



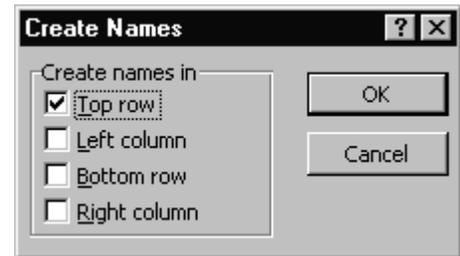
# Regress Quick Guide

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## Establishing a Regress-ready data set in Excel

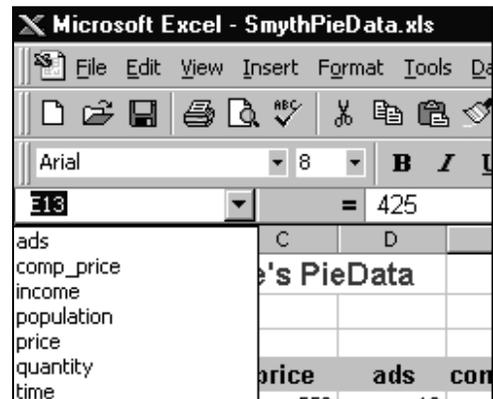
Before you invoke Regress to run a multiple regression, there is one preparatory step you *must* take. Regress requires that your Excel data be arranged in *named ranges*. If you think of your Excel data in its row and column orientation, a named range can be simply a column of the data with a name assigned to the column. Naming each of your columns of data allows Regress to then use these column names in its analyses. There are several ways to name data ranges in Excel. Assuming your data is arranged in columns (so each row of data constitutes a record), the easiest method is this one:

- 1) If your data does not already have headers, add a header row and provide a name for each column of data.
- 2) Select the headers and the data beneath them.
- 3) Choose the Excel commands *Insert* and then *Name, Create*. In the "Create Names" dialog that appears, *Create names in Top row* should be checked. If not, select it and click *OK*. Excel names each column using the header label above it. You now have a "named range" for each column of data.
- 4) Test to make sure the range name operation has worked properly by clicking the drop-down arrow to the right of Excel's "name box" in the formula bar and selecting any range name in the drop-down list. Excel should then highlight whatever range name you select.



Click the drop-down arrow to the right of Excel's name box to see a list of current range names in the workbook. Click any name to have Excel highlight that named range.

Now your Excel data set is ready for Regress.

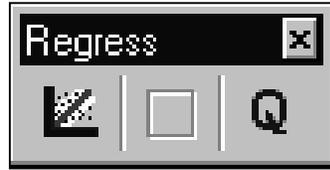


## Invoking Regress from within Excel

Since Excel is a Regress add-in, once you've installed Regress the command to start Regress becomes part of the Excel menu system. To start Regress, click the Excel *Tools* command. Then from the drop-down menu that appears, choose *Regress*.

# Using the Regress interface

When the Regress add-in is loaded into your copy of Excel, a small Regress toolbar floats on top of your Excel workspace and looks like the illustration below.

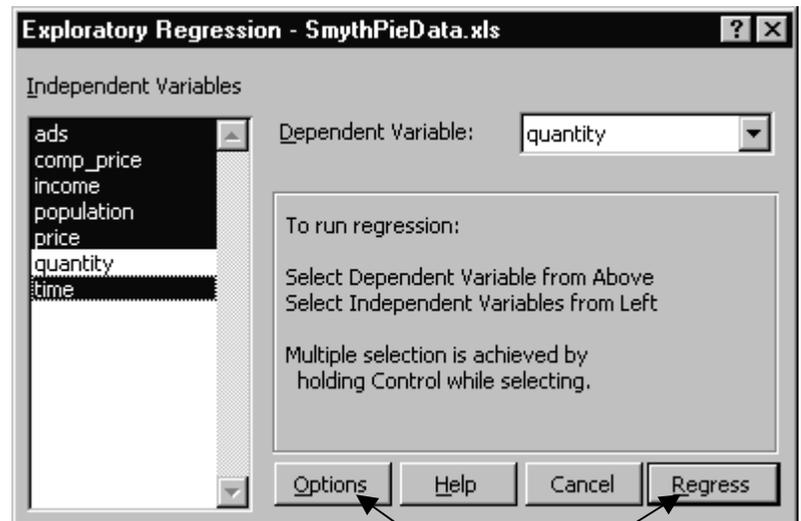


There are three buttons on this toolbar. Use the left-hand “New Model” button to start a new regression analysis. The center blank button is currently unused. Use the right-hand “Quit Regress” button to remove Regress from your current Excel session. (When you’re through working on your regression analyses, use this Q button to remove Regress from Excel and from your computer’s memory. This does not de-install Regress; Regress will still be available from the Excel *Tools* menu the next time you run Excel.)

