

**BUS 735: Business Decision Making and Research**  
**Instructor: Dr. James Murray**  
**Homework: Forecasting**  
**Fall 2013**

The following questions use the dataset `bondstock.xlsx` on the class website. This is monthly data on the Dow Jones Industrial Index and a AAA corporate bond index.

1. For each index, compute a 3 month moving average forecast.
  - (a) Compute the forecast accuracy using MAD, MAPD, and MSE.
  - (b) Use this forecasting method to forecast the next month.
2. For each index, compute an exponential smoothing forecast using  $\alpha = 0.85$ .
  - (a) Compute the forecast accuracy using MAD, MAPD, and MSE.
  - (b) Use this forecasting method to forecast the next month.
3. For each index, compute an adjusted exponential smoothing forecast using a smoothing parameter,  $\alpha = 0.75$ , and a trend parameter,  $\beta = 0.6$ .
  - (a) Compute the forecast accuracy using MAD, MAPD, and MSE.
  - (b) Use this forecasting method to forecast the next month.
4. Which forecasting method is best for each index? Which fund would you recommend buying?