<u>Practice 6 – Introduction to Econometrics (deadline: before next tutorial)</u>

1) Calculate the missing data (XXX) in a human capital model from the following estimation output from Eviews:

Dependent Variable: LOG(INCOME)
Method: Least Squares
Date: 01/19/09 Time: 11:24
Sample: 1 807
Included observations: 807

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	XXX	0.170428	45.73694	0.0000
EDUC	0.059544	XXX	7.578533	0.0000
AGE	0.059116	0.007512	XXX	0.0000
AGE^2	-0.000647	8.18E-05	-7.916456	0.0000

R-squared	0.163916	Mean dependent var	9.687316
Adjusted R-squared	0.160793	S.D. dependent var	0.712696
S.E. of regression	XXX	Akaike info criterion	1.990123
Sum squared resid	342.2893	Schwarz criterion	2.013386
Log likelihood	-799.0147	F-statistic	52.47668
Durbin-Watson stat	1.906575	Prob(F-statistic)	0.000000

2) The same model was re-estimated but now adding an additional variable (CIGS), which stands for the amount of cigarettes a person smokes per day.

- Being this a human capital model, what do you think this variable intends to grasp?

- Is it significant at conventional levels?

- Using the Akaike criterion, which model is better? And using the Schwarz? And according to the r2?

- Which model of the two would you select? Explain.

- Try to interpret the coefficient associated to EDUC, both qualitatively and quantitatively (*note: when the dependant variable is expressed in logarithms it should be understood as a semi-elasticity, that is, percentage changes in the dependent variable to unit changes in the independent variable, 'ceteris paribus').*

- Try to interpret the coefficient associated to AGE^2, only qualitatively.

- Calculate the missing values (XXX).

Dependent Variable: LOG(INCOME)
Method: Least Squares
Date: 02/03/08 Time: 22:25
Sample: 1 807
Included observations: 807

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	XXX	0.170427	45.74062	0.0000
CIGS	0.001731	XXX	1.009835	0.3129
EDUC	0.060361	0.007898	XXX	0.0000
AGE	0.057691	0.007644	7.547594	0.0000
AGE^2	-0.000631	8.34E-05	-7.562635	0.0000

R-squared	0.164978	Mean dependent var	9.687316
Adjusted R-squared	0.160813	S.D. dependent var	0.712696
S.E. of regression	XXX	Akaike info criterion	1.991331
Sum squared resid	341.8547	Schwarz criterion	2.020409
Log likelihood	-798.5019	F-statistic	39.61342
Durbin-Watson stat	1.907601	Prob(F-statistic)	0.000000