

Econ 482

Takehome Assignment Computer Instructions (Using STATA)

You will need a formatted disk or flash drive to copy the data set onto.

How to download the data

1. Use your favorite web browser and go to <http://u.arizona.edu/~rlo/> to download the data file **e482dat.xls**.
2. You would click on **e482dat.xls** and the data file will appear on your screen.
3. Click on the **File** menu at the top of the screen and then click on **Save As**. From here you would use the dialog box to save the excel file to a directory of your choosing.
4. You now have a copy of the data on your diskette or flash drive. Don't forget to take the diskette with you after you are finished with the downloading.

How to estimate the four functional forms in the assignment using STATA

1. To start STATA, simply click on the STATA icon on the Windows desktop . If the STATA icon is not on the Windows desktop, you will need to hunt it down via the 'start' tab at the bottom of the screen and then click on 'All Programs'.
2. After you are in STATA type **edit** in the area marked "**Stata Command**", then press return. A spread sheet will now pop up.
3. Reopen your excel file, and copy all the data, including the top line which gives the name of the variables. Return to STATA and press either CTRL+V or go to the **edit** menu and select **paste** to paste the data to the editor. Close the editor window, and click **OK** in the dialogue box to accept the changes you made if the dialogue box appears.
4. So that you can use this data in the future without having to recopy it from excel, go to the file menu and select **Save As**. In the dialogue box, let STATA know the name you want to give the data file and the directory to which you wish to save it. Click on the **Save** button to exit. In the future, you can simply start STATA, select **Open** from the file menu, and find this data set.
5. To start a log of your output, find the **Log** option in the file menu. Choose **Begin** from the sub-menu. Click on the **Save as type** drop box and select **Log (*.log)**. Give your log file a name in the **File Name** text box and click on the **save** button to save the log to a convenient directory of your choosing. Everything you do in STATA will be written to this log file until you type **log close** in the command box. If you wish to temporarily stop writing to the log file, type **log off**. When you wish to continue writing to the log file, type **log on**.

6. To estimate the linear form $M_{1t} = \beta_0 + \beta_1 r_t + \beta_2 P_t + \beta_3 Q_t + u_t$ do the following:
 - (a) Type the command **regress m1 r p q** (followed by the ‘enter’ key).
 - (b) That’s it! The regression results will appear on the screen and will be captured in the special file.

7. To estimate the double-log form $\ln(M_{1t}) = b_0 + b_1 \ln(r_t) + b_2 \ln(P_t) + b_3 \ln(Q_t) + u_t$ do the following:
 - (a) You need to create new variables that are the logs of the original variables.
 - i. To keep things simple you can use easy to remember log variable names.
 - ii. To create the natural log of **m1** and name this variable **logm1** just type the command **gen logm1 = log(m1)** (followed by the ‘enter’ key).
 - iii. To create the remaining log variables just type the following commands and hit the ‘enter’ key after each command
 - A. **gen logr = log(r)**
 - gen logp = log(p)**
 - gen logq = log(q)**
 - (b) Now type the command **regress logm1 logr logp logq**
The regression results will appear on the screen and will be captured in the special file.

8. To estimate the semi-log form $\ln(M_{1t}) = a_0 + a_1 r_t + a_2 P_t + a_3 Q_t + u_t$
type the command **regress logm1 r p q**

9. To estimate the reciprocal form $M_{1t} = c_0 + c_1 \frac{1}{r_t} + c_2 P_t + c_3 Q_t + u_t$ do the following
 - (a) You can create the reciprocal variable $\frac{1}{r_t}$ and give it a simple name by typing the command **gen recipr = 1/r**
 - (b) Now type the command **regress m1 recipr p q** (followed by the ‘enter’ key).

10. To exit STATA, first type **log close** on the command line, then you can click on the **File** menu at the top and then click on **Exit**. If a dialogue box appears asking whether you want to exit without saving changes to the data, click ‘yes’.

How to print your output file

1. Click on the icon for Microsoft Word and then click on the **File** menu.
2. Click on the **Open** option. At the bottom of the dialog box for the **Files of type** window select **all files**.
3. At the top of the dialog box is the **Look in** window. Browse through to the directory to which you saved your log file.

4. Click a couple of times on your log file and your results should pop onto the screen.
5. Click on the **File** menu and select the **Print** option. After you print out the file you can just exit windows without saving anything.