The peer performance of hedge funds

David Ardia[a,b,*], Kris Boudt[c,d]

[a]*Département de finance, assurance et immobilier, Université Laval, Québec, Canada*
[b]*Centre interuniversitaire sur le risque, les politiques économiques et l'emploi, Québec, Canada*
[c]*Solvay Business School, Vrije Universiteit Brussel, Belgium*
[d]*Faculty of Economics and Business, VU University Amsterdam, The Netherlands*

Abstract

An important component in the analysis of a (hedge) fund returns is to measure the fund's performance with respect to the group of peer funds. The industry standard is to rank funds based on their risk-adjusted return and conclude that the fund outperforms the peers with a lower percent rank. When all funds perform equally well, this rate of outperformance is a random number between zero and one, depending on how lucky the fund is. We use the false discovery rate approach to construct relative performance ratios that account for the uncertainty in estimating the performance differential of two funds. Our application is on hedge funds, which leads us to develop a test for equality of the modified Sharpe ratio of two funds. The effectiveness of the method is illustrated with a Monte Carlo study and an empirical study is performed on the Hedge Fund Research database. Our regression analysis shows that the larger the fund is, the more similar the fund returns are to its peers, and that small funds have a higher tendency to underperform.

Keywords: Equal–performance ratio, false discovery rate, hedge fund, modified Sharpe ratio, out–performance ratio, peer group, performance measurement

*Corresponding author.

Email addresses: david.ardia@fsa.ulaval.ca (David Ardia), kris.boudt@vub.ac.be (Kris Boudt)

Preprint submitted to SSRN *March 16, 2014*