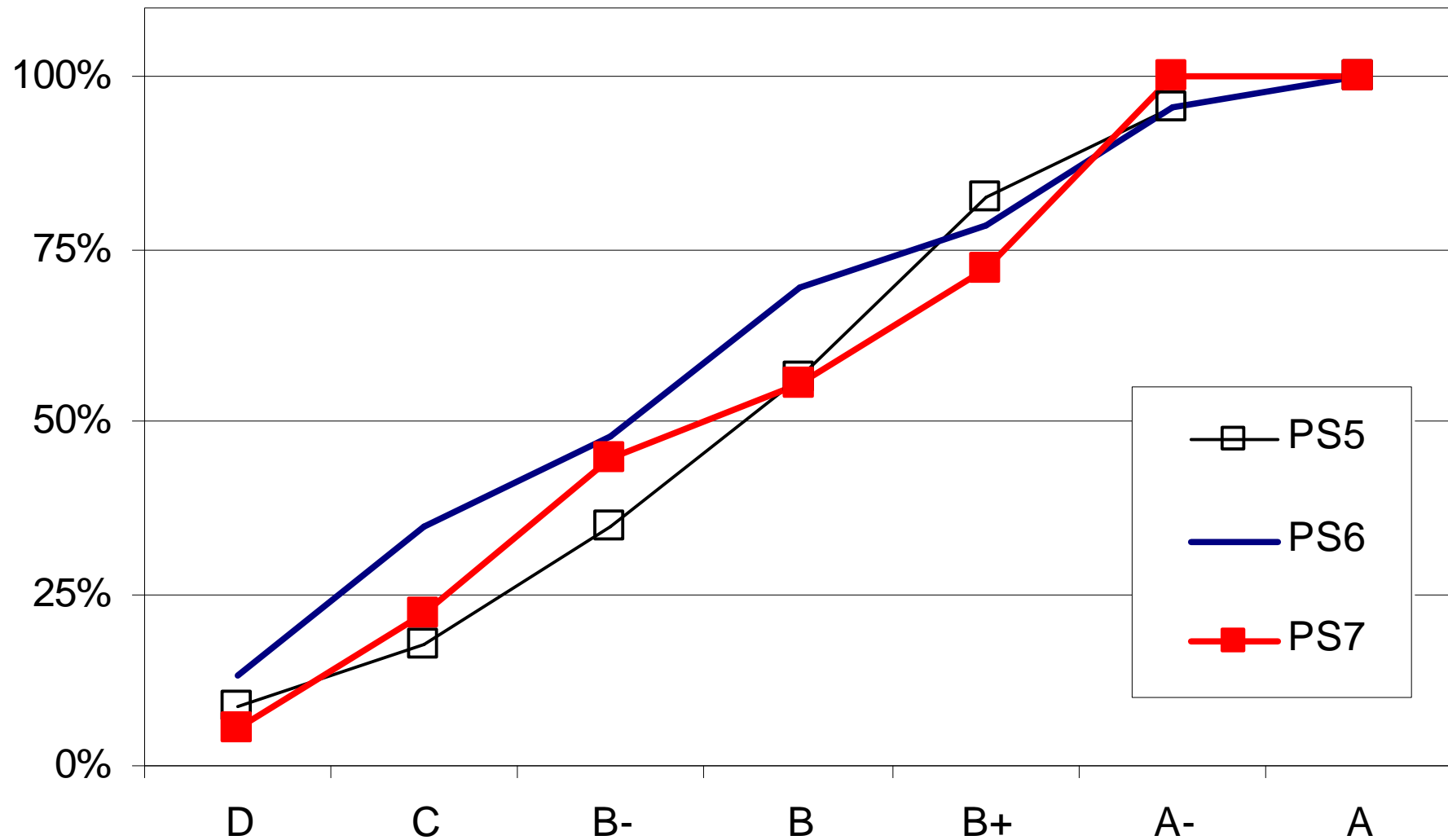


EC220-PS7

Antoine Goujard

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**Office hour: on Monday in S684
from 16:30 to 17:30**



- Problem set 8 (Omitted variable bias) due on Friday 5/12 at 5pm.
- Problem set 9 due January 12 in class.

Main mistakes

- **EXERCISE 5.13/5.19 (estimates)**

When you have a slope dummy variable you have to be more precise when you interpret the estimates.

You can **not** just state that this is the effect of one additional unit of some explanatory variable $X1*MALE$ *holding all the other explanatory variables constant*.

In general if you have a variable $X1*MALE$, the regression may also include the variable $MALE$ and $X1$ which will change at the same time.

- **EXERCISE 5.13/5.19 (t-tests)**

You perform a t-test on a slope dummy variable parameter as for the usual explanatory variable. Be precise: state H_0 and H_1 , the value of t , the value of t -crit (at a particular **sign. Level**, with the right number of **dfs**).

Use the correct sign. Levels:

—If you are able to reject H_0 only at 5% state that you can not do it at 1%. If the t value is very high use 0.1% with the right number of dfs .

—If you are not able to reject H_0 use the 5% or 10% sign levels.

- **EXERCISE 5.13/5.19 (F-tests)**

- **Chow test:** state clearly what is H_0/H_1

H_0 : there is no significant improvement in fit (RSS) of using two separate regressions for the two subsamples rather than a pooled regression.

Know that you can also see the Chow test as a particular F-test on some set of dummy variables.