



Università Commerciale
Luigi Bocconi

Lab Session 1 – Introduction to Eviews

Prof. Massimo Guidolin / Dr. Manuela Pedio

20192– Financial Econometrics

Winter/Spring 2019

Instructions for the lab sessions (1/3)

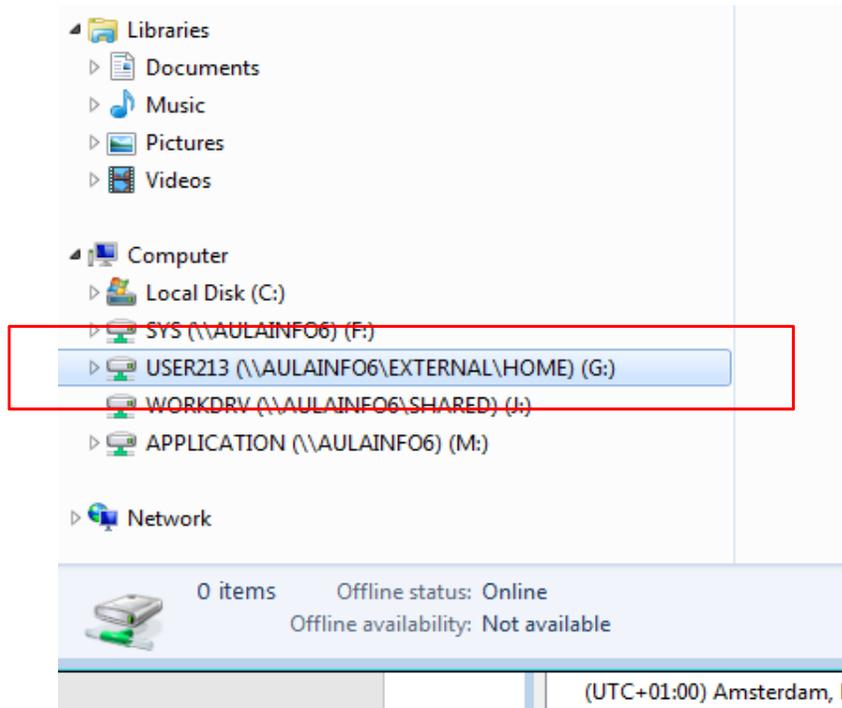
- There will be a total of 6 sessions that will take place in the lab, including this one
- As already discussed in Lecture 0, attendance to the lab sessions is not compulsory, but an active participation to the labs gives access to the “attending” track of the course
- Each lab session (excluding this one, which is introductory) may carry a score up to a maximum of 4%; therefore the maximum score from the labs is 20%
- In each lab, there will be a part in which you will have to produce some results; in order to receive a grade, you need to save these results following the guidelines specified at the beginning of each session

Instructions for the lab sessions (2/3)

- In particular, lab will have the following structure:
 - ❖ the instructor will perform a set of exercises related to the topic of the session
 - ❖ you will be given some time (say, 30-40 minutes) to perform a variant of these exercises on your own
 - ❖ short debriefing and wrap up
- You are supposed to work on the lab's computers; if you use your personal computer (and we strongly discourage that) you will be in any case required to upload your work on the lab's network
- You are responsible for saving your work in the appropriate directory, no exceptions; other locations will not be checked and you will not receive a grade

Instructions for the lab sessions (3/3)

- You will be required to deliver a word file with name “LASTNAME_IDNUMBER” containing copies of the tables and/or plots that you were asked to produce (detailed guidelines will be given at the beginning of each session)
- The file must be saved in **disk G:**



Additional resources

- We will not post the material any material from the lab in the official page of the course (to avoid confusion as lab is meant to be self-contained and truly optional)
- However, the data, together with the workfile of the exercise performed by the instructor, will be available at the website: <https://essentialoftimeseries.wordpress.com/>
- In the website you can also find a set of tutorials about Eviews
- Again, this material is provided as an additional help for those of you that may be interested (for instance for their thesis) but is not required for the final exam

Schedule of the labs (1/2)

- Lab 1 – Introduction
 - Class 15: Feb 19, 16.15-17.45
 - Class 16: Feb 20, 8.45-10.15
 - Class 17: Feb 20, 10.30-12.00
- Lab 2 – Autoregressive Moving Average Models
 - Class 15: Feb 26, 16.15-17.45
 - Class 16: Feb 26, 12.30-14.00
 - Class 17: Feb 26, 10.30-12.00
- Lab 3 – Vector Autoregressive Models
 - Class 15: Mar 15, 14.30-16.00
 - Class 16: Mar 14, 8.45-10.15
 - Class 17: Mar 15, 12.30-14.00

