الانحدار الخطي المتعدد

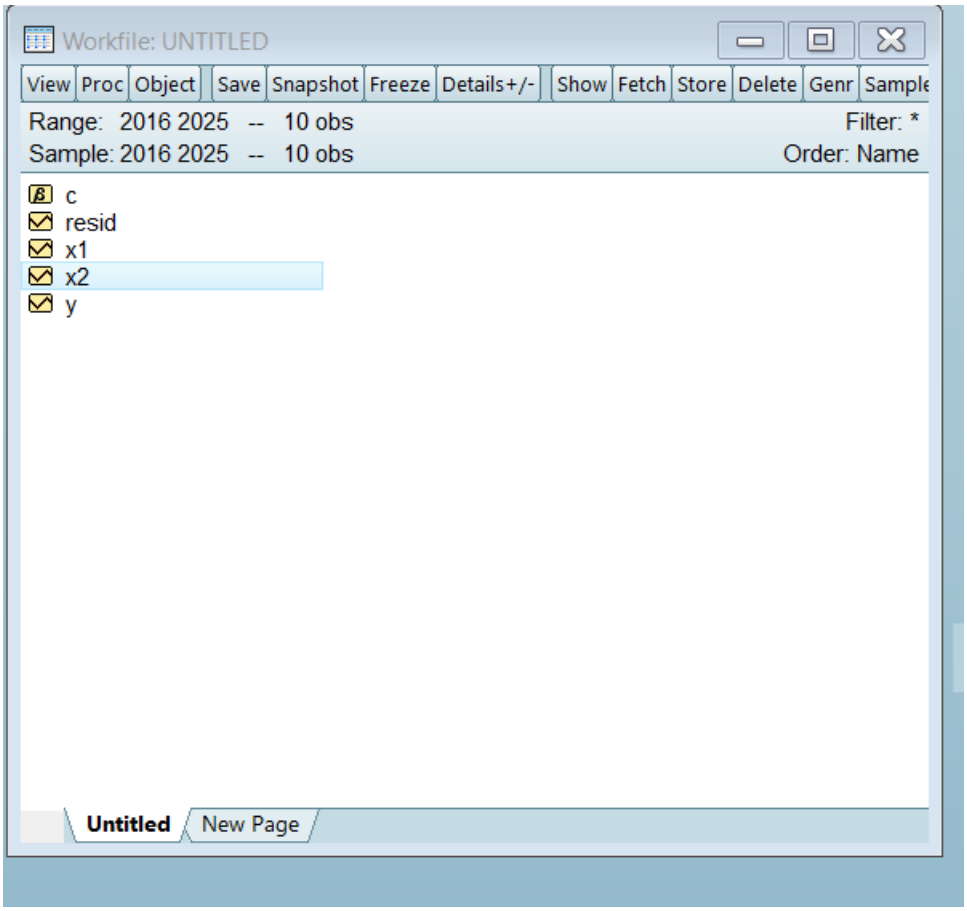
يهدف الانحدار الخطي المتعدد إلى دراسة العلاقة بين متغير تابع (Dependent Variable) ومجموعة من المتغيرات المستقلة .(Independent Variables) الصيغة الرياضية العامة للنموذج هي :

