productivity																				
4.3.1 Resource productiv- ity	2.8	3.6	1.1	1.8	2.5	3.6	2.1	1.2	2.5	4.0	2.8	1.0	3.2	2.3	2.2	3.6	4.5	1.6	4.3	1.9
4.3.2 Produc- tion-based CO2 pro- ductivity	10.6	9.3	7.3	6.3	7.1	9.9	18.4	8.8	8.0	11.1		11.1	14.8	10.3	10.3	20.3	11.5	11.5	12.8	11.4
4.3.3 Labour productiv- ity	57.4	65.2	13.3	32.0	25.0	59.3	82.3	25.2	19.6	37.7	43.6	57.9	56.9	19.6	19.8	112.9	42.3	21.3	90.7	19.7

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Framework conditions																					
Human Resources																					
1.1.1 New doctorate graduates	0.2	0.7	0.4	0.8	0.3	1.1	0.8	0.7	0.0		1.9	0.3	0.5	0.1	0.1	0.1	0.8	0.5	0.3		1.4
1.1.2 Population completed tertiary education	47.7	56.1	45.2	42.5	23.0	53.6	42.8	36.3		27.5	50.6			35.4		35.9	56.8	37.1	44.8		
1.1.3 Lifelong learning	19.7	25.9	8.8	16.9	10.2	38.2	22.8	11.9		1.8	26.3			3.2		2.6	21.5	5.2	7.5		
Attractive research systems																					
1.2.1 International scientific co-publications	1562.0	2553.5	706.6	1826.1	446.8	3134.7	2135.8	898.6	289.0		4452.1	339.6	5045.6	199.4	1047.6	472.9	3405.8	826.5	315.9		
1.2.2 Scientific publications among top 10% most cited	7.6	14.0	5.6	8.0	6.8	12.5	6.3	4.0	3.5	3.8	13.8	4.6	9.2	1.2	3.9	4.6	11.9	5.5	7.5	3.0	13.8
1.2.3 Foreign doctorate students	73.2	NA	3.4	32.0	4.5	36.6	23.8	14.2	3.3	9.9	58.9	1.2		21.8		34.4	26.4	6.3	10.1		
Digitalisation																					
1.3.1 High speed internet access	100.0	98.4	83.8	94.6	95.9	89.7	79.6	73.0			92.2	38.5	95.3				95.4	73.2			82.9
1.3.2 Individuals with above basic overall digital skills	38.0	55.6	23.6	32.0	11.1	38.1	19.8	21.2	8.1	9.8	45.5	7.4			10.7	6.1	51.2	12.8	9.9		

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Investments																					
Finance and support																					
2.1.1 R&D expenditure in the public sector	0.2	0.7	0.5	0.6	0.2	0.9	0.6	0.4				0.2	0.7		0.3		0.8	0.5	0.5	0.1	
2.1.2 Venture capital investments	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.0			0.2		0.1	0.0	0.0	0.0	0.1	0.0	0.0		
2.1.3 Direct and indirect government support for business R&D	0.0	0.2	0.1	0.5	0.0	0.1	0.1	0.1			0.0		0.5			0.0	0.1	0.0	0.3		0.4
Firm investments																					
2.2.1 R&D expenditure in the business sector	0.4	1.6	0.9	1.1	0.3	2.6	1.5	0.6					1.8		0.0		1.0	0.4	0.9	0.2	1.9
2.2.2 Non-R&D innovation expenditures	3.1		0.4	0.3	0.0	0.8	0.1	0.5	0.0					0.2			0.7		0.2	0.1	
2.2.3 Innovation expenditures per person employed	13743.4		3279.9	2954.8	827.7	14303.4	4269.3	3391.9						221.2			7850.1	1345.0	3819.1		
Investments in information technologies																					
2.3.1 Enterprises providing ICT training	75.1	68.5	54.7	38.7	24.9	72.0	48.0	36.4	33.7	29.0				0.2	33.4		66.5	41.5	20.3		
2.3.2 Employed ICT specialists	4.8	7.2	4.5	5.4	2.7	8.9	4.5	4.4		2.1	5.9			2.8		3.2	5.9	4.2	1.6		

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Innovation Activities																					
Innovators																					
3.1.1 SMEs introducing product innovations	28.3	27.7	10.2	28.7	6.5	40.0	26.8	16.2	27.9		38.5	10.3		4.2			38.9	43.9	23.0		
3.1.2 SMEs introducing business process innovations	42.8	43.2	26.7	38.4	4.5	55.8	31.8	26.1	36.8			17.1		9.3			46.0	39.2	35.3		
Linkages																					
3.2.1 Innovative SMEs collaborating with others	11.0	18.5	6.6	11.1	1.9	34.4	11.7	9.0	14.1			1.1		5.9			28.1	13.3	12.0		
3.2.2 Public-private co-publications	219.4	425.0	94.9	220.2	60.1	524.8	328.5	106.8	21.2		860.5	32.7	731.8	21.4	80.2	51.0	619.9	93.2	33.1		
3.2.3 Job-to-job mobility of Human Resources in S&T	7.6	8.7	6.8	7.0	1.4	4.0	7.3	3.4			10.2		8.9		3.4	5.0	9.2	5.7	7.1		
Intellectual assets																					
3.3.1 PCT patent applications	1.1	4.7	0.6	0.9	0.2	8.0	1.7	0.9	0.2	0.1	7.3	0.2	2.5	0.2	1.0	0.2	1.9	0.4	0.9	0.3	3.1
3.3.2 Trade-mark applications	46.6	6.4	6.2	6.7	4.1	7.4	7.9	5.8	0.8	0.3	7.8	0.3		0.8	0.7		1.7	1.2	0.7	1.3	3.2
3.3.3 Design applications	4.3	3.7	3.9	2.1	1.3	3.1	2.1	1.4			3.9	0.0					0.4	0.1	0.1	0.2	1.2

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Impacts																					
Sales and employment impacts																					
4.1.1 Sales of new-to-market and new-to-firm innovations	6.2	8.7	4.1	16.4	3.8	13.9	12.1	14.1						1.4			6.4		12.4		
4.1.2 Employment in innovative enterprises	46.6	63.2	42.6	57.6	10.1	61.8	62.5	38.5	53.5			33.0		24.5			67.9		44.2		
Trade impacts																					
4.2.1 Exports of medium and high-tech products	56.9	51.7	48.8	44.0	57.1	56.1	69.3	70.0	11.3	28.9	41.1	19.1	9.7	22.0	23.3	59.7	12.3	40.5	40.1		
4.2.2 Knowledge-intensive services exports	46.3	76.1	52.5	41.5	54.8	81.0	40.9	47.2	15.9	18.6	72.8	30.0	50.4	46.9	22.6	44.3	74.9	63.5		65.8	83.4
4.2.3 High-tech imports from outside the EU	18.4	19.3	18.9	10.1	9.1	11.6	22.1	28.7	16.7		22.0				38.4	29.4	17.4	18.4	22.7		13.7
Resource and labour productivity																					
4.3.1 Resource productivity	4.0	6.3	1.8	2.0	1.1	1.9	2.4	2.5	1.7	1.3		0.4	2.4			1.4	3.2	0.8	2.3		
4.3.2 Production-based CO2 productivity	15.4	11.1	6.4	14.4	12.2	18.1	8.3	8.1	9.3	3.2	22.5	7.4	15.3	4.7	6.2	5.3	11.3	3.0	4.9		13.7
4.3.3 Labour productivity	33.6	62.8	19.2	23.9	16.2	61.3	31.1	26.8			90.0		73.5				84.5				

