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Kappa ratios and (higher-order) stochastic dominance

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Risk Management

Aims and scope →

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<u>Distribution Theory</u> <u>Multivariate Analysis</u> <u>Power law</u> <u>Stochastic Calculus</u>

Stochastic Analysis Order, Lattices, Ordered Algebraic Structures

Notes

- 1. We note that there are other approaches to measure risk, see, for example, Bea (2009) and Kutan and Yaya (2016).
- 2. We denote risk-seeking SD for risk seekers as RSD while Levy (2015) denotes

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American Journal of Economics and Finance 25: 188-201.

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Balder, S., and N. Schweizer. 2017. Risk aversion vs. the omega ratio: Consistency results. *Finance Research Letters* 21: 78–84.

Article Google Scholar

Bea, R., I. Mitroff, D. Farber, H. Foster, and K.H. Roberts. 2009. A new approach to risk: The implications of E3. *Risk Management* 11 (1): 30–43.

Article Google Scholar

Beedles, W.L. 1979. Return, dispersion and skewness: Synthesis and investment

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Clark, E., Z. Qiao, and W.K. Wong. 2016. Theories of risk: Testing investor behavior on the taiwan stock and stock index futures markets. *Economic Inquiry* 54 (2): 907–924.

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Darsinos, T., and S. Satchell. 2004. Generalizing universal performance measures. *Risk* 17: 80–84.

Google Scholar

Fong, W.M., H.H. Lean, and W.K. Wong. 2008. Stochastic dominance and behavior towards risk: The market for internet stocks. *Journal of Economic Behavior and Organization* 68 (1): 194–208.

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Guo, X., and W.K. Wong. 2016. Multivariate stochastic dominance for risk averters and risk seekers. *RAIRO-Operations Research* 50 (3): 575–586.

Article Google Scholar

Guo, X., and Wong, W.K. 2017. The preferences of omega ratio for risk averters and risk seekers. Social Science Research Network Working Paper Series 2938547.

Hammond, J.S. 1974. Simplifying the choice between uncertain prospects where preference is nonlinear. *Management Science* 20 (7): 1047–1072.

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Leitner, J. 2005. A short note on second-order stochastic dominance preserving coherent risk measures. *Mathematical Finance* 15 (4): 649–651.

Article Google Scholar

Leung, P.L., and W.K. Wong. 2008. On testing the equality of the multiple Sharpe Ratios, with application on the evaluation of iShares. *Journal of Risk* 10 (3): 1–16.

Article Google Scholar

Levy, H. 1969. A utility function depending on the first three moments. *Journal of Finance* 24 (4): 715–719.

Article Google Scholar

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Markowitz, H.M. 1952b. The utility of wealth. *Journal of Political Economy* 60: 151–156.

Article Google Scholar

Niu, C.Z., W.K. Wong, and L.X. Zhu. 2016. *First stochastic dominance and risk measurement; MPRA Paper 75027*. Germany: University Library of Munich.

Google Scholar

Ogryczak, W., and R. Ruszczyński. 1999. From stochastic dominance to mean-risk models: Semideviations as risk measures. *European Journal of Operational Research* 116: 33–50.

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Sharpe, W.F. 1966. Mutual funds performance. *Journal of Business* 39: 119-138.

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Sortino, F.A., and R. van der Meer. 1991. Downside risk. *Journal of Portfolio Management* 17: 27–31.

Article Google Scholar

Sriboonchitta, S., W.K. Wong, S. Dhompongsa, and H.T. Nguyen. 2009. *Stochastic dominance and applications to finance*.. Risk and economics Boca Raton:

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Wong, W.K., and C.K. Li. 1999. A note on convex stochastic dominance theory. *Economics Letters* 62: 293–300.

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Wong, W.K., and C. Ma. 2008. Preferences over location-scale family. *Economic Theory* 37: 119–146.

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Wing-Keung Wong

Department of Economics, Lingnan University, Tuen Mun, Hong Kong

Wing-Keung Wong

School of Business, Ningbo University, Ningbo, China

Qunfang Xu

Department of Finance, College of Management, Asia University, 500,

Lioufeng Rd., Wufeng, Taichung, Taiwan

Wing-Keung Wong

Corresponding author

Correspondence to Wing-Keung Wong

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