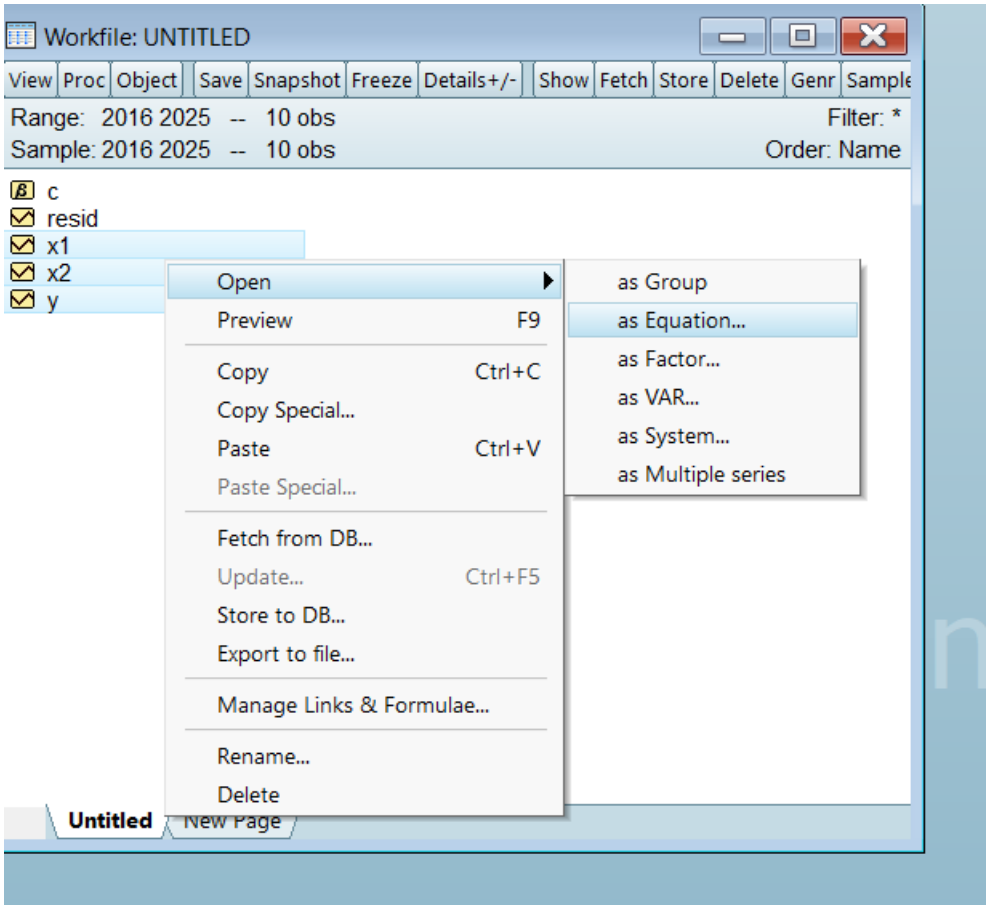
$$Yt = a + b1X1 + b2X2 + b3X3 + \ldots\ldots\ldots\ldots bnXn + Et$$

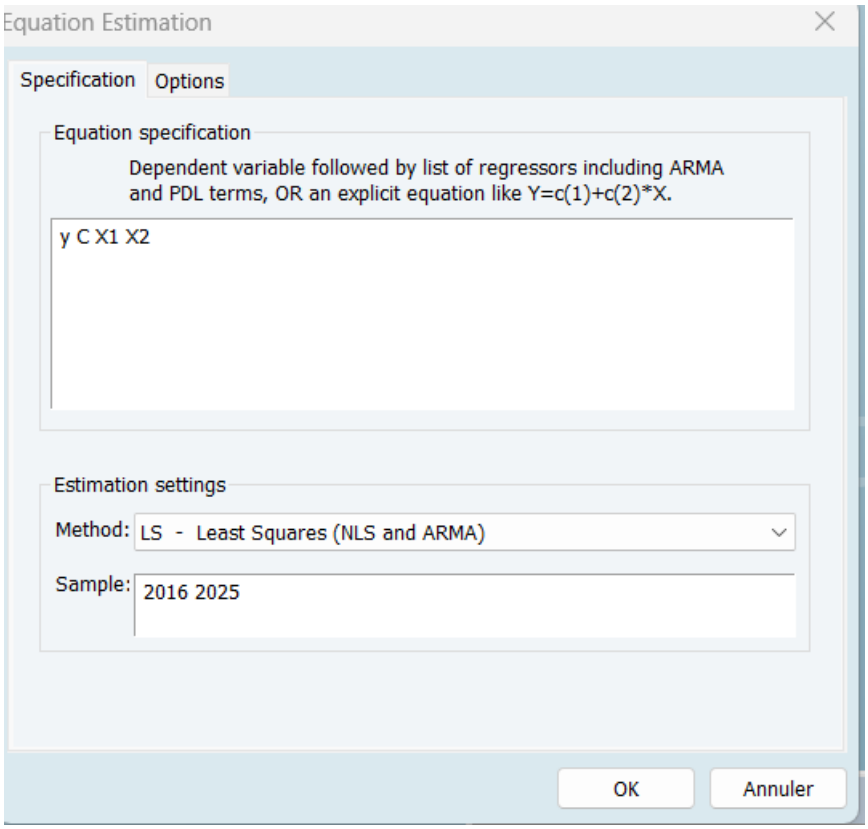
حيث :

