

Things you should be more or less comfortable with by now...

One half of the course is coming to an end – that of OLS. You are beginning new, more advanced topics that deal with problems OLS is unable to cope with. This work will build on your understanding of OLS, so it is important that you are more or less comfortable with certain key things and are able to apply them.

Here is a checklist (probably incomplete) of things you should grasp. If you are not sure of any of them, then now is the time to spend a week getting yourself up-to-date. Tick of each box when you are comfortable with the relevant point.

Here goes for the (non exhaustive) list.

Before you run any regressions:

- 1) The initial model stage. What you want to show or what you want to test.
- 2) You look at the data before doing anything with it automatically and “get to know it”.
- 3) You can decide what form your dependant and independent variable should take e.g. log, dummies etc.
- 4) Based on this, you can choose from the different estimation methods you have learned to far (OLS, probit, count, logit).

Focusing on output with most of this being relevant for OLS

- 5) You automatically check the number of observations in your regressions to make sure it is what you think it should be.
- 6) You can interpret the r^2 .
- 7) You can interpret the F test.
- 8) You can interpret the p-value, and you are able to tell when a variable is significant (that is, significantly different from zero).

- 9) You can interpret the signs of the coefficients.
- 10) You can interpret the magnitude of the coefficients where necessary.
- 11) You can interpret dummy variables.
- 12) You can interpret interaction variables when they are between two dummies or between a dummy and a continuous variable.

Diagnostics

- 13) You can perform some key relevant diagnostics, in particular:
- You can test (and interpret) whether variables should be included (omitted variable test).
 - You can test (and interpret) whether there are two distinct groups within the regressions (Chow test).
 - You can test (and interpret) whether a coefficient is significantly different from a hypothetical value (except zero, which is automatically tested – the significance).

If you are having trouble, please use this next week to catch up. Read Pete's lecture notes (and take notes from them). Read the notes I have provided on my website (www.bath.ac.uk/~sd245/) – these are there as additional helpful material, written in as simple a way as possible to help you understand the ideas and concepts. Read relevant sections of one of the course books when you are still lost. Practice the exercises on e-views and don't be afraid to play around a bit on e-views to see what you can do.