There are two distinct sections: by countries and by fields. By default, Section 1 - comparison of countries across all fields - is shown.

Expand the menu panel by clicking on its top bar.

The web tool provides interactive comparisons of research output by scientific discipline in a set of EU countries in three dimensions: 1) number of articles by the scientific influence of journals; 2) number of articles by their citation impact; 3) number of citations by the scientific influence of citing journals.

See detailed information about the app or generate a PDF printout using these buttons.

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An EU Comparison of 2015-2016 Academic Publication Output and its Citation Impact

ⓘ 🖶

Choose dark or light mode.

Section 1: by Countries — Hide options

Field type
WoS ▼

Classification of fields: WoS categories or broader FORD fields can be selected here.

Focus country ❓
Czech Republic ▼

Compare one country with one or more other countries in these dropdown lists.

Benchmark countries ❓

Austria × | Belgium × | Denmark ×
Finland × | France × | Germany ×
Greece × | Ireland × | Italy ×
Luxembourg × | Netherlands × | Portugal ×
Spain × | Sweden × | United Kingdom ×

☑ All

The average performance of selected countries will be used as a benchmark.

Y-axis index ❓
Articles by journal influence - Top decile: the most influential journals ▼

Select one of 3 publication or citation-based measures to visualize the relative performance of selected countries.

X-axis index ❓
Articles by journal influence - All journals ▼

Filters for Articles ❓
● All
○ Only in journals published domestically
○ Only in journals published abroad

Adjust performance measures by applying one of these filters.

Filters for Citations ❓
⬜ Exclude author self-citations
⬜ Exclude citations in the author's country

Note that these filters apply only to citation-based measures. Only one exclusion can be activated at a time.

Scroll down the menu to see more options...

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IDEA think tank, Economics Institute of the Czech Academy of Sciences

If this option is activated, the ranges of both axes will be fixed at the current level.

Reset axes

Fix graph scale ❓

In some fields, it may not be possible to calculate the deviation from the benchmark, if the benchmark is equal to zero.

Some dots may fall outside the current range of axes (because the Fix graph scales is activated or because there are outliers).

Scatter plot. Y-axis: "Articles by journal influence - Top decile: the most influential journals" (−100% to 150%). X-axis: "Articles by journal influence - All journals" (−100% to 150%). Labeled points: Physics, Particles & Fields; Chemistry, Analytical; Parasitology; Computer Science, Hardware & Architecture.

ⓘ **X and Y Axes:** A chosen measure for the *Focus country* is expressed as a percentage deviation from the mean in *Benchmark countries*.

⚠ Note that the following categories are not displayed in the graph above, because Benchmark countries exhibit zero output in these categories: Andrology.

⚠ Note that 3 categories are currently out of the graph range. Double-click on the graph to display all categories.

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Czech Academy of Sciences

Example: in 'Chemistry, Analytical' Czechia (at least one co-author with Czech affiliation) produced 85 articles per 10 mln inhabitants published in Top decile journals, whereas EU15 countries produced on average 67 articles per 10 mln inhabitants. Thus, Czechia is 27% above the benchmark level in this field.

Section 1: by Countries

Hide options

Field type

WoS

Focus country

Czech Republic

Benchmark countries

Austria ×   Belgium ×   Denmark ×
Finland ×   France ×   Germany ×
Greece ×   Ireland ×   Italy ×
Luxembourg ×   Netherlands ×   Portugal ×
Spain ×   Sweden ×   United Kingdom ×