Schedule of the labs (2/2)

- Lab 4 – Cointegration and Error Correction Models
 - Class 15: Apr 5, 14.30-16.00
 - Class 16: Apr 3, 8.45-10.15
 - Class 17: Apr 5, 12.30-14.00
- Lab 5 – Univariate volatility modelling (ARCH and GARCH)
 - Class 15: May 3, 14.30-16.00
 - Class 16: May 6, 12.30-14.00
 - Class 17: May 6, 14.30-16.00
- Lab 6 – Advanced univariate volatility modelling
 - Class 15: May 10, 14.30-16.00
 - Class 16: May 10, 12.30-14.00
 - Class 17: May 10, 16.15-17.45

Getting ready for the lab (1/2)

- In order to log in in the computer, use the following credentials
 - Username: UserXXX
 - Password: aulaWU1
- Check your computer's date: if it is not today's date (it may happen) you need to change it back to current date, otherwise you may face problems in accessing Eviews
- To open Eviews you need to go to the start button and look for Novell ZENworks
- Open Novell ZENworks and look for scientific applications (in Italian “applicazioni scientifiche”); Eviews is among them

Slide 8

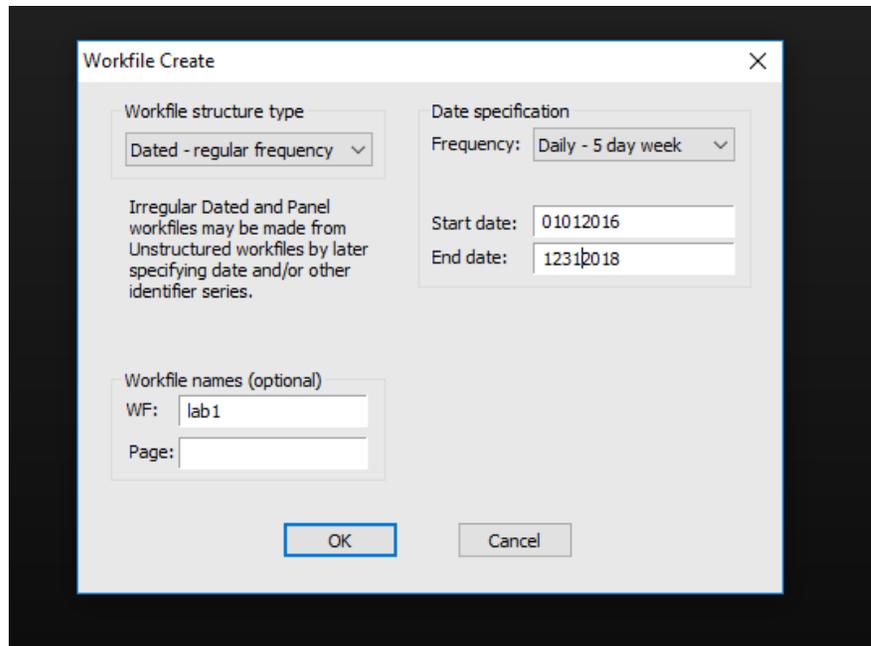
WU1

spero sia vero anche per altro lab

Windows User; 11/02/2019

Getting ready for the lab (2/2)

