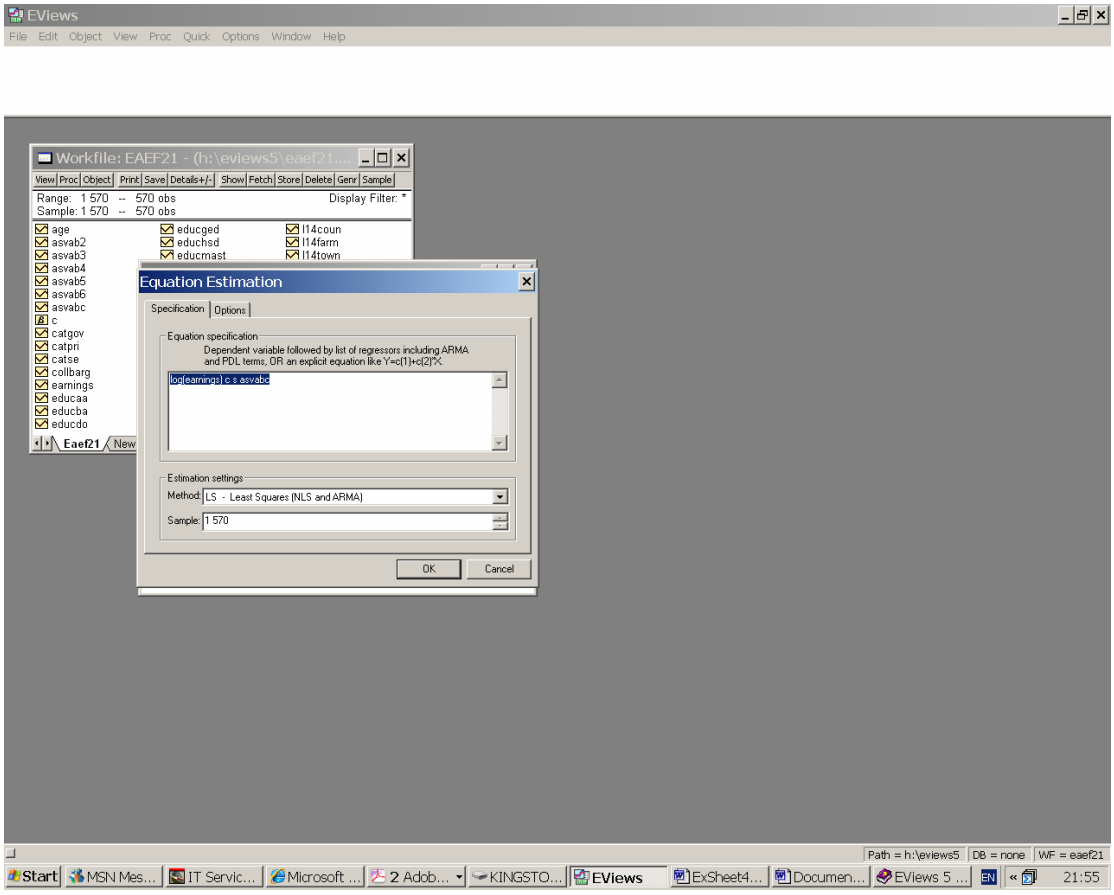
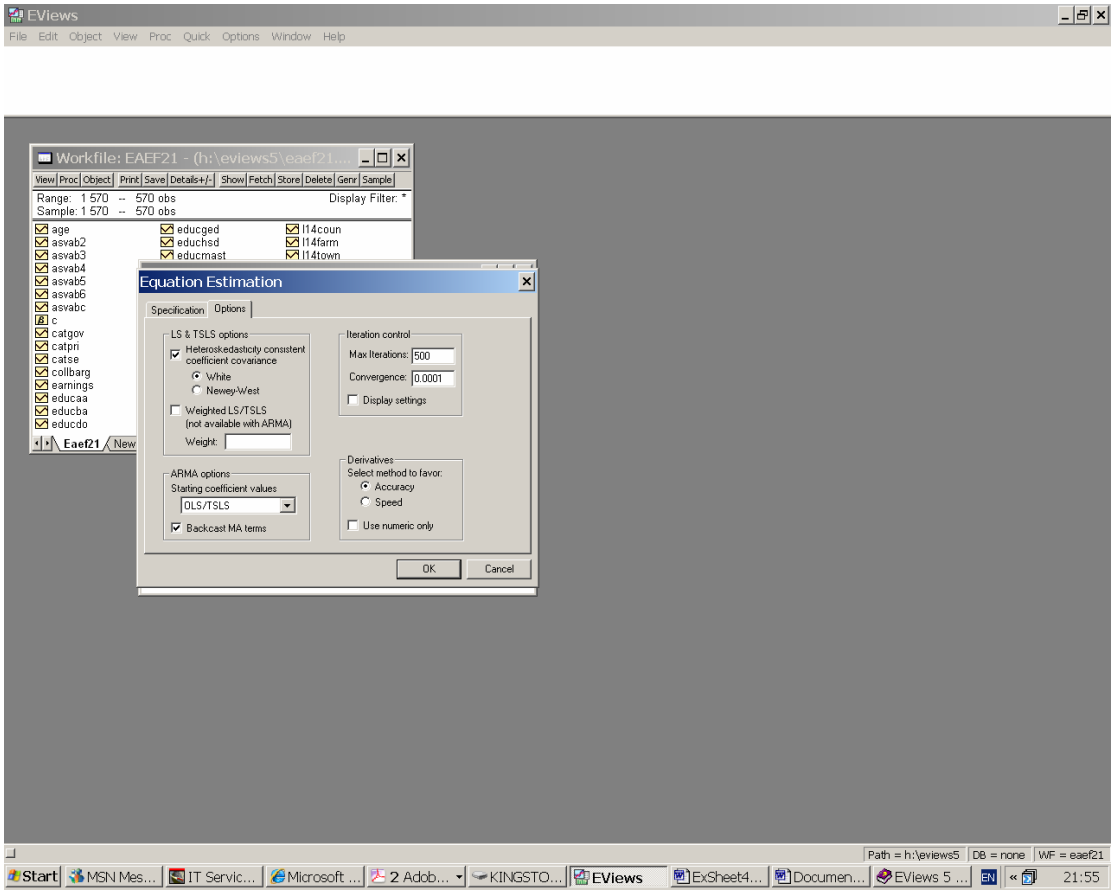
