

# Comparison of different hedge funds databases using static and dynamic risk measures

Rihab BEDOUI and Nesrine Samet

## Abstract

In addition to theoretical concerns about construction techniques of hedge fund indexes, the choice of the database and the empirical implications of the use of various indexes for determining the pair risk / return of hedge funds are also a crucial concern. The objective of this paper is twofold. Firstly, our aim is to compare the performance of several static and dynamic Value-at-Risk (VaR) models, to apply VaR backtesting procedures and to model VaR and Expected Shortfall by applying Extreme Value Theory (EVT) models. Secondly, our objective is to show, for a given strategy, the impact of the database switch on risk measures and on the leaderboard of hedge funds indexes. Our findings show that GARCH(1, 1) model with a Student-type distribution may provide good results which are comparable to VaR based on EVT and Expected Shortfall for all hedge funds databases. Furthermore, the indexes of the same hedge funds strategy differ in their composition from a data provider to another. Therefore, they present disparate risks making investor facing a choice not only of the strategy in which to invest but also the database.

**JEL classification** : C13; C15; G23.

**Keywords** : Hedge funds strategies, Hedge funds databases, GARCH VaR, MA VaR, Risk-

<sup>\_</sup>EconomiX, University of Paris Ouest Nanterre La Défense, 200 avenue de la République, 92000 Nanterre Cedex. E-mail:

Rihab.bedoui@u-paris10.fr. Tel:+33140977820, Fax:+33140975973

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<sup>z</sup>University of Panthéon - Assas - Paris 2, 12 Place du Panthéon 75002. Email: nesrine.samet@gmail.com.

Tel:+33144415356

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