



Discussion:
Implication of Preference for Positive Skewness
to Asset Pricing: Evidence from the Japanese
Stock Market
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Summary

Motivation:

- Popular asset pricing models do not fully account for investor risk preferences
- Empirical studies poorly explain cross-sectional variation of stock returns
- CAPM performs poorly on Japanese stock market data
- SD approach is less restrictive than mean-variance approach

Research goal: investigate role of positive skewness in asset pricing and test if Japanese investors have preference for positive skewness

Main hypothesis: Japanese investors exhibit preference for positive skewness. In such a case, longing 3rd-order stochastic dominant stocks and shorting dominated stocks will yield premium over market

Data: analysis is performed using daily returns on 197 Japanese stocks (comprising Nikkei 225) from 05/2004 to 10/2014

Main result: Japanese investors exhibit preference for positive skewness but display no dislike for negative skewness

Comments and Suggestions I

Overall, empirical results look very much **mixed** to me. It is difficult to draw definitive conclusions from them. I suggest that the authors:

- Expand the evaluation of dominant and dominated stock portfolios to other instances of bull and bear markets (i.e., go beyond the two selected periods)
- Study robustness of results to the approach of creating dominant and dominated stock portfolio. E.g., why not create a portfolio comprised of **all** dominated stocks, rather than just 20 randomly selected dominated stocks?

Results in Panels B and C of Table 3 seem to provide evidence **against** the main hypothesis in that the TSD portfolio is seen **not** to yield a premium over Nikkei 225 on a consistent basis:

- These findings need to be elaborated on and better explained
- Perhaps the implication of the main hypothesis needs to be reformulated. E.g., the authors could more prominently separate preference for positive skewness from dislike of negative skewness

Comments and Suggestions II

The authors provide reasons for focusing on Japanese stock market and expect the results for this market to differ from those for other markets. Such empirical strategy seems quite **restrictive**:

- Preference for positive skewness may be widespread. Why not test it using data for US and other markets? Perhaps the Japanese market is not unique

SD approach and—I guess, also—Babbel and Herce's (2007) algorithm require knowledge of the **entire return distribution** (i.e., return CDF). I have a few related concerns:

- My best guess is that the authors estimate a return CDF based on 120–130 daily return observations. This number is likely sufficient to estimate mean and variance. But is it sufficient to accurately characterize the **tails** of the distribution? Some evidence along these lines would help
- True CDFs are unknown and empirical analysis produces CDF **estimates** only. What is the **confidence region** around these estimates? Could this uncertainty affect construction of dominant and dominated stock portfolios?

Minor Suggestions I

Abstract: negative skewed assets → negatively skewed assets

p. 1: show that the presence → show the presence

p. 1: the stochastic dominance considers → the **SD approach** considers

p. 1: provides practitioners a powerful → provides practitioners **with** a powerful

Also, review and improve the last sentence on p. 1

p. 2: sknewness → skewness; same typo on p. 4

p. 2: Japanese Stock market → Japanese **s**tock market

p. 2: Section 5 is the conclusion → Section 5 concludes

p. 3: “means of the considered assets are equal”: Did you intend to say that mean **returns** are equal?

p. 3: investors is higher → investors **are** higher

Minor Suggestions II

p. 4: per capita**l** → per capita

p. 4: “what has been **tested**”: Did you intend to say “**obtained**” here?

p. 6: is not depend on → is not depend**ent** on

p. 6: overall, the discussion of different orders of SD is not entirely clear. It seems the authors are presenting several definitions in the paper. It would be helpful to clarify which definition is actually used in the empirical analysis. Also, it would help if the authors commented on the extent to which these different definitions are consistent with each other

p. 7: I suggest you closely review this page for possible typos in the definitions of SD

p. 8, last paragraph of Section 3: the descriptions of the time frames for the bearish market and the bullish market are confusing

p. 8: Table 2 and Table 3 reports → Tables 2 and 3 report

p. 10: does not performance → does not **perform**