Factor Performance & Research Update

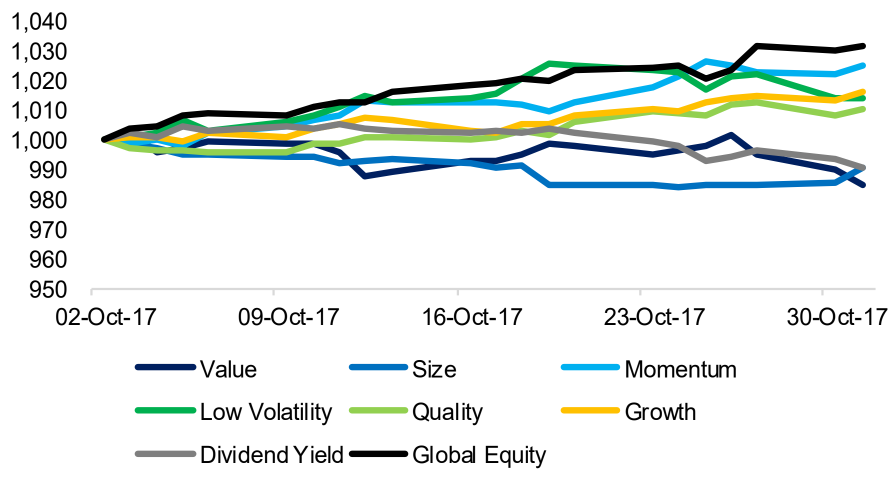
Factor Research

Factor Performance Update

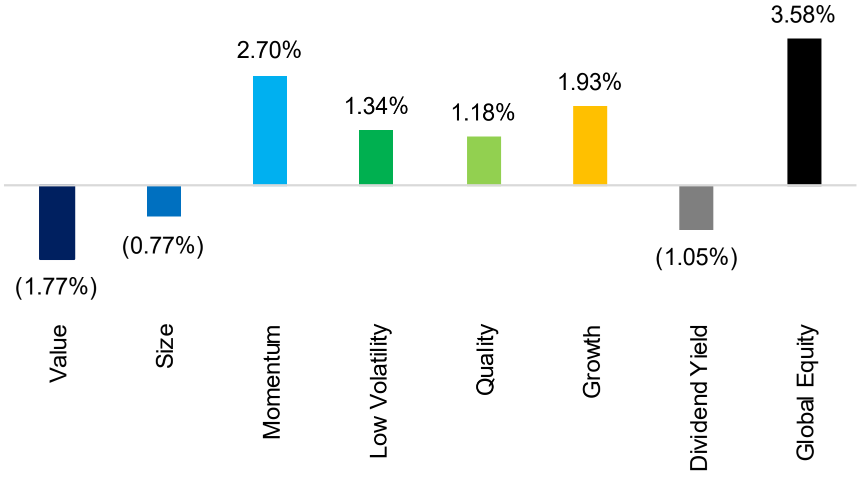
Factor Performance Update: October

January 2017 Consensus Trade, i.e. Value, Continues to Underperform

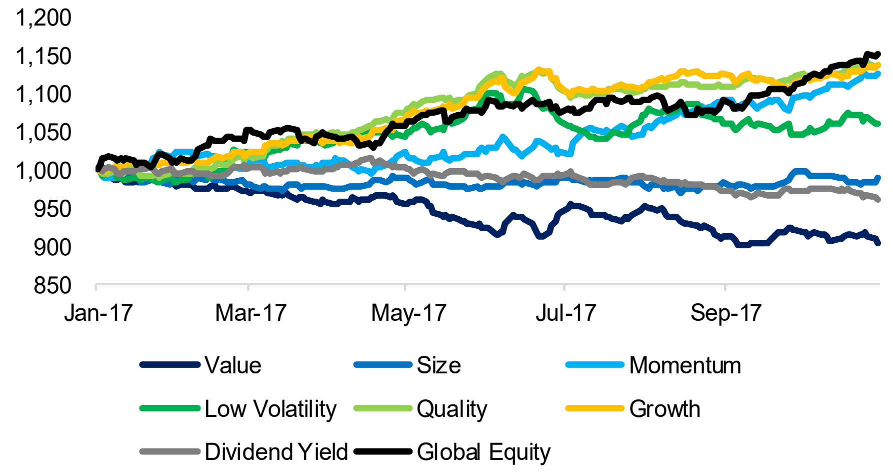
Global Equity Factors (L/S): Last Month



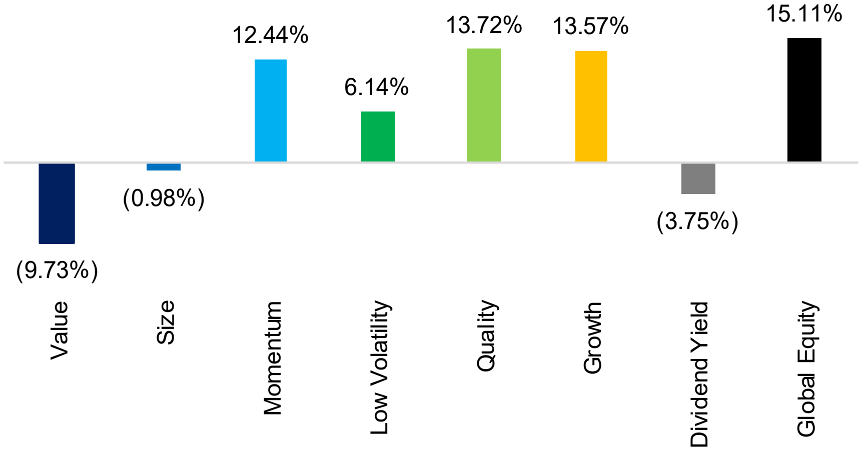
Global Equity Factors (L/S): Last Month



Global Equity Factors (L/S): YTD