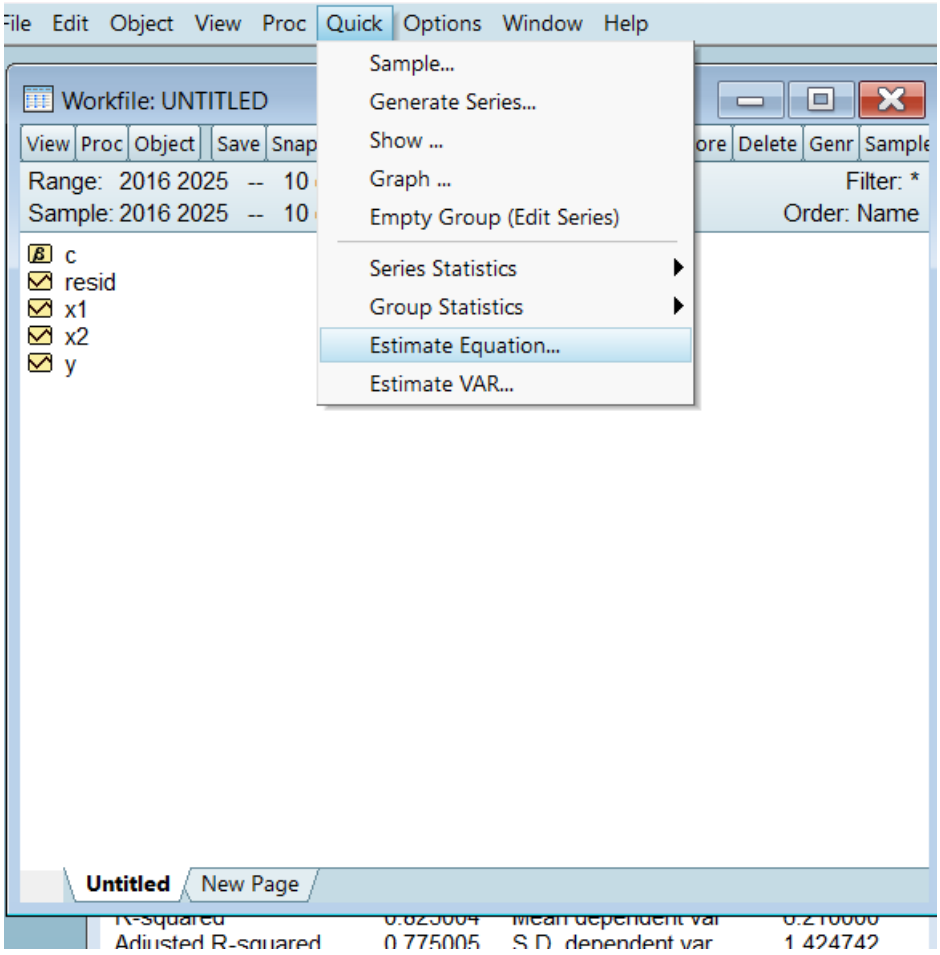
- Y: المتغير التابع.
- X: المتغيرات المستقلة.
- β: معاملات الانحدار.(Parameters)
- ϵ: حد الخطأ العشوائي.

