Stata handout – testing

Today we are going to use the following commands and options (besides use, regress, log using, log close, summarize, correlate…).

1. Hypothesis testing in the linear model

Testing is done after the regress command of the particular regression was executed. Stata stores the standard errors from this latest regression in its memory, and only uses those numbers.

**Command: test**

Syntax: It varies, depending on the null hypothesis. Even though you are testing if the is zero or not, Stata does not require you to write out ‘beta’. So for example testing the is

test educ

This performs the required t-test.

When you need joint significance, you need to use the F-test, but it is also the ‘test’ command in Stata. The is tested by the command

test educ educ\_sq

More complicated null hypotheses, for example against two-sided alternatives can be tested by writing

test 3\*educ-experience

Stata knows that you need a t-test here, and performs it for you. The output of these tests always gives a p-value.

1. Heteroskedasticity robust standard errors (=White-standard errors): this should be your default from now on. Testing is not valid, if the homoscedasticity assumption is not fulfilled.

To get White-standard errors reported to your output, you need to add the option ‘regress’ to the ‘regress’ line after a comma:

regress lwage educ motheduc exper, robust

ALWAYS ADD ‘COMMA,ROBUST’!