

## Basic Regression Commands in EXCEL

Running a regression in EXCEL is relatively straightforward. Note, for this course, I do not expect you to understand the **statistical techniques** used when executing a regression, but I do expect you understand how **to interpret the results** of a regression. Below is a brief description of the basic steps for running a regression.

Step 1: Click on Tools and go down and click on Data Analysis.

Step 2: Scan down and click on "Regression". A dialogue box will pop up.

Step 3: Each of the columns have a heading. So, click in the "Labels" box. You also want confidence intervals so click the "Confidence Intervals" box.

Step 4: Click in the box for the Y input range then highlight the Column of data that you want to measure the dependent variable.

Step 5: Click in the box for X input range then highlight the Column(s) of data that you want to measure the explanatory variables.

Step 6: Select output options. I recommend that you select a separate spreadsheet as output. However, initially you may want it to select the current worksheet if you want to quickly test that the regression ran properly.

Step 7: Select residuals. I recommend you select residuals, but this is not crucial.

Step 8. Click on OK. The regression will run and put the output in either a new spreadsheet or in a new sub-file in the current worksheet.

Note, if you click on tools and you cannot find "Data Analysis" then EXCEL does not have this Add-In installed. You can click on Add-In, click the "Analysis TookPak" box and install the file. If you have difficulty, I can help you or you can go to the SSIL lab on the third floor of McKenzie Hall.

Some of the variables that you may wish to include in your regression may not be pre-defined and you will need to add a column to the current worksheet. EXCEL has a number of functions that will help you define a variable. For example, in the baseball data, if you want to define a variable that equals 1 if the person plays first base you (note this variable is already defined):

Step 1: Create a new column and label it first base.

Step 2: Go to first row below header (Say I2) and type command "`=IF(E2=1, 1, 0)`", which places a "1" in the column if E2=1 (which it does not) and "0" otherwise.

Step 3: Copy this formula to all rows.