1 *Getting Started With EVIEWS*

As you all know EVIEWS is a computer package that is used for Econometrics, but you need to get the data to work with it; that is why the first thing that we will go through is getting data. There are many places to get the data sets you need, but the most used by students is the INTERNET, here you can find all the series that you need, from stock prices and currencies to GDP, exports, etc.

The easiest way to start looking for data on the INTERNET is going to this website, http://rfe.wustl.edu/sc.html, which can also be found from the links that Dr. Swanson has on his website (http://econweb.rutgers.edu/nswanson/) under sites to see. Once you are on this webpage you can find every kind of data that you need, you just have to look for it and be a little patient. For example if you want to analyze consumption and its relation with GDP, well you look for a website that has MACRO or aggregate variables for the economy (US or other economy).

Some people think that it is easier to get MACRO data sets, and this may be true, because they are easily located; but you can get other kind of data, like stock prices, bond prices, or consumption of certain products or services very easy as well. So do not be discouraged if you want to work with the shoe sales of a certain state, you can get the data, it just may take a little longer.

It is important to know that EVIEWS can read a certain kind of data files or sometimes you can paste the data sets straight from Excel or Lotus, in the next section you can find 3 different ways to get the data into Econometric Views. You might feel really comfortable working with Excel and just pasting your data, but sometimes it will be easier to work with another program called KEDIT (which you can borrow during these session).

1.1 DATA SETS AND EVIEWS

a) Organizing your data with Notepad and/or KEDIT.

1.-First choose the data set you want from the INTERNET; for this example we will use data from GDP and consumption.

- Get on the INTERNET, and go to http://www.economagic.com/, click on Most Requested
  Series.
- Choose Real Gross Domestic Product.
- Highlight all the data set, by putting the cursor (mouse) at the beginning of the first year

(1959) hold the right mouse button and go down with the mouse until you reach the end of
the data set (stop at the last number, do not highlight the letters at the end).
- Click edit on the toolbar and choose copy.

2.- Click START, go to programs, choose accessories and click on Notepad.
- Once you are in Notepad, click edit on the toolbar and choose paste.
- The data should be display on the screen (in notepad).
- Click file and choose save (save this file in your disk on drive A), please use a name for the
file that you can remember later.

3.- Now lets get the data for Consumption.
- Go back to the webpage www.economagic.com
- Scroll down to find: Department of Commerce
BEA: National Accounts (GDP): 137 series
- Click on this last line.
- Then click on: C Personal consumption expenditures.
- Highlight all the data set, by putting the cursor (mouse) at the beginning of the first year
(1959) hold the right mouse button and go down with the mouse until you reach the
end of the data set (stop at the last number, do not highlight the letters at the end).
- Click edit on the toolbar and choose copy.
- Repeat procedure number 2 above.

4.- Click START, go to programs, and click on MS-Dos prompt.
- Write a: and hit enter.
- Then type kedit a:filename.txt.
- The data set will be displayed on the screen (DOS screen).
- Notice that this program is just like excel, but each character has a cell for itself.

5.- The first thing to do in KEDIT is:
- Insert a line, so use the arrows on the keyboard to get the cursor all the way up
to the line where it says "top of file" and press ALT and then A, and a line will be
inserted.
- On this line write: Year Qt GDP Average Annual (as headings for the columns,
try to match them with the columns).
- You can use other names but they have to be at most 16 characters long or

Eviews wont read them.

TIP: USE EASY AND IDENTIFIABLE NAMES!!!

- You can see that the first line is out of line with respect to the columns, so we will fix this.

* Use the arrows to get the cursor to the beginning of the first line of numbers.
* Press Alt - A, a line will separate the first number line and the rest of the data.
* Use the arrows to get the cursor to the beginning of the 1959 01 line again.
* Press Alt - B and use the cursor to get to the end of this line and press Alt - B again (all the line will be highlighted).
* Use the arrows to get to the beginning of the empty line, but put the cursor right on top of the column of ones (1's), and then press Alt - K.
* Press Alt - G and you will erase the highlighted line.

