

## ECN 207, third data exercise

[You may wish to refer to the first data exercise document, <http://users.wfu.edu/cottrell/ecn207/data-ex1.pdf>, for details on how to do some of the following things.

Please write up a short document including the graphs that are called for plus your comments, and submit it in PDF format. Note that in gretl you can access the numerical values of a selected series by right-click and “Display values”, or by double-clicking the series.

### Part 1

If gretl is running, exit and restart it. Open the fedstl database and import the series lvxrsa, mixrsa and spcs20rsa. These are all indices of house prices. Since their names are quite obscure, give them more understandable “Display names” as follows:

lvxrsa	Las Vegas
mixrsa	Miami
spcs20rsa	20-city index

To do this, right-click on each series in the main gretl window and select the menu item “Edit attributes.” In the dialog that appears, fill out the field titled “Display name (shown in graphs)” then click OK. For instance, give lvxrsa a display name of “Las Vegas.”

Create a time-series plot of the three series together. (Roughly) by what percentage did house prices increase between 2000 and 2006 according to each of the indices?

### Part 2

Now import the series uscons (employment in the construction industry). Reset the sample range to start in 2000:1. Plot the time series of uscons. By what percentage did employment in construction increase between 2002 and 2006, and by what percentage did it fall between 2007 and 2010?

### Part 3

Reset the sample range to a longer period: use the menu item /Sample/Restore full range. Then import the series isratio (the ratio of business inventories to sales) and create a time-series plot. What do you reckon is happening with the sharp up-spike in 2008-2009? (Plus, any guesses what’s going on with the the progressive drop in this ratio up till 2006?)