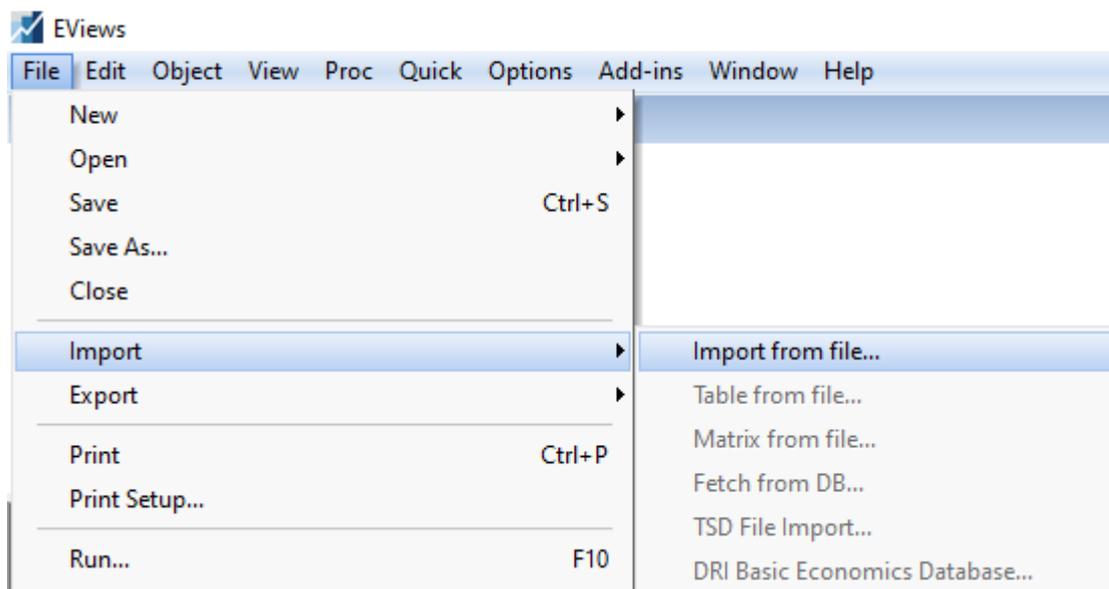


Multiple Regression

Multiple regression analysis in EViews allows you to analyze the relationship between a dependent variable and multiple independent variables. Here's a general guide on how to perform multiple regression analysis in EViews:

- 1- **Data Input**: We upload the filework (in our example Wage1.xls)

