

To download Eviews 10 student version –free:

<http://www.eviews.com/download/download.shtml#eviews10sv>

Open an excel file in eviews:

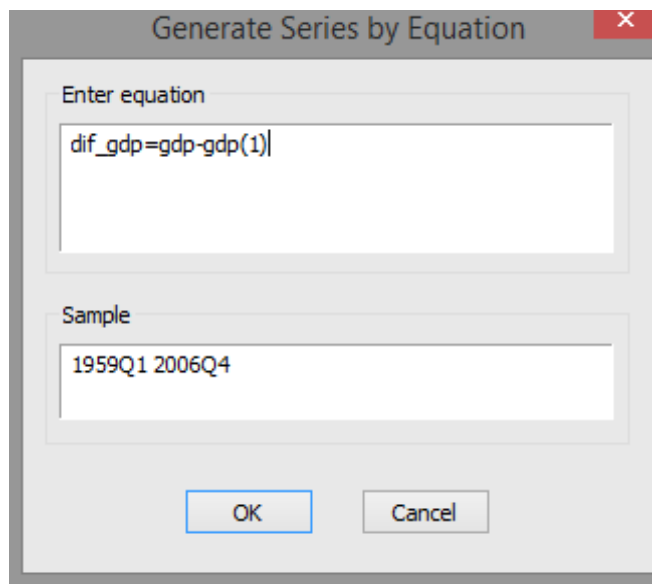
File > Open > Foreign Data as Workfile and select Excel file

Opening a .wf1 file:

File > Open > EViews Workfile and select file

Useful commands

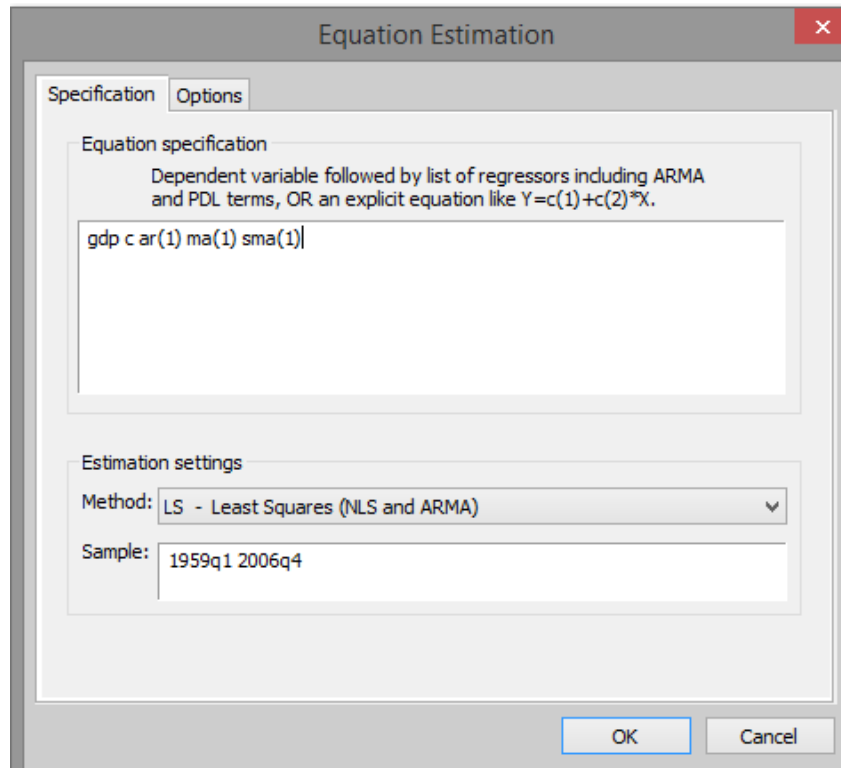
- **Quick:**
  - **Sample:** To select the sampling period
  - **Generate series:** to create a new series by equation