- EVIEWS, DOES NOT READ SYMBOLS ($, %, #).

* To erase the % symbols, get the cursor to the first % in fourth column.
* Press Alt - B, and use the page down key to get to the bottom of the data set and press Alt - B again. (all the column of % should be highlighted now).
* To delete it, press Alt - G.
* Do the same for the other column of %.
* Press the Home Key, type save and hit enter.

- Sometimes, like in our example, the data is not complete for all the years.

* In our example, the average data starts on the second line and the annual data starts on the fifth one.
* Sometimes EVIEWS gets confused with these empty spaces, so you should type NA on those empty lines.

6.- We have to get the GDP data and the Consumption data together.

- Press the Home Key, type scr 2 and hit return.
- Type kedit a:filename.txt (consumption file name).
- You will notice that you have the two data sets.
- To jump between data sets, you just need to press the F10 key.
- We want to copy the data for C to the data set of consumption.
- Get the cursor to the space before the first digit of the first number for consumption data. (310.4)

- Press Alt - B, then use the Page Down key to get to the bottom of the data set of

and get the cursor to the last digit of the last number of the data for the consumption

data set (6303.7) and press Alt - B again. (you will have the entire column highlighted)

- Press the Home key and then the F10 key, and you will be on the GDP data set.

- Use the arrows to put the cursor two or three spaces to the right of the first

line of the last column of GDP data (annual column), and press Alt - K.

- You will have a sixth column on the GDP data set, with no name or heading.

- Put the cursor on top of this last column, and name it Consumption.

- Now press F10 and you will be on the second data set, type qq to close it.

7.- To save your data set file:

- Press the Home key, and then type save and hit enter.

- Or, if you are done working on KEDIT, press the home key and type file and hit enter.

8.- To close the DOS window, type exit and hit enter.

Now you have your data organize in a way that EVIEWS can read.

8. - Ultimately, no matter how you organize your data (i.e. using kedit, notepad or excel, for example), the objective is to have a file with your data in it, say in columns, side by side, for example.

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myfile!!

12.34 15.46
11.14 14.56
10.66 13.22
...

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b) Getting the organized data into EVIEWS.

First, start the program, there are two ways to do this:

1) Double click the Eviews Icon.

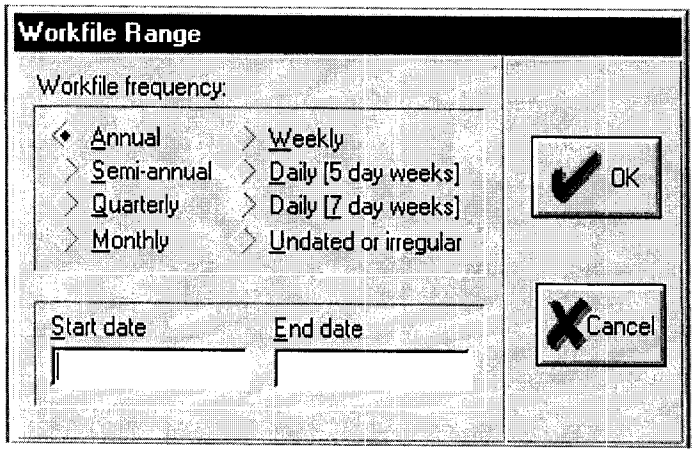
2) Click the Start icon on the toolbar, then click Programs and look for the folder named

Econapp and finally click on Eviews.