☑ All

Y-axis index

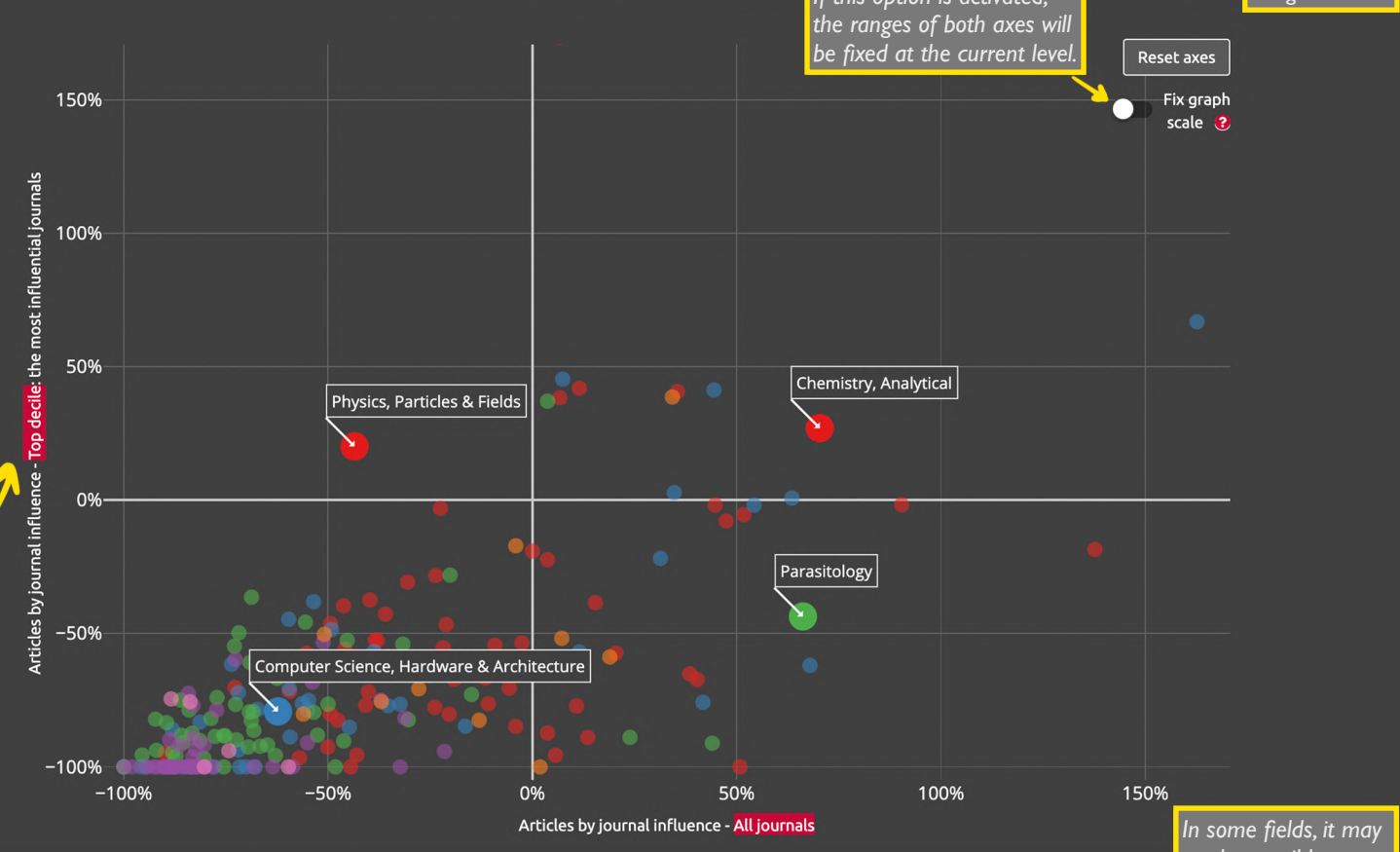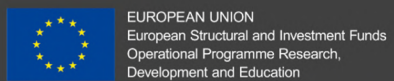