ANNEX D: PERFORMANCE PER INDICATOR - CHANGE SINCE BASE YEAR, 2019

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Framework conditions																				
Human Resources																				
1.1.1 New doctorate graduates	-11.1	11.1	-22.2	22.2	11.1	-11.1	-55.6	0.0	44.4	-33.3	0.0	-22.2	33.3	33.3	22.2	0.0	22.2	22.2	66.7	11.1
1.1.2 Population completed tertiary education	8.6	11.9	4.6	8.0	7.3	26.5	22.5	7.3	-9.3	26.5	21.9	-12.6	37.8	38.4	-5.3	5.3	18.5	21.9	2.6	-5.3
1.1.3 Lifelong learning	14.4	29.8	41.4	22.1	51.0	-1.0	0.0	51.9	7.7	14.4	26.9	-9.6	43.3	11.5	45.2	-1.0	8.7	18.3	-4.8	26.9
Attractive research systems																				
1.2.1 International scientific co-publications	63.1	43.9	13.2	173.6	37.2	22.2	65.9	61.7	42.6	32.1	33.1	71.6	6.3	38.1	38.1	73.3	40.7	52.2	90.3	42.3
1.2.2 Scientific publications among top 10% most cited	-8.2	-19.1	4.6	24.6	11.6	-10.7	-20.6	9.7	16.4	-4.6	-6.9	9.7	-21.0	4.2	11.4	-2.1	0.5	21.5	1.5	11.8
1.2.3 Foreign doctorate students	72.6	-28.2	0.0	81.7	65.5	10.2	25.4	122.5	0.8	12.7	28.6	47.9	-6.9	-7.7	85.4	80.5	2.0	36.5	0.0	-16.9
Digitalisation																				
1.3.1 High speed internet access	174.7	93.2	86.0	232.4	84.0	146.8	13.0	64.5	85.7	20.5	109.9	67.9	149.2	121.8	148.1	176.8	138.9	59.0	15.4	33.5
1.3.2 Individuals with above basic overall digital skills	4.4	14.9	17.6	-12.0	59.1	23.9	64.1	26.6	25.7	3.6	22.1	16.2	16.7	-15.7	55.7	53.8	40.0	19.2	-16.4	-16.3

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Investments																				
Finance support																				
2.1.1 R&D expenditure in the public sector	15.5	22.4	10.3	-1.7	-1.7	0.0	3.5	22.4	19.0	20.7	3.5	15.5	-3.5	29.3	-6.9	-19.0	13.8	6.9	-1.7	34.5
2.1.2 Venture capital investments	14.4	23.3	13.1	-31.7	7.8	35.9	159.8	150.1	13.4	71.7	24.6	149.5	23.9	-10.3	-22.8	-68.7	23.7	91.1	-186.3	-172.8
2.1.3 Direct and indirect government support for business R&D	7.3	45.2	-3.4	13.3	-18.0	19.1	40.4	13.2	44.7	34.5	12.5	-6.8	0.0	7.6	-100.1	-31.8	0.1	15.0	-4.4	2.0
Firm investments																				
2.2.1 R&D expenditure in the business sector	7.2	39.9	-1.4	6.5	5.8	0.0	2.2	43.5	21.0	13.0	5.1	29.0	0.0	23.9	-10.9	-12.3	-4.3	7.2	-17.4	13.8
2.2.2 Non-R&D innovation expenditures	-28.0	-1.9	-18.2	-19.3	-8.9	-15.9	1.3	-46.2	-13.2	1.4	-21.0	-33.0	-36.0	-66.2	-41.9	-46.4	-34.8	-35.1	-8.2	-46.3
2.2.3 Innovation expenditures per person employed	14.5	2.1	3.6	1.4	22.6	0.0	-10.4	-6.4	26.0	11.8	12.9	5.8	15.4	83.0	4.9	41.1	-5.6	-0.9	-5.4	-4.4
Investments in information technologies																				
2.3.1 Enterprises providing ICT training	121.4	90.1	40.0	104.5	119.8	132.7	55.9	112.8	48.5	82.9	121.6	43.6	57.5	67.0	126.2	117.4	223.7	149.6	97.6	124.5
2.3.2 Employed ICT specialists	26.5	8.8	5.9	29.4	2.9	17.6	-5.9	17.6	2.9	20.6	14.7	8.8	11.8	35.3	20.6	-2.9	0.0	55.9	29.4	20.6

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Innovation Activities																				
Innovators																				
3.1.1 SMEs introducing product innovations	-24.4	41.9	-21.6	-0.5	-14.2	-61.0	-0.0	-13.1	18.0	26.8	2.4	-23.9	-24.8	-106.7	8.9	5.2	-1.5	-16.8	-22.8	-19.2
3.1.2 SMEs introducing business process innovations	-21.2	11.4	-8.1	-2.3	-8.2	-8.0	-6.0	-9.8	15.6	18.9	4.3	-12.2	19.4	-65.5	13.6	0.7	11.5	8.5	-3.9	1.7
Linkages																				
3.2.1 Innovative SMEs collaborating with others	16.8	2.4	14.2	-145.9	30.3	-25.5	-52.2	-46.1	-67.1	23.8	1.5	-36.5	22.4	-21.1	-10.9	-2.2	-14.9	-16.2	2.0	13.5
3.2.2 Public-private co-publications	94.8	39.5	26.6	211.0	26.7	26.3	39.7	100.5	65.0	46.8	16.2	46.1	2.3	42.8	53.0	52.8	64.8	29.1	169.5	48.5
3.2.3 Job-to-job mobility of Human Resources in S&T	32.4	-11.8	0.0	100.0	26.5	0.0	-26.5	76.5	47.1	58.8	41.2	35.3	64.7	67.7	70.6		17.6	138.2	14.7	20.6
Intellectual assets																				
3.3.1 PCT patent applications	-16.8	-17.2	-6.3	12.1	-4.3	-19.5	-7.1	-5.8	-1.3	-8.8	-14.7	0.0	-9.2	-8.6	-10.5	-18.2	-10.3	-7.8	-20.0	-2.8
3.3.2 Trademark applications	-11.1	-15.6	17.6	0.0	18.1	-11.9	-23.5	38.7	9.8	-9.7	-6.2	-26.7	-9.4	22.4	10.7	-21.5	-7.1	56.0	-58.4	39.6
3.3.3 Design applications	-49.7	-17.7	-50.0	-52.3	-47.8	-61.7	-76.4	-30.9	-10.3	-15.9	-33.5	-26.4	-25.4	3.8	-5.9	-14.8	-12.8	18.8	-58.7	9.6