The first thing Regress will ask you to do is to identify your dependent and independent variables.

Notice that Regress uses your data’s range names.

The illustration at right shows the seven named ranges. The dependent variable in this data set is identified as **quantity**. All the other variables in the data set are identified as independent variables.



Use the instructions in the dialog box to select the dependent and independent variables.

You have two choices at this point:

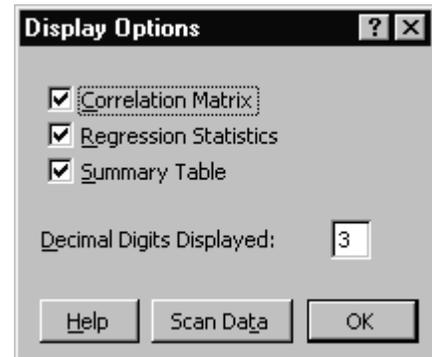
- 1) Start the regression right away by clicking the *Regress* button.
- 2) Choose the outputs you want to see *before* running the regression by clicking the *Options* button.

A Note: While you’re using Regress, the Regress toolbar changes its aspect to reflect that an analysis is underway. During an analysis, the left-hand button becomes the “New Model” button, the middle (formerly unused) button becomes “Create Report”, and the right hand button becomes “End current analysis”. If you choose the “End current analysis” button, the “Q” or quit button appears. Use the quit button to end Regress.



If you chose to run the regression *directly* (by clicking the “Regress” button on the main dialog), Regress runs the regression. Regress then displays standard reports and waits for you to click the middle “Create report” button to see other report options.

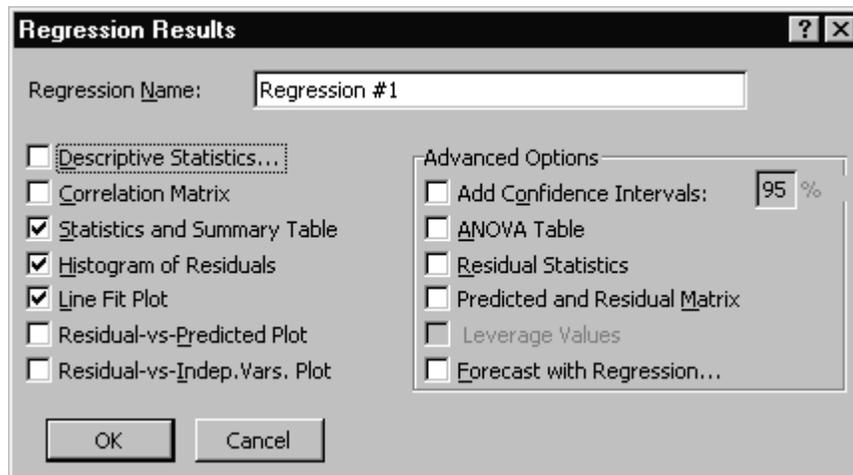
If instead of running the regression immediately you chose instead to select some (standard) reports *before* running the regression, the “Display Options” dialog opens. Select any or all of the three reports from this dialog. Then click “OK” to return to the main dialog where you can click the “Regress” button to run the regression.



Regress displays the reports you’ve chosen.

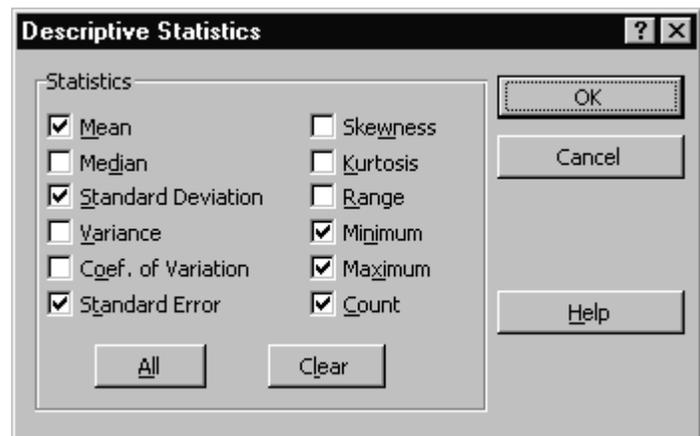
## Selecting Regress Outputs

To see this longer list of additional possible reports, click the “Create Report” button on the Regress toolbar.



