ECO 330: Economics of Development   **Professor Jack Rossbach**

Tips for Problem Set 2

Problem 1

Tip 1.1: You can write your STATA commands in any plain text editor, such as Notepad++, and then copy and paste your commands into the STATA command line to run them. This allows you to save your code, so you can easily continue your work at a different time. See instructions here for how to add STATA syntax highlighting in Notepad++: http://goo.gl/1U9iVw

Tip 1.2: I uploaded all the code you'll need to run the regressions for problem 1. You can copy and paste it into the command console to have STATA generate all the output you'll need to complete the problem.

Tip 1.3: If you don't understand a command you can type **help** followed by the command name. For example, type **help reg** for documentation on how the regression command works.

Tip 1.4: If you're interested in learning more about STATA, look at the instructions I posted for my trade class here. There is also a lot of information online and the documentation is very helpful.

Tip 1.5: Here are some useful slides on understanding regression output in STATA. I strongly suggest looking at pages 4–6 if you have any questions about interpreting the regression output.

Tip 1.6: It is possible to run STATA without writing commands, but rather selecting the commands you want under the Graphics and Statistics menus. See this video for an example about how to run a simple OLS regression using the graphic interface and this video for an example about how to do an IV regression (IV stands for Instrumental Variable).

Tip 1.7: Log refers to natural log or ln in this problem. That log is actually ln should always be assumed in economics, unless otherwise stated. To undo the log transformation, use the exp() function. Note that in excel and most hand calculators, log refers to log base 10. In R, STATA, and most other advanced programs, log is ln by default.

Tip 1.8: If you want to brush up on your statistics, a great online resource is http://onlinestatbook.com/, despite the somewhat sketchy name, it is a top notch intro to stats textbook. Its development was funded by the NSF, and faculty from multiple universities collaborated in its construction. The textbook comes in multiple versions, all free, including a downloadable PDF and an iTunes interactive e-Book.

Problem 2

Tip 2.1: If you get stuck, take a look at the example of the completed misallocation exercise for Chile that I posted on my website.

Tip 2.2: The key thing to be careful with when doing the formulas is absolute versus relative references. See here for a brief reminder of what the difference is and here for a video example.

Tip 2.3: Refer to the tips from Problem Set 1 for reminder tips on creating and formatting graphs graphs. The only difference is that we want to create a curved scatter plot. To do this, select the data we want to graph, then go to the insert tab, select scatter charts, and then **scatter with smooth lines** on the ribbon.

	E	F	G
	replace zeros with NA's so can do log scale graph		
	Lower Bound of Bin	Capital Share Count	Productivity Count
	0	0.005102041	#N/A
	0.03125	0.005102041	#N/A
	0.0625	0.010204082	0.005076142
	0.125	0.051020408	0.030456853
	0.25	0.142857143	0.111675127
	0.5	0.147959184	0.23857868
	0.75	0.163265306	0.203045685
	1	0.137755102	0.152284264
	1.25	0.076530612	0.086294416
	1.5	0.153061224	0.106598985
	2	0.051020408	0.050761421
	2.5	0.005102041	0.010152284
	3	0.035714286	#N/A
	4	0.015306122	0.005076142
	8	#N/A	#N/A
	16	#N/A	#N/A

← Highlight Data

Scatter with Smooth Lines

Tip 2.4: If you already have a graph that you like the formatting of, it is possible to copy and paste that format to other excel graphs. When formatting your density plot for India, I suggest copying the chart from the Chile example and then pasting the format on the India chart. To do this, go to the Chile chart, click on it and press **ctrl+C** or right click on it and select **copy**. Then, go to the chart you created from tip 2.3 for the India Data, click on it, go to the Home tab in the ribbon and click the down arrow under the Paste button. Select **Paste Special**, then in the dialog box that pops up, select **paste Formats**

Copy Chart

Paste Special →

Paste Formats →

Tip 2.5: Use the **consistency checker** tab of the worksheet to check whether your formulas are correct.