

Discussion of



Asset Reclassification and Mutual Fund Flows



Nicolas Bollen, Veronika Pool,
Alexey Vasilenko

Jonathan Reuter
Boston College & NBER

FIRS @ Miami

May 28, 2026

In The Beginning...

In The Beginning...

... there was an audience quiz...

**What was first academic paper to
study mutual fund flows?**

(Hint: No, this paper doesn't cite it)

In The Beginning...

- **Nope [person who got it wrong and whose name will go in the permanent version of these slides], it was this one...**

Consumer Reaction to Measures of Poor Quality: Evidence from the Mutual Fund Industry

Richard A. Ippolito

The Journal of Law & Economics

Vol. 35, No. 1 (Apr., 1992), pp. 45-70 (26 pages)

In The Beginning...

- Use of **mutual fund flows** to measure investor demand goes back at least to *Ippolito (1992)*
- Shape of flow-performance relation for fund X should drive fund/manager incentives (*Sirri & Tufano 1998*)
- Used to justify shifts in risk-taking within calendar year (*Brown, Harlow, Starks 1996*) & differential incentives of younger and older managers (*Chevalier and Ellison 1997*)
- Differences between broker-sold and direct-sold funds help rationalize underperformance of broker-sold funds (*Bergstresser, Chalmers, Tufano 2009; Del Guercio & Reuter 2014*)

Significant Industry Trend

- Rise of DC retirement plans between 1980s and 2000s drove demand for mutual funds
- DC plan participations face limited investment menus and exhibit inertia... especially when automatically enrolled into plans (*Madrian & Shea 2001*)
- **Fund-level flows within retirement plans are primarily driven by menu changes** (*Sialm, Stark, Zhang 2015*)
- When plan sponsor replaces fund X with fund Y, **outflows from fund X and inflows to fund Y are informative about perceived qualities of X and Y**
- **This will not be true of reclassifications!**

Four Other Industry Trends

1. Rise of passive investing (everywhere)
2. Rise of TDFs (inside retirement, especially passive TDFs)
3. **Rise of non-MF institutional vehicles (especially inside retirement plans, as sponsors seek lower fees)**
4. **Rise of ETFs (outside retirement plans... for now)**

Endogeneous sorting of investors into different assets should have implications for monitoring / flow-perf / fees (e.g., *Sun 2021* on rise of Vanguard index funds)

Measurement problems arise when plan replaces MF with IV twin and researcher only sees phantom MF outflow

Problem Back in 2013? Yes!

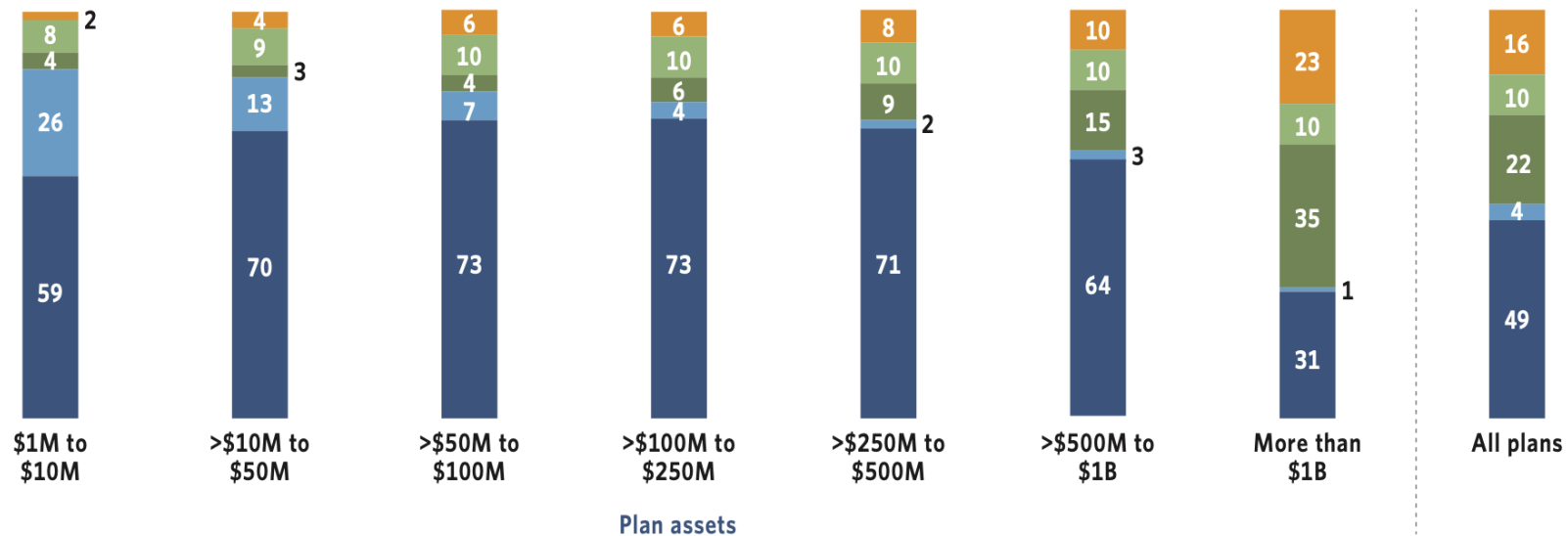
49% of DC assets in MF versus 22% CIT and 4% SMA

