

Simple Regression

Single equation regression estimation in EViews is performed using the *Equation Object*.

Etude de Cas:

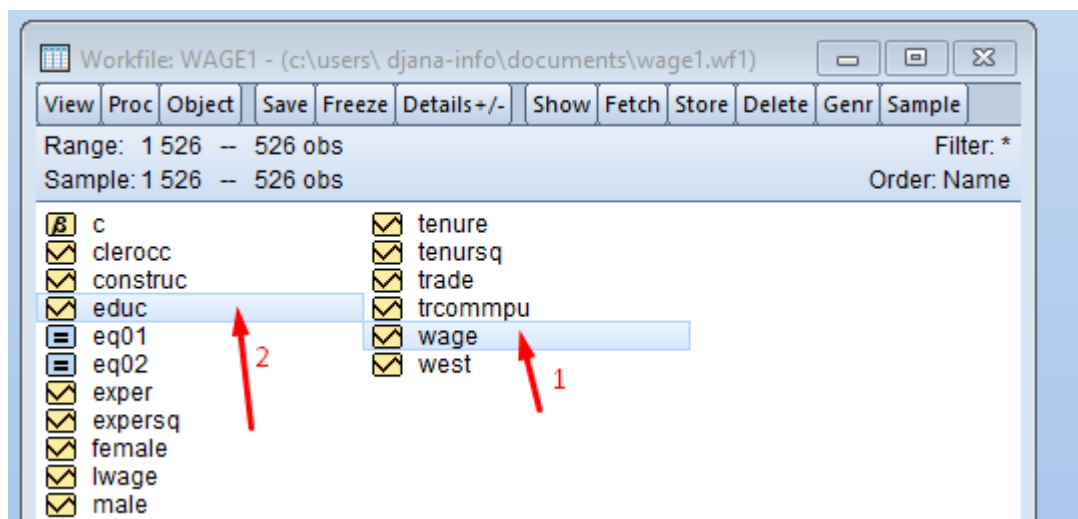
We use the work file given 'Wage1'.

Given the following question: does the level of education influence an individual's salary?

