

***EViews* Introduction**

G31.1101-04: Applied Statistics and Econometrics I (Lab), Fall 2004

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For a rather quick introduction to *EViews*, you can also go through the chapter *A Demonstration/Creating a Workfile and Importing Data* in the *EViews* help file. It covers more or less the same topics as this little guide, albeit with a focus on time-series data. If you want to have more information on a specific topic, go to the respective chapter in the remainder of the *EViews* help file.

1. Read in data from *Excel*

(see also the *EViews* help topic *A Demonstration/Creating a Workfile and Importing Data* or *EViews Basics/Workfile Basics* for a more thorough explanation)

- Click on *File/New/Workfile...* and follow the instructions given there. If you want to import cross-section data, use the option *Undated or irregular* in the *Frequency* box and specify *1* and the number of observations you have in the *Excel* file in the box *Range*. Once you click *OK*, *EViews* **creates an empty workfile** that will be used to accommodate the data from *Excel*.
- To **read the data from *Excel*** into the empty workfile, click *Procs/Import/Read Text-Lotus-Excel....* in the workfile window and follow the instructions. *EViews* will create one object in the workfile window for each variable in the data set. A remark on the box *Data order*: In our context, a *series* consists of the realizations of one variable (e.g. GDP) across all observations (e.g. countries). If one observation corresponds to one line in your *Excel* file, you have to choose *By observation – series in columns*.
- After you are done with the work on your dataset, you can **save your workfile** by clicking *Save* in the workfile toolbar.
- To **open an already existing workfile**, click *File/Open/Workfile...* in the *EViews* menu bar when you start the program.

2. Graphs and Basic Statistics

- To get a histogram and basic statistics for a **single variable**, just left double-click on the respective variable in the workfile window. A new window opens that contains information only on the chosen variable. Click the button *View* in this window and choose the graphs or statistics you would like to see.
- To get statistics on **more than one variable**, select a group of variables in the workfile window with the mouse, left double-click on the selection and choose *Group* from the menu that pops up. A window for the selected group opens and you see the data. Again, use the button *View* to get to the statistics and graphs you wish to examine.

3. Working on the data

- To **generate a new series** out of the existing ones by arithmetic operations, click *Genr* in the workfile window and enter a mathematical expression, for example: $\log x = \log(x)$. This statement would create a new variable named $\log x$ which is calculated as the logarithm of the existing variable x . You can use the normal mathematical operators $+$, $-$, $*$, $/$, $^$ (“to the power of”) and all existing variable names in your equations.
- For more information on **sorting data, extracting subsamples** etc. consult the following chapter in the *EViews* help file: *EViews Basics/Workfile Basics*.

4. Regression

(see also the chapter *Basic Regression* in the *EViews* help)

- To specify a regression equation, the workfile containing your dataset has to be active. Click *Objects/New Object/Equation* and give a **list of variables** or an **explicit formula** for your regression. **Example**: You want to regress the variable *weight* on a constant and *height*. You can do this by writing the following list: $\text{weight } c \text{ height}$ (where c stands for the constant) into the box *Equation specification*. *EViews* treats the first variable in this list as the dependent and all the following as independent variables. Alternatively, you can type in the following

equation: $weight = c(1) + c(2)*height$. Here, $c(1)$ and $c(2)$ refer to the respective coefficients for the constant and for $height$. The functional form has the advantage that you can use mathematical expressions, e.g.: $weight = c(1) + c(2)*log(height)$.

- As the **estimation method**, choose *LS* to get the OLS estimates. After clicking *OK*, *EViews* shows the results of the regression in a new window.
- You can **save the regression** as an object within the workfile that contains your variables. Click *Name* in the window with the regression results and specify a name for the equation object (if you have not done this yet when creating the new equation object).
- For **hypothesis testing**, **residual plots** and other more specific topics, check the *View* and *Procs* buttons in the window with the regression results.