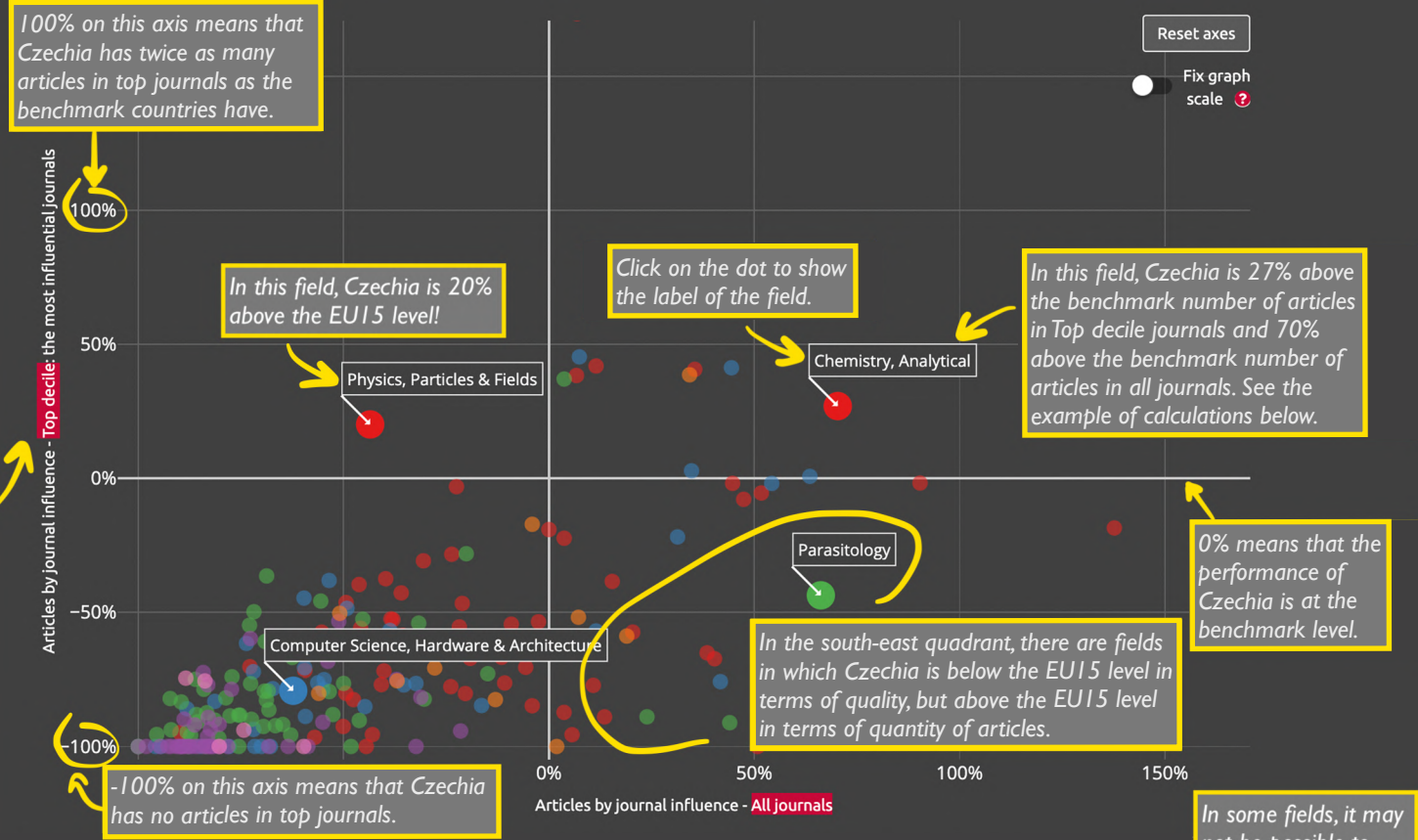Articles by journal influence - Top decile: the most influential journals