EXHIBIT 2.8

Types of Investment Vehicles in 401(k) Plans

Percentage of total assets among plans with audited 401(k) filings in the BrightScope database by plan assets, 2013

- Other*
- GICs
- Collective investment trusts
- Separate accounts
- Mutual funds



Bigger Problem in 2022? Yes!

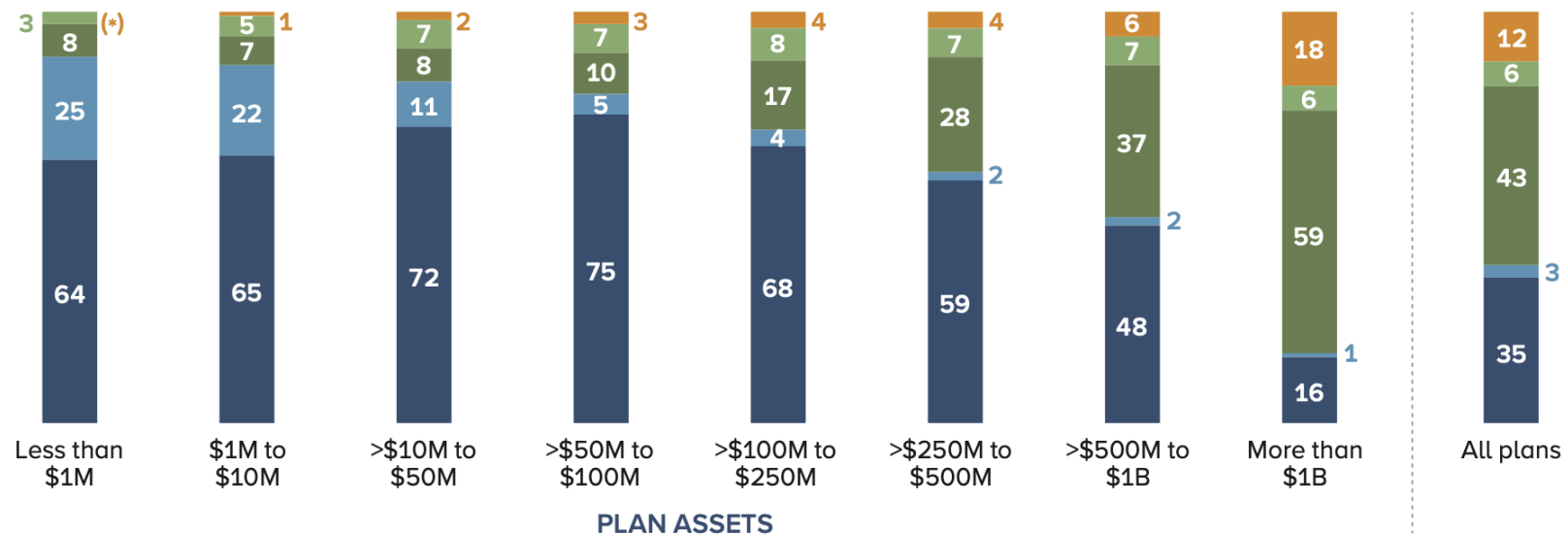
Only 35% of DC assets in MF versus 43% CIT and 3% SMA

EXHIBIT 2.8

Types of Investment Vehicles in 401(k) Plans

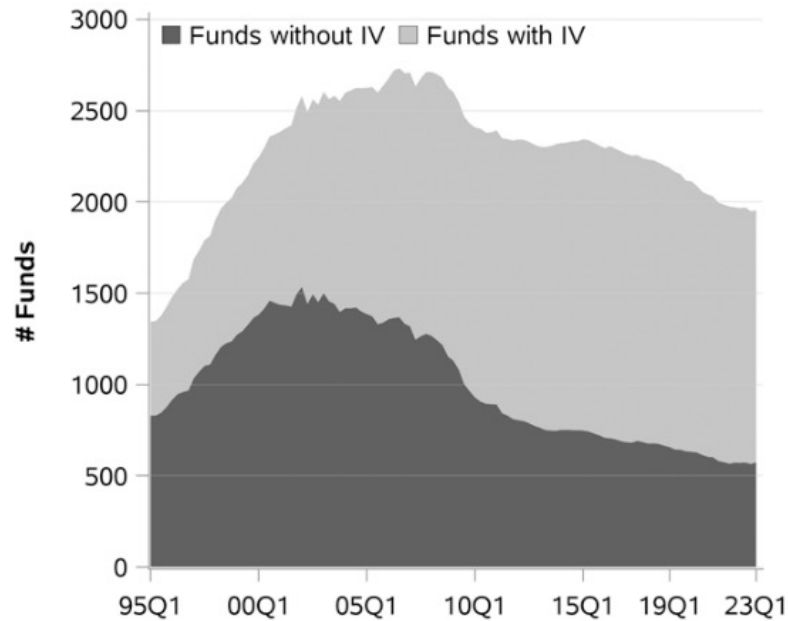
Percentage of total assets among plans with audited 401(k) filings in the BrightScope database by plan assets, 2022