The next step, is the one that you will always have to do when you are starting a NEW workfile
(that is what you will need for now) in Eviews;

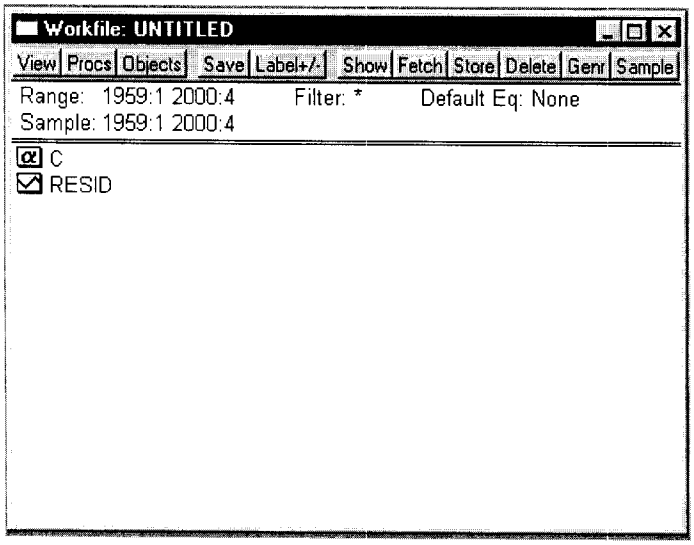
A) Click on File, scroll to New and choose workfile.

B) A new window will appear asking you to specify the workfile properties:



1.- Frequency of the data. (for our example select quarterly)
2.- Start/End date, for all the options except for undated or irregular, where you have to
specify the number of observations. (for our example, type 1959 under start date and
1999 for end date).

After doing this, you will have a new window that indicates what is contained in your workfile, at first you only have the default objects, c (this is the constant term used in regression analysis) and resid (this is where eviews automatically sends the residuals of the regressions).



To get your data into the workfile, you have to import it from the Text file that you have from

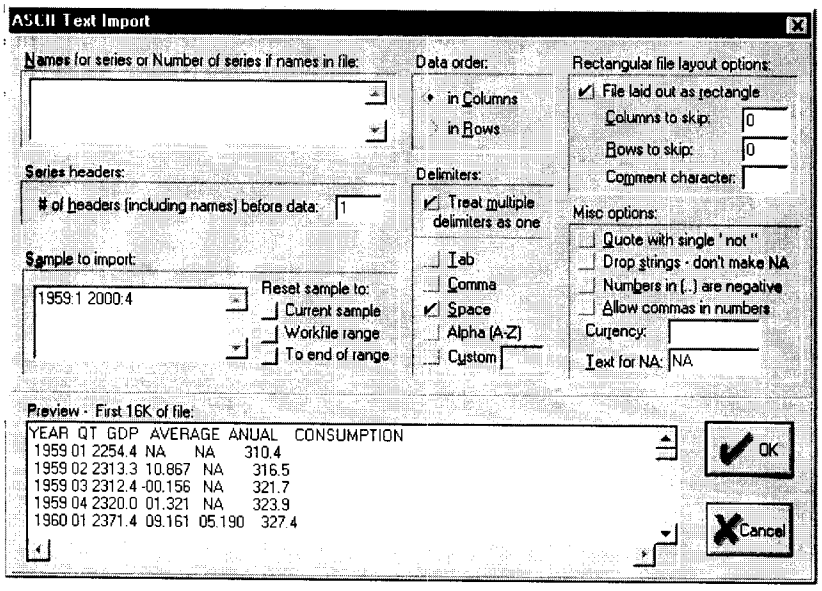
KEDIT.

1.- In Eviews, click on File (toolbar), then scroll down to import and choose Read

Text-Lotus-Excel.

2.- Find your file, by browsing through drive A and open it.