X-axis index

Articles by journal influence - All journals

Filters for Articles

○ All
○ Only in journals published domestically
○ Only in journals published abroad

Filters for Citations

◯ Exclude author self-citations
◯ Exclude citations in the author's country

Reset axes

Fix graph scale ?

100% on this axis means that Czechia has twice as many articles in top journals as the benchmark countries have.

In this field, Czechia is 20% above the EU15 level!

Click on the dot to show the label of the field.

In this field, Czechia is 27% above the benchmark number of articles in Top decile journals and 70% above the benchmark number of articles in all journals. See the example of calculations below.

Physics, Particles & Fields

Chemistry, Analytical

Parasitology

0% means that the performance of Czechia is at the benchmark level.

Computer Science, Hardware & Architecture

In the south-east quadrant, there are fields in which Czechia is below the EU15 level in terms of quality, but above the EU15 level in terms of quantity of articles.

-100% *on this axis means that Czechia has no articles in top journals.*

Articles by journal influence - **Top decile: the most influential journals** (Y-axis label)

Articles by journal influence - **All journals** (X-axis label)

100%   50%   0%   -50%   -100% (Y-axis)

0%   50%   100%   150% (X-axis)

In some fields, it may not be possible to calculate the deviation from benchmark, if the benchmark is equal to zero

ⓘ X and Y Axes: A chosen measure for the *Focus country* is expressed as a percentage deviation from the mean in *Benchmark countries*.

⚠ Note that the following categories are not displayed in the graph above, because Benchmark countries exhibit zero output in these categories: Andrology.

⚠ Note that 3 categories are currently out of the graph range. Double-click on the graph to display all categories.

Some dots may fall outside the current range of axes (because the Fix graph scales is activated or because there are outliers).

Example: in 'Chemistry, Analytical' Czechia (at least one co-author with Czech affiliation) produced 85 articles per 10 mln inhabitants published in Top decile journals, whereas EU15 countries produced on average 67 articles per 10 mln inhabitants. Thus, Czechia is 27% above the benchmark level in this field.

Section 2 - comparison of country profiles within one field - can be activated by clicking on the section header.

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An EU Comparison of 2015-2016 Academic Publication Output and its Citation Impact

Section 1: by Countries — Show options

Section 2: by Fields — Hide options

Field type
WoS

Classification of fields: WoS categories or broader FORD fields can be selected here.

Field
ECONOMICS

Select one field for a cross-country outlook.

Filters for Articles
All

Filters for Citations

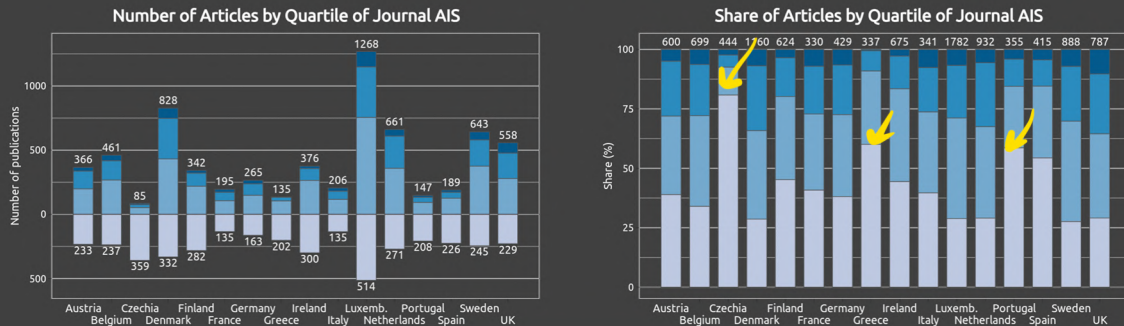*Adjust performance measures by applying one of these filters.*

