Performance Evaluation of Mutual Fund Investments: The Impact of Non-Normality and Time-Varying Volatility

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Abstract

Extending previous work on mutual fund pricing, this paper introduces the idea of modeling the conditional distribution of mutual fund returns using a fat tailed density and a time-varying conditional variance. This approach takes into account the stylized facts of mutual fund return series, that is heteroscedasticity and deviations from normality. We evaluate mutual fund performance using multifactor asset pricing models, with the relevant risk factors being identified through standard model selection techniques. We explore potential impacts of our approach by analyzing individual mutual funds and show that it can be economically important.

JEL classification: G11; G12; C11

Keywords: Fat tails; GARCH; Model selection techniques; Mutual funds; Risk factors; Portfolio construction

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