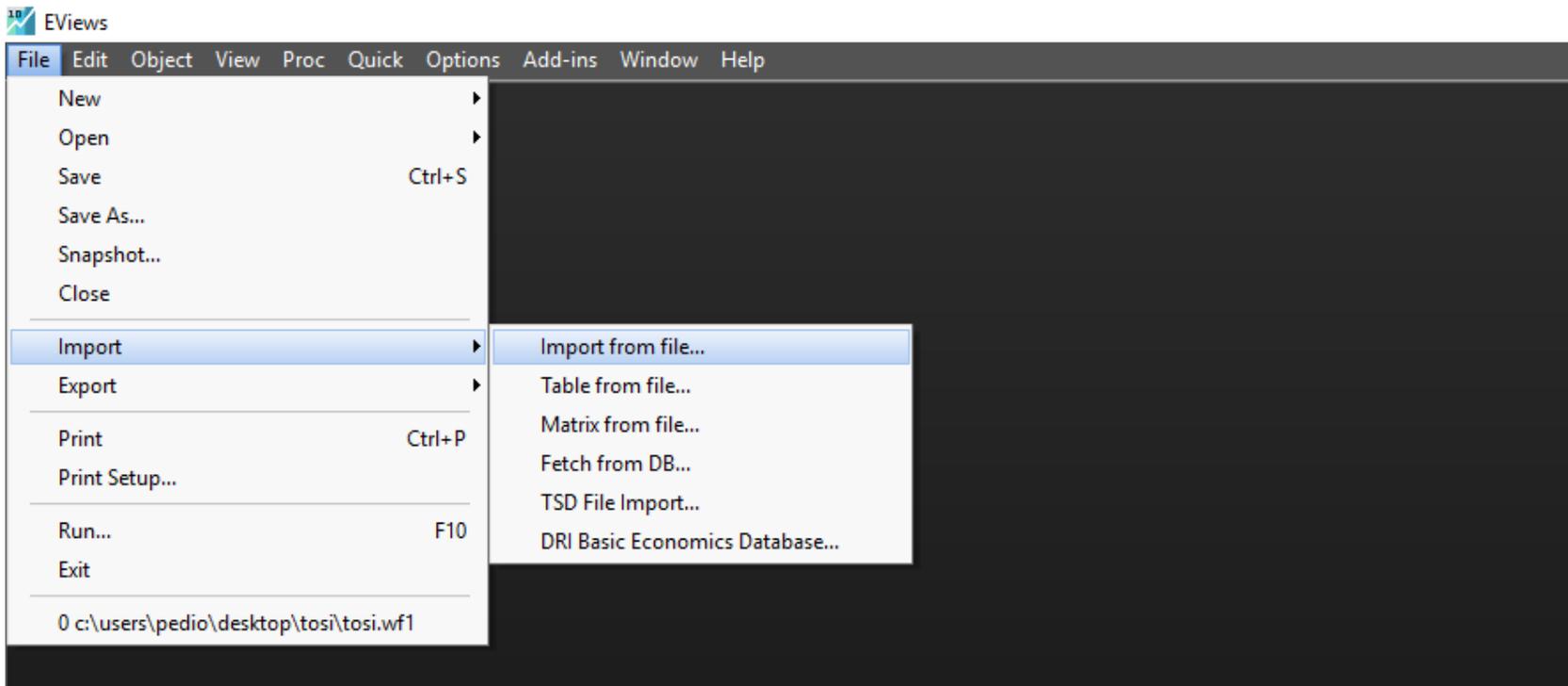
- Open Eviews and create a new workfile (FILE => NEW WORKFILE)
- For the purpose of today's lab create a dated (regular frequency) workfile, with daily (5-days) frequency
 - Start date: 01/01/2016
 - End date: 31/12/2018



Note that in Eviews date are expressed as **MMDDYYYY**

Upload the data (1/3)

- You will find the data (in excel format) that are needed for your exercise in the J folder (where you also find the instructions for your assignment) WU2
- To upload data from Excel into Eviews you need to do the following:



Slide 10

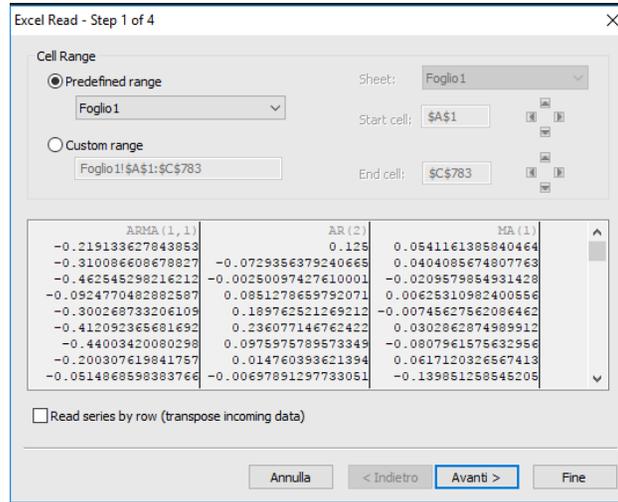
WU2

check other lab

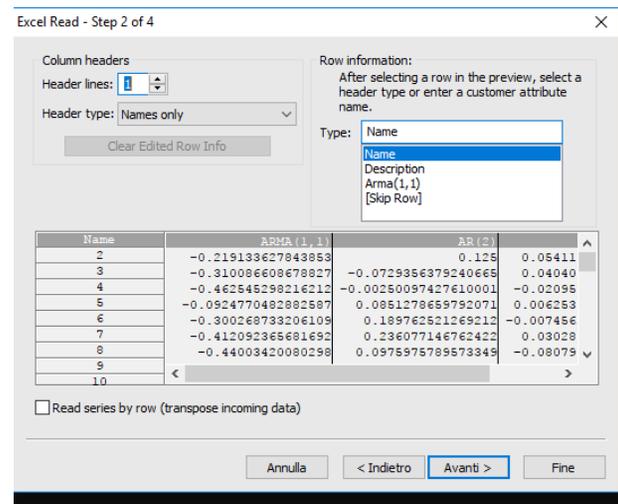
Windows User; 11/02/2019

Upload the data (2/3)