INDICATOR	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	EU	FI	FR	HR	HU	IE	IT	LT	LU	LV
Impacts																				
Sales and employment impacts																				
4.1.1 Sales of new-to-market and new-to-firm innovations	-20.4	-25.1	-17.6	-12.8	6.1	-7.1	19.9	16.2	4.8	32.3	-4.1	34.3	-24.1	38.5	11.3	0.0	24.9	-42.5	-8.5	-17.4
4.1.2 Employment in innovative enterprises	-20.7	7.0	-9.2	13.6	-4.0	-1.7	19.1	8.3	19.1	-7.2	7.0	-22.7	17.4	-24.6	2.7	-34.2	27.2	16.9	-61.3	-1.8
Trade impacts																				
4.2.1 Exports of medium and high-tech products	-0.6	7.0	2.5	-56.5	4.2	-2.8	7.1	4.8	8.4	-1.7	4.3	5.4	-5.0	1.0	1.6	36.0	-0.5	-0.6	4.0	-3.5
4.2.2 Knowledge-intensive services exports	5.1	2.7	29.1	20.2	13.2	1.9	12.4	29.9	0.4	11.5	6.6	8.1	7.6	7.1	3.5	6.2	0.1	27.6	-8.8	12.7
4.2.3 High-tech imports from outside the EU	-10.5	-17.5	-4.0	7.4	-14.7	3.7	-9.1	-16.2	-9.5	-4.5	0.7	1.4	25.4	3.5	3.4	-44.5	-0.6	4.7	30.8	-5.8
Resource and labour productivity																				
4.3.1 Resource productivity	41.9	59.0	18.8	13.2	49.2	75.0	33.4	22.3	25.6	54.1	44.4	14.8	23.7	34.2	35.5	79.2	47.1	16.1	52.7	23.1
4.3.2 Production-based CO ₂ productivity	42.8	40.9	61.2	15.7	46.1	56.6	109.9	109.4	51.4	62.3	53.7	78.2	70.0	45.7	61.0	106.7	50.5	31.7	80.7	42.8
4.3.3 Labour productivity	6.4	7.0	6.3	11.2	1.9	4.1	15.5	1.7	1.3	2.4	4.2	0.8	-3.5	7.2	5.0	28.9	-2.1	6.4	-9.0	7.2

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Framework conditions																					
Human Resources																					
1.1.1 New doctorate graduates	0.0	0.0	22.2	0.0	0.0	-33.3	-78.4	-11.1	-11.1	2.3	0.0	-0.6	-11.1	-2.8	11.1	0.0	0.0	0.0	11.1	-5.9	-6.8
1.1.2 Population completed tertiary education	31.8	3.3	22.5	-22.5	0.0	28.5	13.9	-21.2	20.8	2.6	-11.3	-5.9	35.1	35.8	41.1	10.6	14.6	17.9	41.1	0.0	63.4
1.1.3 Lifelong learning	56.7	-6.7	30.8	42.3	51.0	0.0	27.9	-8.7	9.0	-2.9	33.6	5.0	30.8	18.9	-4.8	3.9	19.2	3.9	9.6	0.0	1.9
Attractive research systems																					
1.2.1 International scientific co-publications	48.2	43.7	30.6	53.0	18.7	55.9	55.2	23.0	19.2	16.1	0.0	12.7	0.0	9.8	59.7	24.4	82.9	32.1	19.6	4.4	36.9
1.2.2 Scientific publications among top 10% most cited	21.4	-18.3	13.0	-20.9	38.3	-10.1	-2.9	12.9	11.5	0.3	-8.7	28.1	2.8	-18.5	14.5	19.1	-1.8	12.2	21.4	16.0	-11.3
1.2.3 Foreign doctorate students	0.0	31.1	7.0	28.1	0.5	9.1	89.1	27.1	-46.1	0.0	21.7	-4.6	99.0	57.0	-45.9	-26.5	31.8	-5.0	10.6	2.4	-5.6
Digitalisation																					
1.3.1 High speed internet access	0.0	33.5	80.2	39.6	94.9	43.0	53.9	93.9			43.7	55.8	45.4				81.9	48.1			211.3
1.3.2 Individuals with above basic overall digital skills	11.4	0.0	13.0	15.3	10.7	10.8	0.4	1.5	18.1	19.6	23.2	-2.0	0.0		7.0	-8.9	38.2	2.3	0.2		

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Investments																					
Finance and support																					
2.1.1 R&D expenditure in the public sector	-3.5	-1.7	25.9	-5.2	-8.6	-3.5	29.3	-1.7	0.0	0.0	-1.7	-11.6	-6.9	-5.2	-5.2	0.0	-34.5	-5.2	-12.1	-3.5	49.3
2.1.2 Venture capital investments	-316.9	34.4	-18.1	-17.6	-43.4	207.9	19.8	10.8	0.0	0.0	3.5	2.0	61.1	0.0	0.0	-8.8	43.6	5.2	27.0	10.4	100.8
2.1.3 Direct and indirect government support for business R&D	-16.3	7.4	57.4	121.8	-5.0	8.9	-22.9	22.0		0.0	1.4		124.1	-0.7	0.0	0.0	-18.6	0.0	105.3	0.0	0.0
Firm investments																					
2.2.1 R&D expenditure in the business sector	2.9	8.7	16.7	30.4	0.0	0.0	6.5	8.0	0.7	0.0	8.7		32.6	-0.6	-2.2	0.7	-5.8	8.7	26.8	0.7	10.4
2.2.2 Non-R&D innovation expenditures	96.1	NA	-48.5	-55.3	-14.2	2.9	-63.0	-17.8	0.0	0.0			0.0	-19.6	0.0	0.0	2.4	0.0	-14.6	-23.1	37.5
2.2.3 Innovation expenditures per person employed	130.4	0.0	-5.9	-12.0	6.7	1.6	7.6	10.0		0.0			0.0	-0.6	0.0	0.0	26.1	0.0	10.3		
Investments in information technologies																					
2.3.1 Enterprises providing ICT training	162.4	85.3	182.2	59.1	61.8	1.6	91.7	64.5	57.2	87.3		38.6		0.0	64.7	-3.5	66.9	110.3	43.0		47.1
2.3.2 Employed ICT specialists	0.0	14.7	23.5	23.5	2.9	0.0	-8.8	2.9	5.9	17.6	11.8	-14.7	5.9	24.2	17.6	14.7	14.7	20.6	5.9	5.9	30.4

