Hedge Funds Non-Transparency: Skill or Risk-Taking?

By Olga Kuzmina and Sergiy Gorovyy A discussion by Branko Urošević Faculty of Economics, University of Belgrade and NBS

Moscow, November 2013

Summary

- Hedge funds are increasingly scrutinized investment vehicles
- Often over-performed in the past. In post-Lehman crisis many performed badly
- Mostly unregulated, often secretive
- Previous research: secretiveness essential for good performance (need time to implement strategies, prevents free riding)
- This paper: novel look on source of over-performance of secretive funds in good times. Skill vs loading up on unobservable risks? For answer, looks at bad times
- Answer: loading up on unobservable risk must be at least part of the reason for over-performance in good times
- Conclusion: regulation may be needed!

Novel dataset with unique features

- Data on monthly performance of hedge funds from a large fund of funds
- Around 200 families of hedge funds, all major strategy types, broadly representative of the hedge fund industry
- Qualitative data on level of secretiveness, illiquidity, concentration, complexity
- Authors break up funds into 3 levels (high, medium and low) by each of the categorical variables

The strategy

- Suppose some (linear) risk factor omitted from the model.
- Other risk factors implicitly assumed to be the same, known, and loaded the same way
- Suppose highly secretive and transparent funds have average excess returns equal, respectively, to:

$$R_{t}^{SEC} = \alpha^{SEC} + \beta^{SEC} F_{t}$$

$$R_{t}^{TRANS} = \alpha^{TRANS} + \beta^{TRANS} F_{t} \Longrightarrow$$

$$(R_{t}^{SEC} - R_{t}^{TRANS}) = (\alpha^{SEC} - \alpha^{TRANS}) + (\beta^{SEC} - \beta^{TRANS}) F_{t}$$

The strategy

- In good times, when lhs positive, hard to tell if over-performance of secretive funds is due to high alpha or high beta
- In bad times, if relative performance negative, has to be at least in part due to higher beta (if risk factor negative)
- Thus, over-performance in good times and underperformance in bad times of secretive funds would be consistent with secretive funds loading up on unobservable risk factor (does not preclude that they are more skillful, though)

Key empirical results

- Compare performance in year Apr 2006-March 2007 (good time) and Apr 2008-March 2009 (bad times)
- Introduce dummies for med and high levels of the four categorical variables
- Various control variables
- In the most complete specification (7):
 - High and med secretive funds outperform transparent funds in good time times (highly significant). Consistent with the literature
 - High and med concentrated funds outperform less concentrated funds. Consistent with the literature
 - Highly concentrated that are also highly secretive outperform in good times.
- Last result -> risk premium may exist for concentration of funds and is related to secretiveness (people may not know what are positions of the fund so cannot fully diversify, thus premium)

Key empirical results

- In bad times, in the most complete specification (7):
 - Med secretive funds significantly underperform transparent funds (highly significant)
 - Highly secretive funds underperform, but insignificant (for specification 7)
 - Concentration does not appear to be significant in bad times (for any specification)
 - Do not test diff in diff for highly secretive highly concentrated funds in bad times (likely no significance)

Overall assessment

- Very important topic
- Paper easy and fun to read
- Interesting and novel dataset
- Novel look on relationship between secretiveness and performance of hedge funds
- Fun and recommend to read. However, there are some issues and comments that seem important to address to make it even more appealing

Potential issues and comments

- Motivating argument:
 - Seems to assume that unobservable factor is the same across funds and that observable factors are the same and loaded the same way (cancel out in the difference)
 - Also, assumes linearity of the unobserved factor.
 Hedge funds often have non-linear exposures.
 Suppose we have instead

$$R_t = \alpha + \beta (F_t)^2$$

- What exactly is the connection with general equilibrium model of Schmaltz and Zhuk (2013) (quoted in the paper).
- That model assumes that risk averse rep. agent prefers high alpha and low beta.
- From that follows that in good times hard to tell whether we have high alpha or small beta.
- Bad times more informative.
- Would be important to spell out the connection more precisely (not just in the footnote)

- Underperformance in bad times stronger in case of med than high level of secrecy. Why? This is glossed over
- Would be interesting to check specifically performance of relative value funds. They have the highest percentage of med and high level of secrecy. Also, they should be related to market neutrality (at least in theory).
- Perhaps the most interesting result is interaction of high level of secrecy and high concentration. However, nothing said about that in bad times.
- In particular, nothing is significant in bad times when it comes to concentration. Is that consistent with the story on concentration risk factor that the authors propose?

- Clearer comparison with the literature needed
- In particular, it is implied that concentration risk factor is related to a (presumably) positive premium on concentration. At the same time stated that high concentration corresponds to high level of idiosyncratic volatility (unreported result). Thus, seems to imply positive impact on idio. vol. on hedge fund returns
- How does this relate to Ang et all (2009) (there is another relevant paper, Ang et all (2012))
- These papers find the opposite result for a very broad range of stocks (US and G7 markets): low. Idio. vol -> high returns and vice versa. So, opposite of what is claimed here.
- The authors here have asymmetric info as potential explanation of their effect. Ang et al reject that (and many other) explanations of their effect for stock return vol. dependence. So, how all this fits together (or does not....)?

- Regulation:
- Authors claim that the fact that secretive hedge funds presumably take more unobservable risk means that regulation is warranted.
- There is some important discussion on regulation of hedge funds in the literature. Key reasons for regulation outlined (Edwards (2003), eg) would be:
 - Whether there is a threat to the financial stability as a result of hedge fund activities
 - Whether retail investors (general public) is potentially damaged
 - Both are possible but not studied here. Thus, conclusions about regulation seem premature in my opinion
- A related question: why the fund of funds that provides the data for this study purchases highly secretive funds year after year if that is something bad for investors?