

# Are Star Funds Really Shining? Cross-Trading and Performance Shifting in Mutual Fund Families

By Alexander Eisele, Tamara Nefedova, and  
Gianpaolo Parise

Discussant: Angelo Ranaldo

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# This paper is about ...

- Large asset managers with two options to trade securities of affiliated funds:
  1. Open market
  2. Off market
- Off-market should cost less because no transaction costs, commission, clearing fees, order handling costs, ... but ...

# The main finding is ...

- Off-market trades are apparently more expensive!
- Performing a transaction-based analysis, after controlling for stock, size, time, fund family ... they also find that mispricing
  - Increases with uncertainty, illiquidity, and volatility
  - Is associated with a shift from «junk» to «star»

# The main implications are ...

- *For investors: open- vs off-market can produce unfair wealth allocation*
- *For regulators: need to regulate against possible mispricing*
  - *E.g. more stringent SEC requirements on fund families in 2004*
- *For academics: (transaction-based) identification strategy is key*

# I think this paper ...

- is very interesting
- addresses an important and timely issue, especially in a world of excess liquidity that flows everywhere including asset funds
- has potential for an original contribution to the literature
- However, the following issues can be improved
  - Measurement
  - Explanation and connection with theory

# Comment 1: Measurement

Using ANcerno data, Execution Shortfall is computed as:

- $ES_{CT} = \frac{|P^{AM,CT} - P^{OM}|}{P^{OM}}; ES_{OM} = \frac{|P^{AM,OM} - P^{OM}|}{P^{OM}}$

Does this measure of mispricing incorporate NOISE?

- $P^{OM} = M + S$ , where is  $M$  the fundamental value, and  $S$  is half bid-ask spread
- $P^{AM,OM} = M + S^{AM}$ , where  $S^{AM}$  is half-spread for AM
- $P^{AM,CT} = \begin{cases} M \\ M + \pi \end{cases}$ , depending if AM charges  $\pi$

# Comment 1: Measurement

Let us assume AM is a **fair** guy, i.e.  $P^{AM,CT} = M$ , then

- $P^{AM,CT} < P^{OM}$ , if  $P^{OM}$  is a buy; opposite if a sell
- $ES_{CT}$  increases with  $S$  and hence with illiquidity and volatility
- For any  $S^{AM} > 0$ ,  $ES_{CT} > ES_{OM}$  always !!!

# Comment 1: Measurement

Now let us assume that AM is **opportunistic** and charge  $\pi$

- $ES_{CT} = \frac{|M+\pi-(M+S)|}{POM}$  giving  $\frac{|\pi-S|}{POM}$  if  $P^{OM}$  is buy,  $\frac{|\pi+S|}{POM}$  if a sell
- Downward (upward) bias of  $ES_{CT}$  for buys (sells) increasing with  $S$
- In case of  $\pi \geq S$ ,  $E[ES_{CT}] = \pi$
- In case of  $S^{AM} > 0$ ,  $ES_{CT} > ES_{OM}$  always !!!
- We reach the **same** conclusion no matter if the AM is **fair** or **opportunistic**



# Comment 1: Measurement

What to do?

- Take  $M$  as a proxy of  $P^{OM}$  as the midquote price
- Should be snapped close to the time of the CT
- How? For instance TAQ data for U.S. stocks.
- Maybe midquote at opening or closing times, or midrange
  
- But opening price or VWP do not fix this issue!

# Comment 2: Explanations, connection to theory

Research design at three levels ...

- Trade-level: ES larger for CT
- Market-level: ES increases with volatility and illiquidity
- Fund-level: ES for weaker governance; winner-picking

But why?

# Comment 2: Explanations, connection to theory

Why mispricing? Theories postulate ...

- Risk (e.g. DeLong et al. 1990; Loewenstein and Willard 2006).
- Margin constraints (e.g. Gârleanu and Pedersen 2011; Ashcraft et al. 2011)
- Constraints on equity capital (e.g. Schleifer and Vishny 1997; Krishnamurthy and He 2008, 2009)
- Leverage constraints (e.g. Gromb and Vayanos 2002; Liu and Longstaff 2004; Brunnermeier and Pedersen 2009; Kondor 2009; Geanakoplos 1997, 2003)
- Short selling constraints (e.g. Duffie 1996; Krishnamurthy 2002)
- Search cost (e.g. Duffie et al. 2002; Vayanos & Weill 2008)
- Market power, segmentation, habitat (e.g. Vayanos Villa 2009)

# Comment 2: Explanations, connection to theory

- For instance, Shleifer & Vishny (1997):
  - Capital constraints limit the ability to profit from mispricings;
  - Long position hit by a shock triggers outflows;
  - Higher leverage, stronger reduction and price effects
- Better connection to theory to set up HPs and interpret findings
- Many of these theories imply **ASYMMETRIC** effects between long and short positions. Why don't you look at asymmetries?