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Innovation Activities																					
Innovators																					
3.1.1 SMEs introducing product innovations	-10.4	4.7	-9.5	7.6	-13.9	16.9	-41.0	10.9	0.0	0.0	19.3	-34.2	0.0	-12.4	0.0		-28.7	0.0	12.9	0.0	9.3
3.1.2 SMEs introducing business process innovations	9.4	11.6	29.1	20.8	0.0	32.3	-12.8	15.4	0.0	0.0	0.0	19.6	0.0	-5.8	0.0		-17.1	0.0	21.4	0.0	
Linkages																					
3.2.1 Innovative SMEs collaborating with others	23.5	39.0	22.2	33.6	0.4	33.3	-8.8	6.5	0.0			-7.4	0.0	-13.3	0.0		0.5	0.0	52.6	-22.7	0.0
3.2.2 Public-private co-publications	82.1	28.4	29.9	76.3	13.8	41.3	54.2	5.0	11.0	16.2	0.0	11.8	16.1	10.3	24.0	21.2	82.3	26.1	15.1	10.0	37.9
3.2.3 Job-to-job mobility of Human Resources in S&T	41.2	-32.4	26.5	64.7	-11.8	-61.8	76.5	17.6			26.5		0.0		-44.1	82.3	11.8	50.0	-41.2		23.5
Intellectual assets																					
3.3.1 PCT patent applications	-16.3	-16.8	-2.9	-5.4	-6.3	0.0	-10.3	-2.4	1.4	-12.8	-2.2	-16.8	-0.9	-18.3	9.3	9.6	-32.0	-2.3	0.7	-8.5	-7.7
3.3.2 Trade-mark applications	0.0	-10.3	13.7	-5.7	25.2	-17.3	4.0	21.4	-0.5	2.1	-21.2	-3.6	0.3	10.1	-5.9	5.4	-10.0	3.3	5.7	26.0	-27.2
3.3.3 Design applications	-55.8	-8.4	-39.7	-42.2	0.1	-38.3	-21.2	-5.8	7.8	0.4	-45.9	0.0	10.5	-5.5	0.0	-1.2	-1.3	-0.6	-1.3	-3.0	-40.8

INDICATOR	MT	NL	PL	PT	RO	SE	SI	SK	AL	BA	CH	GE	IS	MD	ME	MK	NO	RS	TR	UA	UK
Impacts																					
Sales and employment impacts																					
4.1.1 Sales of new-to-market and new-to-firm innovations	-16.4	-13.9	-17.6	54.1	-7.6	42.5	28.0	-50.0	0.0	0.0	54.2		0.0	-14.0	0.0	0.0	-7.2	0.0	19.5	3.1	20.9
4.1.2 Employment in innovative enterprises	20.1	-10.8	41.4	-48.0	0.0	2.9	44.4	0.2	0.0	0.0	-61.0	-31.7	3.9	-58.0	0.0	0.0	-19.0	0.0	14.5		-6.0
Trade impacts																					
4.2.1 Exports of medium and high-tech products	9.3	3.6	0.4	7.6	-0.1	2.8	23.8	4.2	-2.2	15.7	-22.8	-14.8	0.0	-1.9	13.6	-1.8	-1.1	6.2	-0.1	-20.4	-0.1
4.2.2 Knowledge-intensive services exports	2.3	-3.0	19.4	6.4	18.2	3.5	9.3	15.2	-15.3	6.0	-1.0	25.6	0.6	15.7	6.8	25.2	-3.5	21.7	3.6	32.5	5.7
4.2.3 High-tech imports from outside the EU	-0.1	25.2	1.8	-4.8	-0.6	-12.9	-15.1	31.8	-21.8		16.0				-36.1	11.2	-8.1	-21.7	-14.9		-15.2
Resource and labour productivity																					
4.3.1 Resource productivity	110.6	14.6	33.6	32.7	19.1	25.6	32.0	49.8	50.9	30.4	8.6	4.0	27.8			25.0	86.1	4.6	51.6		13.8
4.3.2 Production-based CO2 productivity	9.4	79.3	41.7	132.5	64.2	23.3	41.1	43.6	3.4	17.0	3.1	16.4	57.7	-2.7	0.2	8.8	40.0	5.0	-19.7	22.4	75.7
4.3.3 Labour productivity	14.4	5.7	9.3	1.6	4.7	8.9	6.1	10.1			12.3		13.4				6.5	5.4			

ANNEX E: INDICATOR DEFINITIONS

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
1.1.1	Number of doctorate graduates in science, technology, engineering, and mathematics (STEM)	Eurostat	Population between and including 25 and 34 years	Eurostat	Measure of the supply of new second-stage tertiary graduates (ISCED 8). For most countries this captures PhD graduates. There is a complex relation between STEM-graduates and innovation in the private sector; STEM-graduates do well as employees within firms with many taking up managerial positions.
1.1.2	Number of persons in age class with some form of post-secondary education	Eurostat	Population between and including 25 and 34 years	Eurostat	General indicator of the supply of advanced skills. Not limited to science and technical fields because adoption of innovations in many areas especially service sectors depends on a wide range of skills. Focuses on a relatively young cohort and will quickly reflect changes in educational policies leading to more tertiary graduates.
1.1.3	All persons in private households aged 25–64 years. Covers all education or training whether or not relevant to the respondent's current or possible future job. Reference period is the four weeks preceding the interview.	Eurostat	Total population of the same age group excluding those who did not answer the question concerning participation in (formal and non-formal) education and training	Eurostat	Lifelong learning encompasses all purposeful learning activity whether formal, non-formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence. The intention or aim to learn is the critical point that distinguishes these activities from non-learning activities.
1.2.1	Number of scientific publications with at least one co-author based abroad. For individual countries all publications with at least one co-author outside the country are included. For the EU only publications with at least one co-author in a non-EU Member State are included.	Scopus database. Data calculated by Science-Metrix for the European Commission	Total population.	Eurostat	International scientific co-publications are a proxy for the quality of scientific research as collaboration increases scientific productivity.

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
1.2.2	Number of scientific publications among the top-10% most cited publications worldwide	Scopus database. Data calculated by Science-Metrix for the European Commission	Total number of scientific publications	Eurostat	Measure for the quality of the research system as highly cited publications are assumed to be of higher quality. There could be a bias towards small or English-speaking countries given the coverage of Scopus' publication data.
1.2.3	Number of doctorate students from foreign countries	Eurostat	Total number of doctorate students	Eurostat	The share of foreign doctorate students reflects the mobility of students as an effective way of diffusing knowledge. Attracting high-skilled foreign doctorate students will secure a continuous supply of researchers.
1.3.1	Number of households with fixed very high capacity network (VHCN) connection	Eurostat	Total number of households	Eurostat	Measures the share of households with a fixed Very High-Capacity Network (VHCN) connection. A VHCN refers to a network that either consists entirely of optical fibre elements up to at least the distribution point or delivers comparable network performance under usual peak-time conditions. Reflects the quality of a country's digital infrastructure.
1.3.2	Number of individuals with above basic overall digital skills	Eurostat, EU survey on ICT usage in households and by individuals	Individuals aged 16-74	Eurostat	Above basic overall digital skills represent the highest level of the overall digital skills indicator, a composite based on selected activities performed by individuals aged 16-74 on the internet in four specific areas (information, communication, problem solving, content creation) during the previous 3 months.
2.1.1	All R&D expenditures in the government sector (GOVERD) and the higher education sector (HERD)	Eurostat	Gross Domestic Product	Eurostat	R&D expenditure is a major driver of economic growth in a knowledge-based economy. Trends provide key indications of future competitiveness and wealth of the EU. R&D spending is essential for making the transition to a knowledge-based economy and for improving production technologies.