The “Regression Results” dialog available after running the regression. Use this dialog to select the regression reports you want to see.

Notice that *some* of the selections you make on this main dialog may lead you to other, sub-level dialog boxes. For example, if you ask for “Descriptive Statistics” on the main dialog, Regress immediately shows you a “Descriptive Statistics” sub-level dialog, to let you choose *which* descriptive statistics you want it to generate. Make your choices from this dialog and click the *OK* button to return to the top-level report dialog.

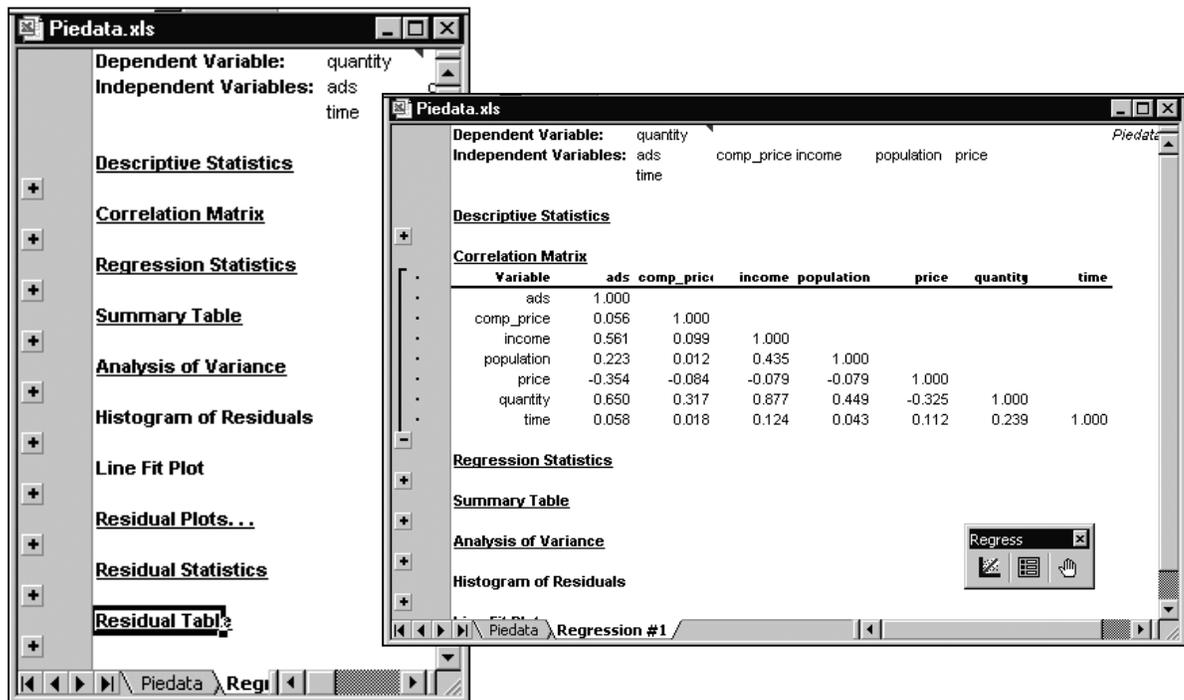


Also notice that one set of outputs on the top-level dialog are related: Only by selecting the “Predicted and Residual Matrix” can you get the option to select “Leverage Values”. If you don’t select “Predicted and Residual Matrix”, then “Leverage Values” is grayed out.

Once you’ve selected what you want from the top-level reports dialog, click the *OK* button.

## Managing Report Outputs

Regress creates the reports you request and locates them on a new tab in the current Excel workbook. It displays the reports in an outline-style format so it’s easy to “show” or “hide” any report using the “plus” and “minus” icons in the left-hand margin.



## Quitting Regress

On the floating Regress toolbar, click the right-hand “End current analysis” button (the button with the hand).

When you click the “End current analysis” button, the button turns into a “Q” or quit button. Click the quit button to remove Regress from your current Excel session.

