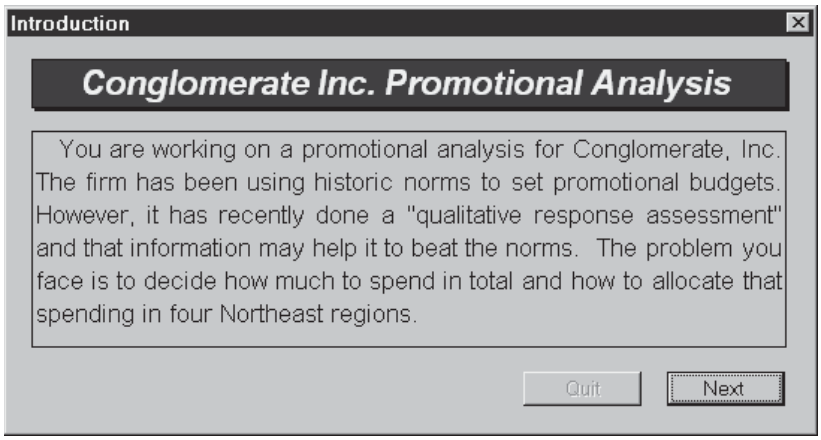
1. TUTORIAL FOR CONGLOMERATE INC. PROMOTIONAL ANAYLSIS (conglom.xls)

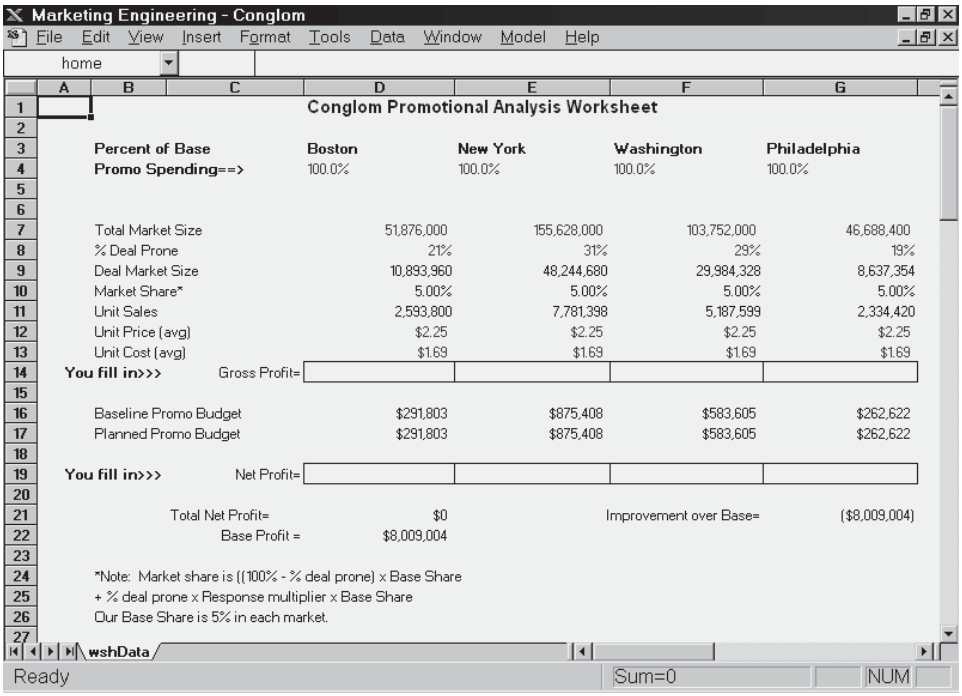
CASE: CONGLOMERATE, INC. PROMOTIONAL ANALYSIS, P. 58

This spreadsheet and the associated exercise are intended to familiarize you with building formulas in Excel, to teach you to use Excel's Solver function, and to introduce the concept of response functions.

On the **Model** menu, select **Conglomerate Promotional Analysis (XL)** to see the **Introduction** screen.



