

Statistical Methods for Economists – Week 5

(Questions and Tasks)

The topic: *Synthesis of previous tasks*

The task: Open an online database such as OECD database: (<https://www.oecd.org/content/oecd/en/search.html?q=GDP&orderBy=mostRelevant&page=0>) and formulate a hypothesis about countries' GDP and one other (explanatory) variable. It might be a population density, population, country area, literacy rate, Gini coefficient, gender inequality, etc. Form a data sample of at least 20 countries. This design is called *a cross-sectional study*. Next, use regression and correlation analysis to investigate the relationship between your two variables. Draw a diagram. Test the statistical significance of the relationship (regression and correlation coefficients). Make a conclusion about the relationship.