

BUSI 4440U Financial Econometrics

Possible Course project topics

Due: April 1, 2020.

The assignment#3 will link to your course project if you choose to do a project on stocks return predictability.

Choose a country or a stock market (data period January 1992 to December 2018)

- 1) Does a stock's idiosyncratic volatility (CAPM idiosyncratic volatility) cross-sectionally predict stock returns? (Theory being tested: CAPM)
- 2) Does a stock's book-to-market ratio cross-sectionally predict stock return (theory being tested: market efficiency).
- 3) Does a stock's earning to price ratio cross-sectionally predict stock return (theory being tested: market efficiency).
- 4) Does any other fundamental variable cross-sectionally predict stock return (theory being tested: market efficiency).

You need to go to Financial lab to download data from Datastream and ask the staff in the lab to find the accounting variable for the financial variables. You also need to run Fama-MacBath Regressions to perform these tests.

Steps:

- 1) Download all relevant data and calculate all needed financial variables from assignment#3
- 2) Sort all stocks by their financial variables into 5 or 10 portfolios.
- 3) Calculate the equal-weighted or value-weighted returns of each portfolio for the period.
- 4) Report these returns in a table and calculate the difference of returns between the highest ranked portfolio and lowest ranked portfolio (high minus low) for the period.
- 5) Run a CAPM model regression to get the alpha of each portfolio including the High minus low portfolio (H-L).
- 6) Run a FAMA-MacBath Regressions with each stock's excess return as dependent variable and the predictor as independent variable.
- 7) Report the t-statistics of independent variables on the FM regressions.

Note: before you run any sas codes, make sure you clean the data.

You present the project on April 1, 2020.

After your presentation, you email Your project report and PPT file to my TA Farqan at farqan.shabbir1@ontariotechu.net

and

me at Samuel.xinliang@uoit.ca.