

Stata Project

Predicting Bankruptcy

THIS IS AN INDIVIDUAL PROJECT. NO CHEATING OR COLLABORATION WILL BE TOLERATED.

1. Read the Introduction, Data, and Conclusion sections of Altman's Z Score Paper, <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6261.1968.tb00843.x/pdf>
2. Download and open Bankrupt.dta from Canvas
3. Creating the variables and using the coefficients from the Altman paper, listed on page 594. Create a Z score for every observation in the sample
4. Drop all firms with the SIC Codes of 6000-6999 and 4800-4999
5. Winsorize Z score at the 1 and 99th percentiles (use "findit winsor" to download the package, p(.01) will winsorize at the 1st and 99th percentiles)
6. Find the mean, median, min and max z score for the whole sample
7. Find the mean, median, min, and max z score by 2 digit SIC industry
8. Find the mean Z score by year, graph this using a **customized** line graph (at least three options written in the stata code, not through a graph editor). With so many options to choose from, your graph shouldn't be like any others turned in.

Using the information above, turn in the following for the project: (Max two pages, one sided)

1. Include your name, course number, section number on the first line.
2. Below your name include "Stata Project <SEMESTER> <YEAR>"
3. Skip a line and copy/paste your Stata code from your do-file needed to generate the 8 steps above (2 points)
4. Answer the following questions: (1 point each)
 - a. What is the mean, median, min, and max Z score for the sample after the above adjustments and winsorization?
 - b. What is the mean, median, min, and max Z score for airlines (SIC 4512)?
 - c. What is the mean, median, min, and max Z score for year 2010?
5. Copy your Stata graph onto this page (1 point for correct graph, 1 point for at least 3 customizations)
6. In his paper, Altman found that small firms and large firms had different probabilities for bankruptcy. Why were the probabilities different? (3-5 sentences) (1 point)
7. If you were going to use an average Z score to determine the health of the market as a whole, would you include both small and large stocks in your sample? Why or why not? (3-5 sentences) (2 points)

Points will be deducted for late assignments (2 points per day), unprofessional/unorganized content, or assignments not sent according to the above instructions. Assignments turned in after the initial collection at the beginning of class will be counted as late.

1 point deduction if I have to print or staple your assignment.