Global Equity Factors (L/S): YTD



Factor Research

Research Topic 1:

Death, Taxes and Mean-Reversion

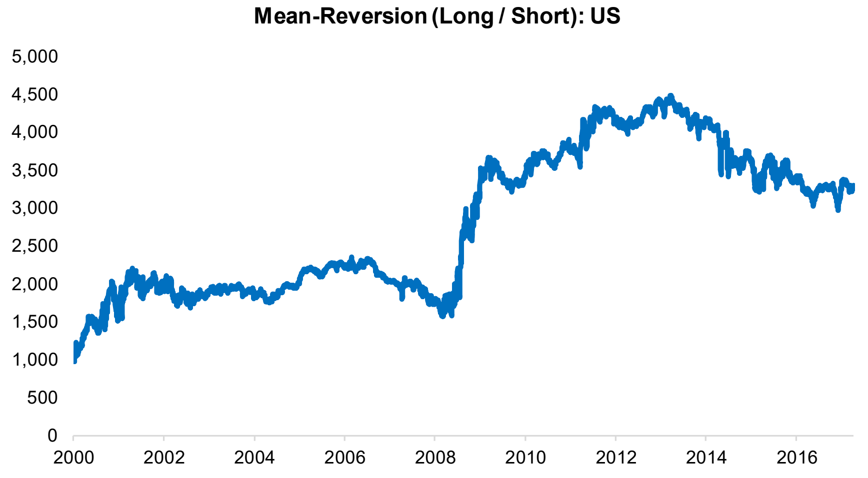
Death, Taxes & Mean-Reversion (I / II)

Low Market Volatility, Low Mean-Reversion Returns

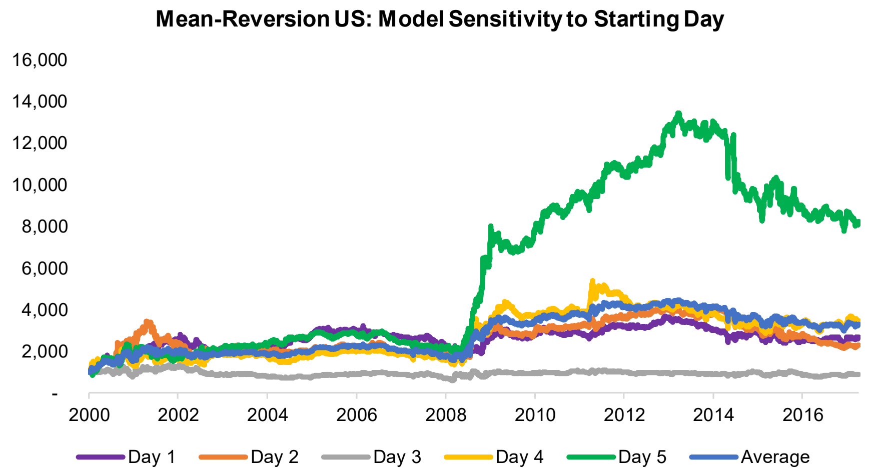
Comment

- Mean-Reversion is defined as buying last week's losers and shorting the winners
- Has not performed well over last few years
  - Requires higher levels of market volatility
- Highly sensitive to model assumptions

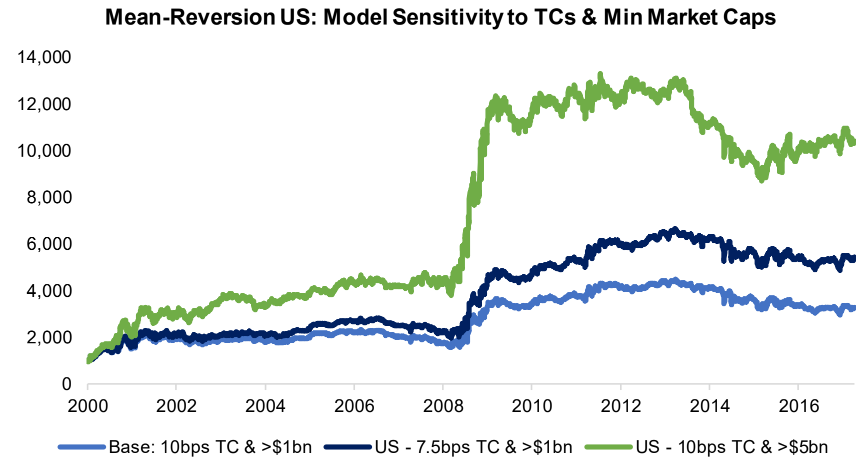
Mean-Reversion (Long / Short): US



Mean-Reversion US: Model Sensitivity to Starting Day



Model Sensitivity to TCs & Min Market Caps



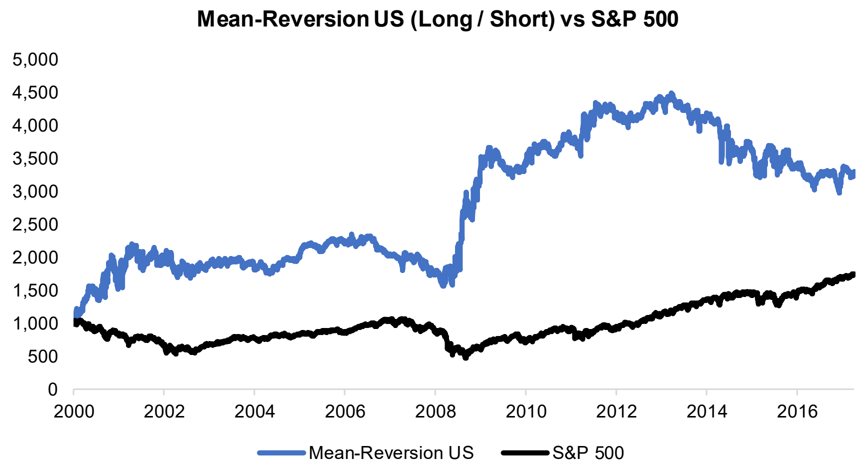
Death, Taxes & Mean-Reversion (II / II)

Attractive Addition for an Equity-Centric Portfolio

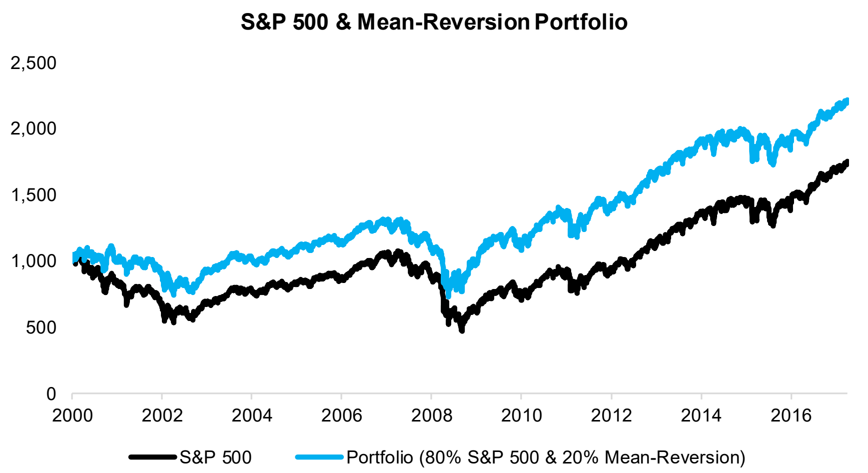
Comment

- Mean-Reversion does well when volatility is high, which occurs typically when markets decline
  - Attractive addition for an equity-centric portfolio

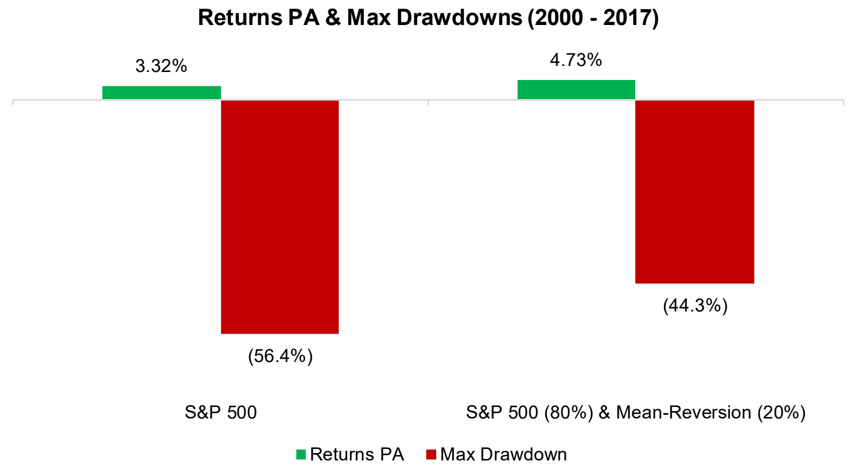
Mean-Reversion (Long / Short): US



S&P 500 & Mean-Reversion Portfolio



Returns PA & Max Drawdowns (2000 - 2017)



Research Topic 2:

Quality Factor: Zero Alpha for Most Investors?

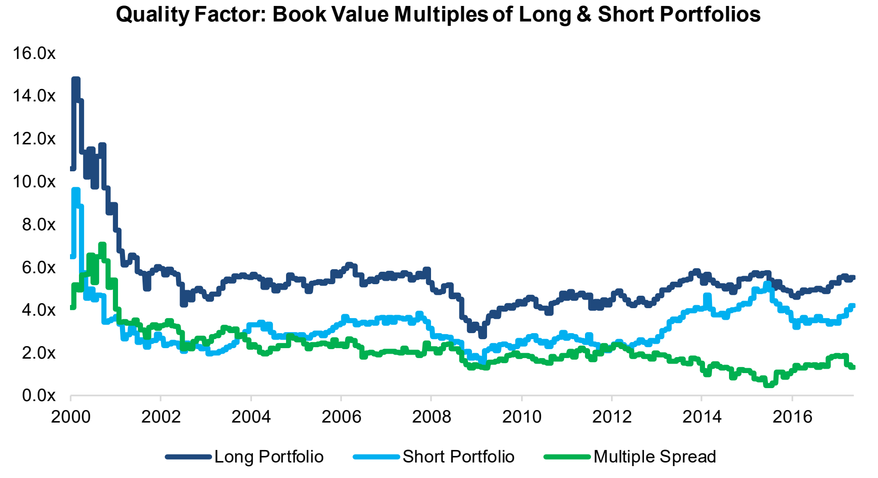
Quality Factor: Zero Alpha for Most Investors? (I / II)

Why Should there be Positive Returns from the Quality Factor?

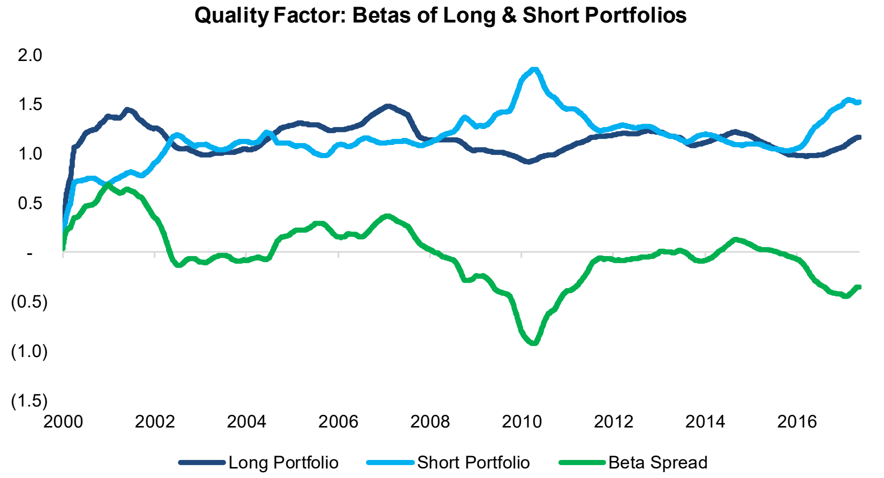
Comment

- Quality factor (long/short) is defined as a combination of return-on-equity and debt-over-equity
- It's difficult to rationalise why there should be excess returns from high quality stocks
  - Most investors like stocks with quality characteristics

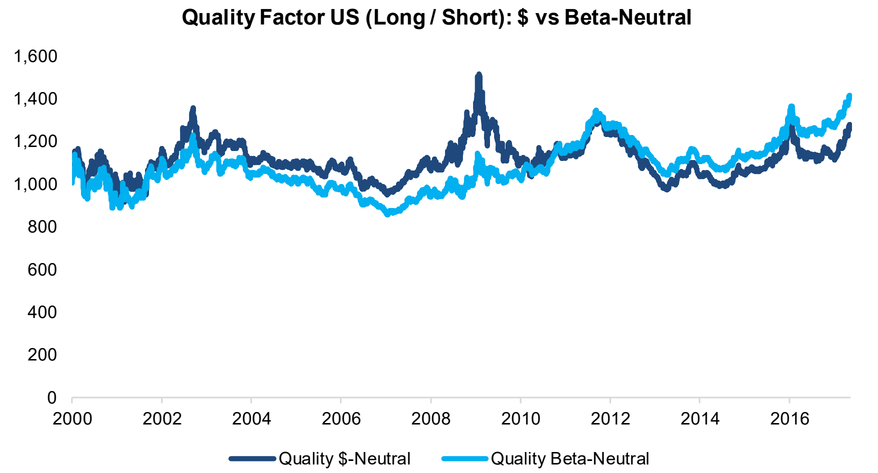
Quality Factor: Book Value Multiples of Long & Short Portfolios



Quality Factor US (Long / Short): $ vs Beta-Neutral



Quality Factor US (Long / Short): $ vs Beta-Neutral



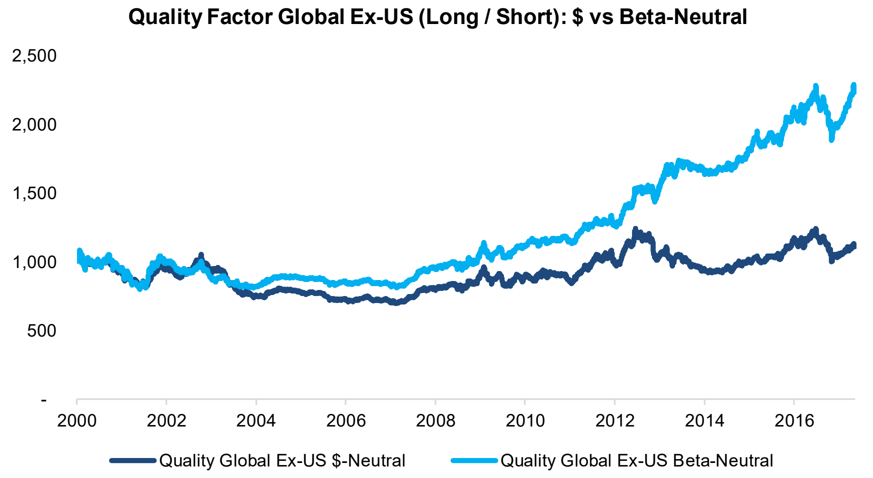
Quality Factor: Zero Alpha for Most Investors? (II / II)

Requires Beta-Neutrality for Positive Excess Returns

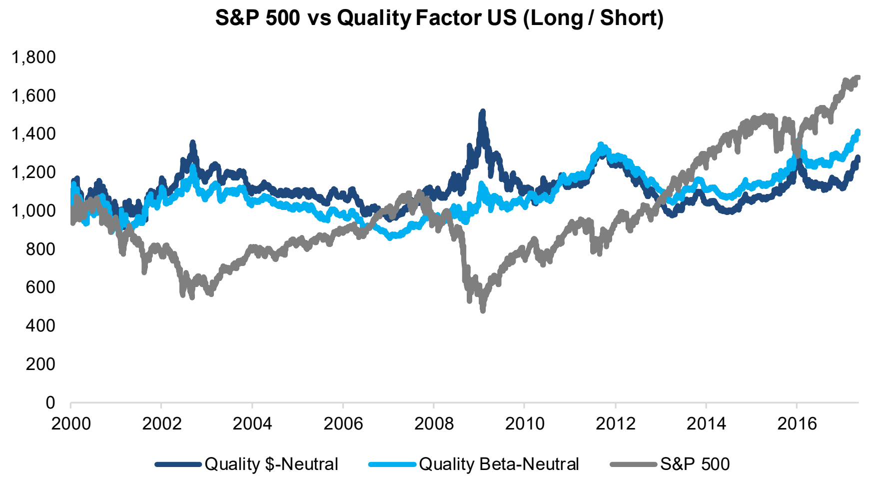
Comment

- Factor construction matters
  - Significant difference between beta and $-neutral portfolios
- Quality tends to move opposite of the market
  - Attractive addition to an equity-centric portfolio

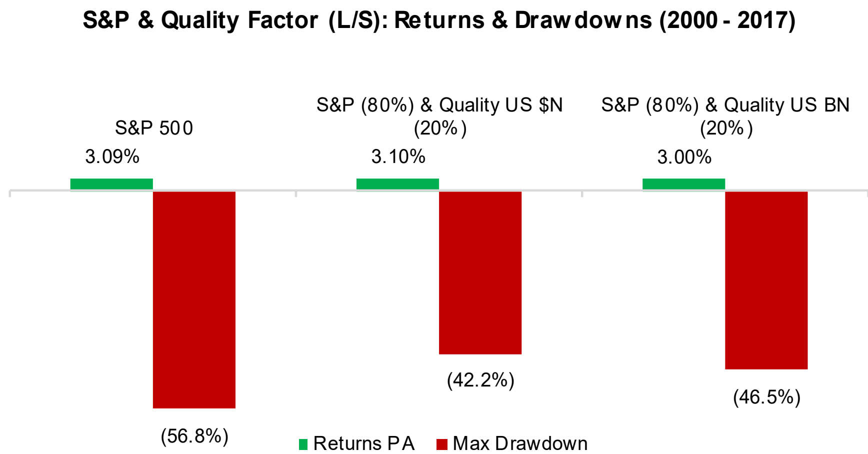
Quality Factor Global Ex-US: $ vs Beta-Neutral



S&P 500 vs Quality Factor US (Long / Short)



S&P 500 & Quality Factor: Return PA & Max Drawdowns



Factor Research

Research Topic 3:

Factor Allocation 101: Equal vs Volatility-Weighted?

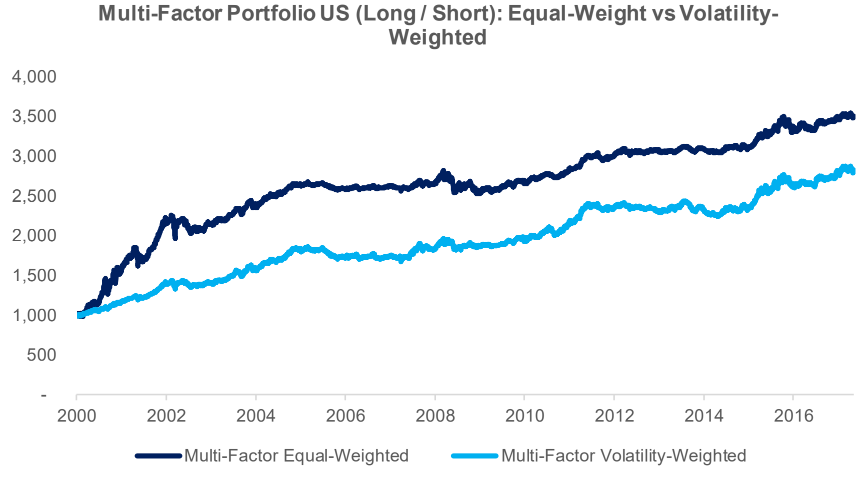
Factor Allocation 101: Equal vs Volatility-Weighted? (I / II)

Vol-Weighted Portfolios Don't Show Higher Returns than Equal-Weight Portfolios

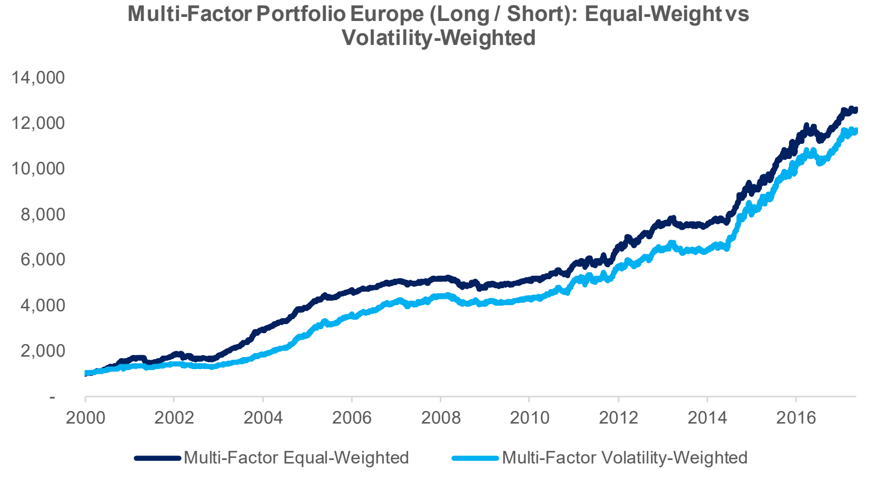
Comment

- Equal-weight and volatility-weighted allocations are two common factor allocation frameworks
- Multi-factor portfolios include Value, Size, Momentum, Low Volatility, Quality and Growth
  - All constructed as beta-neutral long-short portfolios

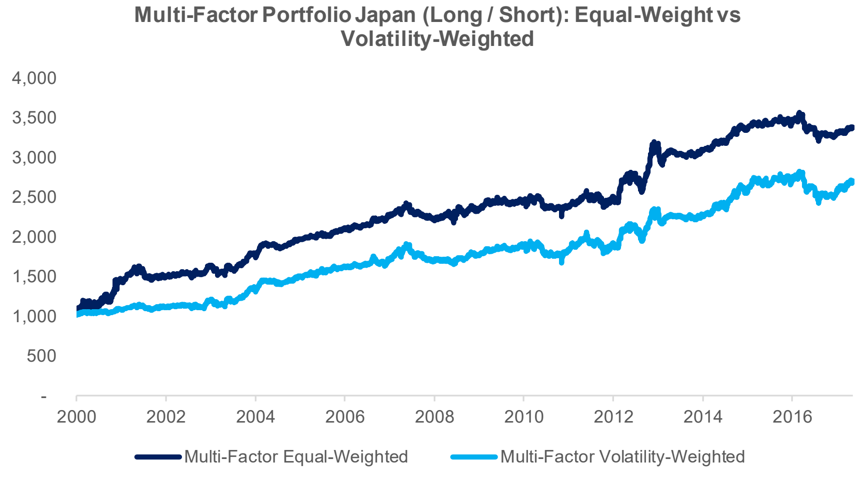
Multi-Factor Portfolio US (L/S): Equal- vs Vol-Weighted



Multi-Factor Portfolio Europe (L/S): Equal- vs Vol-Weighted



Multi-Factor Portfolio Japan (L/S): Equal- vs Vol-Weighted



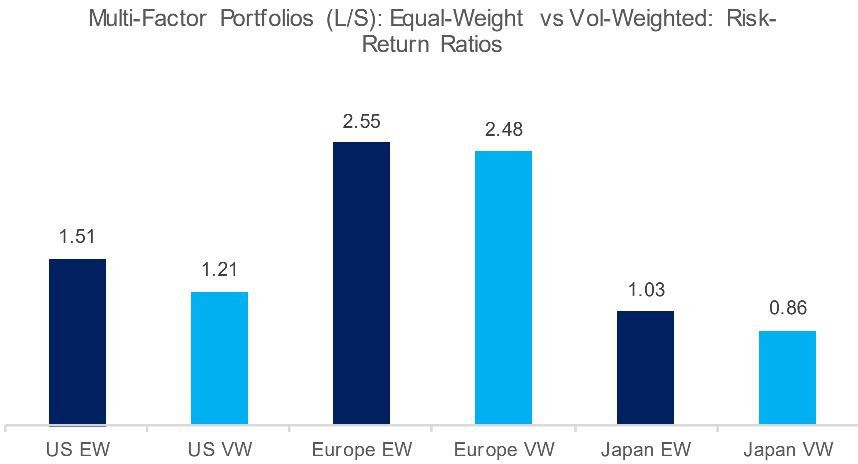
Factor Allocation 101: Equal vs Volatility-Weighted? (II / II)

