# Homework

### Econometric Methods

#### Fall 1999

## Instructions

Using the data provided on the website (http://ladkins.bus.okstate.edu) and the SAS software, answer each of the following. The data file is called capm.dat. The assignment is due on Friday, 1 October.

## **Problems**

- 1. Do exercise 3.9 part (b) in your textbook.
- 2. At the 5% level test the null hypothesis that Mobil's  $\beta$  is one against the alternative that it is less than 1. What is the economic interpretation of a beta equal to 1? Less than 1?
- 3. Form a 95% confidence interval for  $\beta$ .
- 4. Finance theory says that the intercept should be zero in the CAPM model. Test the hypothesis that Mobil's intercept is zero against the alternative that it is not (at the 5% level). What do you conclude?
- 5. Estimate the model without an intercept and repeat items  $1,\ 2,\ \mathrm{and}\ 3$  above.
- 6. Write a short report (a page or so) summarizing what you know about Mobil Oil's stock and its relationship to the stock market as a whole.