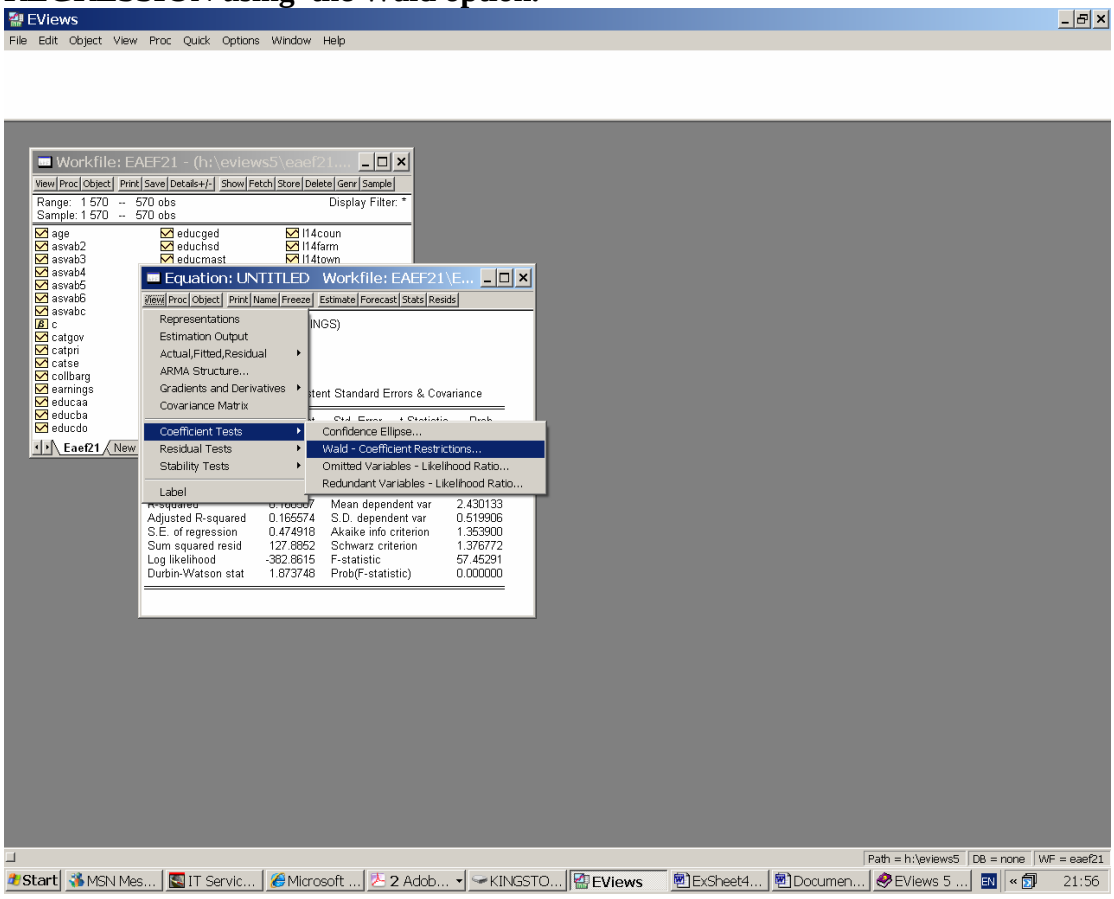
Standard Errors allowing for Heteroskedasticity



