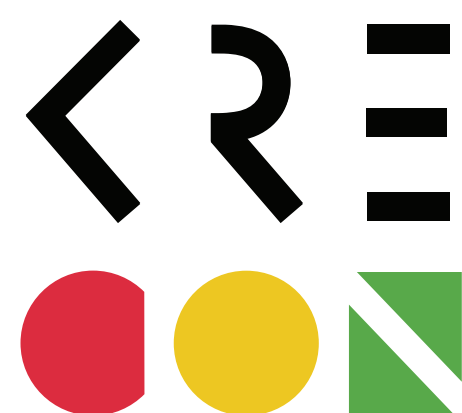
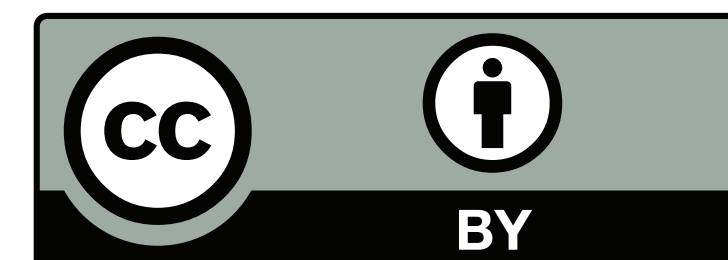




Knowledge
Research
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Conference
2025

13 – 14 November 2025
Cutting-Edge Research
Challenges and Opportunities



Cutting-edge scientific fields in the Czech Republic? In search of indicators of excellence

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National Centre for Information
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Cutting-edge scientific fields in the Czech Republic?

In search of indicators of excellence

Štěpán Jurajda



The National Evaluation is not & will not be a tool for supporting excellence.

Scientific excellence is best recognized at the individual level (ERC Advanced)

Support for excellence is ideally aimed at individuals, for example within a program of national chairs of 'research excellence', filled for 10 years in a predetermined field structure, à la ERC CZ, with a national committee composed of ex-ERC panelists.

But any strategy supporting excellence needs indicators – to set goals and monitor impacts. Do we have top-notch universities, institutes, disciplines?

And to assess excellence by institution/field, one needs research capacities.

Sectoral indicators of top science? Besides the ERC

National Evaluation:

- Publication profiles, but the profile can look good even if the absolute production of Q1 or D1 is insufficient relative to capacities.
- Q1, D1 productivity per author, but only for ROs in the Czech Republic.

Therefore, we will compare the productivity of our universities with relevant benchmarks, e.g. with KU Leuven, not with the EU15 average. We will compare universities with universities and non-university institutes with non-university institutes.

Czech Universities vs. U of Gronigen, U of Heidelberg, KU Leuven, U of Milan, U of Vienna, U of Warsaw

- Publication productivity = D1 article count per author, 2022-2023. EU15=100%
- <https://ideaapps.cerge-ei.cz/Performance>, author counts by Metod 1.
- International productivity comparisons indicate the relative position of the strongest domestic ROs against relevant EU15 benchmarks. The National Evaluation is then an ideal productivity comparison for all domestic ROs.