3.- A window like this will pop out :

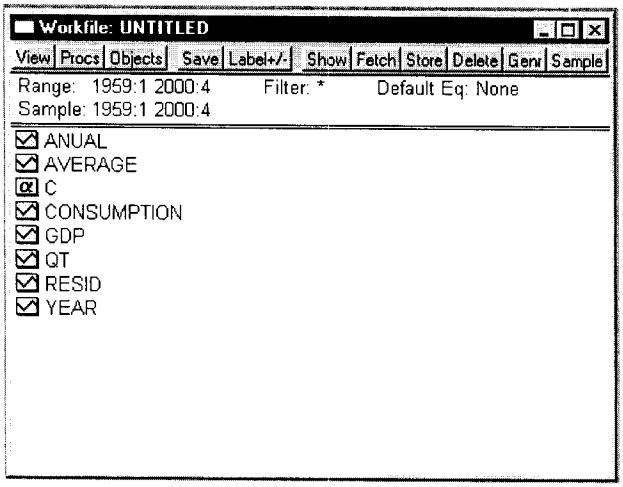


4.- You have a lot of options here, but since you have already organize the data in Kedit you just

need to type 6 under the Names for the series or Number of series if names in file option and

hit OK.

5.- If you did everything right, your workfile will look like this:



6.- Save your workfile by clicking file and then save, again, choose a name that is easy to

remember and identify. TIP: BE SURE TO SAVE YOUR WORKFILE ON YOUR DISK AND

NOT ON THE HARD DRIVE.

c) Getting Excel data into EVIEWS.

Sometimes you will have your data in Excel Format (filename.xls) or Lotus format, and you can

put it into Eviews using copy/paste procedure or importing data from EVIEWS program (just

like the example above, but instead of having a Text file you have an Excel or Lotus file).

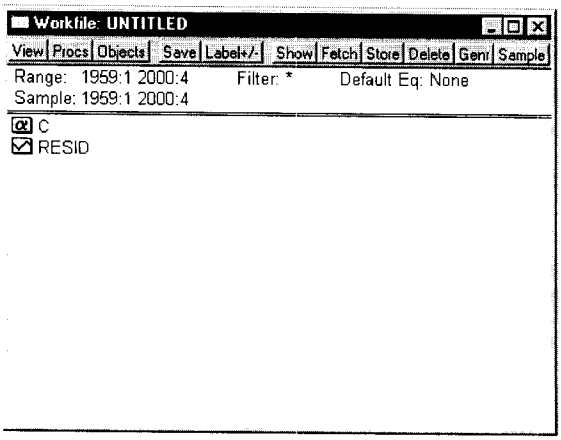
c.1) Using Copy/Paste procedure.

1.- Open Excel and load the file containing the data. (For our example, open this file: gdp.xls)

2.- You will see that it is the same data that we used for the text file.

3.- Open Eviews, start a new workfile (just like you did before, remember part b, to get

a screen like this)

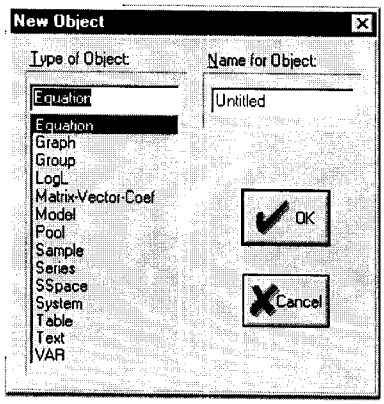


4.- You must know which and how many variables you want to have in Eviews.

- In our example, we have 6 variables
- So we need to create these variables, to do that you do this:

a) On the new screen, click on Objects and select new object to have

this screen.



b) Here you have to click on series or write series under type of Object and under

Name for Object you write the name of the variable.

c) Repeat a) and b), for all the variables that you need.

d) Once you are finish doing it for all the variable (six in our example), press the Ctrl

key on the keyboard and then with the mouse (keeping the Ctrl key pressed) click

on each variable name on the workfile; this will highlight the variables that you want

