ECO 521
Quantitative Methods II
Spring Semester 2021

Problem Set 1

These problems are due by **5 pm Friday, March 5, 2021**. No exceptions! You should submit a copy of the SAS program **you** wrote in order to solve the problem, the output and any relevant charts, and of course **your** analysis of and solution to the problem.

Please follow the specifications for submitting the problems (which will posted separately). Failure to do so will result in a 10 percent penalty on the problem set. I reserve the right to *escalate* the penalty on future problem sets if you insist on failing to adhere to the specifications.

late problem sets will not be accepted!

General note: You *are not* required to use the DDE method to bring the Excel data into SAS. You can use the "import wizard" instead if you choose.

    1. The Excel workbook on Blackboard contains three *simulated* time series data sets, each based on a simple time series model – in other words, there are **no mixed models**. The series are designated **X1, X2, X3**.

    A.   Use SAS to plot each original data series *before* proceeding to the next phase of analysis. State whether or not each original series appears to be stationary.

    B.   Use SAS to obtain the SACF and SPACF for each series and tentatively identify **a time series model** for each series. You must decide on **one model** — no hedging of bets! If you insist on selecting multiple models, I will take the first identification you make as your solution and will **ignore** the rest.

    C.   Now use SAS to estimate the model *that you identified.* **Discuss** (based on the SAS output) how well you were able to identify the model.