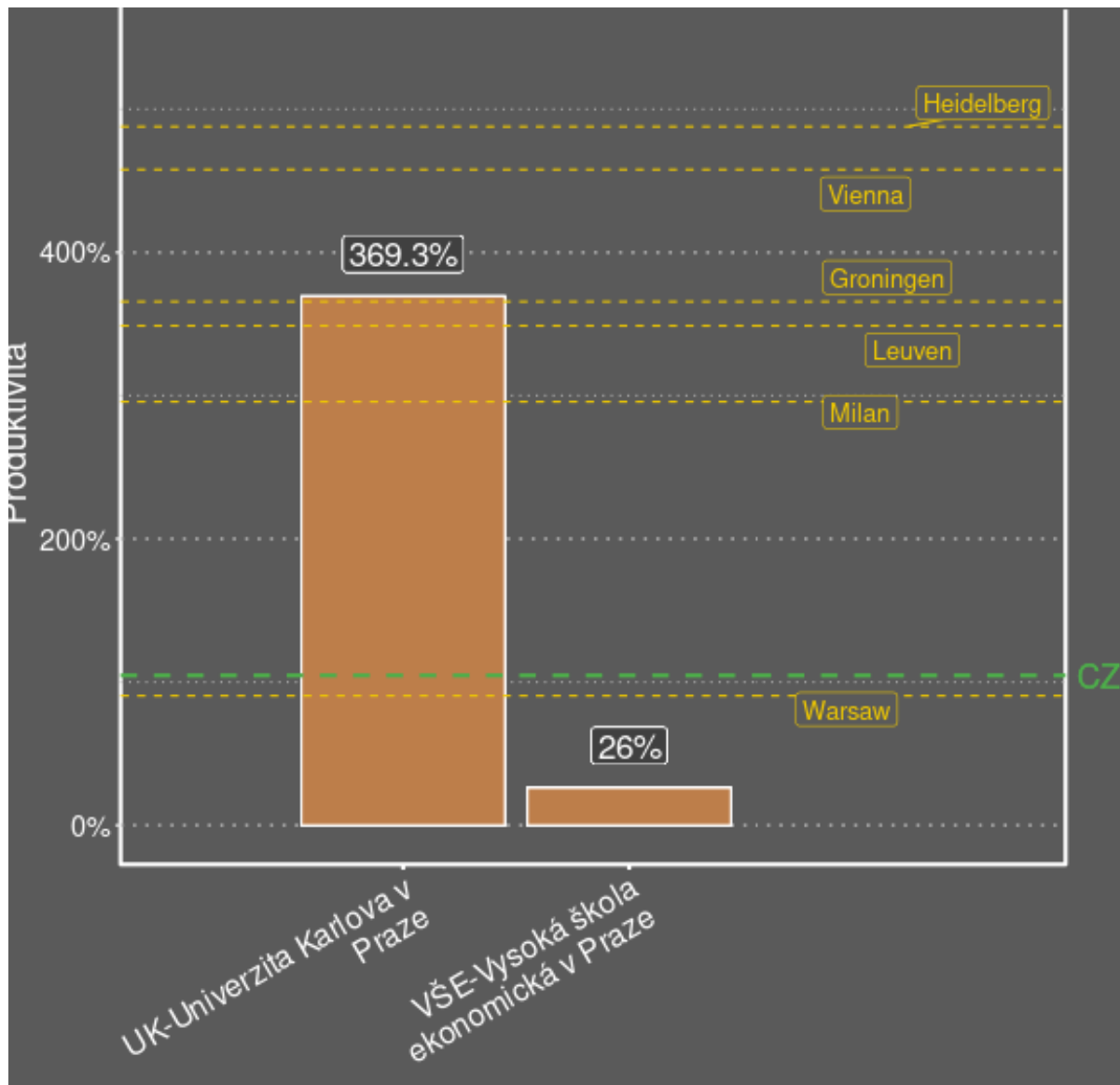
Institutes of AVČR vs. CNRS (France) and Helmholtz + Fraunhofer + Leibnitz + Max Planck (Germany)

- Publication productivity = D1 article count per author, 2021-2022.
- <https://ideaapps.cerge-ei.cz/AVCR>, autoři dle Metody 3.