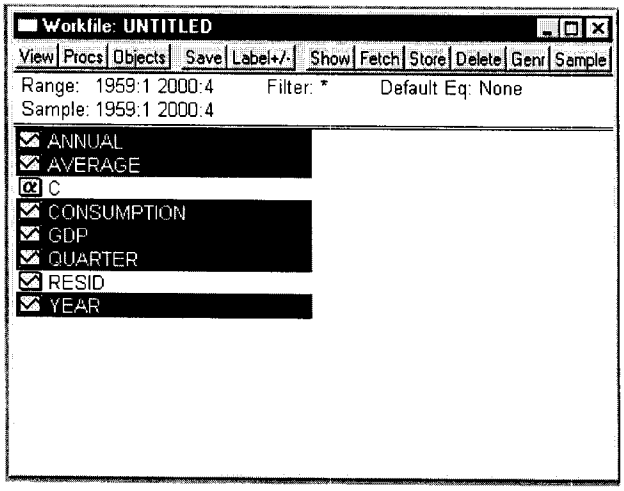
but try to keep them in order, like this:

-Press and hold Ctrl.

-Click on year, then on quarter, then on GDP, then on Average, then on

Annual and finally on Consumption.

- Once you finish your screen will look like this:

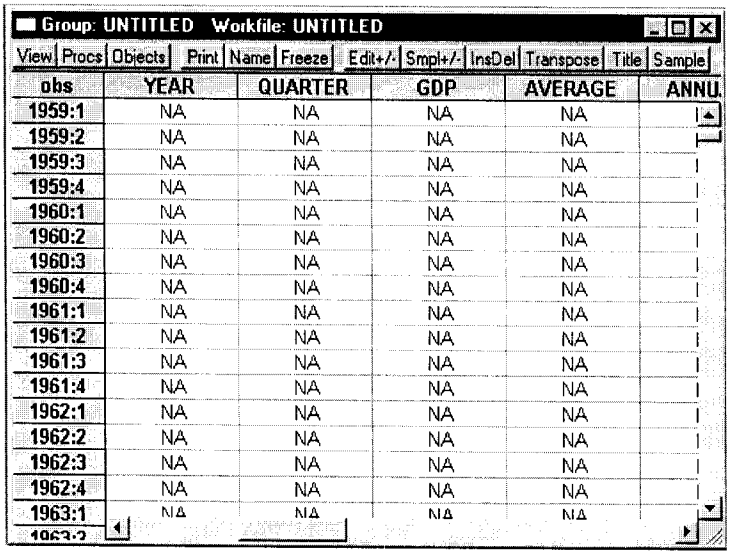


- Finally, put the mouse (arrow) on any part of the yellow area,

which correspond to the variables that are highlighted and then click

the right button of the mouse, select open and then choose As Group,

and this screen will appear.

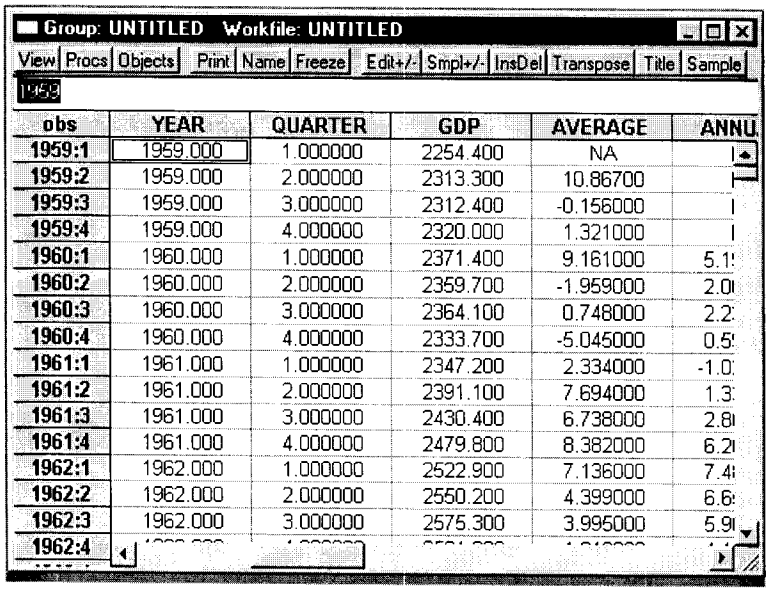


- On this screen, click on Edit +/-, and then go to Excel.