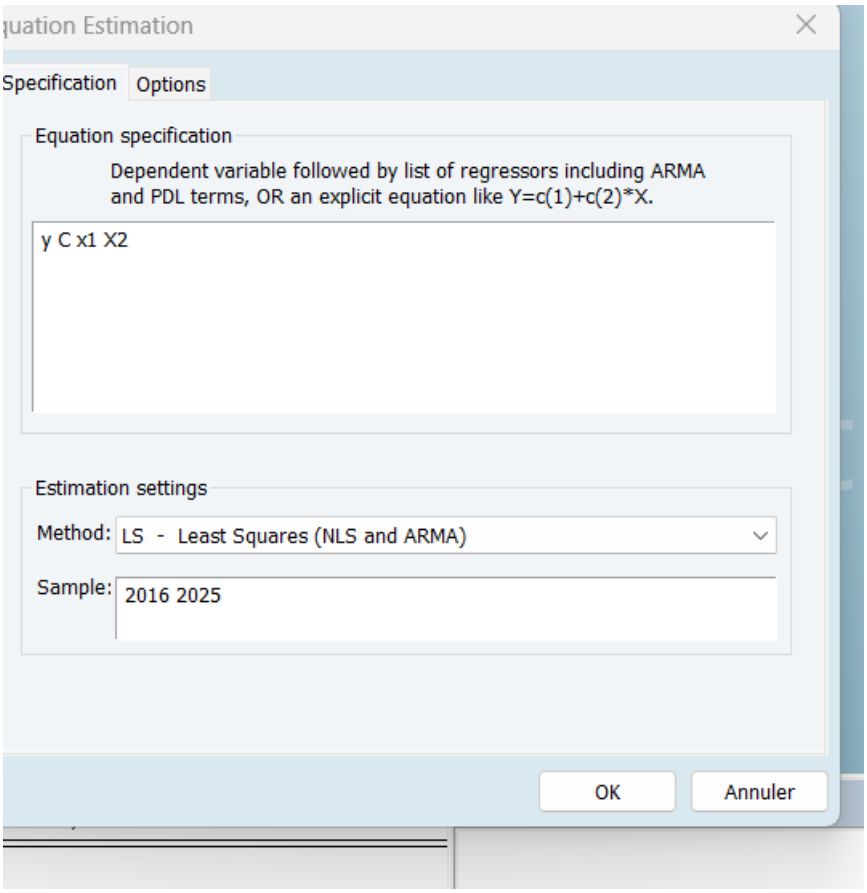
2. تقدير نموذج الانحدار الخطي المتعدد وفق برنامج EVIEWS

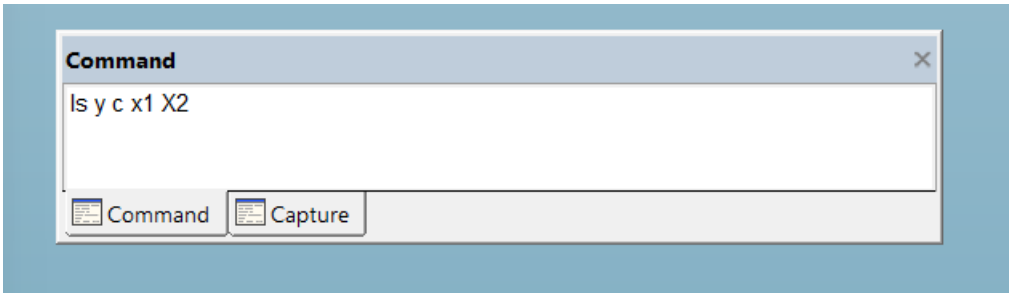

Workfile: UNTITLED
View Proc Object Save Snapshot Freeze Details+/- Show Fetch Store Delete Genr Sample
Range: 2016 2025 -- 10 obs
Filter: *
Sample: 2016 2025 -- 10 obs
Order: Name
c
resid
x1
x2
y
Untitled
New Page