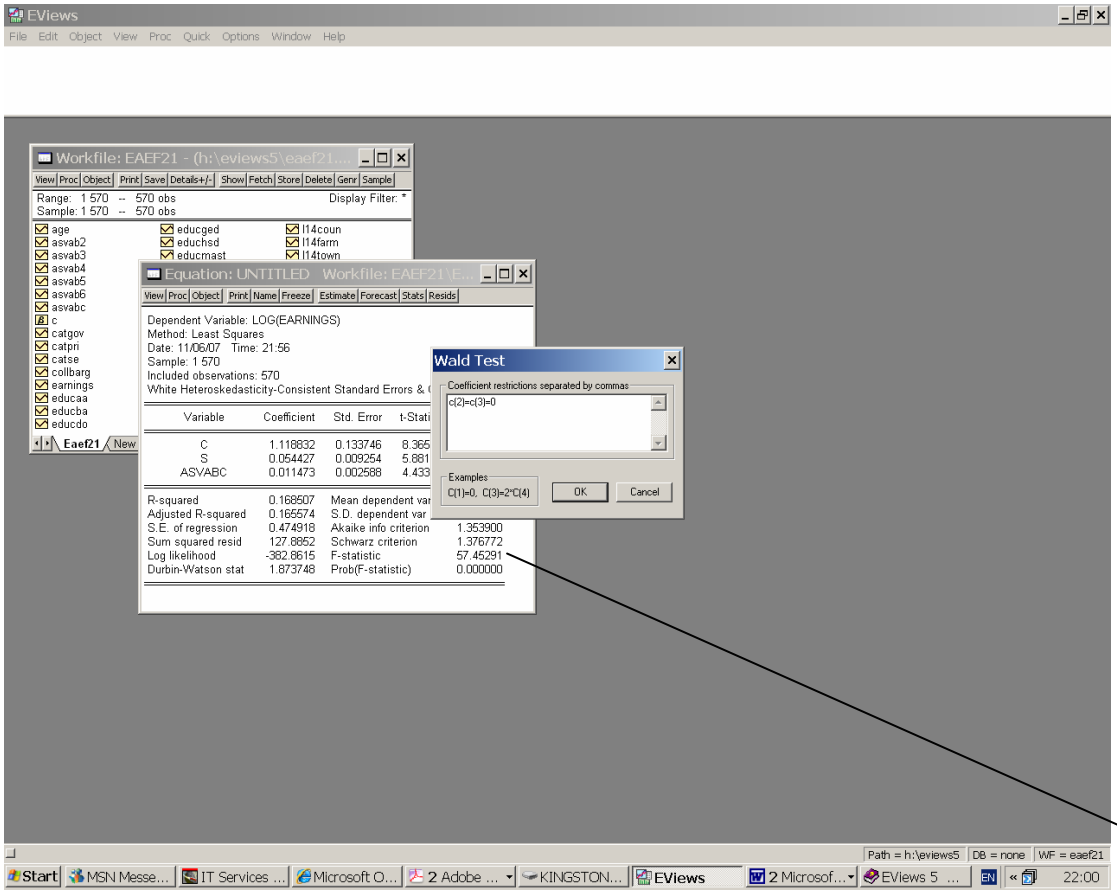

EViews
File Edit Object View Proc Quick Options Window Help
Workfile: EAEF21 - (h:\eviews5\eaef21....
View Proc Object Print Save Details+/- Show Fetch Store Delete Genr Sample
Range: 1 570 -- 570 obs
Sample: 1 570 -- 570 obs
Display Filter: *
age
asvab2
asvab3
asvab4
asvab5
asvab6
asvabc
c
catgov
catpri
catse
collbarg
earnings
educaa
educba
educdo
educged
educhsd
educmast
l14coun
l14farm
l14town
Eaef21
New
Equation Estimation
Specification
Options
LS & TSLS options
Heteroskedasticity consistent coefficient covariance
White
Newey-West
Weighted LS/TSLS (not available with ARMA)
Weight:
Iteration control
Max Iterations: 500
Convergence: 0.0001
Display settings
ARMA options
Starting coefficient values
OLS/TSLS
Backcast MA terms
Derivatives
Select method to favor:
Accuracy
Speed
Use numeric only
OK
Cancel
Path = h:\eviews5
DB = none
WF = eaef21
Start
MSN Mes...
IT Servic...
Microsoft ...
2 Adob...
KINGSTO...
EViews
ExSheet4...
Documen...
EViews 5 ...
EN
21:55

ONCE YOU HAVE OBTAINED YOUR OUTPUT COMPUTE THE CORRECT F-STATISTIC FOR THE OVERALL SIGNIFICANCE OF THE REGRESSION using the Wald option.



$$H_0 : \beta_1 = \beta_2 = 0$$

We only have two coefficients, excluding the constant (which we call alpha).
In Eviews notation these coefficients are c(2) and c(3). c(1) would be the constant.



Here is your output:

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	49.55690	(2, 567)	0.0000
Chi-square	99.11381	2	0.0000

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(2)	0.054427	0.009254
C(3)	0.011473	0.002588

Restrictions are linear in coefficients.

The F above does not take into account the possible heteroskedasticity. The one on the left does.

You can check that if you do NOT select the White standard errors when estimating the equation and then run the Wald test as we just did, you will obtain the same F-statistic that EVIEWS provides by default (whether or not you are using the robust standard errors).