Homework Assignment 5. This assignment does not have to be turned in.

1. (2 points) What would you expect to happen to ratings of different bonds during a recession?
2. (2 points) Suppose that government cuts the highest federal income tax rate from 36 to 30. What do you think would happen to the yields on municipal bonds?
3. (4 points) Suppose that the yield on one-year bonds today is 5%. Also assume that the yield on one-year bonds next year it is going to be 7%, two years from now it is going to be 3%, three years from now it will be 4%, and four years from now it will be 6%.
   a. Using the expectations hypothesis, determine the yields on the two-year bonds now, a year from now, and two years from now.
   b. Using the expectations hypothesis, determine the yields on the three-year bonds now, a year from now, and two years from now.
   c. Using yields on one-year, two-year, and three-year bonds plot three yield curves – today, a year from now, and two years from now.
   d. Do yields on bonds with different maturities move together? Are long-term yields more or less volatile than short-term yields? Is yield curve always upward sloping?
4. (2 points) Go to the Fed’s historical interest rate data page (http://www.federalreserve.gov/releases/h15/data.htm#fn3) and download the annual interest rates on the 3-month non-financial commercial paper and on the 3-month Treasury Bills (secondary market) starting from 1997. Plot the two series and comment on the movements of the spread between interest rates on commercial paper and T-Bills.