

## General Guidelines for Problem Sets that Involve Estimation Exercises

In this short document I want to provide you with general guidelines for handing out problem sets that involve computer (estimation) exercises. These should be useful guidelines in general, and are not restricted to this course only.

- When reporting your results, you should always remember to compute and report the corresponding standard errors. An estimated figure contains no information if it does not have a standard error attached to it.
- Report your estimation results in a compact and organized way. If you are using Stata, for example, the Stata printout should generally be enough. When using Matlab or Gauss, however, the typical output file is quite messy and not very clear. In such a case, you are expected to organize the results in a new table which is easy to read and understand.
- Always spend some time looking at the results and try to give them some economic interpretation. Some (brief) discussion of the results is required, even when you are not specifically asked to do so. If a result makes no economic sense (which may be the case, especially in problem sets, when we typically use smaller data sets and simpler specifications), you should note it and suggest reasons for why this is so.
- Whenever the estimation is not straight forward, always submit your code with your problem set (m files in Matlab, do files in Stata, etc.). When you do that, make sure that you add your comments on it, so it is easy to follow. A well-written code does not require many comments, and should be self-explanatory. This can be achieved, for example, by a careful choice of variable names. Over-commenting a code (e.g., using Matlab syntax: “ $a=b+c$ ; % we add  $b$  and  $c$ , and let  $a$  equal to the sum”) is often worse than not commenting at all.
- Having trouble with the code? It is always a good idea to simulate data according to the “true model” and run your estimation program on the simulated data. Finding coding errors that way is sometimes much easier.
- When working in groups, write and submit your own personal write-up, indicating who the other members in the group are.