Home exercise 1:

Exercise 1:

Getting data from a homepage table:

Go to the Statistics Norway homepage, http://www.ssb.no/kpi/tab-01.html. You will encounter a table with historical consumer price index data on Norway. We will begin by importing the date to Excel. Note that comma is used as the decimal delimiter, so should make sure that the decimal delimiter is specified to comma in Excel (Excel menu: Tools-alternatives-international). Copy and paste data to Excel (avoid copying any thing else than the data and variable names, ex. logos etc.). Delete any empty spaces in the series. Because Stata can only use a dot (.) as decimal delimiter, you now have to change the settings in Excel to this use. To import data to Stata you can use the "save as tabulated tekst" option in Excel and load data using the insheet command in Stata (insheet using address/variable name). You can also try to copy and paste the date directly.

Working with data and variables in Stata:

- Specify variable names for the first and last column in the Stata spreadsheet (the year variable, and the yearly average cpi).
- Delete all columns except the first and last using the "keep" command
- Type "tsset year" to declare the that the variable you named "year" is to be regarded as a time ordering variable.
- Generate a new variable containing the yearly inflation rate using the lag or difference operator (generate newvar = (cpi – L.cpi)/cpi).
- Generate a new variable called proxy equal to the difference in logs of the price index (you may first want to specify a new variable containg the log of cpi using the ln(varname) function.

Working with simple graphics:

(You may want to use the "simple graph" alternatives in the Stata
graphics menu)

- Make a scatterplot of the inflation rate against proxy. When is proxy
  a good approximation for the inflation rate?
- Make a time series plot of the inflation rate.

Regress and predict

- Regress the inflation rate using lagged (the pervious year) inflation
  rate as an explanatory variable. Use this (naïve) model to make a
  prediction for the inflation rate in 2010.

Home exercise 2:

Type :

"use http://fmwww.bc.edu/ec-p/data/wooldridge/WAGE1"

- Reproduce the regression results given in exercise 2.4 where
  education is used to explain wage. Interpret the slope coefficient.
- Generate a new variable equal to the log of the wage variable and do
  the same regression using the new variable as the explained variable.
  Now interpret the slope coefficient.
- Use the regression results from each of these regressions to make
  predictions of the wage variable. Calculate R^2 for wage (not log
  wage) using the two models. Which of the models explains wage best?
- For each of the models, plot the fitted regression points together
  with the data points in a diagram with wage on the y-axis and
  education on the x-axis. Then calculate the residuals and make a plot
  with the residuals on the y-axis and education on the x-axis.

Exercise 3:

Type :

"use http://fmwww.bc.edu/ec-p/data/wooldridge/HPRICE1"

- Do computer exercise 3.14 (page 108).