Problem Set 2*

September 29, 2022

The homework is due Thursday October 13th by 15:30 on ZoneCours. It is graded out of 5, with one point penalty per day for late submissions. The homework can be done in teams of 2 maximum (one submission per team). Maximum 5 pages in **PDF** with the following structure:

Note that **you can use the same data set** you used in the previous homework.

1. Research question with an explanation of why it is an interesting question and the results you expect to find. Data source. summary statistics for the key variables and comment on them (means, standard deviation, maximum, maximum). (1 point)

2. Provide a multivariate econometric model with **at least** two variables ($y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + ... + u_i$). Estimate the model using the software of your choice. Interpret the parameters of the model. Verify the OLS properties of your estimators. (1 point) Provide a discussion with regards to the t-statistics, p-values, and confidence intervals of your estimators. (1 point)

3. Discuss the F-statistic, R^2, and conclude about the validity of your model (i.e. are your conclusions in line with the results you expected to find, does the respect of the OLS hypotheses matter for your conclusions?) (1 point)

4. Provide the code (or snapshots of your code) allowing the replication of your work. (1 point)

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