

# Term Project Assignment

Data Analysis 2

CEU 2016/7 Fall

*Submission deadline: Wednesday Jan 4 9:00 AM.*

*Late submissions: one point is deducted for each hour.*

Submit a single pdf file to the appropriate student folder on the course e-learning site with all your results, and include your code as an appendix. Name this file as `lastname.pdf`.

Question and answer	3p
Data & description	3p
Analysis	3p
Visualization	2p
Interpreting results	2p
Discussion	3p
Something extra	+2p
Total	16 + 2p

Your term project should use regression analysis of cross-sectional or time series data to answer a question that is motivated by a decision problem in policy, business, or consumer choice.

Write a 3 to 5 pages long document with the results of the project. The main text should contain the question, the answer (and its qualifications if appropriate), documentation and description of the data, the analysis, your main results, interpretation of the most important results, and discussion of how they help answer your question. Supporting material, such as extra tables and graphs, should be included in an appendix. The appendix can be of any length, but the main text should be self-contained.

Choose your own topic and data for the term project. Enter your choice in the Google spreadsheet

<https://drive.google.com/open?id=1ahSHosK5DRKN7qNJsOmjPzHWDpVaK0vLNRNs7Sfs2ms>

Sample ideas for the term project

- Where are skilled workers underpriced? Use cross-sectional data from the CPS or similar individual survey data from another country to examine regional differences of skilled workers to identify regions where skilled workforce may be underpriced.
- Does marriage make men earn more? Use cross-sectional data from the CPS or similar individual survey data from another country to examine differences of married men

versus unmarried men, and try to get as close to the causal effect of getting married as possible.

- What's the risk-return tradeoff on a particular asset market? Use a cross section of assets on an asset markets (say, company shares on a stock exchanges) and examine how their returns are related to their risk. (Calculate average return and variance of return for each asset, as well as their "market beta" coefficients, over the same period of time, and regress return on variance and market beta.)
- Find a good deal on a service or a used product using an online classified ads or price comparison website. Examples include used cars, houses/apartments, hotels, airbnb apartments, holiday trips. Identify a handful of good deals that have the lowest price for their characteristics.
- What does make countries with the same average income more or less healthy? Identify one factor that may have an important effect on how long people live in a country, conditional on GDP per capita. Use a cross-section of countries, and try to get as close to the causal effect of that factor as possible.