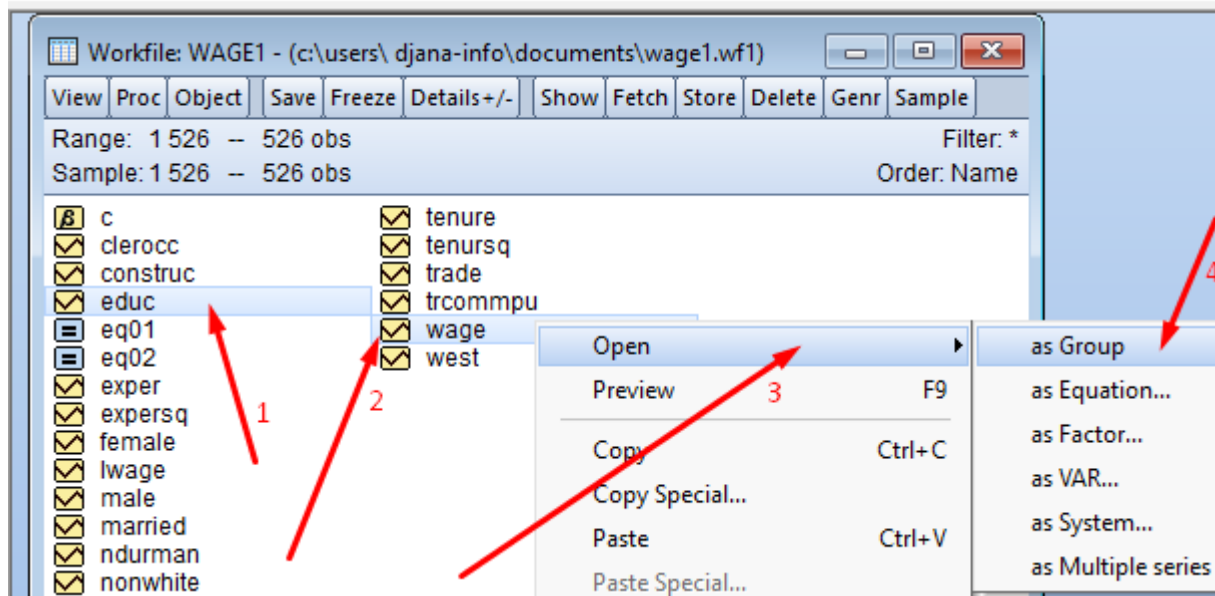
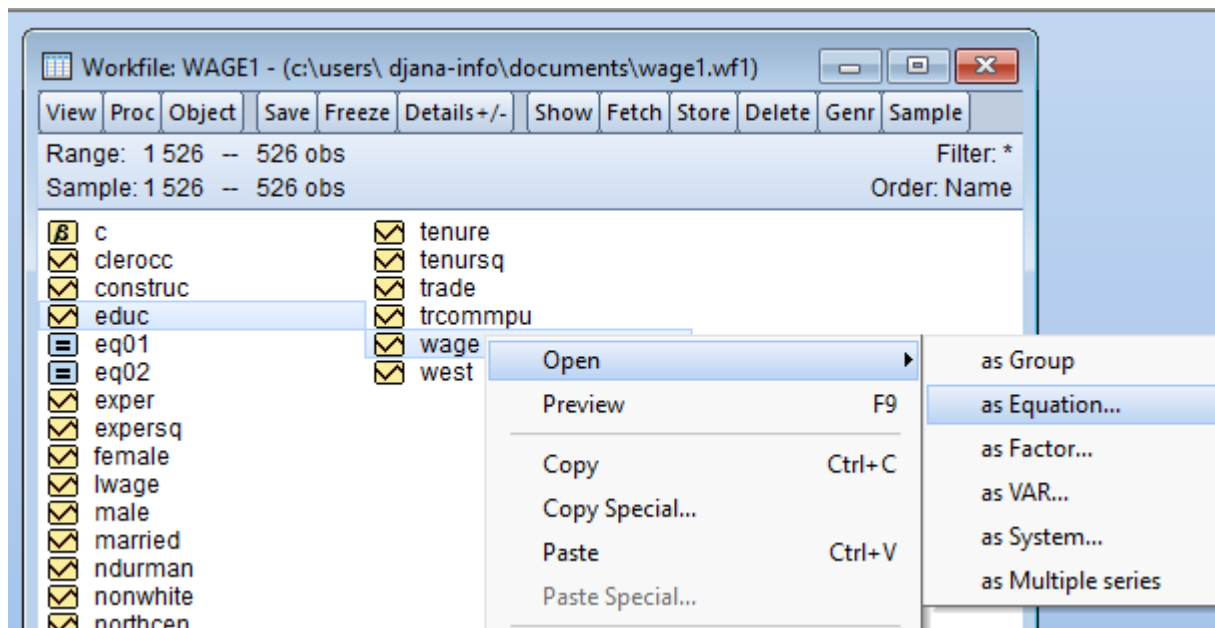
if this influence exists, how can it be quantified?

how to predict an individual's salary based on their level of education

1-Select variables



2- Open Contextual menu



Specify your equation either by:
List or Formula

Specify your estimation method

Specify your sample

Equation Estimation

Specification Options

Equation specification
Dependent variable followed by list of regressors including ARMA and PDL terms, OR an explicit equation like $Y=c(1)+c(2)*X$.

wage educ c

Estimation settings

Method: LS - Least Squares (NLS and ARMA)