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
2.1.2	Venture capital defined as private equity raised for investment in companies. Excludes management buyouts, buy-ins, and venture purchase of quoted shares. Includes early-stage (seed + start-up) and expansion and replacement capital.	Venture capital data from Invest Europe. GDP data from Eurostat	Gross Domestic Product	Eurostat	The amount of venture capital is a proxy for the relative dynamism of new business creation. Particularly for enterprises using or developing new (risky) technologies, venture capital is often the only available means of financing.
2.1.3	Sum of GTARD (government tax allowances for R&D) and direct funding of BERD	OECD R&D Tax Incentive Database	Gross Domestic Product	Eurostat	Public financing of R&D can take two forms: direct funding through instruments such as grants and public procurement, and indirect support through the tax system.
2.2.1	All R&D expenditures in the business sector (BERD)	Eurostat	Gross Domestic Product	Eurostat	Captures the formal creation of new knowledge within firms. Particularly important in science-based sectors (pharmaceuticals, chemicals and some areas of electronics) where most new knowledge is created in or near R&D laboratories.
2.2.2	Sum of total innovation expenditure for enterprises, excluding intramural and extramural R&D expenditures	Eurostat (Community Innovation Survey)	Total turnover for all enterprises	Eurostat	Measures non-R&D innovation expenditure as a percentage of total turnover. Several components, such as investment in equipment and machinery and acquisition of patents and licenses, measure the diffusion of new production technology and ideas.
2.2.3	Sum of total innovation expenditure by enterprises in all size classes in Purchasing Power Standard (PPS)	Eurostat (Community Innovation Survey)	Total employment in innovative enterprises in all size classes	Eurostat	Measures the monetary input directly related to innovation activities.
2.3.1	Enterprises with 10 or more persons employed that reported using cloud computing services	Eurostat	Total number of enterprises with 10 or more persons employed	Eurostat	Cloud computing refers to ICT services used over the internet to access software, computing power, storage capacity etc. Reflects the percentage of enterprises using at least one intermediate or sophisticated cloud computing service. Data is collected yearly by national statistical institutes.

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
2.3.2	Number of employed ICT specialists	Eurostat	Total employment	Eurostat	Eurostat defines ICT specialists as workers who have the ability to develop, operate and maintain ICT systems, and for whom ICT constitute the main part of their job. Operationalised in terms of ISCO codes following the ISCO-08 standard.
3.1.1	Number of SMEs who introduced at least one product innovation either new to the enterprise or new to their market. SMEs defined as enterprises with 10 to 249 employees.	Eurostat (Community Innovation Survey)	Total number of SMEs (enterprises with 10 to 249 employees)	Eurostat	Product innovation is a key ingredient to innovation as it can create new markets and improve competitiveness. Higher shares of product innovators reflect a higher level of innovation activities.
3.1.2	Number of SMEs who introduced at least one business process innovation either new to the enterprise or new to their market. SMEs defined as enterprises with 10 to 249 employees.	Eurostat (Community Innovation Survey)	Total number of SMEs (enterprises with 10 to 249 employees)	Eurostat	Many firms innovate not by improving new products but by improving their business processes. Business process innovations include process, marketing and organisational innovation.
3.2.1	Number of SMEs with innovation cooperation activities including all enterprises that had any co-operation agreements on innovation activities with other enterprises or institutions in the three years of the survey period. SMEs defined as enterprises with 10 to 249 employees.	Eurostat (Community Innovation Survey)	Total number of SMEs (enterprises with 10 to 249 employees)	Eurostat	Measures the degree to which SMEs are involved in innovation co-operation. Complex innovations in particular in ICT often depend on the ability to draw on diverse sources of knowledge or to collaborate. This indicator measures the flow of knowledge between public research institutions and firms, and between firms.
3.2.2	Number of public-private co-authored research publications with both domestic and foreign collaborators. The definition of the private sector excludes the private medical and health sector.	Scopus database. Data calculated by Science-Metrix for the European Commission (DG Research and Innovation). Population data from Eurostat	Total population	Eurostat	Captures public-private research linkages and active collaboration activities between business sector researchers and public sector researchers resulting in academic publications.

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
3.2.3	Job-to-job mobility of Human Resources in Science & Technology	Eurostat	Working age population aged 25-64	Eurostat	HRST are people who have successfully completed tertiary level education or are employed in an S&T occupation requiring such qualifications. Job-to-job mobility is defined as movement of individuals between one job and another from one year to the next. It does not include inflows into the labour market from unemployment or inactivity. Mobility of skilled personnel affects the degree of knowledge creation.
3.3.1	Number of patent applications filed under the PCT, at international phase, designating the European Patent Office (EPO). Patent counts based on priority date, inventor's country of residence and fractional counts.	Eurostat	Gross Domestic Product in Purchasing Power Standard	Eurostat	The capacity of firms to develop new products will determine their competitive advantage. One measure of the rate of new product innovation is the number of patents. This indicator measures the number of PCT patent applications.
3.3.2	Number of trademark applications applied for at EUIPO	Trademark data from European Union Intellectual Property Office	Gross Domestic Product in Purchasing Power Standard	Eurostat	Trademarks are an important innovation indicator, especially for the service sector. The Community trademark gives its proprietor a uniform right applicable in all Member States through a single procedure. It fulfils three essential functions: identifies the origin of goods and services, guarantees consistent quality, and is a form of communication and advertising.
3.3.3	Number of individual designs applied for at the European Union Intellectual Property Office (EUIPO)	Design data from European Union Intellectual Property Office	Gross Domestic Product in Purchasing Power Standard	Eurostat	A design is the outward appearance of a product resulting from lines, contours, colours, shape, texture, materials and/or ornamentation. Community design protection is directly enforceable in each Member State providing both unregistered and registered Community design rights for all Member States.

