

Discussion of

**“Investor Mix and Mutual Fund Performance:
A Flow Based Measure of Relative Smartness”**

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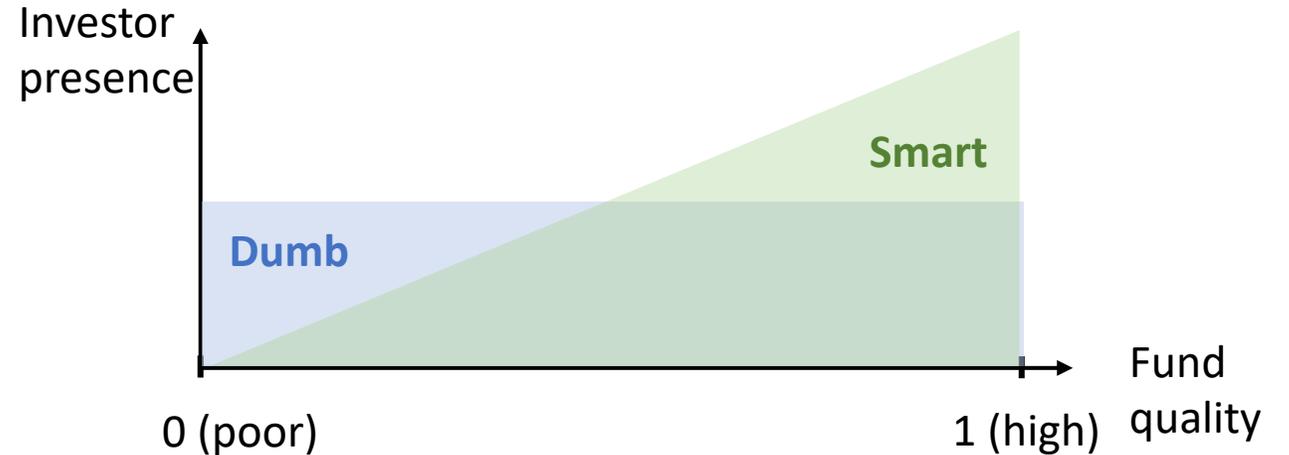
Overview

- This paper: a measure of “what fraction of investors are smart” predicts fund returns
 - The authors define a “smart/dumb ratio” (SDR) measure
 - Funds with high SDR have higher returns
 - Auxiliary tests show that SDR is correlated with other measures of investor sophistication
- My discussion will primarily focus on the economic motivation of this measure

1. *A summary of this paper*

Idea: smart investors pick better funds

- Good funds (that will outperform) have a higher fraction of smart investors



- Therefore, if we can measure the **fraction of smart investors**, we can use that to predict fund returns

$$\text{SDR (Smart dumb ratio)} = \frac{\mu_{Smart}}{\mu_{Dumb}}$$

Measuring smartness/dumbness: what do flows respond to?

- Key premise: investor flows response to different **types** of variables (X)

$$Flow = \mu_{Smart} \cdot Flow_{Smart} + \mu_{Dumb} \cdot Flow_{Dumb}$$

$$Flow_{Smart} = b \cdot X_{Smart} + \epsilon_{Smart}$$

$$Flow_{Dumb} = b \cdot X_{Dumb} + \epsilon_{Dumb}$$

$$\Rightarrow Flow = \frac{SDR \cdot b}{1 + SDR} \cdot X_{Smart} + \frac{b}{1 + SDR} \cdot X_{Dumb} + \epsilon$$

- Conclusion: we can measure the smartness of investors by what flows respond to

Key findings

- Authors ran 60 month rolling regressions of *individual* fund flows on a list of “smart” and “dumb” variables

$$Flow_{i,t} = b'_{s,i} \cdot X_{smart,i,t-1} + b'_{d,i} \cdot X_{dumb,i,t-1}$$

- Dumb variables: past return/performance
- Smart variables: other fund characteristics such as fund size, flows, etc...

- Final measure:
$$SDR = \frac{R^2_{smart\ variables}}{R^2_{dumb\ variables}}$$

- Long/short SDR decile predicts $\approx 1\%$ return per year
 - Authors also show auxiliary evidence that SDR is related to other measures of investor sophistication

2. Discussion

Comment 1: which variables are smart/dumb?

Variable	Mean coefficient
Non-risk group	
Fundamental Fund Characteristics	
Fund Size (log)	-0.199
Family Size Log	0.136
Age (month)	0.001
Expense Ratio	1.303
Flow	-0.094
Category Flow	0.000
Turnover	-0.004
Flow Volatility	0.028
Return Volatility	-0.068
Ratings	
MS Overall Rating	-0.006
Performance group	
Traditional Performance Measure	
Fund Return	0.056
Market Excess Return	0.144
CAPM Alpha	2.025
FF3 Alpha	1.564
Exotic Performance Measure	
FF4 Alpha	-1.567
FF5 Alpha	0.939
Q-factors Alpha	-0.331
Mispricing Alpha	-0.357

**“Smart”
variables**

**“Dumb”
variables**

- Authors argue that performance chasing is dumb.
 - People may quibble about that, given there is some performance persistence, but let’s put that aside for now.
- Is chasing Morningstar ratings smart?
 - Evans and Sun (2020), Ben-David et al (2020): investors chase ratings blindly without understanding the methodology
 - This also creates stock market distortions

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**“Smart”
variables**

**“Dumb”
variables**

- Still on which variables to include:
 - How should we interpret the use of past flows? Category flows?
- Should there be restrictions imposed on the sign of coefficients?
 - Investors chase higher expense ratios?
 - Is this behavior smart? Everything being equal, higher expense ratio = lower returns.

Comment 1: in summary

- The current choices “makes sense”, but I can also see arguments for the reverse classification for a number of variables
 - Some coefficient signs are also puzzling
- Given that the SDR-based return predictability is around 1% per year, as a reader, I slightly worry about the robustness of the main result

Comment 1: what to do?

- Inevitably, there will be some subjectivity in choosing “smart” and “dumb” variables. There are two ways out (not mutually exclusive)”
 - 1) Show that the result is robust to many reasonable reclassifications of variables and to imposing coefficient sign restrictions
 - 2) Find a more principled way to choose variables that is harder to disagree with

Comment 2: Auxiliary tests

- Prior literature argues that direct-sold funds have more sophisticated investors. Section 5.1 shows that the SDR-based predictability is strongest in those funds
- This prediction does not have a clear motivation.
- From the earlier conceptual framework, predictability of SDR depends on the **variation** of smart investor presence and not the **level**
 - If you restrict attention to a set of funds with high fraction of smart investors (e.g. direct-sold funds), you may or may not *expect* to find stronger return predictability

- Similarly, the authors showed that SDR-based return predictability is stronger in institutional funds and low turnover funds
- For the same reason just mentioned, those tests also lack clear motivation

Summary

- This is a well executed paper on an interesting idea: identify smart funds by identifying smart fund investors
- I learned a lot reading this paper
- I think the paper can improve on the tightness of its main measure and some related tests