- Once you select the file from which you want to upload the data you simply follow Eviews' guided procedure

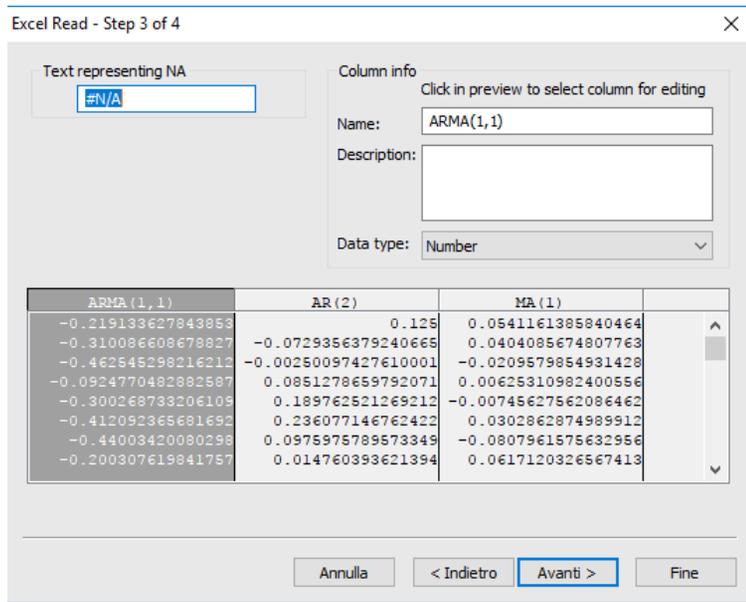


- You can also set custom range if you want to specify a range that is different from the one automatically selected by Eviews



- You can specify whether your data have headers

Upload the data (3/3)



Excel Read - Step 3 of 4

Text representing NA: #N/A

Column info: Click in preview to select column for editing

Name: ARMA(1,1)

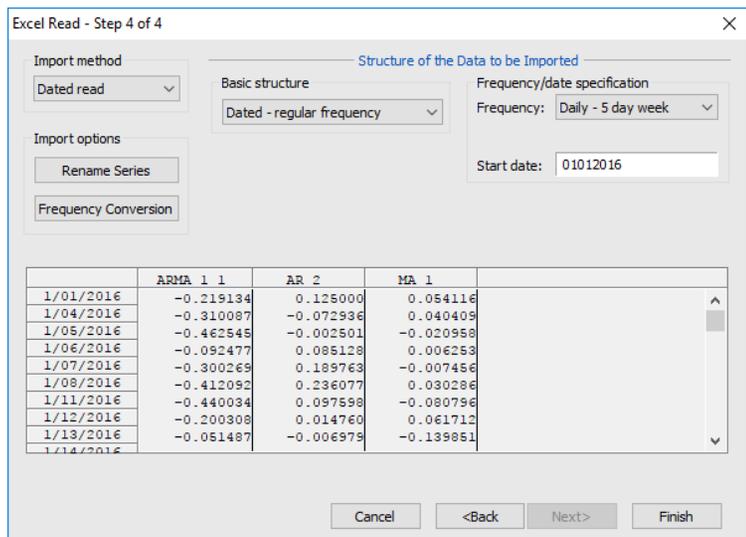
Description:

Data type: Number

ARMA (1, 1)	AR (2)	MA (1)
-0.219133627843853	0.125	0.0541161385840464
-0.310086608678827	-0.0729356379240665	0.0404085674807763
-0.462545298216212	-0.00250097427610001	-0.0209579854931428
-0.0924770482882587	0.0851278659792071	0.00625310982400556
-0.300268733206109	0.189762521269212	-0.00745627562086462
-0.412092365681692	0.236077146762422	0.0302862874989912
-0.44003420090298	0.0975975789573349	-0.0807961575632956
-0.200307619841757	0.014760393621394	0.0617120326567413

Buttons: Annulla, < Indietro, Avanti >, Fine

- You can specify if you want to change the standard representation of not available information (not relevant here, just proceed)
- We can change names to the columns
- We can also add descriptions
- Then in step 4 we need to set time frequency and starting date (which is 01/01/2016)
- Once we finish three new objects (one for each series) will appear in Eviews



