

Applying Factors in Chinese Equity Markets

Original Article: "Factor Investing In the China A-Share Market" by Rohit Shrivastava, Jaime H. Lee, and George D. Mussalli, *AIAR Volume 8, Issue 3*
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Excerpted from the *Alternative Investment Analyst Review*, Volume 8, Issue 3

The Alternative Investment Analyst Review is the official publication of the CAIA Association. Access to the most current issue is an exclusive benefit of CAIA Membership while archived issues are available to the public in the Perspectives section at CAIA.org.

[The full article may be accessed here.](#)

Central Issue of the Paper

With recent increased visibility into the China A-shares market, quantitative investors may finally have what they need to build a diversified equity portfolio. However, while investors can better link fundamental data to price returns, factor investing in the China A-share market brings its own set of unique challenges and results. In this Viewpoint, we discuss some of the takeaways from Rohit Shrivastava, Jaime H. Lee, and George D. Mussalli's article, "Factor Investing In the China A-Share Market", which as published in Volume 8, Issue 3 of the *Alternative Investment Analyst Review*.

Approach Employed by Paper

What Makes China A-Share Unique?

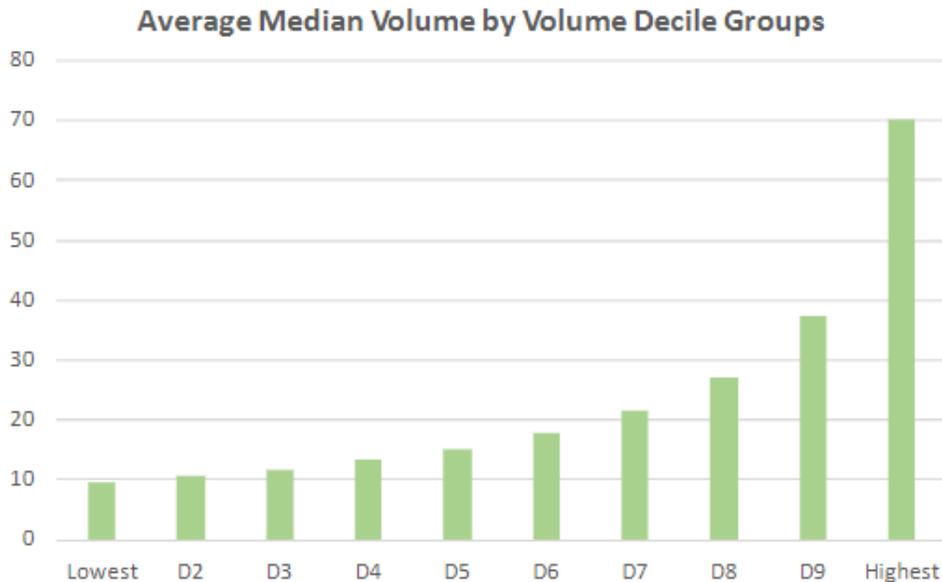
Relative to the rest of the world, the authors identify three major characteristics that differentiate the China A-share market from the rest of the world:

- 1) Retail Investor Participation – retail investors account for 80% of aggregate trading volume in the A-share market. With such a high retail presence, certain behavioral effects are magnified. For example, Chinese retail investors trade almost four times more frequently than US investors and they hold almost 60% of the aggregate market – one of the highest ownership percentages in the world. Since retail investors tend to be more emotional than institutional investors, price movements in A-share companies tend to be very sentiment-based and more reactive than their H-shares counterparts.
- 2) Government Intervention – Chinese markets are heavily regulated by the CSRC, and there are many examples of when regulators have exercised their authority as a means to control markets. More recently, the Chinese government has made it a priority to deleverage balance sheets of publicly listed firms.
- 3) Corporate Governance – there are two major differentiators regarding Chinese corporate governance: state-owned enterprises (SOEs) and split-share structure. SOEs are government-controlled companies that are run by state-appointed executives to align company interests with

state initiatives. Split-share structures are applied to some SOEs, meaning a portion of their shares are non-tradable.

These three characteristics can help explain why certain factors are more robust than others, suggesting there may be opportunities for fundamentally driven quantitative investors to add value.

The China A-Share Market and Tested Factors



When the authors broke down certain metrics of the A-share market, they noticed some interesting liquidity profiles (pictured above). Specifically, the bottom five deciles of companies in the market all have very similar liquidity profiles, with only marginally increased liquidity until the top two deciles. This is important to the study, as a lack of liquidity, stock suspensions, delistings, and regulatory events could impact factor measurements.

The authors measured four primary factors in the study: value (buying cheap stocks and selling expensive stocks), momentum (buying past winners and selling past losers), quality/profitability/accruals (buying high quality and selling low quality), and sentiment (measuring crowdsourced views on stocks). They then applied a proprietary contextual modeling framework, which is designed to better identify return drivers of each stock independently rather than a one-size-fits-all model.

Findings of the Paper

While well-known factors such as value, momentum, quality and profitability tend to be very robust in other markets around the world, their application to the China A-share market is mixed at best. More specifically, valuation-based and sentiment-based factors appear to work well throughout the equity market. Quality and profitability are positive but muted, and price momentum does not appear to work well.
