1st Homework – Bond Pricing and Trading
Due Wednesday, January 30, 2008

This homework requires Treasury prices from January 17th and 22nd (so you can start it on the 22nd). You can get these prices from the Wall Street Journal webpage (Bonds and STRIPS) or from the Bloomberg. You can use the prices I post on webCafe from the Bloomberg, but if you want to use prices from another source, include the relevant screens so we can see the prices you are using.

Assume Same-Day Settlement when Relevant

1. Consider three Treasuries maturing 5/15/17: an 8.75% coupon bond, a 4.5% coupon note and a zero-coupon STRIP (the WSJ lists a couple 5/15/17 STRIPS; for the purposes of this homework, use the last one listed).
   a. What are their bid and ask prices, not including accrued interest, on Thursday, January 17th?
   b. Establish whether it was cheaper to buy the 4.5% note directly, or to instead buy a portfolio of the 8.75% bond and the STRIP with the same cash flows
   c. Show that, for this comparison, it does not matter whether or not you include accrued interest (that is, you could add it in for each note, or leave it out, and your answer to b is the same).

2. Now look at the five-days-later prices of the same three securities on January 22nd. If you had followed the strategy of buying the cheaper one and selling the more expensive one on the 17th, and then unwinding the trade on the 22nd (i.e. sell on the 22nd what you bought on the 17th, and buy what you sold), what would your profit/loss have been?

3. Suppose that news of high inflation sent all yields to maturity up 0.25% (e.g. from 3.79% to 4.04%) from 1/17 to 1/22. What would the ask prices (as quoted, so not including accrued interest, and in 32nds) on 1/22 of the three 5/15/17 securities have been?