Excel Read - Step 4 of 4

Import method: Dated read

Structure of the Data to be Imported

Basic structure: Dated - regular frequency

Frequency/date specification: Frequency: Daily - 5 day week

Start date: 01/01/2016

Import options: Rename Series, Frequency Conversion

	ARMA 1 1	AR 2	MA 1
1/01/2016	-0.219134	0.125000	0.054116
1/04/2016	-0.310087	-0.072936	0.040409
1/05/2016	-0.462545	-0.002501	-0.020958
1/06/2016	-0.092477	0.085128	0.006253
1/07/2016	-0.300269	0.189763	-0.007456
1/08/2016	-0.412092	0.236077	0.030286
1/11/2016	-0.440034	0.097598	-0.080796
1/12/2016	-0.200308	0.014760	0.061712
1/13/2016	-0.051487	-0.006979	-0.139851
1/14/2016			

Buttons: Cancel, < Back, Next >, Finish

Other general things about Eviews (1/3)

- The command window (below) can be used to give write commands to Eviews to execute

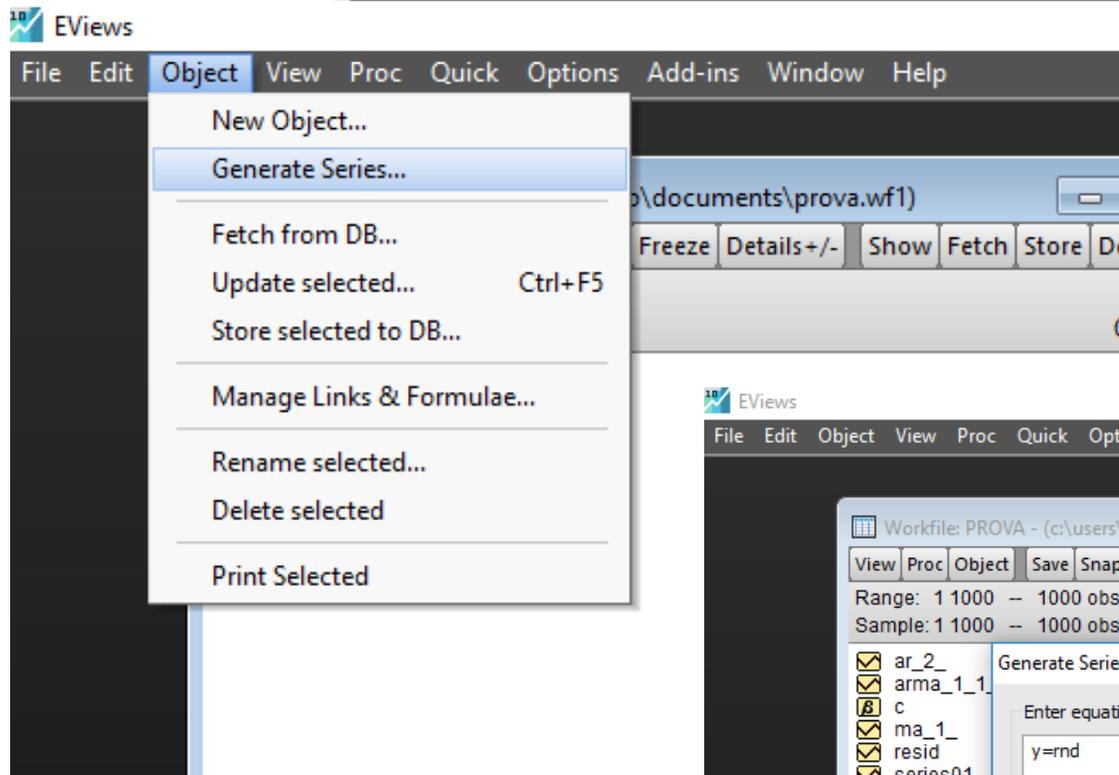


- For example, the command below creates a series of random numbers



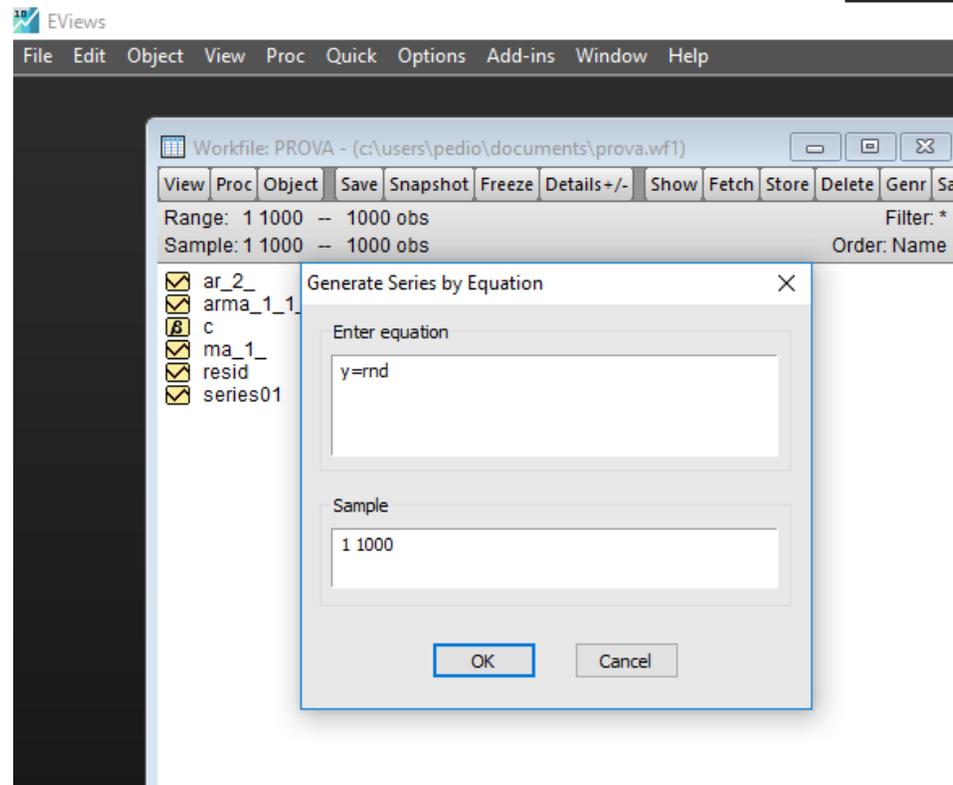
- However, the same result can be in general obtained with clicks
- For example, the next slide will show how we can generate the same series by using «object, generate series»

Other general things about Eviews (2/3)

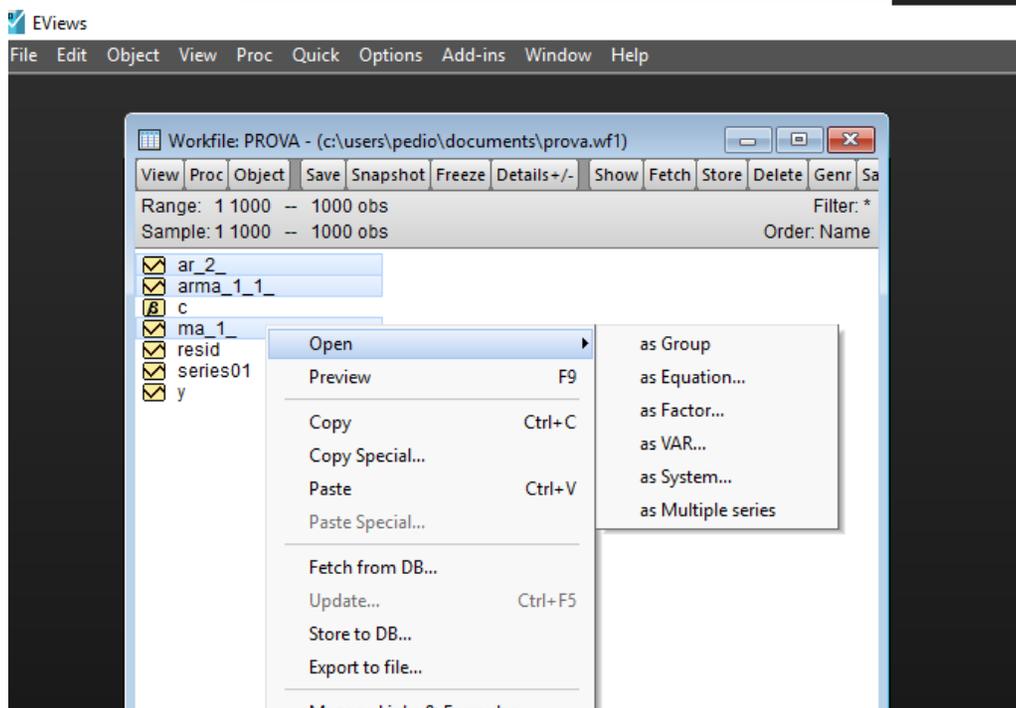


- This will give the same result as the previous command

- We will preferably use “clicks” during our lectures



Other general things about Eviews (3/3)

