

# Discussion: Hedge Fund Performance and Systemic Risk

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# Objectives and Measures

- Paper studies hedge funds with fund, systemic risk measures.
- Three clear objectives:
  - ① Relate risk measures to fund traits;
  - ② Explain fund performance with risk measures; and,
  - ③ Explain fund failure with risk measures.
- Risk measures (given  $q$  quantile):
  - Expected shortfall ( $ES_q$ ): fund risk;  $E(R^i | R^i \leq VaR_q^i)$
  - Marginal ES ( $MES_q$ ): fund/systemic risk;  $E(R^i | R^{sys} \leq VaR_q^{sys})$
  - $CoES_q$ : systemic risk;  $E(R^{sys} | R^{sys} \leq VaR_q^{sys}(VaR_q^i))$ .
- Paper then looks at  $\Delta CoES_q = CoES_q - CoES_{median}$

# Findings

- Different fund traits are related to  $ES$ ,  $MES$ ,  $\Delta CoES$ .
  - Fees, mgr  $\Delta$ , smoothing, flow: fund risk  $\uparrow$ , systemic risk  $\downarrow$ ;
  - Lockup and redemption periods, age increase all risks;
  - Notice period increases fund risk only; and,
  - High watermarks, leverage, size: no effect.
- Relates risk measures to fund excess returns<sup>1</sup>, Fung-Hsieh  $\alpha$ 's
  - Excess returns well-explained by  $MES$ , not by  $ES$ ;
  - $MES$ ,  $\Delta CoES$  decile 1–10: significantly different returns;
  - As risk increases: excess returns  $\uparrow$  normally;  $\downarrow$  in crisis;
  - Fung-Hsieh  $\alpha$ 's only explained by  $MES$ .
- Fund failure rate increases with  $MES$ ,  $ES$ .

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<sup>1</sup>After Fung-Hsieh and Pastor-Stambaugh factors.

# Risk and Policy Implications

Author is too modest; undersells how much this study reveals.  
Should note other interesting implications:

- Opposite signs for  $\Delta CoES$ ,  $ES$  vs some fund traits
  - Funds care about effect on system but not own investors?
  - Suggest funds know they have a ratcheting-strike put.
  - Also suggest funds avoid being “too risky to fail.”
  - Or, are funds trying to stay out of regulators’ sights<sup>2</sup>?
- Does age raise risk? Or proxy for interconnectedness?
- Some possibilities for effective policy targets:
  - Shorter lockup, redemption periods reduce risk measures;
  - Shorter notice periods increase fund risk (illiquidity?)<sup>3</sup>.

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<sup>2</sup>*cf.* Chicago local vs national elections.

<sup>3</sup>Should balance vs other concerns; see w.p. by Sadka.

# Governance Issues and Methodological Result

- Look a little deeper in a few places:
  - Do high watermarks relate to risk if fund is “down”?
  - Do high watermarks make sense if so?
  - Typical story: if DOOM, shut down or take large risks.
- Evidence in support of Weisman (2002):
  - $\beta > 0$  for *ES* vs incentive and management fee, manager  $\Delta$ ;
  - Incentive fee increases P(fund failure).
- Marginal expected shortfall *MES* (effect of system on fund):
  - Aggregate effect on fund returns, alpha is zero; but,
  - Positive (negative) for both normally (in crisis).
  - A new risk factor beyond Fung-Hsieh, Pastor-Stambaugh!

# Small Changes

- Number all equations and refer to those equations in tables;
- More discussion of Fung-Hsieh alpha regressions;
- Clearly and explicitly define  $\theta$ ;
- Need a table of means/std devs/high/low of firm traits;
- Remind reader: higher risk measures  $\Rightarrow$  more negative;
- LTCM period: could look at July–September/October 1998;
- Explain CoES more clearly; and,
- Investigate if there is endogeneity between *MES* and *CoES*.
  - If so, this would be evidence of possible contagion.

# Conclusion

- Interesting paper which indicates rich possibilities.
  - Prior knowledge mostly one-way: HFs may trigger crisis.
  - May help explore endogeneity between fund, system returns.
  - Might even find early-warning indicators for crises.
- Also highly policy relevant due to concerns about:
  - Effects hedge funds have on markets; and,
  - Effects of systemic risk on market participants.
- Risk measures help tease more information from data.
  - Indeed: *MES* risk measure appears to be a new factor.
- Look forward to reading final version of this paper.