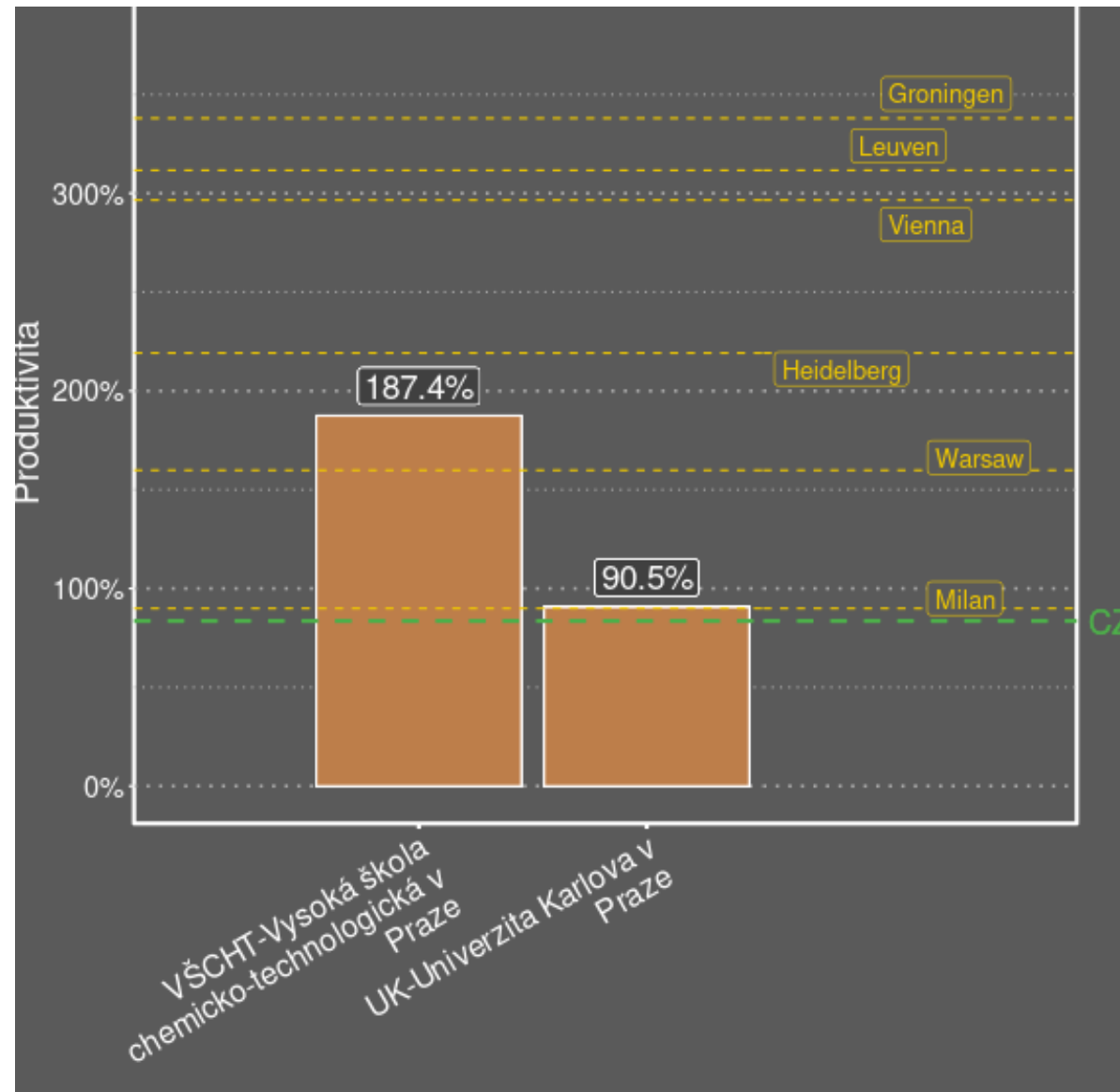
Universities, D1 productivity

(100%=EU15)