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
4.1.1	Sum of total turnover of new or significantly improved products, either new-to-the-enterprise or new-to-the-market, for all enterprises	Eurostat (Community Innovation Survey)	Total turnover for all enterprises	Eurostat	Measures the turnover of new or significantly improved products including both products only new to the enterprise and products also new to the market. Captures both the creation of state-of-the-art technologies (new-to-market) and the diffusion of these technologies (new-to-enterprise).
4.1.2	Number of employed persons in innovative enterprises (enterprises that have either introduced an innovation or have any kind of innovation activity including enterprises with abandoned/suspended or on-going innovation activities)	Eurostat (Community Innovation Survey)	Total employment for enterprises with 10 or more employees	Eurostat	Innovation in enterprises has a profound impact on the employability of workers but its effect in product- and process-innovation oriented firms varies across countries. Firm innovation proves specifically important during economic recession.
4.2.1	Value of medium and high-tech exports in national currency and current prices, including exports of specific SITC Rev.3 products (266, 267, 512, 513, 525, 533, 54, 553, 554, 562, 57, 58, 591, 593, 597, 598, 629, 653, 671, 672, 679, 71, 72, 731, 733, 737, 74, 751, 752, 759, 76, 77, 78, 79, 812, 87, 88, 891)	Eurostat for Member States	Value of total product exports	Eurostat	Measures the technological competitiveness of the EU - the ability to commercialise the results of R&D and innovation in international markets. Also reflects product specialisation by country. Medium and high technology products are key drivers for economic growth, productivity and welfare.
4.2.2	Exports of knowledge-intensive services defined as the sum of credits in EBOPS 2011 items: SC1 (Sea transport), SC2 (Air transport), SC3A (Space transport), SF (Insurance and pension services), SG (Financial services), SH (Charges for the use of intellectual property), SI (Telecommunications, computer, and information services), SJ (Other business services), SK1 (Audio-visual and related services)	nan	Total value of services exports	Eurostat	Measures the competitiveness of the knowledge-intensive services sector. Reflects the ability of an economy to export services with high levels of value added and successfully take part in knowledge-intensive global value chains.

INDICATOR	DEFINITION NUMERATOR	SOURCE NUMERATOR	DEFINITION DENOMINATOR	SOURCE DENOMINATOR	INTERPRETATION
4.2.3	High-tech (product codes: CPA_C21, CPA_C26, CPA_J59_60, CPA_J61, CPA_J62_63, CPA_M72) imports from partners outside of the EU27	Eurostat	Total high-tech (product codes: CPA_C21, CPA_C26, CPA_J59_60, CPA_J61, CPA_J62_63, CPA_M72) use	Eurostat	Demonstrates how much EU Member States' domestic use of high-tech products and services is dependent on imports from outside the EU. Shows the share of high-tech products and services used by firms, households, and the government that is supplied by non-EU countries.
4.3.1	Gross Domestic Product (GDP)	Eurostat	Domestic Material Consumption (DMC) in euros per kg	Eurostat	Resource productivity measures the total amount of materials directly used by an economy (DMC) in relation to GDP. Provides insights into whether decoupling between the use of natural resources and economic growth is taking place. DMC measures the annual quantity of raw materials extracted from the domestic territory plus physical imports minus physical exports.
4.3.2	GDP (US Dollars)	OECD	Energy-related CO2 emissions	Eurostat	CO2 productivity (GDP per CO2 emissions) provides insights into how efficiently an economy generates value while minimising carbon emissions. Helps assess progress in decarbonising economic activities, promoting energy efficiency, and transitioning to low-carbon technologies.
4.3.3	Real GDP in chain-linked volumes	Eurostat	Hours worked	Eurostat	Real labour productivity per hour worked can provide a measure of economic efficiency and innovation-driven growth. Accounts for variations in working hours ensuring better cross-country comparability. By dividing real GDP in constant prices by total hours worked the indicator isolates true productivity gains from inflation and structural labour differences.

ANNEX F: SUMMARY INNOVATION INDEX (SII) TIME SERIES: NORMALISED SCORES, RELATIVE TO EU SCORES, AND CHANGE OVER TIME

	2019	2020	2021	2022	2023	2024	2025	2026		2019	2020	2021	2022	2023	2024	2025	2026	CHANGE BETWEEN 2019 AND 2026
EU	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		100.0	100.4	102.1	106.4	107.8	109.4	109.9	111.6	11.6
AT	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		117.2	118.5	120.3	125.2	127.9	128.8	128.5	126.1	8.9
BE	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7		125.8	128.3	130.1	136.5	137.6	138.2	138.5	137.4	11.6
BG	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3		50.0	49.8	50.7	54.9	53.4	54.5	55.6	54.5	4.5
CY	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5		89.0	89.4	96.1	102.8	105.1	98.8	98.6	102.7	13.8
CZ	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4		75.6	77.3	77.3	85.8	88.4	92.8	90.7	88.2	12.6
DE	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		118.4	118.5	119.3	123.7	124.7	121.6	121.1	124.1	5.7
DK	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7		144.1	145.3	148.0	153.5	152.0	153.4	150.4	150.2	6.2
EE	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6		101.4	103.9	107.9	115.4	119.1	118.0	119.3	121.1	19.8
EL	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		71.9	73.4	74.5	84.5	84.2	84.4	85.6	86.5	14.6
ES	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5		90.8	92.3	93.8	96.6	97.4	99.9	102.0	104.9	14.1
FI	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7		130.4	131.0	133.7	140.0	141.1	140.2	141.5	138.8	8.3
FR	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6		110.5	111.2	111.1	113.2	115.9	117.7	119.5	121.7	11.2
HR	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4		66.3	67.6	71.1	75.5	79.3	79.1	77.8	77.2	11.0
HU	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4		67.1	64.4	66.8	68.5	71.0	75.9	80.8	80.4	13.4
IE	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		121.4	120.3	120.0	122.9	125.4	128.1	129.8	132.3	10.9
IT	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		92.3	93.0	98.4	105.5	105.2	100.9	102.3	107.3	15.0
LT	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5		76.9	80.3	82.5	87.4	88.0	95.1	94.6	96.6	19.7

LU	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
LV	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
MT	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
NL	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
PL	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
PT	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
RO	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SE	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
SI	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
SK	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
AL	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
BA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
CH	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
GE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IS	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
MD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ME	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
MK	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NO	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
RS	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
TR	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
UA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
UK	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7

128.7	127.1	129.4	126.8	125.7	127.2	130.6	129.2	0.5
61.9	63.2	61.6	62.5	65.0	65.1	65.3	68.1	6.2
99.7	100.7	97.0	95.4	100.5	101.6	97.1	112.8	13.1
135.0	136.0	138.0	142.7	141.8	144.2	143.8	142.1	7.1
56.5	57.9	60.7	65.6	66.7	71.5	74.3	72.8	16.3
91.0	91.5	94.6	93.4	95.4	100.0	102.6	104.0	13.0
38.5	39.9	40.3	41.4	42.1	42.8	45.3	46.7	8.2
147.6	147.4	148.3	153.0	153.7	152.6	153.0	155.1	7.6
89.9	87.5	91.5	93.0	99.9	99.5	97.3	97.3	7.4
59.6	59.9	61.0	62.5	64.6	68.2	68.5	69.5	10.0
43.5	42.6	38.7	44.8	41.2	43.9	46.8	46.4	2.9
24.8	26.0	26.2	27.0	27.3	28.6	29.7	31.2	6.4
156.1	158.6	159.9	161.4	160.0	158.9	157.2	157.6	1.5
21.8	18.6	17.5	20.1	19.5	21.0	22.7	23.1	1.3
107.0	112.9	112.8	117.5	117.9	122.4	123.2	121.5	14.4
22.9	22.3	24.4	24.3	24.6	21.5	21.8	20.7	-2.2
46.7	51.6	49.3	47.8	47.0	46.8	47.1	49.9	3.2
35.5	38.0	36.6	40.0	42.2	42.0	43.7	43.0	7.5
121.7	123.3	126.0	131.3	130.4	131.4	130.6	129.1	7.4
59.4	59.8	60.6	62.5	60.9	64.8	65.7	67.4	8.0
50.9	51.5	52.7	54.6	54.9	61.5	61.9	63.5	12.6
26.4	25.9	27.2	28.7	29.0	28.1	27.7	27.8	1.5
129.3	134.0	137.2	142.4	141.6	144.6	144.4	145.6	16.3

