

MGMT 638

Session 7

Kerry Back

Fall 2025

Agenda

1. Algos, HFTs, and quants
2. Alphas and portfolio improvement
3. data2_nov2025.xlsx
4. Traditional stock analysis (valuation by multiples)

Algos, HFTs, and Quants

- Algorithmic trading: using an algorithm to optimally execute a large order over time
- High frequency trading: submitting and cancelling orders to earn bid-ask spreads or to hit bids and asks that are slightly mispriced
- Quantitative investing: longer-horizon investing based on quantitative signals
- [Algos, HFTs, and Quants Explained video](#)
- [Quant Investing Revolution video](#)

New Dataset

- Download [data2_nov2025.xlsx](#)
- Ask Claude to describe the data and to list all columns.

Traditional Stock Analysis

- Let's pick a stock to analyze.
- Ask Claude to use the data2_nov2025.xlsx data to find stocks in the same industry with similar marketcaps and to list their PE and PB ratios, ROE, and 5-year revenue growth.
- Does the company we're analyzing look undervalued, overvalued, or correctly valued?
- Try to understand the company's valuation using other data from data2_nov2025.xlsx. And ask Claude to get other data as needed from the Rice database.

Research Report

- Ask Claude to do online research to find any information relevant to the company's valuation.
- Ask Claude to create a Word doc containing an analysis of the company based on the peer data, any other data gathered, and the online research.
- Is there other information we would want to look at?