



Macroeconomics - Hall and Taylor Model in GAMS using PCs (BRB 4th Floor Lab)

Quick review on how to log in to a session




1. Make sure the monitor is set to '2' (DVI - D), i.e. the number '2' is lit up on bottom panel of the monitor. If it is not, press the leftmost button on the bottom panel of the monitor (it looks like a box with an arrow going into it) repeatedly until the number 2 is lit up on the bottom pane of the monitor. For PCs, you need to use the **DELL (black) keyboard** and **DELL (black) mouse**.
2. Press <ALT> <CTRL> or **left click** on the button named **Logon**. To log in, use your **UT EID** and **corresponding password**.

Quick review on how to download the files needed for the lab

1. Open a browser such as **Internet Explorer** or **Mozilla Firefox**. One way to do this is by **Double Left Clicking** on the relevant icon (**Internet Explorer**  or **Mozilla Firefox** ) at the bottom left of the screen next to the Start button.
2. Go to the class website at <http://www.eco.utexas.edu/compeco/Courses/index392.html>
3. Find the lab of interest (labs are organized by date) in the program archive table on the website. The first column has the date, the second has the name of the topics, the third contains links to download the code, the fourth contains links for software documentation and the fifth contains links to related handouts.
4. Download the files in the code column by Right-Clicking on the file name and choosing "Save Link As..." (Firefox) or "Save Target As..." (Explorer). Left-clicking on the file name may only display the codes but you need to save the files in order to run them from your account. Save the files in any directory (you can make your own, if you wish) of your choice. It might help to save the files on the "Desktop" or in "My Documents" as you can access or view your files readily from these locations.




Launching GAMS on the PCs



1. Double Left Click on the **GAMS** icon on the desktop
2. If prompted, type any **project name** you choose and click **Open**. You do not need to create the project in the same location as your GAMS files although that is preferable if you are working with multiple files and projects. GAMS asks for a project name in order to create a list of files that were created and run etc. Do not worry about this step.
3. Click on the open icon  in the menu bar located on top of the GAMS window. Navigate to your file location by clicking on Desktop or My Documents on the left panel and/or by double clicking on the relevant folder(s) in the window that pops up. Highlight the GAMS file you wish to run (chakra.gms, transport.gms, mexss.gms or kentay.gms) and **click OK**.
4. You can now see the GAMS program file in the main window. The editor color codes variables commands and comments for convenience. The name of the GAMS program ends with (has an extension) ‘.gms’
5. Before modifying the file, it is advisable to run it once. To **Run** the code, press the F9 key or click on the icon shown .
6. GAMS executes the file and displays a window which shows all the details of the execution process. Check to see whether the last line on the window titled” No active process” is “*** Status: Normal Completion.” This window can be closed now.
7. The output of the GAMS code file (.gms) is in the list file (.lst) which is also displayed in the main window.
8. You can check the results in the list file
9. To modify the code, click on the button that has the name of the GAMS file. i.e. chakra.gms here. After modifying the file, you need to **run the program again** following **steps 5 through 8**. Changes can be seen in the output list file (chakra.lst here).

Ending a Session

To end your session, close all your currently active processes and then perform the following action:

Click on the box named ‘Log Out, Printing & Help’  at the bottom left of the screen, on the taskbar close to the Start button and then click on Logout . Choose ‘Yes’  to confirm that you want to Log out.

Very Important Notes:

1. If you are using PCs in the 4th floor lab, remember to **save your work on a flash drive, or email the modified files to yourself, or upload the files on to Webspaces, or use SSH file transfer** or any other storage option in order to keep your files after you have logged out. **Once you log out, all your saved work will be lost.**
2. While editing GAMS files, please **avoid using <tab> instead of <space>**. GAMS recognizes spaces while reading columns in tables etc. but has **problems with syntax if you use <tab>**.
3. Also, please be sure to restrict the **names of variables to 10 characters or less.**
4. You may encounter a compilation error when you run a PC edited “*.gms” file on UNIX. This problem is caused because UNIX does not recognize DOS end-of-line characters. To run the GAMS file in UNIX, you need to change the file in DOS format to Unix. To do this, say if the GAMS file that’s causing the errors is named *myfile.gms*, type

dos2unix myfile.gms newfilename.gms

Here *newfilename.gms* is the name of the file you are giving to the newly created Unix-format of the GAMS file. After this procedure you can run the file in UNIX with the command

gams newfilename.gms.