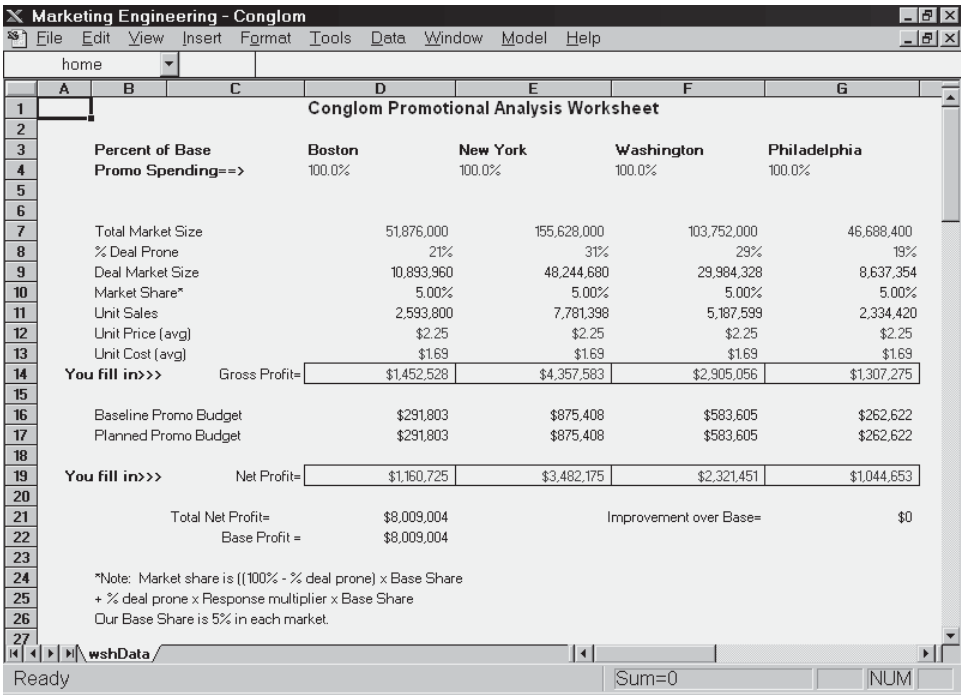
Click **Next** to see the main spreadsheet.



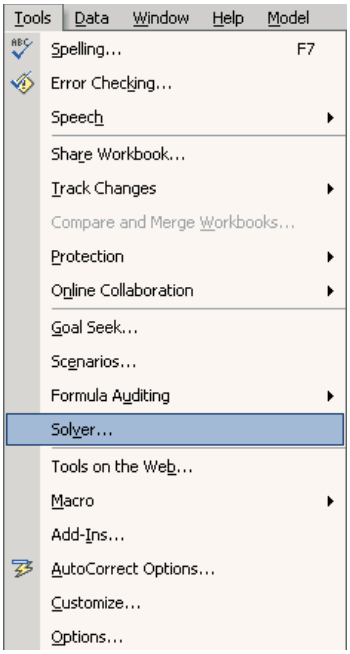
* Tutorial 1, June 2005

If you fill in the gross-profit and net-profit cells correctly your screen will look like this:

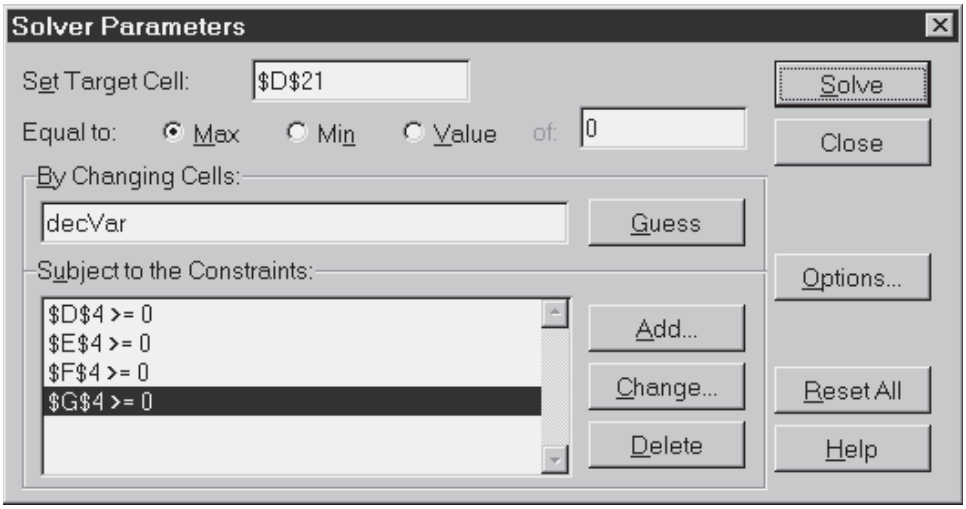
***Note**: You must fill in the gross profit and net profit cells using Excel formulas that you develop.*



Next, you must determine the "optimal" spending level that maximizes Total Net Profit (cell D21). (Your spending level for each of the four regions must be greater than or equal to zero.)