Sample: 1 526

OK Annuler

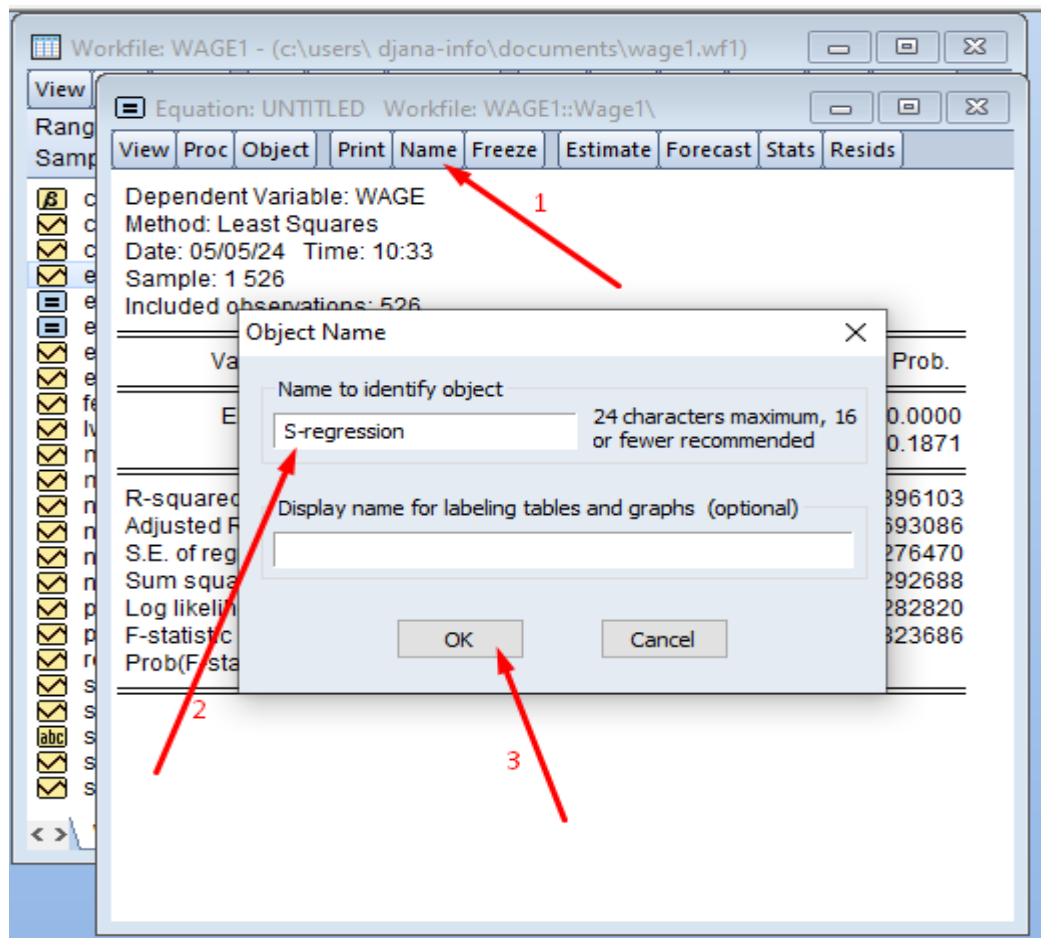
3-Click on OK.

