Project 4 - Price Momentum

Due on October 2 by 3:30 pm

FINA 4330 - Fall 2014

Trading Strategies and Financial Models

This project requires you to use Stocktrak to try and profit from the price momentum. You are required to take buy at least five stocks and to short at least five stocks. You may choose the dollar amounts you like as long as you keep your investment in each stock below \$50K. You may find an online stock screener helpful - for example, Yahoo Finance provides a good one. Keep in mind, however, that no stock screener can screen on all criteria you may want to screen on - sometimes you may have to use more than one screener and sometimes you may have to collect the info manually stock-by-stock.

i. Select the stocks you intend to short and the stocks you intend to buy. Report the tickers, your investment in each stock, and the values of the characteristics that led you to believe that these stocks should be bought/sold. Make sure that at least two characteristics, beyond the one that classifies firms as winners/losers, are the ones we discussed in class. Describe the reasoning why these characteristics make your firms a good subsample for exploiting the momentum effect. *(40 points)*

ii. Explain how you use what you learned about the short-term reversal to make your strategy more profitable. *(10 points)*

iii. Compute the return to S&P 500 in the past 36 months (Hint: you need one very simple formula). Looking at the return to S&P 500, do you predict your momentum strategy to be profitable? *(10 points)*

iv. Use the regression from Chordia and Shivakumar (JF 2002) to predict the return to the momentum strategy in the next month (you do not need to run a regression, you can borrow the coefficients from the slides). You may use the August 2014 values of the variables you need. Assume that the dividend yield is 2% and obtain the value of all other variables from FRED database at the St. Louis Fed branch. If you are doing the calculations right, in November 2011, DEF=1.27%, TB=0.01%, TERM=1.9%. You should use the returns as percentages, not as decimals (i.e., 2% is 2, not 0.02). *(15 points)*

v. Take the smallest winner stock in your portfolio and the smallest loser stock for your portfolio (smallest means the lowest market cap). Calculate their trading costs as the bid-ask spread plus the price impact. Assume a hedge fund intends to trade $2 million in each of the two stocks and faces the same price impact as anyone. The fund expect to complete the opening/closing of the positions in one day and intends to hold the positions for 6 months. How large the return to the strategy involving only those two stocks has to be before the hedge fund starts making profit? *(25 points)*