



FE 570 - Project 2

Fall 2020



Waldyr Faustini

Project:

The project selected: "Download the trade and quote data for a stock of your choice for one day from Bloomberg, compute and compare the different liquidity measures discussed in class: bid-ask spread measure (Roll, effective, realized). Discuss the results."

Project Objective:

This project will compare different methods of measuring the liquidity of stocks during a day. The main bid-ask spread measures are: roll, effective and realized liquidity; I will use some knowledge learned through the classes and also some key books about microstructure and liquidity to discuss the results. I will present the theory and after that I will discuss my results.

The project scope will include only stock shares. I chose 4 stocks for the project: Berkshire Hathaway (ticker: BRK.B), Facebook (ticker: FB), United Airlines Holdings (ticker: UAL) and Amazon (ticker: AMZN). In addition, I will also collect the price data of the S&P 500 Index. In total I will get 5 different assets to analyze the data. These stocks were chosen because they are of well-known and reputable companies with high number of daily deals and are part of different business sectors as well.

The initial idea is to price these Stock shares for at least 5 different days. I will select at least one day pre Covid, another day with market in circuit break for this year, a day during March-May with Covid possible impact, a day with stock options expires in the market and finally the election-day. My goal is to analyze the data of these 5 different situations this year and hopefully I can find something interesting in my results. I carefully chose these different days for its uniqueness, which will help me highlight and analyze the difference in liquidity in each particular situation.

Data Collection and Analysis:

I will collect the data using Bloomberg Terminal and will analyze this data coding in R with some trading packages.

Project Timeline:

Date	Task
Oct 26 - Nov 05	Data Collection
Nov 05 – Nov 12	Coding in R to analyze the data
Nov 12 – Nov 19	Analyze Results
Nov 19 – Nov 26	Report Writing
Nov 26 – Nov 29	Draft Report
Nov 30	Final Project Delivery

References:

- [1] Florescu, Ionut and Maria Mariani, 2007 . *Empirical Market Microstructure*. Oxford University Press.
- [2] O'hara, Maureen, 1997. *Market Microstructure Theory*. Blackwell Publishing
- [3] Harris, Larry, 2003. *Trading & Exchanges : Market Microstructure for Practitioners*. Oxford University Press.a
- [4] Foucault, Thierry and Marco Pagano. *Market Liquidity* . Oxford University Press.