

JEM 007 Otázky na státní zkoušku z Applied Microeconometrics

1. Typical steps in empirical research and a structure of an empirical paper
2. Data – types, sources and basic problems, use in regression analysis.
3. Identification problems: the main sources and overview of potential solutions.
4. Regression equation: Its components and interpretation of coefficients, estimation and inference using OLS.
5. Treatment effects in the context of program evaluation.
6. Controlled experiments: pros and cons, application of randomization in program evaluation and field experiments.
7. Natural experiments as a source of identification: examples and usual problems.
8. Difference-in-differences (DD) estimator: principles, limitations and examples.
9. Instrumental variable as an identification strategy: principles, application and limitations. Problem of weak instrumental variables.
10. Local average treatment effect in the instrumental variable application: use and interpretation of instrumental variable approach under idiosyncratic gains, comparison with regression discontinuity.
11. Regression discontinuity: sharp vs. fuzzy design, pros and cons, applications. Comparison with instrumental variable approach.
12. Panel data: fixed effects versus random effects model.
13. Identification using cross-sectional vs. panel data, comparisons of the regression specifications and interpretation of results
14. Structural models, steps in building a structural model, estimation, pros and cons, examples
15. Matching in the estimation of treatment effects: basic idea, types of matching, problems and application. Common support problem. Linear regression versus matching.