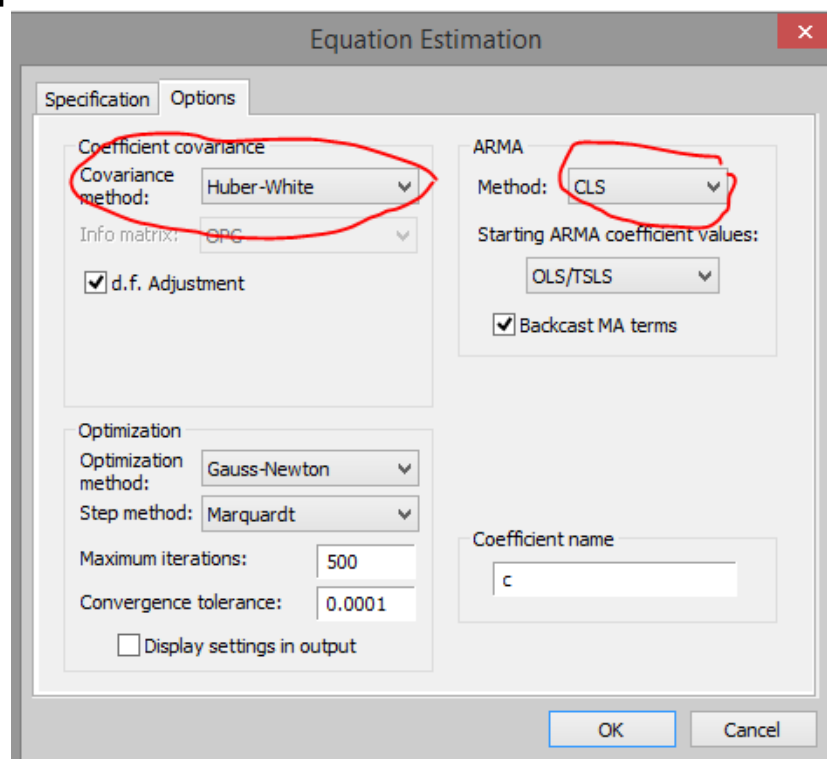
Alternatively, we can use the command line:

```
Command  
series lgdp=log(gdp)
```

- **Estimate Equation:** (this is the way to do it in EViews 10 – in past versions of EViews it's simpler – just type the equation and run or (choose White covariance method))



And select **options:**



Equation: UNTITLED Workfile: USREALGDP::Usrealgdp\

View Proc Object Print Name Freeze Estimate Forecast Stats Resids

Dependent Variable: GDP  
Method: ARMA Conditional Least Squares (Gauss-Newton / Marquardt steps)  
Date: 09/14/18 Time: 21:49  
Sample (adjusted): 1959Q2 2006Q4  
Included observations: 191 after adjustments  
Failure to improve likelihood (non-zero gradients) after 50 iterations  
Huber-White-Hinkley (HC1) heteroskedasticity consistent standard errors and covariance  
MA Backcast: 1958Q4 1959Q1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-15.44866	17.12120	-0.902312	0.3681
AR(1)	1.006328	0.001401	718.1961	0.0000
MA(1)	0.095066	237.5290	0.000400	0.9997
SMA(1)	0.095439	237.5285	0.000402	0.9997

R-squared	0.999722	Mean dependent var	61.93217
Adjusted R-squared	0.999718	S.D. dependent var	26.24411
S.E. of regression	0.441097	Akaike info criterion	1.221617
Sum squared resid	36.38399	Schwarz criterion	1.289728
Log likelihood	-112.6645	Hannan-Quinn criter.	1.249205
F-statistic	224133.4	Durbin-Watson stat	1.955142
Prob(F-statistic)	0.000000		

Inverted AR Roots	1.01	
	Estimated AR process is nonstationary	
Inverted MA Roots	-10	-10

To analyze the residuals: **View-> Residual Diagnostics....**

To save the residuals: **Proc-> Make residual series**

To estimate a GARCH model:

Quick-> Estimate Equation and in method select ARCH

Click OK

Dependent Variable: GDP  
Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)  
Date: 09/14/18 Time: 22:19  
Sample (adjusted): 1959Q2 2006Q4  
Included observations: 191 after adjustments  
Convergence achieved after 54 iterations  
Coefficient covariance computed using outer product of gradients  
MA Backcast: 1959Q1  
Presample variance: backcast (parameter = 0.7)  
GARCH = C(4) + C(5)\*RESID(-1)<sup>2</sup> + C(6)\*GARCH(-1)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-17.00480	16.70902	-1.017702	0.3088
AR(1)	1.006730	0.001374	732.5304	0.0000
MA(1)	0.158991	0.082075	1.937145	0.0527

Variance Equation				
	Coefficient	Std. Error	z-Statistic	Prob.
C	0.012946	0.010015	1.292624	0.1961
RESID(-1) <sup>2</sup>	0.119975	0.065012	1.845430	0.0650
GARCH(-1)	0.819479	0.080798	10.14237	0.0000