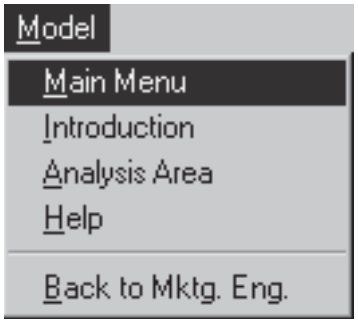
On the **Tools** menu, select **Solver** to perform this task.



Enter the target cell, D21, the one you want to maximize.

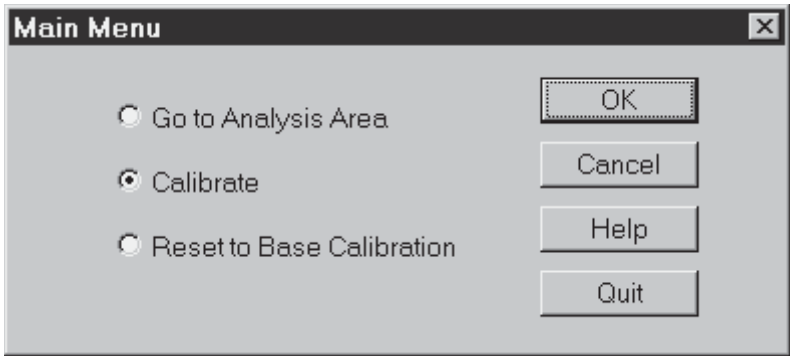
You must determine the percent of the base promotional expenditure that will be allotted to each area (i.e., the decision variables are cells D4 to G4). And you need to **Add** constraints to be sure the values in D4 to G4 are ≥ 0. Click **Solve** to try solving.

In some cases, the Solver run in Excel will not converge. You may then have to provide Solver with new starting values. Please see the appendix to Chapter 2 of the text.

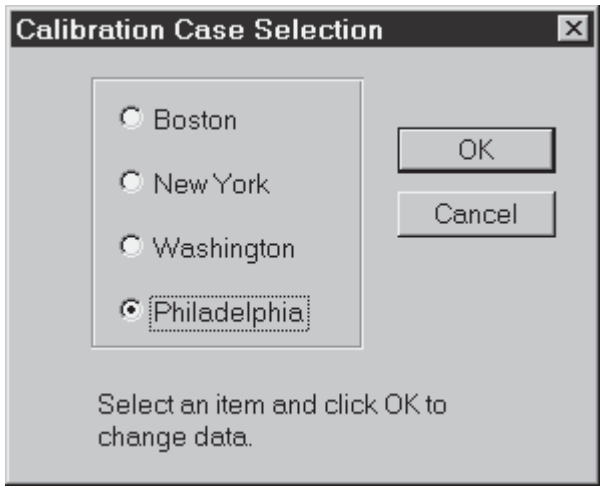


For other options, go to the **Model** menu and select **Main Menu**.

The main menu offers the following options:



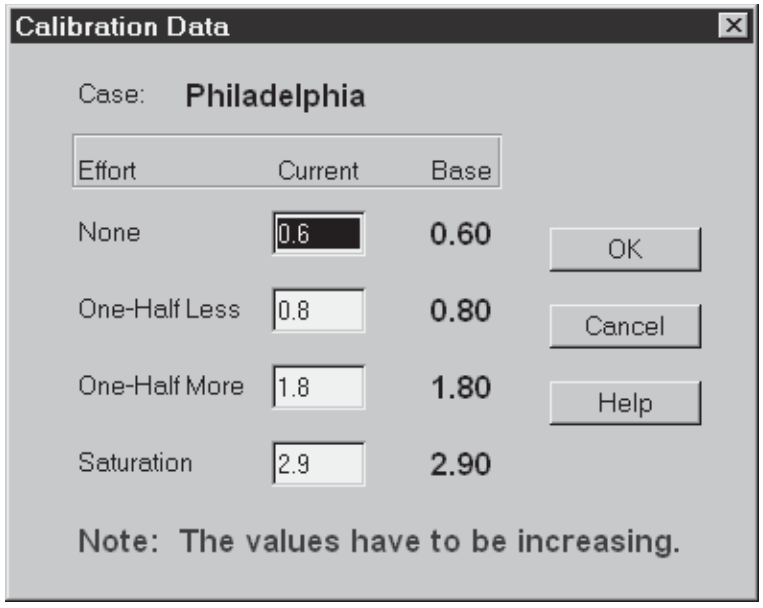
To modify the built-in response functions, select **Calibrate**. Choose one of the regions to pull up the base data for calibration and to change those data.



