Stata exercises

1. With the file **ipc.xlsx** and using Stata:
- Graph the series
- Obtain the stationary series through differences and logarithmic transformations
- Confirm the stationarity with the Dickey-Fuller test
- Build the ARIMA model

2. In order to analyze the determinants of wage in Spanish regions, we can focus on the following econometric specification:

$$\ln W_{it} = C + \ln P_{it-1} - U_{it} + \mu_i + v_{it}$$

Where W represents the wage, P the price index and U the unemployment. μ_i and v_{it} are individual effects and error term respectively.

Using Stata and the file **wage.xlsx**:

- Obtain descriptive statistics. W is measured in euros, P is an index (expressed in 2011 constant values) and U is miles of persons.
- Perform the estimation, choosing the most efficient estimator, according to the tests F of individuals and Hausman, explaining the obtained results.
- It is possible in this context to estimate a dynamic model?. How do the results change if we perform a dynamic model?

Pack all the files in a compressed .ZIP file and send through e-mail to: inmaculada.alvarez@uam.es