- Other*
- GICs
- Collective investment trusts
- Separate accounts
- Mutual funds

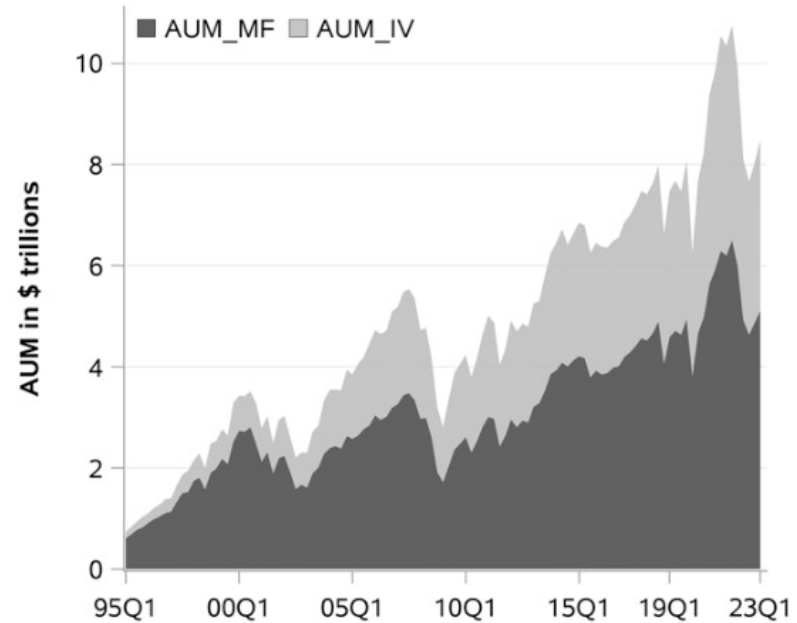


“Remeasuring Scale in Active Management”

- Huang, et al. (2026) highlight one econometric problem associated with rise in twin institutional vehicles (IV)



(a) # Funds



(b) AUM

- 2023Q1: **\$5.1T** in active equity MF and **\$3.4T** in IV

“Remeasuring Scale in Active Management”

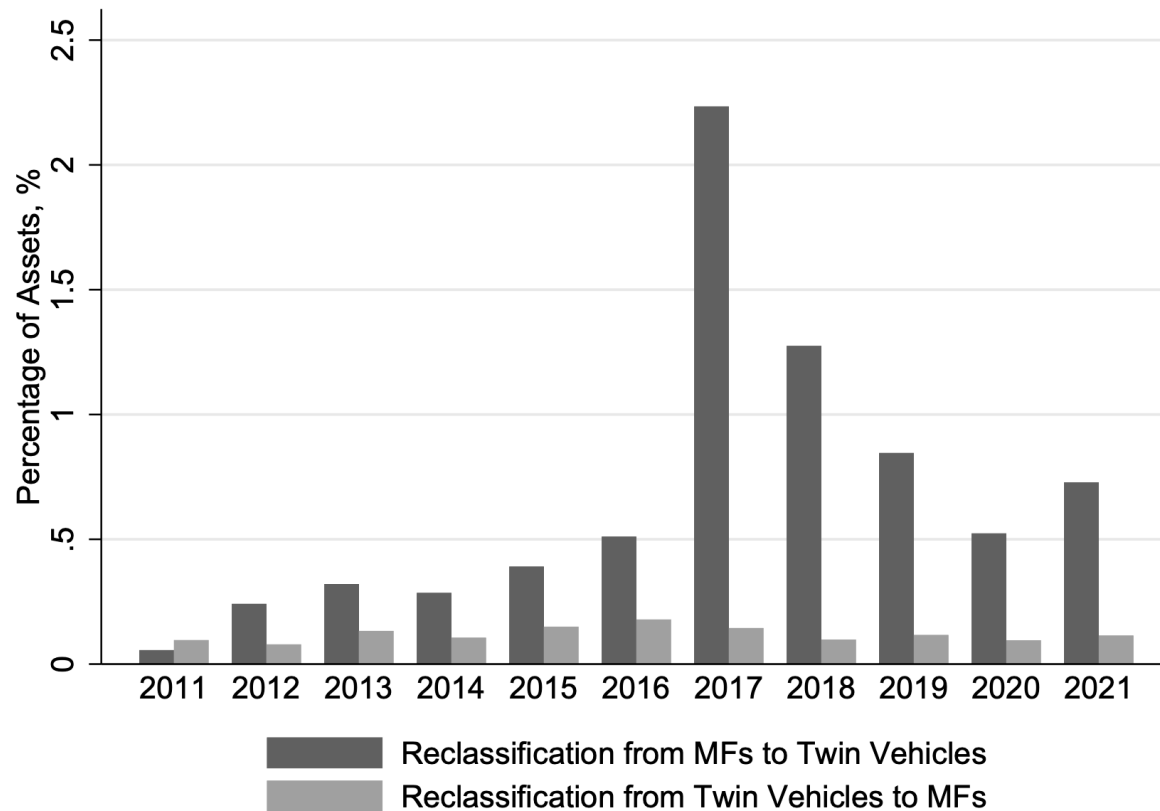
- MF and IV twin should earn the same before-fee return
- Authors identified twins whenever pairwise return correlations between MFs and potential twins > 0.99
 - Caveat: If cross subsidization causes before-fee portfolio returns to diverge, will fail to identify all twin portfolios
- What do they use IV data to show? **Regressing portfolio returns on MF AUM rather than MF + IV AUM biases diseconomies of scale upward, value added downward**
 - For example, if MF and IV twin portfolios both same size, true portfolio-level DoS (estimated in levels) only half as large, and true valued added is double