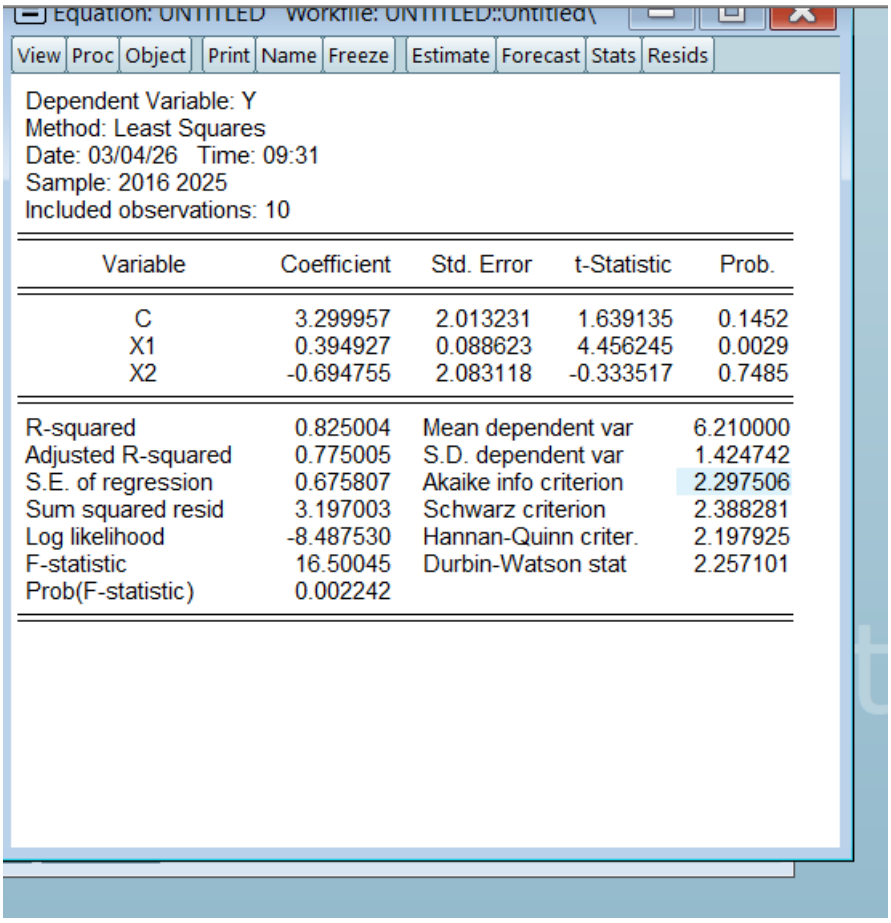

Workfile: UNTITLED
View Proc Object Save Snapshot Freeze Details+/- Show Fetch Store Delete Genr Sample
Range: 2016 2025 -- 10 obs
Filter: *
Sample: 2016 2025 -- 10 obs
Order: Name
c
resid
x1
x2
y
Open
Preview F9
Copy Ctrl+C
Copy Special...
Paste Ctrl+V
Paste Special...
Fetch from DB...
Update... Ctrl+F5
Store to DB...
Export to file...
Manage Links & Formulae...
Rename...
Delete
as Group
as Equation...
as Factor...
as VAR...
as System...
as Multiple series
Untitled
New Page


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.
y C X1 X2
Estimation settings
Method: LS - Least Squares (NLS and ARMA)
Sample: 2016 2025
OK
Annuler