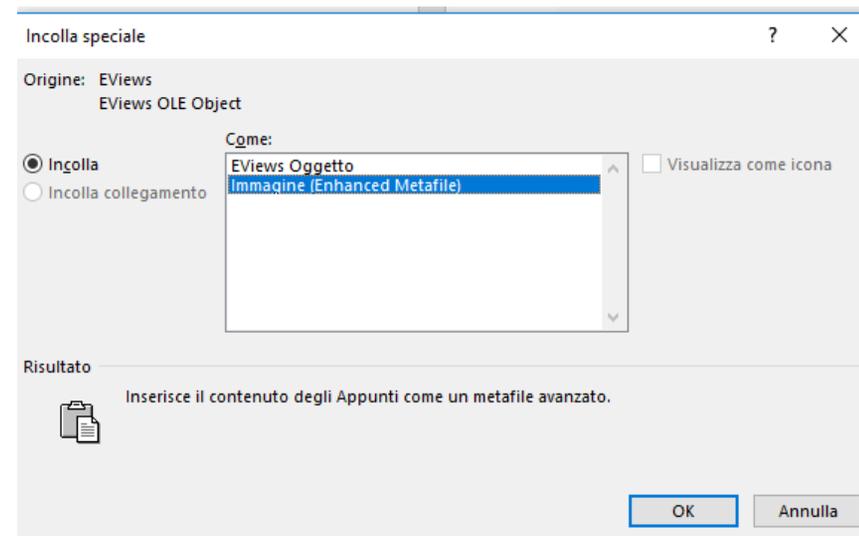
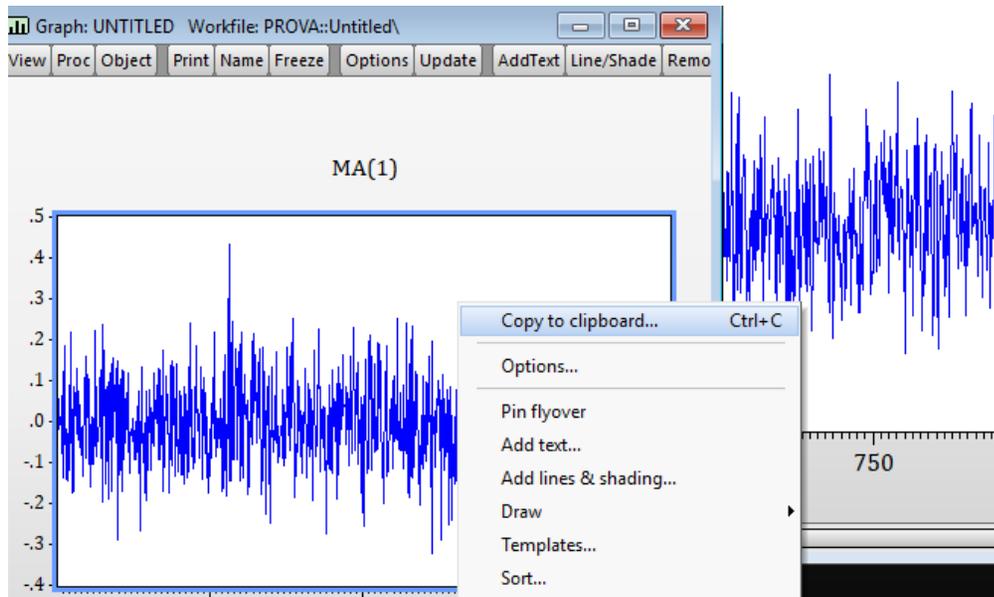


- If you select a number of different series and do right click you will have the opportunity to open the series as a number of different objects

- “Open as a group” just groups a number of series into a unique object
- Later in the course we will also open series as a VAR, as an Equation and as a System

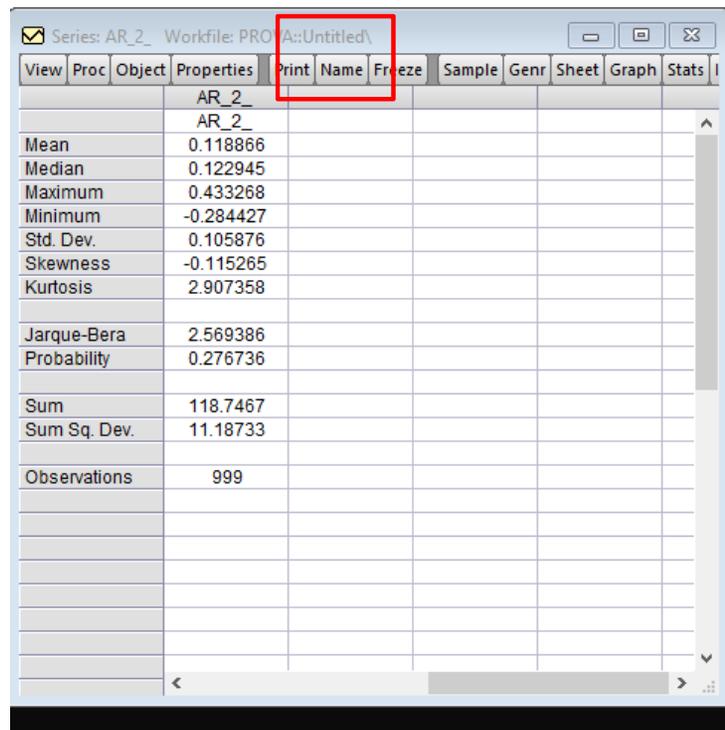
How to save your outputs (1/2)