- In Excel, select all the data that you need, by highlighting it with the mouse or any other procedure that you know, do not select the names of the variables.

- Click on Edit and choose copy.

- Go to Eviews, select the first cell of the data, that is the cell of 1959:1 for year, click Edit and choose paste. (the screen will look like this)



- To close this new window, click the little X at the top right of THIS WINDOW.

- Save your workfile by clicking on File and selecting save.
  NOTE: Use an easy to remember name.

c.2) Importing data from an Excel/Lotus File.

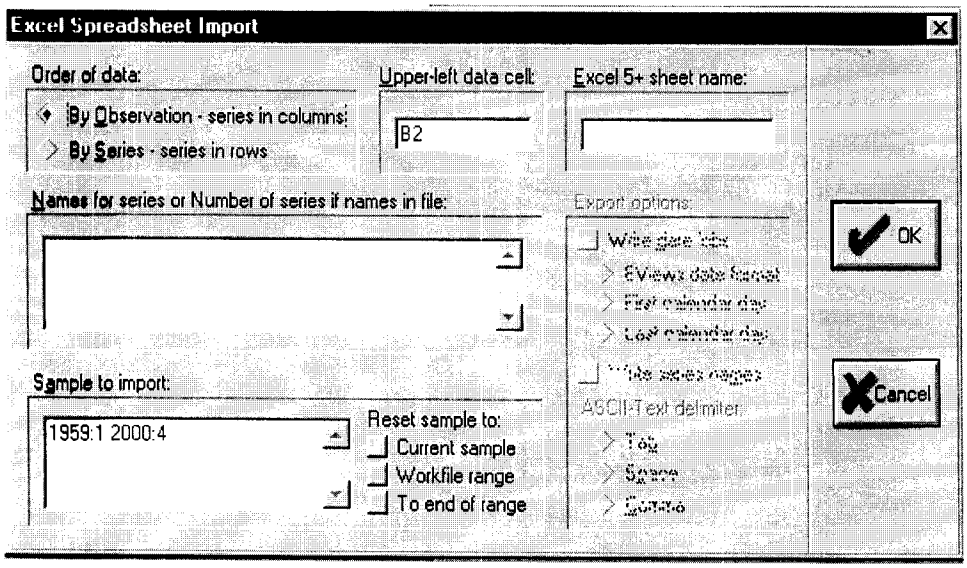
a) First take a look at the Excel file from the Excel program.

b) Try to remember the order and names of your variables (if your short term memory is bad
take notes on these variables).

c) Open Eviews and create a new workfile, just like you have done before (remember that
for our example we need a quarterly workfile)

d) Once you have your new workfile, click on File, scroll down to import and select Read
Text-Lotus-Excel, find your file and open it. (For our example use a:gdp.xls)

e) You will see this new window:



f) In this screen you just need to:

1.- Under Upper-Left data cell write, A2.

2.- Name for Series or Number....., write the name of the variables. (For our example recall that they are: year, quarter, gdp, average, annual and consumption).

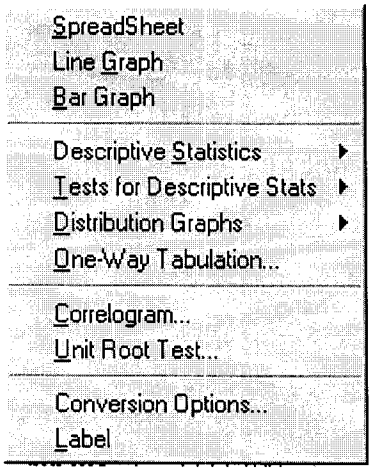
3.- Click OK and you will have the usual screen with the variables in the workfile.

