Economics ECONGA-1101.003 Applied Statistics and Econometrics I Fall 2021 Monday 6:20-8:20 PM Teaching Assistant: Dragos Ailoae

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Instructions for Term Project

The purpose of the project is to provide you Opportunity to experience of applying econometric skills learned in class to real world issues. The project involves posing a problem, collecting an appropriate data set, conducting an econometric analysis, and writing the results on the form of a short research paper. This will be a group project and students are required to form the group consisting of 3 to 5 students. Group formation need to be completed by **September 27.**

In order to ensure timely progress toward project completion, the project will have two intermediate deadlines. Each group must submit a problem statement (maximum 2 pages) identifying the data set you plan to use and the economic problem you plan to study. Please include in the first page, the full name and NYU-ID of each group member together with a tentative title of the research paper. The problem statement is due on **October 12, 2021**. Please email it to me and Teaching Assistant.

Once I have approved the problem statement, group members need to prepare a model description (not more than two pages). This should use some economic theory to develop the problem identified earlier into an explicit conceptual and/or theoretical and/or mathematical model with testable hypothesis or forecasts of interest. If possible, include the information about data sources. The model description is due **November 1, 2021** and should be emailed to me and Teaching Assistant.

A final written paper needs to be submitted no later than **December 17, 2021**. The paper should be not more than 15 pages long (inclusive of tables, footnotes, and bibliography), typed, double spaced. I would like an electronic and paper version of the paper. When you email me the final copy of the paper, **please mention the name and NYU-ID** for each group member and attach the data set that you used, and the program output from the statistical software package. Please email the final paper to both me (via email) and to Teaching Assistant (via email or load in a location under NYU Brightspace as per TA's direction)

A suggested paper structure is as follows:

- I. Introduction of the economic/econometric problem.
- II. Brief review of the relevant literature and a brief description of the economic model.
- III. Description of the econometric model and the data you chose.
- IV. Description and Interpretation of Results (Include results of all diagnostic tests)

- V. Conclusions
- VI. References
- VII. Tables and Figures

Sections III and IV are the core of the paper. Put extra effort into these sections. You must be able to motivate your choice of data, the formulation of the model, and the econometric techniques you used. Explain why you have included each of the variables you have used. Justify the exclusion of variables that others may deem important. Explain your econometric techniques. What are the assumptions you are making? What diagnostic test did you undertake? Is heteroscedasticity or autocorrelation present? Did you correct for it? If not, what can you do to correct for it?

Summary of Timeline:

| Project Requirement | Date Due |
|----------------------|-----------------------|
| Group Formation | September 27, 2021 |
| Problem Statement | October 12, 2021 |
| Model Description | Nov 1, 2021 |
| Project Presentation | Nov 29 to Dec 6, 2021 |
| Final Report | December 17, 2021 |

<u>Note:</u> All members of the group are expected to participate in the project work equally. Therefore, please make a plan to divide the work among group members and at the end of the project, please indicate the contribution of each member towards the final paper.