5.2 Economics and Business (>100 authors)

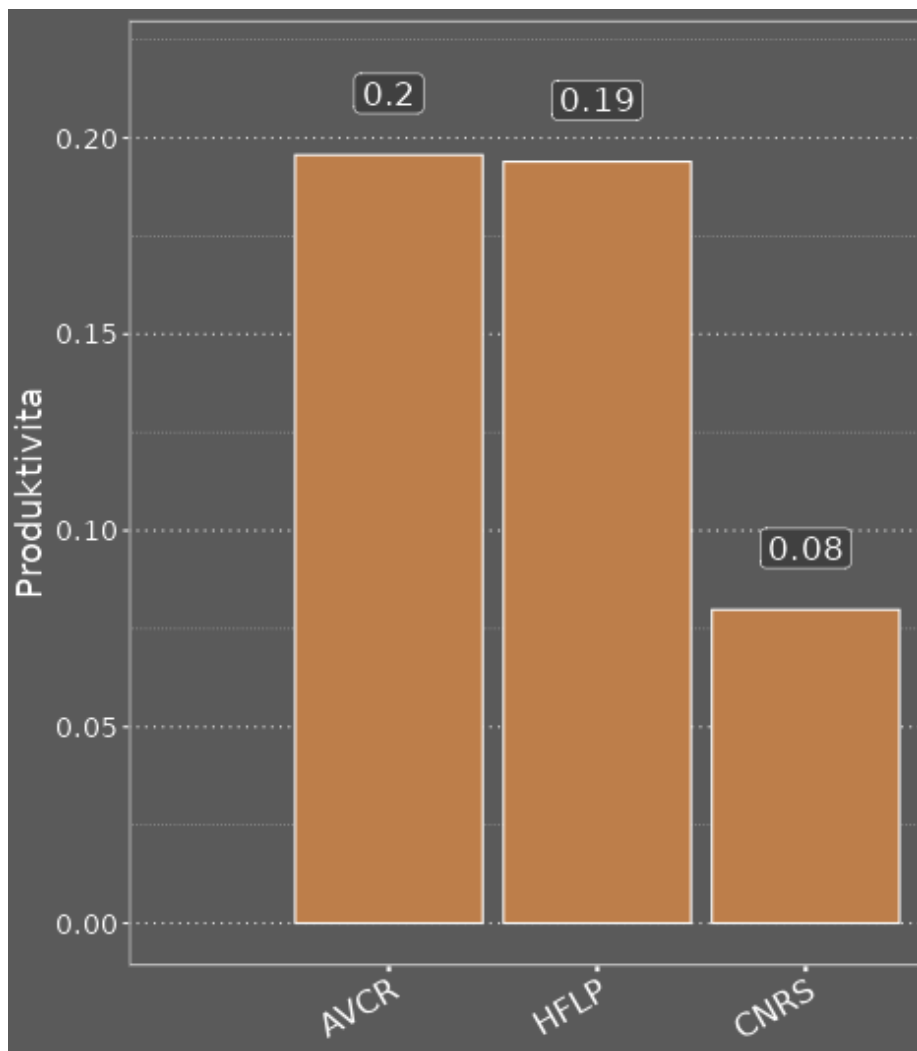


1.4 Chemical Sciences (>400 authors)

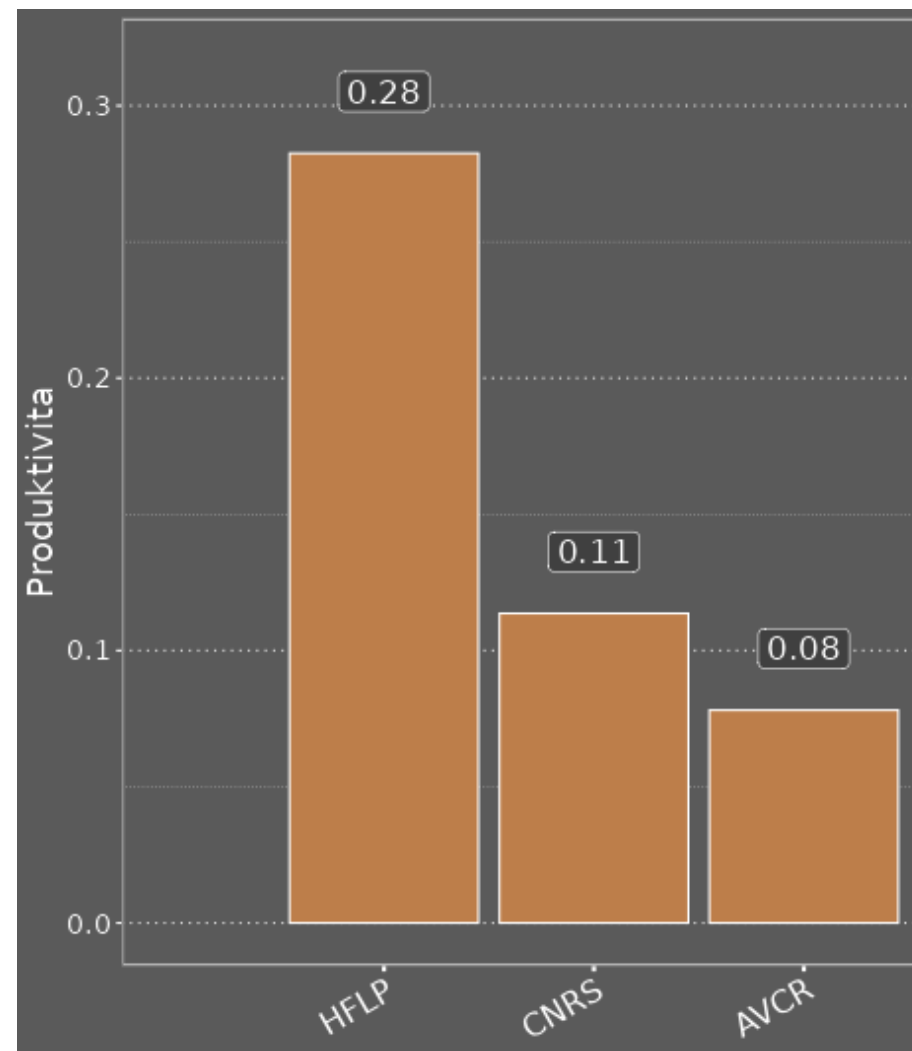


Non-Uni Institutes, D1 productivity

5.2 Economics and Business



1.4 Chemical Sciences



Social Sciences

- In economics, political science, and social geography, Czech universities are at about 50% of Q1 productivity of benchmark EU15 universities, in psychology, sociology and pedagogy at about 30%.
- Czech Academy of Sciences: D1 productivity in economics at the level of Germany, psychology and sociology are at the lower level of France.
- The best universities are not necessarily less productive in top journals in social sciences than in natural sciences such as chemistry.
- This applies within universities, within the Academy of Sciences, and for entire fields at the national level.

P.S. For CERGE-EI, we checked how sensitive these comparisons are to the definition of an author

- Compare productivity based on all authors with an affiliation to those based on *core faculty*. Comparison to leading European economics schools/centers. (London, Barcelona, Paris, Toulouse, and Stockholm Schools of Economics, London Business School, Università Commerciale Luigi Bocconi; Centers: CEMFI, EIEF).
- https://ideaapps.cerge-ei.cz/Comparison_CERGE-EI/ 2020-2024, D1 productivity
- Conclusion: rankings largely robust