⬤ Exclude author self-citations
◯ Exclude citations in the author's country

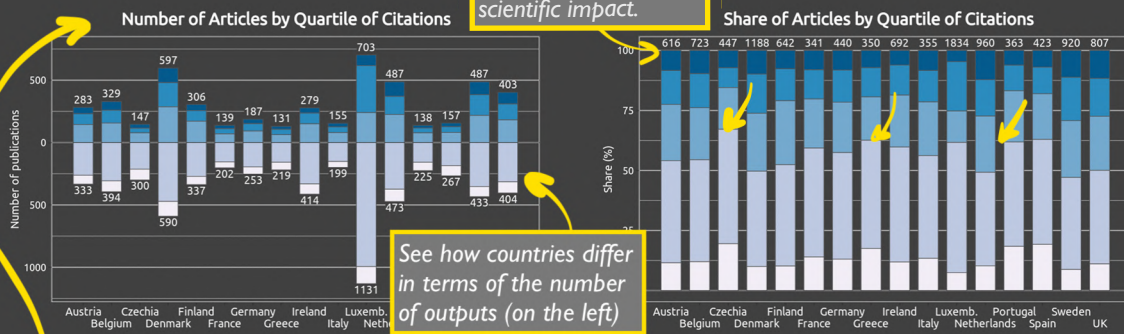*Note that these filters apply only to citation-based measures. Only one exclusion can be activated at a time.*

Number of Articles by Quartile of Journal AIS

Journals with the AIS index in the:
Top Decile | 1st Quartile | 2nd Quartile | Bottom Half

Share of Articles by Quartile of Journal AIS

Darker shades indicate higher degrees of scientific impact.

Journals with the AIS index in the:
Top Decile | 1st Quartile | 2nd Quartile | Bottom Half

Number of Articles by Quartile of Citations

Articles with citations in the:
Top Decile | 1st Quartile | 2nd Quartile | Bottom Half | Not cited

Share of Articles by Quartile of Citations

See how countries differ in terms of the number of outputs (on the left)

...or in terms of the qualitative structure of outputs (on the right).

Articles with citations in the:
Top Decile | 1st Quartile | 2nd Quartile | Bottom Half | Not cited

Number of Citations by Quartile of Citing Journal AIS

Citations in journals with AIS index in the:
Top Decile | 1st Quartile | 2nd Quartile | Bottom Half

Share of Citations by Quartile of Citing Journal AIS

All counts for each country are normalized by 10 mln inhabitants.

Citations in journals with AIS index in the:
Top Decile | 1st Quartile | 2nd Quartile | Bottom Half

What do the graphs show about the field of Economics?

1) There is an evident correlation between the quantity and quality of outputs - countries with relatively low numbers of publications, such as Czechia, Greece, and Portugal, also exhibit the largest shares of outputs in the bottom half of the impact distribution.

2) There is an evident correlation between three measures of scientific impact - countries with more articles published in Top quartile journals, such as Denmark, Luxembourg, Netherlands, Sweden, and the UK, also attract more citations and exhibit larger shares of citations from Top quartile journals.
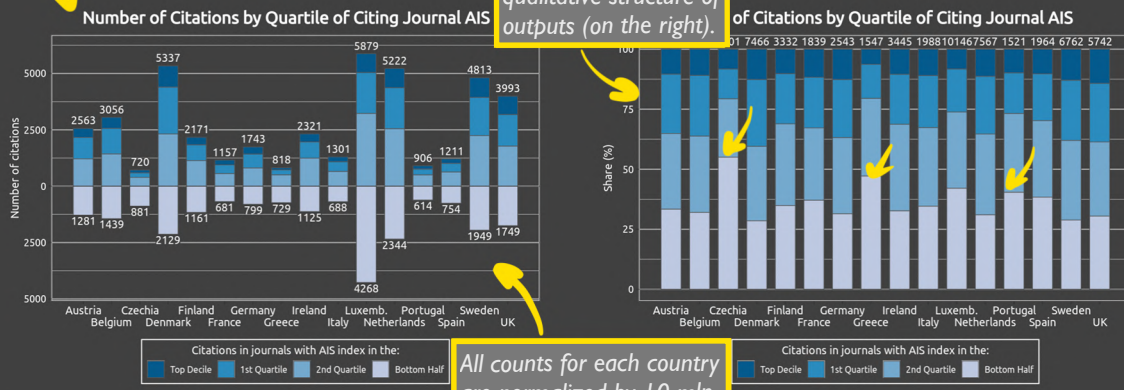
ⓘ Notes:
Top Quartile excludes the Top Decile.
Data includes 2015-2016, publication counts for each country are per 10 million inhabitants.

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