

Econ 481

Takehome Assignment Computer Instructions

You will need a formatted $3\frac{1}{2}$ diskette to copy the data set onto.

How to download the data

1. Use your favorite web browser and go to <http://crab.bpa.arizona.edu/~rlo> to download the data file **e481dat.txt**.
2. You would click on **e481dat.txt** 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 find the diskette you have placed in drive A.
4. After you have located Drive A in the dialog box, type **e481dat.txt** in the filename window and then click on the **Save** button.
5. You now have a copy of the data on your diskette. 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 Soritec

1. To start Soritec, simply click on the Soritec icon on the Windows desktop.
2. After you are in Soritec click on the **File** menu and click on the **Open Data File** option. A dialog box appears. At the bottom of the box is a little window labeled **Files of type**. Scroll down and select **All Files (*.*)**. At the top of the box is a little window labelled **Look in**.
3. Assuming the data file **e481dat.txt** is located on your diskette in Drive A:, just scroll through and locate Drive A:, click a couple of times on **e481dat.txt** or click once and then click on the **Open** button.
4. Type the command ON LOG (followed by the 'enter' key). This command creates a file named SORITEC.LOG that will contain all of your output. You can find and print out the file after you have exited the Soritec program.
5. To estimate the linear form $Q_t = \beta_0 + \beta_1 P_t + \beta_2 C_t + u_t$ do the following:
 - (a) Type the command **regress q p c** (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.
6. To estimate the double-log form $\ln(Q_t) = b_0 + b_1 \ln(P_t) + b_2 \ln(C_t) + u_t$ 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 **q** and name this variable **logq** just type the command **logq = log(q)** (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

$$\mathbf{logp = log(p)}$$

$$\mathbf{logc = log(c)}$$
 - b. Now type the command **regress logq logp logc**
The regression results will appear on the screen and will be captured in the special file.
7. To estimate the semi-log form $\ln(Q_t) = a_0 + a_1 P_t + a_2 C_t + u_t$
type the command **regress logq p c**
8. To estimate the reciprocal form $Q_t = c_0 + c_1 \frac{1}{P_t} + c_2 C_t + u_t$ do the following
- (a) You can create the reciprocal variable $\frac{1}{P_t}$ and give it a simple name by typing the command **recip = 1/p**
 - (b) Now type the command **regress q recip c** (followed by the 'enter' key).
9. To exit Soritec, you can click on the **File** menu at the top and then click on **Exit**.

How to copy the output file to your diskette

1. Assuming you typed the ON LOG command in your Soritec session, your output results will be stored in a file named SORITEC.LOG. This file will be found on either the C: Drive or the D: Drive under the Soritec directory. You can use the **Find** command on the Windows **Start** menu to find the file.
2. Using Windows Explorer just click on the file SORITEC.LOG and drag it to the A: Drive where your diskette is waiting. The file will be copied on your diskette.
3. Now click on the A: Drive icon in Windows Explorer so that you can move over to the A: Drive
4. Click once on the file SORITEC.LOG file to highlight the file name. Right click on the mouse to access a menu that has the **Rename** option. Click on the **Rename** option and you will see SORITEC.LOG highlighted.

5. To change the name to TAKEHOME.TXT, simply type this new file name over the old one.

How to print out your estimation results

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 **Text files** .
3. At the top of the dialog box is the **Look in** window. Browse through to Drive A: and you should spot your renamed file TAKEHOME.TXT.
4. Click a couple of times on the file name TAKEHOME.TXT 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.