Corner Rank: AMS 520 Final Iteration

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Original Strategy Recap

Basic Methodology:

- Select candidate alphas, prioritizing extreme alphas with values closest to their next period returns.
- Optimize portfolio weights with a turnover preference parameter and constraints that limit changes in weights.
- Rebalance weekly with each update in alpha data.

Benefits:

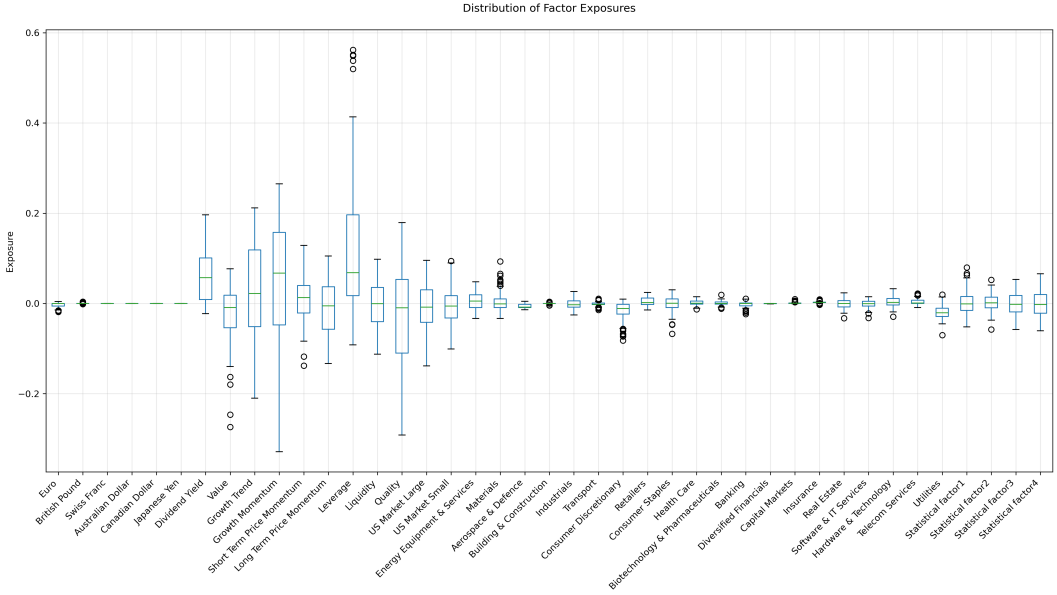
- Low transaction costs.
- Preservation of alpha signals in the portfolio.