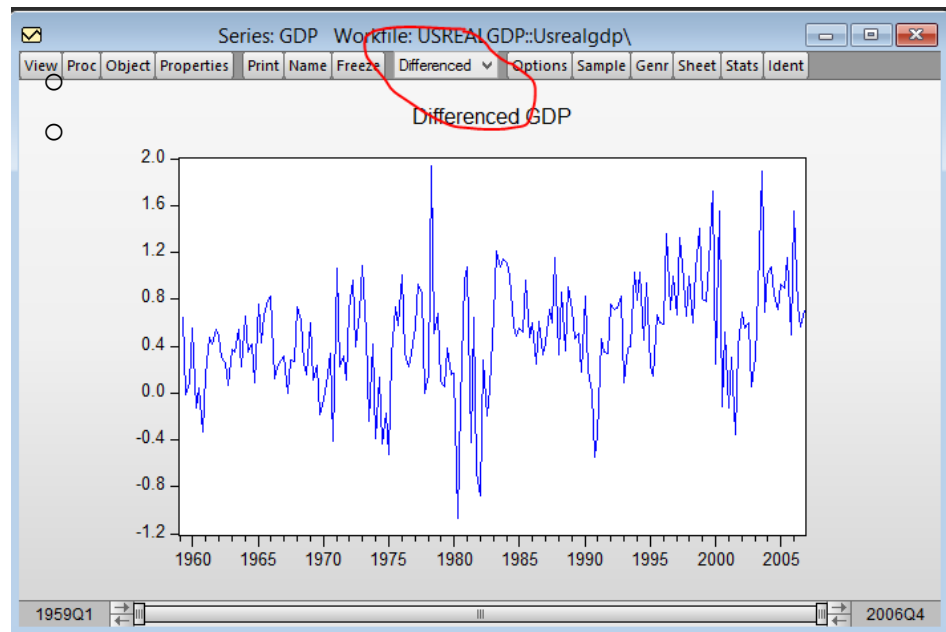
R-squared	0.999719	Mean dependent var	61.93217
Adjusted R-squared	0.999716	S.D. dependent var	26.24411
S.E. of regression	0.442421	Akaike info criterion	1.183012
Sum squared resid	36.79850	Schwarz criterion	1.285178
Log likelihood	-106.9776	Hannan-Quinn criter.	1.224394
Durbin-Watson stat	1.865176		

Inverted AR Roots	1.01
Estimated AR process is nonstationary	
Inverted MA Roots	-.16

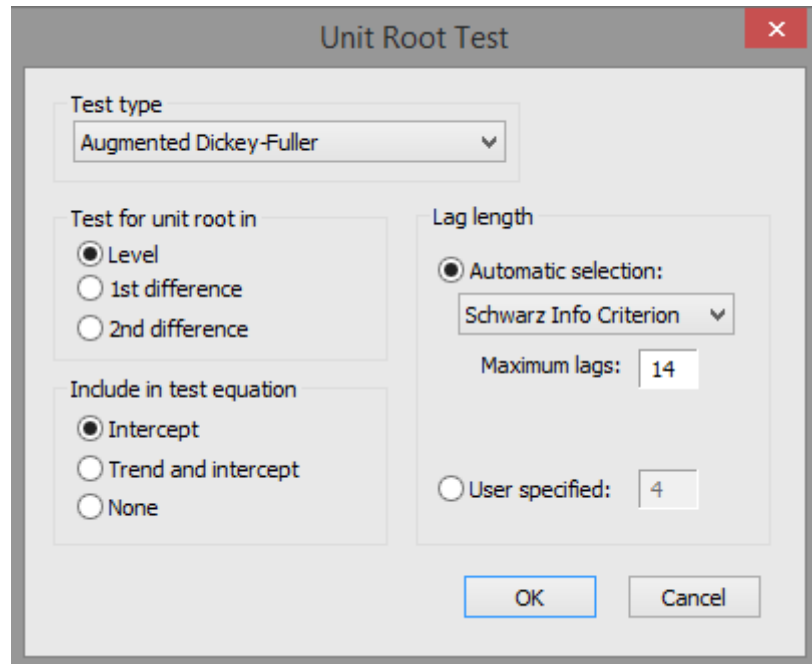
**Double click on the series you want to analyze and:**

- **View:**
  - **Spreadsheet:** to see the series of observations
  - **Graph:** to make a plot of the series
    - We can look at some transformations of the series by selecting from the drop-down list:



- **Descriptive Statistics and Tests** (to analyze series (mean, stdev,...), Jarque-Bera test)
- **Correlogram** (you can choose level, first differences, second differences to compute PACF and ACF – Ljung-Box test is automatic)

- **Unit Root test:**



- PROC:
- Sample: to select the sample period

**Code to simulate an MA(1) process:**

```
series e=0.5*nrnd  
series y=2+0.5*e(-1) +e
```

**Code to simulate an AR(1) process:**

```
smpl @first @first  
series y=0  
smpl @first+1 @last  
series y=1+0.4*y(-1)+0.5*nrnd
```