
Project_C

Salary Survey after a MBA?

The file salaryof newmba.xls contains a recent survey about new MBA graduates from the top 40 MBA schools in the U.S. Suppose you wanted to develop a regression model to predict the salary/bonus based on variables that represent various factors about each MBA school. For example, if a student wants to go to a specific MBA institution and finances his/her education through student loans, is it worth doing it? Or looking at the employment rate within 6 month after his/her graduation is it worth doing it? Using EXCEL or PHStat2, answer the following: The following is a **minimum guideline** about what you should analyze. You need to perform more in-depth analysis for a better grade than a C. For example, you may have to use such tools as confidence interval estimates, one or two-sample tests on the data to improve the quality of your report.

- a) State statistical objective(s) for the project.
- b) Perform EDA (Section 3.4) including numerical descriptive measures.
- c) Construct scatter diagrams for pairs of variables. Do any of these appear to have some association?
- d) From (b) and (c), does any simple linear model appear to hold? You may want to run some testing to substantiate your findings.
- e) Does multiple regression model appear to hold? You may want to run some testing to substantiate why or why not. If so, is there more than one variable that may be used as a dependent variable?
- f) Is the regression significant? Report the results of the appropriate test, and interpret its meaning.
- g) Suppose now that you want to develop a regression model based on your choice of dependent variables against various independent variables (of your choice), do the data on region play any role in your model? Did you have to modify the region data in such a way that the location of each school makes a significant contribution to your model? How about including the data on the type of schools (public vs. private)?
- h) Do you find any interaction term in the model that makes a significant contribution to the model?
- i) Summarize and comment on your results.