If you select Philadelphia, you will see the current values for the Philadelphia promotional response function. These are given as fractions of base response compared to fractions of base spending. These values are used to estimate the parameters of an Adbudg function (see Chapter 2).

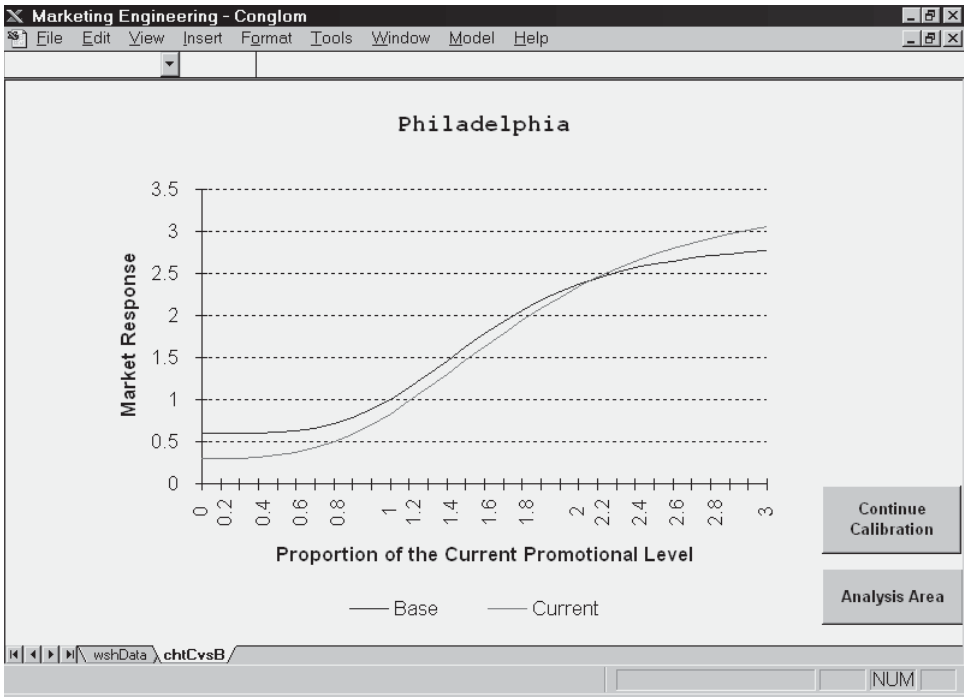
In this case, you are asked to estimate and enter the sales level that you think would be realized if Conglomerate had

No promotional budget
Half of the current promotional budget (0.5 · $262,622)
50 percent more than the current promotional budget (1.5 · $262,622)
An unlimited promotional budget



The base values for these four levels (0.6, 0.8, 1.8, and 2.9, respectively) are normalized relative to base sales level ($2,334,420). Thus the value 0.6 means: "If we cut our promotional budget to 0, we expect to sell 60 percent of $2,334,420."

If you make Philadelphia much less responsive to promotional effort by entering lower values in the **Current** column and click **OK**, you will see the new promotional response curve compared to the old one (you can thus verify that the new input data make sense).



Click **Analysis Area** to do other analyses with different assumptions about market response. For example, by changing the values in cells D4 to G4 (multipliers of the current or base spending level) you can see the impact of changing spending levels and allocations on total net profit. You can recover the original base calibration at any time by going to the **Model** menu, selecting **Main Menu**, and selecting **Reset to Base Calibration**.