**Excel & SPSS for Business Applications**

**Teaching notes on *What-If-Analysis***

What-if analysis is the process of changing the values in cells to see how those changes will affect the outcome of formulas on the worksheet. For example, you can use a data table to vary the interest rate and term length that are used in a loan to determine possible monthly payment amounts.

**Kinds of what-if analysis**    there are three kinds of what-if analysis tools in Excel: *scenarios, data tables, and Goal Seek*. Scenarios and data tables take sets of input values and determine possible results. Goal Seek works differently from scenarios and data tables in that it takes a result and determines possible input values that produce that result.

Like scenarios, data tables help you explore a set of possible outcomes. Unlike scenarios, data tables show you all the outcomes in one table on one worksheet. Using data tables makes it easy to examine a range of possibilities at a glance. Because you focus on only one or two variables, results are easy to read and share in tabular form.

A data table cannot accommodate more than two variables. If you want to analyze more than two variables, you should instead use scenarios. Although it is limited to only one or two variables (one for the row input cell and one for the column input cell), a data table can include as many different variable values as you want. A scenario can have a maximum of 32 different values, but you can create as many scenarios as you want.