- In order to save the outputs that you are required to produce do the following:
 - open a word file
 - in case we ask you to save a figure that you have generated, as first step “freeze” it
 - then right click on it and select copy to clipboard; then copy it to word as an Enhanced Metafile



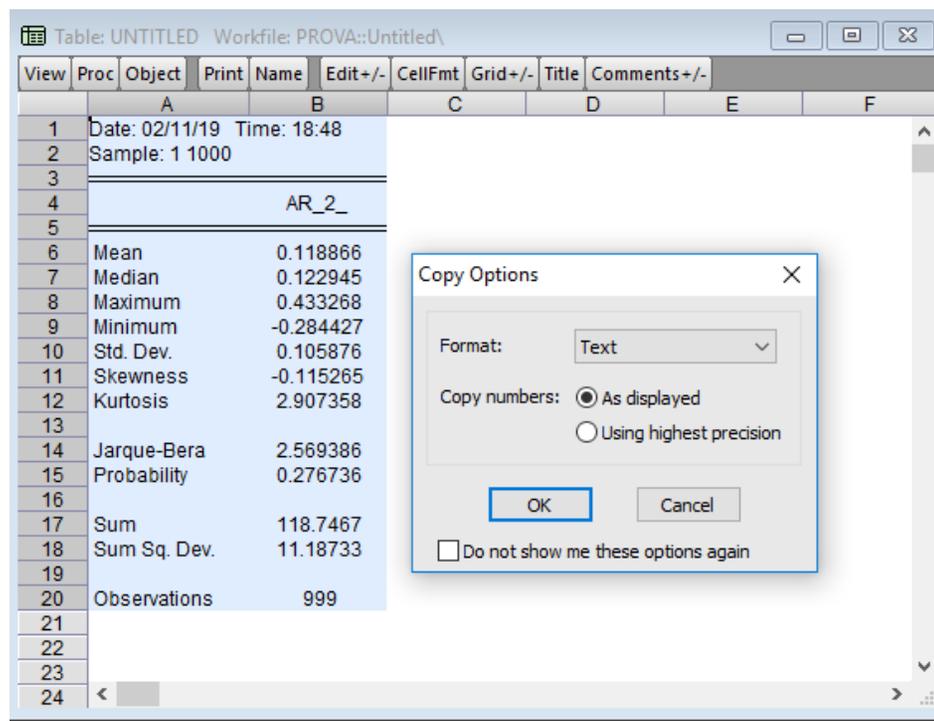
How to save your outputs (2/2)

- If you are asked to save a table:
 - again freeze it
 - select the portion of interest in the “frozen” table, do right click and select copy, as displayed
 - again paste it as enhanced metafile



The screenshot shows the EViews software interface with a table of statistics for series AR_2_. The table is displayed in a grid format with columns for the statistic name and its value. The 'Print' button in the menu bar is highlighted with a red box.

	AR_2_
Mean	0.118866
Median	0.122945
Maximum	0.433268
Minimum	-0.284427
Std. Dev.	0.105876
Skewness	-0.115265
Kurtosis	2.907358
Jarque-Bera	2.569386
Probability	0.276736
Sum	118.7467
Sum Sq. Dev.	11.18733
Observations	999



The screenshot shows the EViews software interface with a table of statistics for series AR_2_. The table is displayed in a grid format with columns for the statistic name and its value. The 'Copy Options' dialog box is open, showing the format set to 'Text' and the 'Copy numbers' option set to 'As displayed'.

	A	B	C	D	E	F
1	Date: 02/11/19	Time: 18:48				
2	Sample: 1 1000					
3						
4		AR_2_				
5						
6	Mean	0.118866				
7	Median	0.122945				
8	Maximum	0.433268				
9	Minimum	-0.284427				
10	Std. Dev.	0.105876				
11	Skewness	-0.115265				
12	Kurtosis	2.907358				
13						
14	Jarque-Bera	2.569386				
15	Probability	0.276736				
16						
17	Sum	118.7467				
18	Sum Sq. Dev.	11.18733				
19						
20	Observations	999				
21						
22						
23						
24						