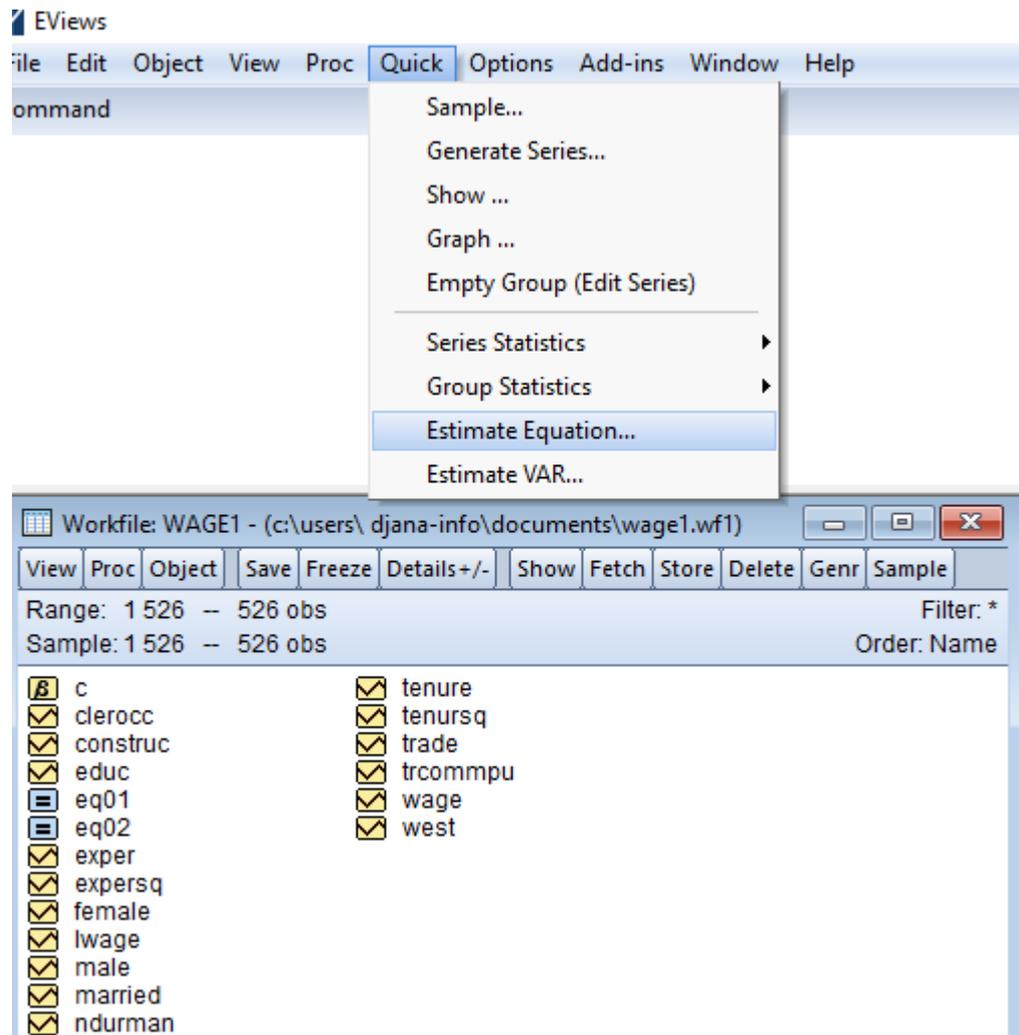


- 2- **Open Regression Dialog Box**:

Go to the "Quick" menu and select "Estimate Equation." Alternatively, you can click on the "Proc" menu and choose "Estimate Equation." This will open the regression dialog box

- 3- **Select Dependent and Independent Variables**:

In the regression dialog box, you'll see two main sections: "Specification" and "Estimation." In the "Specification" section, select your dependent variable from the list. Then, click on the arrow button to move it to the "Dependent" box. Next, select your independent variables from the list and move them to the "Independent" box



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 c educ exper

1

Estimation settings

Method: LS - Least Squares (NLS and ARMA)

Sample: 1 526

OK Annuler

- mare
- married
- ndurman
- nonwhite
- northcen
- numdep
- profocc
- profserv
- resid
- services
- servocc
- sex

Equation: UNTITLED Workfile: WAGE1::Wage1

View Proc Object Print Name Freeze Estimate Forecast Stats Resids

Dependent Variable: WAGE
 Method: Least Squares
 Date: 05/07/24 Time: 18:24
 Sample: 1 526
 Included observations: 526

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.397539	0.766566	-4.423023	0.0000
EDUC	0.644272	0.053806	11.97397	0.0000
EXPER	0.070095	0.010978	6.385291	0.0000

R-squared	0.225162	Mean dependent var	5.896103
Adjusted R-squared	0.222199	S.D. dependent var	3.693086
S.E. of regression	3.257044	Akaike info criterion	5.205204
Sum squared resid	5548.160	Schwarz criterion	5.229531
Log likelihood	-1365.969	Hannan-Quinn criter.	5.214729
F-statistic	75.98998	Durbin-Watson stat	1.820274
Prob(F-statistic)	0.000000		

EViews

File Edit Object View Proc Quick Options Window Help

Command

Workfile: WAGE1 - (c:\users\abdoukarim\documents\wage1...)

View Proc Object Save Snapshot Freeze Details+/- Show Fetch Store Delete Genr Sam

Range: 1 526 -- 526 obs Filter: *

Sample: 1 526 -- 526 obs Order: Name

<input checked="" type="checkbox"/> c	<input checked="" type="checkbox"/> smsa
<input checked="" type="checkbox"/> clerocc	<input checked="" type="checkbox"/> south
<input checked="" type="checkbox"/> construc	<input checked="" type="checkbox"/> tenure
<input checked="" type="checkbox"/> educ	<input checked="" type="checkbox"/> tenursq
<input checked="" type="checkbox"/> exper	<input checked="" type="checkbox"/> trade
<input checked="" type="checkbox"/> expersq	<input checked="" type="checkbox"/> trcompu
<input checked="" type="checkbox"/> female	<input checked="" type="checkbox"/> wage
<input checked="" type="checkbox"/> lwage	<input checked="" type="checkbox"/> west
<input checked="" type="checkbox"/> married	
<input checked="" type="checkbox"/> ndurman	
<input checked="" type="checkbox"/> nonwhite	
<input checked="" type="checkbox"/> northcen	
<input checked="" type="checkbox"/> numdep	
<input checked="" type="checkbox"/> profocc	
<input checked="" type="checkbox"/> profserv	
<input checked="" type="checkbox"/> resid	
<input checked="" type="checkbox"/> services	
<input checked="" type="checkbox"/> servocc	

Wage1 New Page

$$\text{Wage} = c + \alpha_1 \cdot \text{educ} + \alpha_2 \cdot \text{exper}$$

ws 12 Student Lite

4- Interpreting the results

The output window will display the regression results, including coefficients, standard errors, t-statistics, p-values, and goodness-of-fit measures such as R-squared. Interpret the coefficients to understand the relationship between the dependent variable and independent variables. Pay attention to the significance of the coefficients and the overall fit of the model.