

# UNEQUAL DEVELOPMENT IN R&D FIELD IN CEE COUNTRIES

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**Abstract:** Research and development (R&D) is widely known as a key factor in promoting economic growth and competitiveness. In this context, the authors aim at exploring the differences and changes in the field of R&D in twenty countries in Central and Eastern Europe (CEE). An overall image of these countries in what concerns their R&D indicators and competitiveness at international level and their participation in European Framework Programmes (FPs) is offered. The analysis shows that there are significant differences among the selected countries in CEE in all analysed aspects, with countries outside the EU registering lower performance than the EU members. Thus, the authors present the capacity of the CEE countries to innovate and underline the role of the policymakers in developing sustainable policies on research and development, encouraging investments in R&D field in order to strengthen the performance in research and innovation, and eventually stimulate economic growth.

**Key words:** RDI; competitiveness; research programmes; science and technology indicators; CEE countries

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## References

1. Arnold, E., 2011a. Inaugural Lecture: *Understanding the Long-term Impacts of the EU Framework Programme of Research and Technological Development*, University of Twente.
2. Arnold, E., Maheiu, B., Stroyan, J., Campbell, D., Carlberg, M., Giaracca, F., Horvath, A., Javorka, Z., Knee, P., Meijer, I., Sidiqui, S. and Wagner, C., 2011b. *Understanding the Long Term Impact of the Framework Programme*, European Policy Evaluation Consortium (EPEC), Brussels.
3. CORDIS, *EU research projects under FP4 – 1994-1998*. Available at: <https://data.europa.eu/euodp/en/data/dataset/cordisfp4projects>.
4. CORDIS, *EU research projects under FP5 – 1998-2002*. Available at: <https://data.europa.eu/euodp/en/data/dataset/cordisfp5projects>.
5. CORDIS, *EU research projects under FP6 – 2002-2006*. Available at: <https://data.europa.eu/euodp/en/data/dataset/cordisfp6projects>.
6. CORDIS, *EU research projects under FP7 – 2007-2013*. Available at: <https://data.europa.eu/euodp/en/data/dataset/cordisfp7projects>.
7. CORDIS, *EU research projects under Horizon 2020 – 2014-2020*. Available at: <https://data.europa.eu/euodp/en/data/dataset/cordisH2020projects>.
8. CORDIS, 1994. *Fourth Framework Programme*. Available at: [http://cordis.europa.eu/programme/rcn/342\\_en.html](http://cordis.europa.eu/programme/rcn/342_en.html).
9. CORDIS, 1998. *Fifth Framework Programme*. Available at: <http://cordis.europa.eu/fp5/>.
10. CORDIS, 2002. *Sixth Framework Programme*. Available at: [http://cordis.europa.eu/fp6/home\\_en.html](http://cordis.europa.eu/fp6/home_en.html).
11. CORDIS, 2007. *Seventh Framework Programme*. Available at: [http://cordis.europa.eu/fp7/home\\_en.html](http://cordis.europa.eu/fp7/home_en.html).
12. European Commission, 2014. *Horizon 2020. The EU Framework Programme for Research and Innovation*. Available at: <https://ec.europa.eu/programmes/horizon2020/>.
13. European Commission, 1994. *Fifth Periodic Report on the Social and Economic Situation*, Luxembourg.
14. European Council, 1983. *Council Resolution on framework programmes for Community research, development and demonstration activities and a first framework programme 1984 to 1987*, OJ C 208 of 4 August 1983.
15. IMD, 2017. *The World Competitiveness Yearbook*, Lausanne.
16. Lengyel, I. and Rechnitzer, J., 2013. The Competitiveness of Regions in the Central European Transition Countries, *The MacrotHEME Review*, 2(4), pp.106-121.
17. Martin, R., 2004. *A study on the Factors of Regional Competitiveness*, Cambridge econometrics, Cambridge.
18. Varga, A. and Sebestyen, T., 2013. Innovation in Central and Eastern European Regions: Does EU Framework Program participation lead to better innovative performance?, *GRINCOH Working Paper Series*, 3.02.
19. Varga, A. and Sebestyen, T., 2017. Does Eu Framework Programme Participation Affect Regional Innovation? The Differentiating Role of Economic Development, *International Regional Science Review*, 40(4), pp. 405-439.

20. World Economic Forum, (2002-2017) *The Global Competitiveness Report*. Oxford: Oxford University Press.
21. World Bank, *World Development Indicators* – 1994-2016. Available at: <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>.