Machine-learning the skill of mutual fund managers

作者：Kaniel et al. (2023)　　　阅读：王梦涵

2024 年 10 月 30 日

1. **What are the research questions?**

   - Which–if any–characteristics of mutual funds and of the stocks they hold can help separate corn from chaff?

2. **Why are the research questions interesting?**

   - U.S. equity mutual funds are enormous and rapidly growing, with increasing reliance from investors.

   - Mixed results exist regarding the investment performance of actively traded equity mutual funds.

   - $\rightarrow$ Is there any characteristics to separate good or bad fund?

3. **What is the paper's contribution?**

   - Contribute to literature about predictors of fund performance
     - Prior: identified different directional effects for different components of flow and fund returns
     - Extension: MLs revives the predictive role of flows and shows fund flow predicts performance positively.
   - Contribute to literature on fund return predictability
     - Prior: Abnormal returns are smaller and shorter
     - Extension: Show that the predictive power of fund momentum and fund flows for both short and long leg
   - Contribute to literature on ML's use for asset pricing
     - Prior: Focuse on returns prediction with held stocks' characteristics or fund-specific characteristics
     - Compare the prediction and trading benefits by varying the info set with same ML

4. **What hypotheses are tested in the paper? list them explicitly**

   - H1: Fund momentum and fund flow are the most important predictors of future risk-adjusted fund performance.

   (a) **Do these hypotheses follow from and answer the research questions?**
       Yes

   (b) **Do these hypotheses follow from theory or are they otherwise adequately developed? Please explain the logic of the hypotheses (use visualization if possible)**
       - Some investors can detect skill and (re)allocate their investment towards skilled managers
       - Fund families attract flows through marketing rather than—or in addition to—through investment skill

5. **Sample: comment on the appropriateness of the sample selection procedures**

   - Use equity mutual funds are reasonable

6. **Dependent and independent variables: comment on the appropriateness of variable definition and measurement (focus on the key dependent variables and independent variables)**

   - The selection of characteristics is reasonable. However, this paper can test more stock characteristics.

7. **Regression/prediction model specification: comment on the appropriateness of the regression/prediction model specification**

   - The feedforward network method is appropriate.

8. **What difficulties arise in drawing inferences from the empirical work**

   - The empirical word is rigorous

9. **Describe at least one publishable and feasible extension of this research**

   - New stock factor for stocks held by high performance funds