this window is displayed

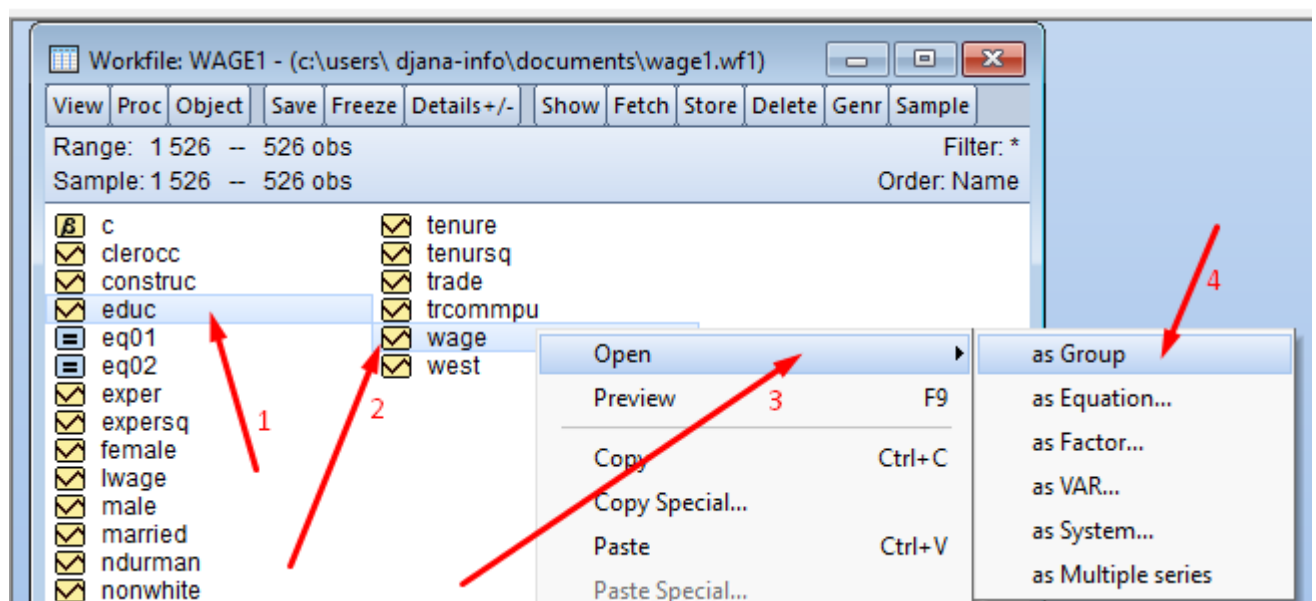
Equation: UNTITLED Workfile: WAGE1:Wage1

View	Proc	Object	Print	Name	Freeze	Estimate	Forecast	Stats	Resids
Dependent Variable: WAGE Method: Least Squares Date: 05/05/24 Time: 10:06 Sample: 1 526 Included observations: 526									
Variable	Coefficient	Std. Error	t-Statistic	Prob.					
EDUC	0.541359	0.053248	10.16675	0.0000					
C	-0.904852	0.684968	-1.321013	0.1871					
R-squared	0.164758	Mean dependent var	5.896103						
Adjusted R-squared	0.163164	S.D. dependent var	3.693086						
S.E. of regression	3.378390	Akaike info criterion	5.276470						
Sum squared resid	5980.682	Schwarz criterion	5.292688						
Log likelihood	-1385.712	Hannan-Quinn criter.	5.282820						
F-statistic	103.3627	Durbin-Watson stat	1.823686						
Prob(F-statistic)	0.000000								

4- save/name simple regression equation (S-regression)



5- Open variables (educ, wage)



Group: UNTITLED Workfile: WAGE1::Wage1\

View	Proc	Object	Print	Name	Freeze	Default	Sort	Edit+/-	Smpl+/-	Compare+/-
		WAGE		EDUC						
1		3.100000		11						
2		3.240000		12						
3		3.000000		11						
4		6.000000		8						
5		5.300000		12						
6		8.750000		16						
7		11.25000		18						
8		5.000000		12						
9		3.600000		12						
10		18.18000		17						
11		6.250000		16						
12		8.130000		13						
13		8.770000		12						
14		5.500000		12						
15		22.20000		12						
16		17.33000		16						
17		7.500000		12						
18		10.63000		13						
19		3.600000		12						
20		4.500000		12						
21		6.880000		12						
22		8.480000		12						
23		6.330000		16						
24		0.530000		12						