4.- Save your work, just like you have done before.

1.2 GRAPHING IN EVIEWS

a) Individual Graphs and Statistics.

- Double click on the variable you want to graph. (For this example double click on gdp)
- The spreadsheet for this variable will be shown on screen.
- Click View, and you will see this options:



- For graphs you have: Line graph and Bar graph

- For Statistics you have Descriptive Statistics, and choose Histogram and Stats.

- To close this window click on the little X on the top-right.

b) Multiple Graphs.

- Select the variables you want to graph, by pressing and holding Ctrl key and clicking

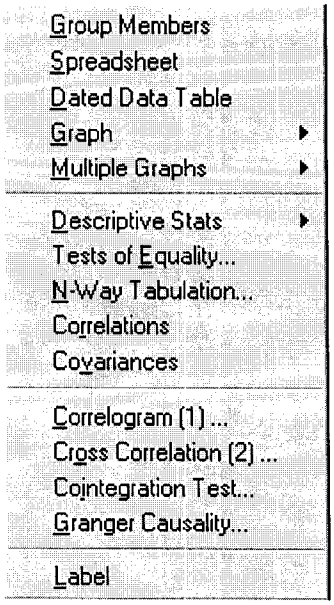
variables you want (this will highlight them) then put the mouse (arrow) on any of the

yellow areas and press the right button of the mouse and select open and choose as

Group.

- You will see the spreadsheet containing all the data for the variables you have selected.

- Click View, and you will see this options:



- For graphs you have single graph (Graph) or multiple graphs options. (Play with them)

- For Statistics you have Descriptive Statistics, and you can choose common sample or

individual sample, depending on what you want.

Data Transformation and Lags in EVIEWS

Assume that you have a variable of interest, say y_t. this variable might be U.S. GDP, for example. Assume that you read the variable into an eviews workfile and call it GDP.

Thus, GDP = y_t. Where GDP is the "eviews" name and y_t is the name which we use in class to discuss such a variable. The following commands are valid in eviews. simply click the "generate" box on the command bar in eviews, and type the following sorts of commands.

GDPl1 = GDP(-1) – this new variable is y_{t-1}.

GDPl2 = GDP(-2) – this new variable is y_{t-2}.

... and so on ... you can create many lags!!!

logGDP = log(GDP) – this new variable is $logy_t$.

logGDPl1 = logGDP(-1) – this new variable is $logy_{t-1}$.

DlogGDP = log(GDP)-log(GDP(-1)) – this new variable is $\Delta logy_t = logy_t - logy_{t-1}$.

... alternatively, given the above variables, note that

DlogGDP = logGDP-logGDPl1

DlogDGPl1 = DlogDGP(-1) – this new variable is $\Delta logy_{t-1} = logy_{t-1} - logy_{t-2}$.

... and so on ... you can create many lags of any variable!!!

You may want to transform your data in other ways, too.

GDP2 = GDP**2 – this new variable is y_t^2.

GDPl1l2 = GDPl1*GDPl2 – this new variable is $y_{t-1}y_{t-2}$.

log100GDP = 100*log(GDP) – this new variable is $100logy_t$.

XpY = X+Y – this new variable is $X_t + Y_t$.

... and so on ... you can create many new variable!!!

To include lagged or transformed variables in regressions, simply click on them and include then in your equation. Remember to include the intercept, called "c" in your regression models.

Example : Say that you click on two variables to regress, X and Y. Then the equation dialogue box gixes: X Y C. Click O.K. for the regression $x_t = c + \beta_1 y_t + u_t$. On the other hand, you may modify this regression to include lags. From within the same dialogue box, type over the Y, and write: X Y(-1 to -3) C. Click O.K. for the regression $x_t = c + \beta_1 y_{t-1} + \beta_2 y_{t-2} - \beta_3 y_{t-3} + u_t$. Thus, you have included lags in your regression without first having had to explicitly create the lag variables!