

VANGUARD SCIENTIFIC INSTRUMENTS IN MANAGEMENT '2021

World Development Indicators: Discovering high-weighting factors for Eastern European Countries' economic development

Data: World Bank - world development indicators

Aim: to discover the key factors for economic growth of the lower developed Eastern countries

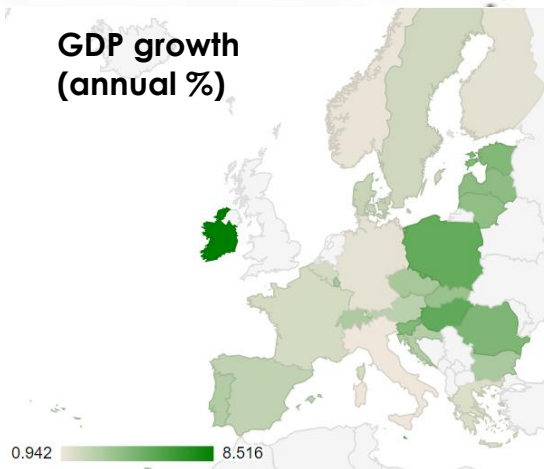
Scope:

- Analyses of different indicators for development & economic growth
- Creation of predictive model for the economic growth

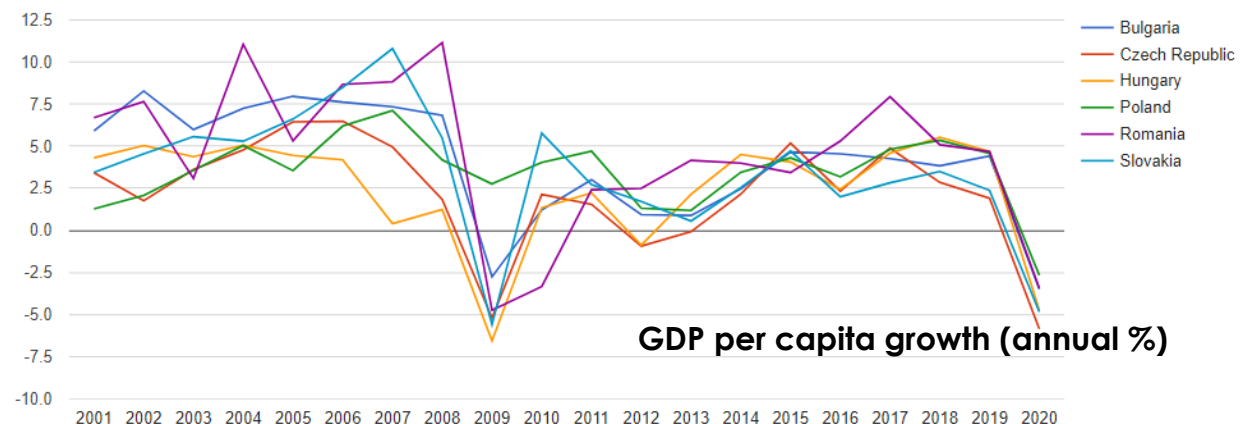
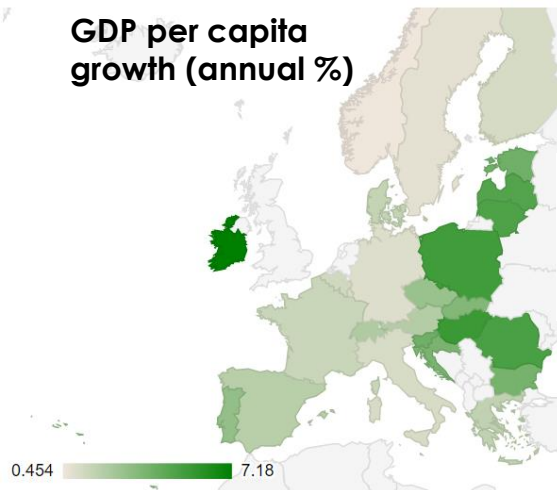
Subject of research: indicators for Bulgaria, Romania, Czech Republic, Poland, Hungary, Slovakia

Methods: Best subset selection, Linear regression analyses, Random forest, Decision trees

GDP growth (annual %)



GDP per capita growth (annual %)



- **Diversity of factors** for economic growth
- **Common and specific factors** for each country
- **Factors increasing the economic growth:** employment to population ratio 15+, service value added per worker, foreign direct investments inflow, transported goods & passengers, service and food exports, wage & salary workers %, savings of energy depletion & CO2 damage %, reserves, cereal production, trade %, changes in inventories, national income per capita, urban population
- **Factors decreasing the economic growth:** adolescent fertility rate births per 1000 woman 15-24, foreign direct investments outflow, commercial service exports, mortality rate, rural population