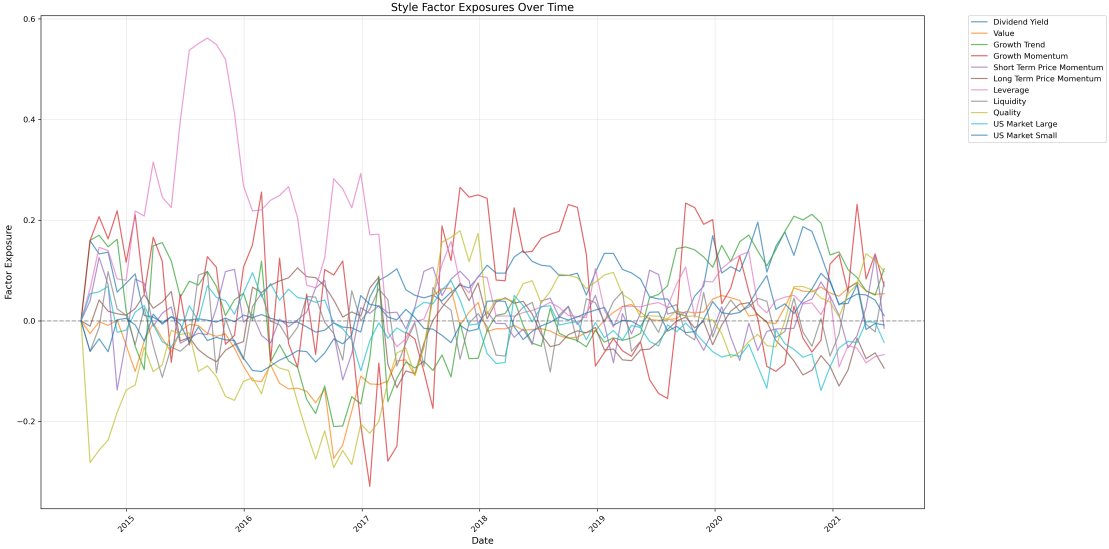
Changes Since Last Presentation

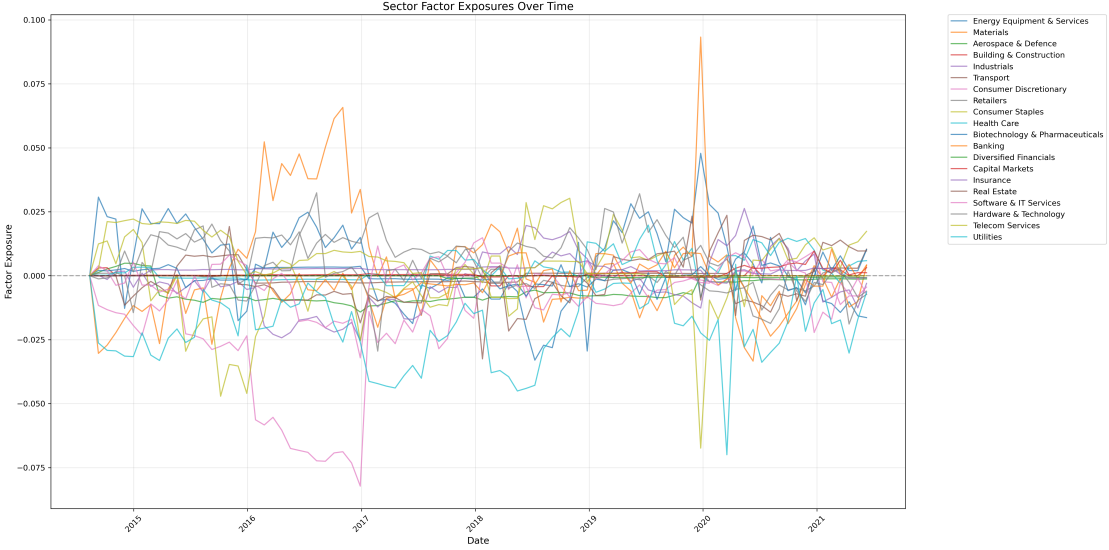
1. Included a simple factor-neutral objective in the optimization that attempts to produce a factor-neutral portfolio (squared exposures go to zero for each factor).
2. Portfolio weights are now a linear combination of the two objectives.
3. Tradeoff between factor-neutral weights and original weights is given by a simple parameter between 0 and 1, where:
   - 0 represents only original optimization weights.
   - 1 represents only factor-neutral weights.

Results

- Exposures are more consolidated in Value, Quality, Market Large, etc. which is what the expected return model was built on.
- Portfolio returns are now very exposed to style factors.
- Total absolute portfolio exposure is down about $1/3$ since the previous iteration.
- There are some unintended high exposures, such as US Market Small.


Distribution of Factor Exposures
Exposure
0.6
0.4
0.2
0.0
−0.2
Euro
British Pound
Swiss Franc
Australian Dollar
Canadian Dollar
Japanese Yen
Dividend Yield
Value
Growth Trend
Growth Momentum
Short Term Price Momentum
Long Term Price Momentum
Leverage
Liquidity
Quality
US Market Large
US Market Small
Energy Equipment & Services
Materials
Aerospace & Defence
Building & Construction
Industrials
Transport
Consumer Discretionary
Retailers
Consumer Staples
Health Care
Biotechnology & Pharmaceuticals
Banking
Diversified Financials
Capital Markets
Insurance
Real Estate
Software & IT Services
Hardware & Technology
Telecom Services
Utilities
Statistical factor1
Statistical factor2
Statistical factor3
Statistical factor4


Style Factor Exposures Over Time
Factor Exposure
0.6
0.4
0.2
0.0
−0.2
2015
2016
2017
2018
2019
2020
2021
Date
Dividend Yield
Value
Growth Trend
Growth Momentum
Short Term Price Momentum
Long Term Price Momentum
Leverage
Liquidity
Quality
US Market Large
US Market Small


Sector Factor Exposures Over Time
Factor Exposure
Date
0.100
0.075
0.050
0.025
0.000
−0.025
−0.050
−0.075
2015
2016
2017
2018
2019
2020
2021
Energy Equipment & Services
Materials
Aerospace & Defence
Building & Construction
Industrials
Transport
Consumer Discretionary
Retailers
Consumer Staples
Health Care
Biotechnology & Pharmaceuticals
Banking
Diversified Financials
Capital Markets
Insurance
Real Estate
Software & IT Services
Hardware & Technology
Telecom Services
Utilities