

Quantitative Equity Investing

MGMT 675: AI-Assisted Financial Analysis



RICE | BUSINESS
Jones Graduate School of Business

Motivation: Can we profitably trade on quantitative signals?

1. Example dataset
2. Returns of portfolios formed by sorting on characteristics
3. Regressing returns on characteristics at each date
4. Training a model on past data and sorting on its predictions

Example Data: `stocks.csv`

- Weekly data on 800 to 1,000 stocks from 2021 to present
- Roughly top half of Russell 2000
 - Sorted on marketcap on Jan 1, 2021. Chose stocks from 1,001 through 2,000.
 - Followed them to present. Down to around 800 now due to mergers, etc.
- All items are as of the end-of-week market close except ret
- ret is the return from close of the date shown through close of the following week
- Original daily data comes from [Nasdaq Data Link](#), specifically [Sharadar Equity Bundle](#)
- Download stocks.csv from the Schedule page and upload to Julius. Ask Julius to describe the data.

Variables

- open, high, low are for the week
- volume is average daily volume for the week
- closeunadj is split but not dividend-adjusted close for the week
- closeadj is split and dividend-adjusted close for the week
- pb, pe, ps are price to book, earnings, and sales
- evebit, evebitda are enterprise value to EBIT and EBITDA
- lag1 is the return over the week ending on the date shown
- lag4 is the return over the prior 4 weeks including the week ending on the date shown, etc.
- rsi is the [Relative Strength Index](#)