

R&D: Czech Republic and Slovakia reach EU targets?

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Abstract

Purpose of the article The contribution analyses the relationship between Research and Development Intensity and economic growth. The studied geographical area is two EU members Czech Republic and Slovakia. The indicators considered in this contribution are R & D Intensity, total intramural expenditure on research and development performed on the national territory during a given period and GDP per inhabitant

Methodology/methods The contribution studied statistical dataset is two countries – both EU members – Czech Republic and Slovakia; one is member of European Area (EA) in 2008 - 2015. Based on theoretical background discussed in contribution, the hypothesis and assumption formed for testing here is the following: Funding of the R&D activities as GERD leads to increase the long-term economic growth. For multiple regressions has been used software STATISTICA 12.

Scientific aim The scientific aim is to find the relevant relationship basis of multiple regression in between R&D funding and economic growth in Czech Republic and Slovakia.

Findings The econometric analysis show that R & D Intensity is an important driver of economic growth ($R = 0.64$) that is measured by GDP per inhabitant in PPS. The first phase research produced a regression analyze with dependent variable GDP per inhabitant and independent variable R&D Intensity. In the second phase of the research were formulated econometric models. The Czech Republic in period 2008 – 2015 is shown correlation with $R^2_{adj.} = 0.534$, $DW = 1.55$. The Slovakia in period 2008 – 2015 is shown correlation with $R^2_{adj.} = 0.885$, $DW = 2.01$.

Conclusions The empirical findings suggest that Slovakia has a closer relationship than rival country. The global 3% R & D investment target will not reach even one without dramatic changes in innovation policy.

Keywords: Economic growth, Europe 2020 Strategy, GDP per inhabitant, R&D Intensity, Multiple regression

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