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Dear IMC

I want to thank you personally for your work on modeling PE ratios. Your work has convinced us that we should not use this technique to model PE ratios in the long term future. However, we would like you to consider using a rational model in the short term future.

In this project, we would like you to model the price and earnings of the company you are analyzing with regression models. Using your manpower, find linear and quadratic regression models for the price as well as the earnings. Divide up the task by assigning members to find a linear regression model for the price, a linear regression model for the earnings, a quadratic regression model for the price, and a quadratic regression model for the earnings. Once you have found these models, you will divide the different models to obtain four different models for the PE ratio.

Your team will need to examine these models and decide which is the best model to help you forecast the PE ratio in each of the quarters for 2015. You should calculate the rate at which the PE ratio is changing at the beginning of 2015 and then use that number to show how the PE ratio will change in each quarter. Because of this you will assume a constant rate of change for all of 2015.

Your instructor has designed several technology assignments to help you come up with a strategy for solving this problem.

- Technology Assignment 4 Find a Regression Model for the Price and Earnings – In this assignment, you and your team will examine linear and quadratic regression models for the price and earnings.
- Technology Assignment 5 Calculate a Rational Model for the PE Ratio – In this assignment, each team member will divide the models from Technology Assignment 4 to find a model for the PE ratio..

Once these assignments are completed, you will need to determine which model from Technology Assignment 5 is best to use to forecast the PE ratio. Using this best model your

team will calculate the rate at which the PE ratio is changing and then use that number to forecast the PE ratio over the next four quarters.

Each of you has a key part in this project so you will need to communicate closely to make sure you do not duplicate effort unintentionally. We expect you to document your solution like your previous project. The documentation for your first project will be a good starting point for documenting this project.

Sincerely

Alex Hamilton

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Director of Research
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