ANNEX G: PERFORMANCE SCORES BY EUROPEAN COUNTRY PER DIMENSION IN 2026

	1.1	1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	4.1	4.2	4.3
AT	112.7	174.0	152.6	138.8	110.4	161.4	115.2	212.2	105.9	101.3	78.9	147.5
BE	145.2	135.6	173.8	159.0	144.4	185.8	158.4	204.1	69.9	124.6	95.6	166.4
BG	58.1	34.5	123.8	21.8	34.5	95.7	31.1	39.1	67.8	25.3	78.4	48.7
CY	120.3	187.6	138.1	18.9	36.4	151.1	189.3	236.4	90.5	76.2	60.0	78.0
CZ	89.5	97.9	132.6	64.8	80.4	153.3	84.4	108.2	54.2	95.7	79.5	89.6
DE	104.4	116.0	135.2	106.5	143.6	166.3	119.3	162.2	96.5	127.2	104.0	164.4
DK	168.1	212.9	233.3	151.0	114.4	193.7	118.0	239.1	101.4	105.9	104.7	193.2
EE	128.8	147.7	157.1	124.3	87.8	200.7	158.2	215.3	105.9	113.7	70.4	72.7
EL	88.0	80.7	96.2	73.5	77.3	64.1	174.4	111.2	44.2	139.4	66.3	89.4
ES	134.3	100.5	198.3	124.3	62.7	133.7	65.4	119.0	65.2	118.9	73.5	157.8
FI	142.1	178.6	210.5	142.5	114.7	241.0	112.5	228.9	100.5	125.5	96.0	111.9
FR	159.8	112.9	177.4	166.8	91.5	133.7	109.6	141.2	67.8	89.1	100.4	180.3
HR	80.1	53.1	146.2	43.4	78.5	143.6	49.8	124.5	40.2	80.8	68.1	99.7
HU	62.2	93.0	172.9	63.0	62.9	140.2	60.0	110.5	46.8	49.7	83.2	97.0
IE	157.0	181.2	218.8	78.6	97.3	209.4	102.1	195.9	44.4	139.7	88.1	238.9
IT	79.0	105.7	143.3	71.5	59.1	169.9	154.3	109.5	94.4	133.8	88.9	168.9
LT	117.7	68.6	144.5	78.2	67.3	176.4	111.1	161.2	70.5	99.4	73.3	93.2
LU	178.6	236.3	171.9	58.6	43.1	196.4	91.4	235.4	94.4	53.8	99.5	222.7
LV	83.4	47.9	111.2	48.1	26.5	132.3	45.3	98.0	61.2	40.3	74.3	97.5
MT	100.9	158.5	203.8	4.5	129.8	187.2	108.4	138.4	106.7	56.4	76.4	179.3
NL	157.4	204.6	235.7	132.5	108.7	220.5	108.0	212.6	96.0	95.2	88.1	186.1
PL	77.7	44.6	143.3	67.3	57.6	149.2	42.2	92.2	69.2	41.0	73.3	64.1
PT	112.4	127.8	180.7	124.7	57.3	140.0	102.0	132.0	60.4	116.5	77.7	120.7
RO	39.1	47.2	130.7	12.2	13.3	68.7	3.9	13.6	37.3	12.4	96.0	79.3
SE	180.1	192.3	188.6	155.9	150.4	235.2	156.1	227.9	104.8	113.9	106.3	170.2
SI	127.9	112.4	127.6	78.8	65.6	138.6	86.3	156.5	70.0	107.8	76.0	100.5
SK	82.5	55.4	121.2	38.1	52.9	118.1	53.9	62.2	52.2	73.9	69.6	98.2
AL	30.3	22.2	20.2	1.1	5.1	60.7	97.3	71.8	16.3	138.8	29.7	106.1
BA	12.2	35.8	28.6	0.0	0.9	64.3	116.8	22.4	5.9	74.7	21.9	40.2
CH	186.5	246.9	210.7	101.1	160.5	175.2	112.7	315.3	111.4	138.6	74.7	246.5
GE	41.3	26.8	34.8	5.6		20.7	25.6	9.5	9.0	21.6	21.3	46.7
IS	132.3	199.0	213.6	139.4	85.3	113.3	105.9	266.7	51.4	88.4	30.1	181.6
MD	31.4	33.5		4.9	14.2	31.1	0.0	30.6	14.7	2.8	38.8	39.6
ME	38.2	53.9	33.3	10.0	20.4	78.6	171.1	86.4	23.4	100.2	12.9	66.7
MK	29.0	79.1	10.7	11.1	40.0	59.8		64.6	18.1	36.8	59.7	62.1
NO	152.6	180.2	229.5	110.5	90.4	193.7	136.9	285.0	39.6	94.1	62.9	186.4
RS	57.4	51.0	100.7	35.4	76.4	122.7	135.7	101.4	20.7	86.7	74.5	15.2
TR	69.0	56.2	29.5	93.3	55.1	41.2	84.2	103.1	22.4	77.1	56.4	88.1
UA	74.7	15.2		12.5	19.8	29.2	0.0	12.6	21.0	3.1	48.9	43.9
UK	171.0	179.9	186.7	186.0	114.9	156.6	95.3	274.1	59.6	134.9	102.1	211.6

ANNEX H: INDICATORS AND DATA SOURCES: COMPARISON WITH GLOBAL COMPETITORS

INDICATOR	DATA SOURCE	DATA NOT AVAILABLE FOR	MOST RECENT YEAR
FRAMEWORK CONDITIONS			
Human resources			
1.1.1 New doctorate graduates in science, technology, engineering, and mathematics (STEM) per 1000 population aged 25-34	OECD	CN	2023
1.1.2 Percentage population aged 25-34 having completed tertiary education	OECD, National Bureau of Statistics of China	-	2024
Attractive research systems			
1.2.1 International scientific co-publications per million population	Scopus	-	2024
1.2.2 Scientific publications among the top-10% most cited publications worldwide as percentage of total scientific publications of the country	Scopus	-	2023
<i>Digitalisation - No indicator included in international comparison</i>			
INVESTMENTS			
Finance and support			
2.1.1 R&D expenditure in the public sector (percentage of GDP)	OECD	BR	2024
2.1.3 Direct government funding and government tax support for business R&D (percentage of GDP)	OECD	IN	2022
Firm investments			
2.2.1 R&D expenditure in the business sector (percentage of GDP)	OECD		2024
Use of information technologies			
2.3.2 ICT specialists (as a percentage of total employment)	OECD, UNECE	CA, CN, IN, ZA	2024
INNOVATION ACTIVITIES			
Innovators			
3.1.1 SMEs introducing product innovations (percentage of SMEs)	OECD	CN, MX, ZA	2022
3.1.2 SMEs introducing business process innovations (percentage of SMEs)	OECD	BR, CN, MX	2022