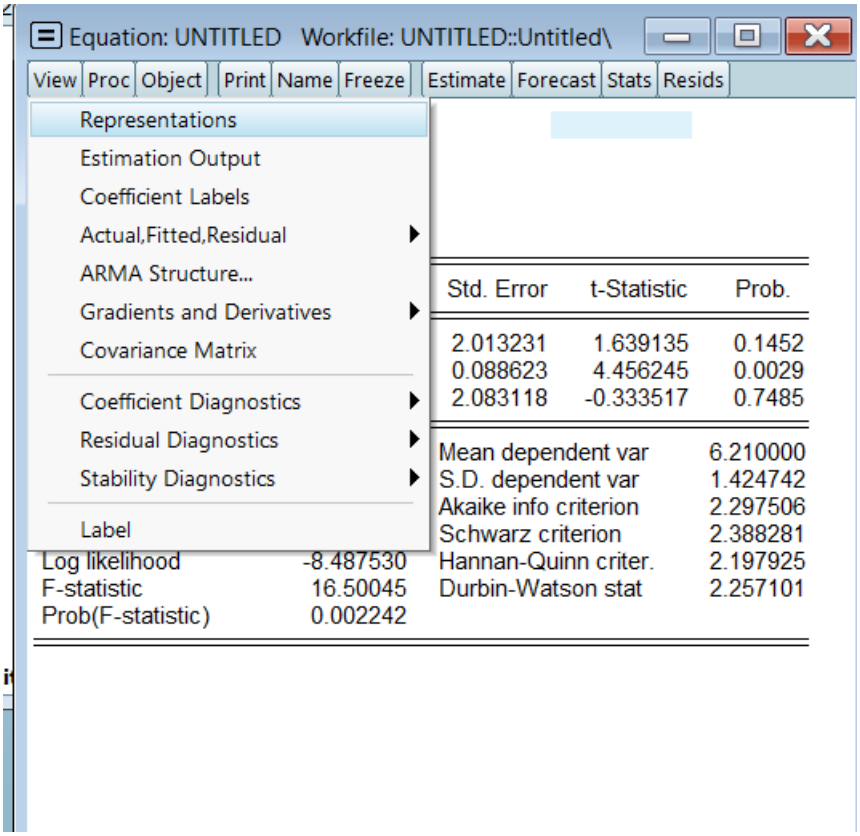

File Edit Object View Proc Quick Options Window Help
Workfile: UNTITLED
View Proc Object Save Snap
Delete Genr Sample
Range: 2016 2025 -- 10
Sample: 2016 2025 -- 10
Filter: *
Order: Name
c
resid
x1
x2
y
Sample...
Generate Series...
Show ...
Graph ...
Empty Group (Edit Series)
Series Statistics
Group Statistics
Estimate Equation...
Estimate VAR...
Untitled
New Page
Adjusted R-squared
0.775005
S.D. dependent var
1.424742

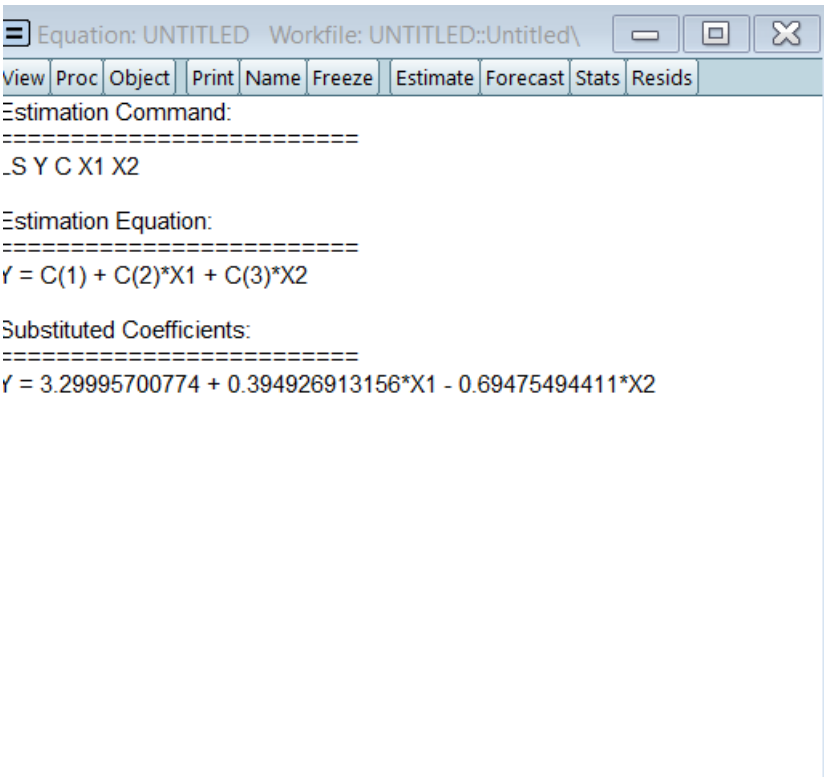

uation Estimation
Specification
Options
Equation specification
Dependent variable followed by list of regressors including ARMA and PDL terms, OR an explicit equation like Y=c(1)+c(2)*X.
y C x1 X2
Estimation settings
Method: LS - Least Squares (NLS and ARMA)
Sample: 2016 2025
OK
Annuler


Command
ls y c x1 X2
Command
Capture



لاستخراج معادلة الانحدار الخطي المتعدد :





ثالثا: تفسير النتائج:

1. المعنوية الجزئية للمعلمات