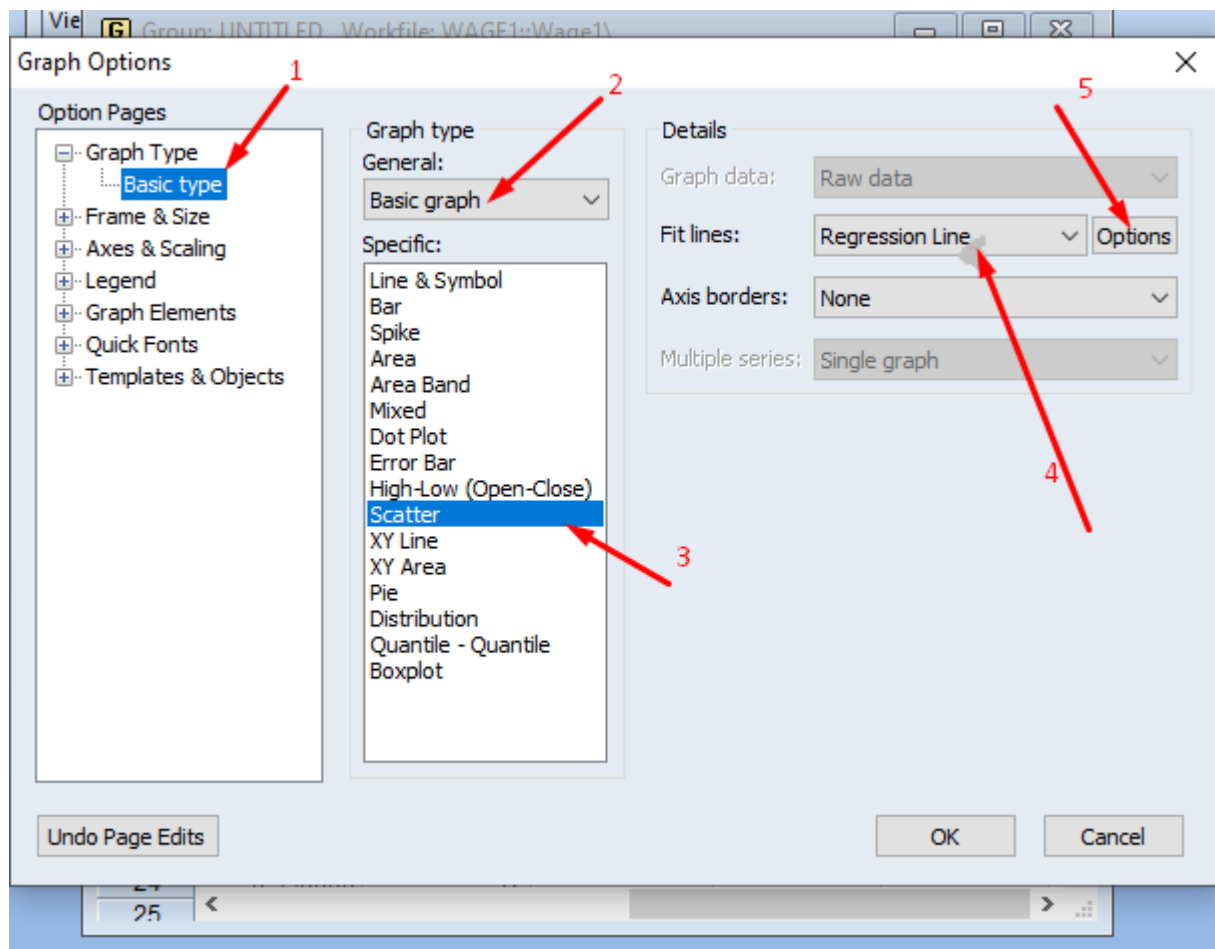
6- cli on View→Graph

Group: UNTITLED Workfile: WAGE1::Wage1\

View	Proc	Object	Print	Name	Freeze	Default	Sort	Edit+/-	Smpl+/-	Compare+/-
		WAGE		EDUC						
1		3.100000		11						
2		3.240000		12						
3		3.000000		11						
4		6.000000		8						
5		5.300000		12						
6		8.750000		16						
7		11.25000		18						
8		5.000000		12						
9		3.600000		12						
10		18.18000		17						
11		6.250000		16						
12		8.130000		13						
13		8.770000		12						
14		5.500000		12						
15		22.20000		12						
16		17.33000		16						
17		7.500000		12						
18		10.63000		13						
19		3.600000		12						
20		4.500000		12						
21		6.880000		12						
22		8.480000		12						
23		6.330000		16						
24		0.530000		12						

Group Members
 Spreadsheet
 Dated Data Table
Graph...
 Descriptive Stats
 Covariance Analysis...
 N-Way Tabulation...
 Tests of Equality...

7- Select (1,2,3, 4) and clic on 5 (Options)



8-We get the next window: