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The pioneering spirit

Comments on

"The distribution of cross sectional momentum returns"

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Motivation

- Large academic and industry interest on cross-sectional momentum (CSM) strategies and their returns
  - Theory has not investigated the distributional properties of these returns
  - Analytical results can improve our understanding of these distributional properties

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This paper

- Assumes that underlying asset returns are multivariate normal.
- Derives the density of CSM returns in analytic form, along with moments of all orders.
- Illustrates the case with two risky assets, providing many interesting and instructive insights:
  - Mixture of (skew-)normal
  - Skewness dependence to assets correlation
  - Kurtosis dependence to Sharpe ratio

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Comment (1)

- Real empirical challenge
  - Pick two available assets with sufficiently long time span and compute their CSM returns for various investment horizons.
  - Plot the empirical distributions of CSM returns for various horizons.
  - Compare to the analytical ones.

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Comment (2)

- Characterization of the skewness and especially the kurtosis of CSM returns can be exploited to further analyze (e.g., infer) the size and frequency of momentum crashes discussed elsewhere in the literature.

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Comment (3)

- Risk management and momentum strategies
  - While options on CSM strategies are not traded, knowledge about the distribution of CSM returns may help in designing hedging strategies.
- Asset allocation
  - Similar to asset allocation with derivatives (i.e. options), the paper results open the room for analyzing asset allocation with momentum strategies in the portfolio menu.

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Comment (4)

- Behavioral challenge
  - Who are the investors whose attitude towards risk is consistent with optimally choosing momentum portfolio strategies?

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Conclusion

- Very nice and technically competent article that explicitly derives the distributional properties of CSM returns.
- These properties can exploited in many contexts. Looking forward to seeing them in real applications.

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