



Higher order moments of the estimated tangency portfolio weights

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Abstract

In this paper we consider the estimated weights of tangency portfolio. The returns are assumed to be independently and multivariate normally distributed. We derive analytical expressions for the higher order non-central and central moments of these weights. Moreover, the expressions for mean, variance, skewness and kurtosis of the estimated weights are obtained in closed-forms. Finally, we complement our result with an empirical study where we analyze a portfolio with actual returns of eight financial indexes listed in NASDAQ stock exchange.

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