Discussion of: Fund Size and Managers' Risk-Shifting

by Ping Mclemore, George Jiang, and Ao Wang

Discussed by Pingle Wang

University of Rochester

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Mutual Fund Risk-shifting

Fund managers change their risk levels for many reasons:

- Tournament:
    - Brown et al. (1996), Kempf and Ruenzi (2008)
- Flow-performance sensitivity:
    - Chevalier and Ellison (1997), Huang et al (2007)
- Employment risk:
    - Kempf et al. (2008)

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How do we measure risk-shifting?

- Return based:
  - volatility of returns
  - tracking error to benchmark portfolio
  - systematic risk and idiosyncratic risk
- Holding based (Huang et al (2011):
  - $\sigma_{f,t}^{Holding} - \sigma_{f,t}^{Realized}$

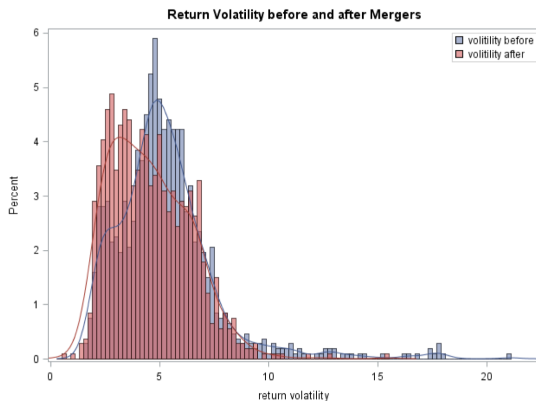
This Paper

- Goal: Does size affect a fund's risk-taking behavior?
- Challenge: Size is not randomly assigned.
- Solution: Using fund merger as a shock to fund size
- Findings:
  - Main result - fund volatility decreases after mergers
  - Liquidity matters - Small-cap funds experience larger downward risk-shifting than large-cap.
  - Fee matters - High 12b-1 funds experience larger downward risk-shifting than low fee funds.

My discussion

- Alternative explanations
- Empirical methods
- Suggestions

Main result



- Blue bar: $std(ret^{Acquiring}_{-36,-1})$
- Red bar: $std(ret^{Merged}_{13,36})$

Alternative explanation: diversification

- Acquiring Fund + Target Fund $\rightarrow$ Merged Fund
- It is not exactly an apple-to-apple comparison.
- Suppose $\sigma^{Target} = \sigma^{Acquiring}$, and $\rho(ret^{Target}, ret^{Acquiring}) < 1$:

$$\sigma^{Merged} < \sigma^{Acquiring}$$

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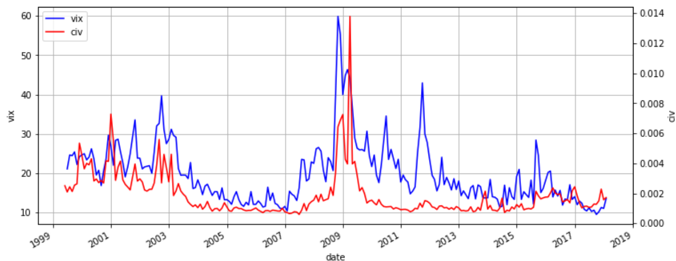
- . . . , which also explains heterogeneous effect between small-cap and large-cap funds
  - Less comovement among small stocks than large stocks
  - Benefit of diversification is greater for small-cap

Alternative explanation: Time-varying Volatility

- Substantial movement of aggregated idiosyncratic volatility
  - Especially around 2003-2005 and 2007-2009
  - Coincide with years when most of fund merger happens
  - All funds are shifting risk downward, not just merged funds with size shocks.



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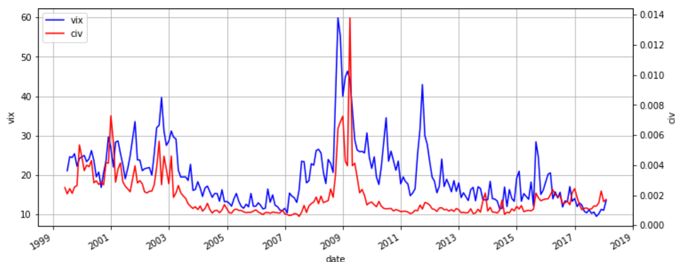

- Bottom line: return-based risk measures are subject to time-varying market conditions.
  - Holding-based risk-shifting measures

Mechanism

Where does the reduced risk come from?

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- Tracking errors
- Change in fund managers due to merger

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Minor Comment:

- Tables 4 to 12: Panel regression, but dependent variable is populated pre- and post-merger.
  - Essentially, these are just two data points.