INDICATOR	DATA SOURCE	DATA NOT AVAILABLE FOR	MOST RECENT YEAR
Linkages			
3.2.1 Innovative SMEs collaborating with others (percentage of SMEs)	OECD	CN, IN, MX	2022
3.2.2 Public-private co-publications per million population	Scopus	-	2024
Intellectual assets			
3.3.1 PCT patent applications per billion GDP (in PPS)	OECD, World Bank	-	2023
3.3.2 Trademarks applications per billion GDP (in PPS)	World Bank	-	2021
3.3.3 Designs applications per billion GDP (in PPS)	World Bank	-	2021
IMPACTS			
<i>Employment impacts - No indicator included in international comparison</i>			
Sales effects			
4.2.1 Exports of medium and high technology products as a share of total product exports	UNComtrade	-	2025
4.2.2 Knowledge-intensive services exports as percentage of total services exports	UNCTAD	-	2024
Environmental sustainability			
4.3.2 Production-based CO2 productivity	OECD	-	2024
4.3.3 Labour productivity	OECD	BR, CN, IN, ZA	2024

ANNEX I: CONTEXTUAL INDICATORS AND DATA SOURCES: COMPARISON WITH GLOBAL COMPETITORS

DIMENSION/INDICATOR	PERIOD	SOURCE
Performance and structure of the economy		
GDP per capita (PPS)	Average 2022-2024	World Bank: World Development Indicators
Average annual GDP growth (%)	Average 2022-2024	World Bank: World Development Indicators
Employment share in Agriculture (%)	Average 2023-2025	World Bank: World Development Indicators
Employment share in Industry (%)	Average 2023-2025	World Bank: World Development Indicators
Employment share Services (%)	Average 2023-2025	World Bank: World Development Indicators
Employment share Knowledge-intensive services (%)	Average 2022-2024	World Bank: World Development Indicators
Business and entrepreneurship		
Total early-stage Entrepreneurial Activity (TEA) (%)	Average 2023-2025	Global Entrepreneurship Monitor
FDI net inflows (% GDP)	Average 2022-2024	World Bank: World Development Indicators
Top R&D spending enterprises per 10 million population	Average 2023-2025	EU Industrial R&D Investment Scoreboard
Top R&D spending enterprises, million Euros	Average 2023-2025	EU Industrial R&D Investment Scoreboard
Number of Unicorns	2026	CB Insights
Governance and policy framework		
Corruption Perceptions Index	Average 2023-2025	Transparency International
Basic-school entrepreneurial education and training (1 to 5 best)	Average 2023-2025	Global Entrepreneurship Monitor
Government procurement of advanced technology products (1 to 7 best)	Average 2015-2017	World Economic Forum
Rule of law (-2.5 to 2.5 best)	Average 2022-2024	World Bank: Worldwide Governance Indicators
Demography		
Population size (millions)	Average 2022-2024	World Bank: World Development Indicators
Average annual population growth (%)	Average 2022-2024	World Bank: World Development Indicators
Population density (inhabitants / km2)	Average 2021-2023	World Bank: World Development Indicators

ANNEX J: PERFORMANCE DATA GLOBAL COMPETITORS

	KR	CA	US	AU	CN	JP	BR	CL	IN	ZA	MX
Summary Innovation Index	122.8	107.0	101.8	105.3	107.0	94.7	49.1	36.8	49.1	36.8	31.6
1.1.1 New doctorate graduates	108.1	74.3	82.4	135.1		41.9	20.3	13.5	0.0	2.7	12.2
1.1.2 Population completed tertiary education	175.4	170.2	122.8	136.8	77.2	163.2	42.1	91.2	40.4	0.0	57.9
1.2.1 International scientific co-publications	101.7	165.5	103.5	172.4	36.2	65.5	37.9	96.6	12.1	56.9	25.9
1.2.2 Scientific publications among top 10% most cited	86.8	122.6	137.7	177.4	149.1	22.6	7.6	28.3	77.4	60.4	0.0
2.1.1 Direct & indirect government funding business R&D	132.4	107.4	94.1	104.4	82.4	105.9		2.9	44.1	38.2	11.8
2.1.2 Venture capital investment in the public sector	181.8	120.0	161.8	81.8	161.8	94.5	45.5	3.6		3.6	3.6
2.2.1 R&D expenditure in the business sector	263.2	73.7	194.7	63.2	152.6	210.5		7.9	21.1	10.5	0.0
2.3.2 Employees in ICT	95.7		93.5	89.1		108.7	29.4	42.4			1.1
3.1.1 SMEs with product innovations	33.3	222.2	48.9	146.7		31.1	62.2	8.9	35.6	155.6	
3.1.2 SMEs with business process innovations	0.0	178.6	64.3	142.9		60.7		8.9	16.1	78.6	
3.2.1 Innovative SMEs collaborating with others	159.1	195.5	186.4	354.5		136.4	113.6	0.0	454.5	168.2	
3.2.2 Public-private co-publications	160.0	186.0	120.0	200.0	68.0	88.0	10.0	30.0	2.0	14.0	4.0
3.3.1 PCT patent applications	231.0	97.6	109.5	66.7	107.1	231.0	16.7	26.2	31.0	21.4	0.0
3.3.2 Trademark applications	558.3	275.0	58.3	458.3	833.3	200.0	400.0	491.7	83.3	108.3	250.0
3.3.3 Design applications	293.8	87.5	53.1	103.1	306.3	109.4	34.4	0.0	37.5	37.5	40.6
4.2.1 Medium & high-tech product exports	114.0	46.5	72.1	5.8	91.9	108.1	23.3	0.0	57.0	41.9	111.6
4.2.2 Knowledge-intensive services exports	108.6	70.4	95.1	0.0	101.2	84.0	97.5	37.0	119.8	35.8	12.4
4.3.2 Air emissions in fine particulates (PM2.5) in industry	42.0	31.0	48.0	37.0	13.0	61.0	74.0	81.0	32.0	6.0	57.0
4.3.3 Environment-related technologies	66.1	88.7	161.3	112.9		66.1		12.9			11.3

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This report presents the results of the 2026 edition of the European Innovation Scoreboard (EIS). The EIS provides a comparative analysis of the innovation performance of the European Union (EU), the 27 Member States, 13 neighbouring European countries and 11 global competitors. The analysis of national innovation system performance is based on a set of 32 indicators covering four dimensions. The EIS uses the most up to date statistics from Eurostat and other internationally recognised sources, such as the OECD and the United Nations. The analysis is conducted fully in line with international guidelines and best practices in composite indicator construction.

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