Risk-Return Ratios and Max Draw-Downs Don't Improve with Vol-Weighting

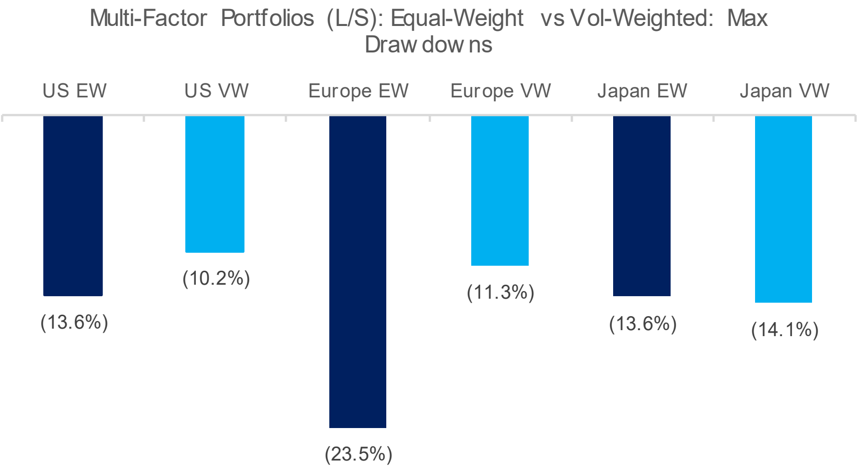
Comment

- Risk-return ratios and drawdowns don't improve with volatility-weighted allocations
- Different reasons can explain the superiority of equal-weight allocations
  - The relationship between historical and future volatility is weak
  - Higher factor volatility does not imply lower risk-return ratios for all factors

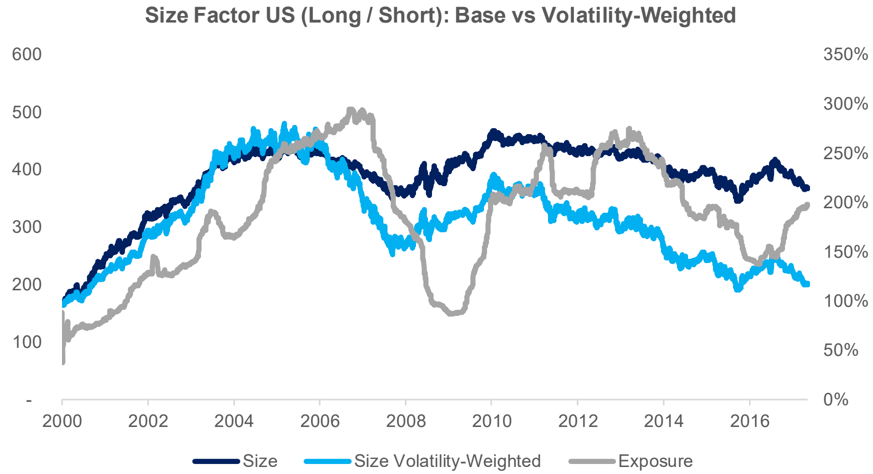
Risk-Return Ratios



Max Drawdowns



Size Factor US: Base vs Volatility-Weighted



Q&A

Contact Details & Disclaimer

Contact Details

Subscribe to our research:

www.factorresearch.com/research

Follow us on Twitter:

#FactorResearch

Follow us on LinkedIn:

https://uk.linkedin.com/company/factorresearch

www.factorresearch.com

Email: info@factorresearch.com

Tel: +44 20 7193 4044

FactorResearch

1-6 Yarmouth Place

W1J 7BU, London

United Kingdom

Disclaimer

By reading this report, you agree to the following terms and conditions and other applicable law. If you do not agree to be bound by these terms and conditions, please do not use this report. We reserve the right to make changes to this report and these conditions at any time.

Terms

- The information and material provided in this report is "as is" and FactorResearch expressly disclaims all warranties of any kind whether express or implied including the warranties of merchantability and fitness for a particular purpose.
- Neither FactorResearch nor any of its affiliates, directors, employees or other representatives will be liable for damages arising out of or in connection with the use of this report. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit, loss of or damage to property and claims of third parties.
- Any use you make of the information provided in this report is at your own risk.

Recipients

This report is intended for professional clients and not for retail investors.