What Does this Paper Argue?

- Rise in IV assets partly reflects reclassifications of assets out of MFs and into IV twins
- Reclassifications mechanically generate MF outflows and IV inflows... even though MF+IV assets are unchanged
- Reclassifications in this direction reflect willingness of plan sponsors to accept lower fees in exchange for less disclosure (**>\$1B plans: 45% IV in 2013, 65% in 2022**)
- **In practice, phantom outflows bias regressions using MF flows as dependent or independent variable...**
- **... and bias regressions focused on IV flows in isolation**

1st Empirical Strategy

- Dataset based on Form 5500 filings allows for annual measures of reclassification between MF and IV twins

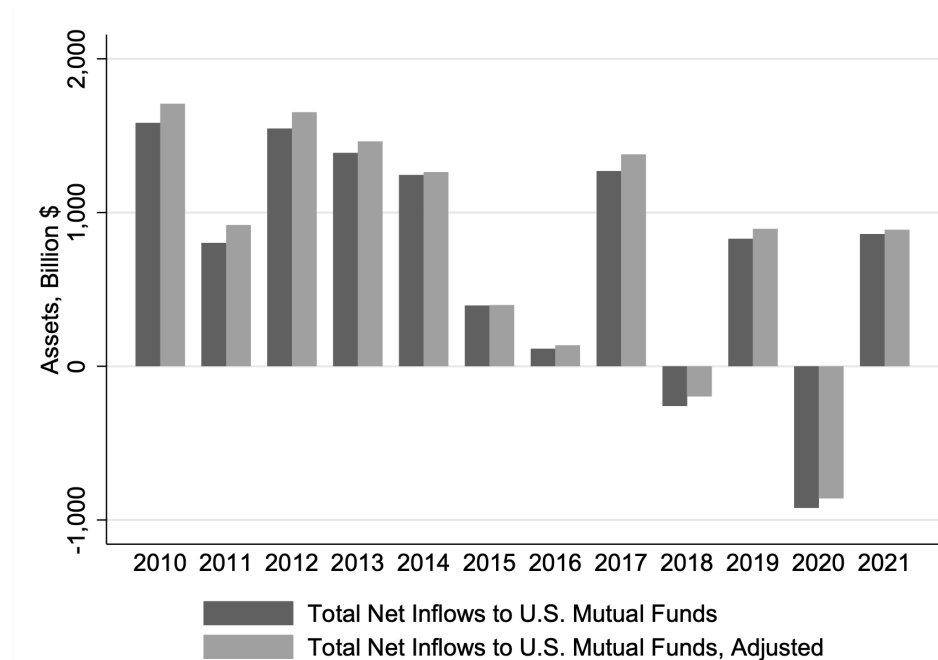


1st Empirical Strategy

- Dataset based on Form 5500 filings allows for annual measures of reclassification between MF and IV twins
- Transitions much more common after 2016, following Vanguard's reclassification of Extended Market Index Fund assets to CIT
- MFs reclassified as CITs are larger, cheaper, and have higher past returns → observe phantom MF outflows following periods of higher returns
- “Allocation strategies account for 87.49% of CIT reclassifications” → reclassifications are particularly problematic when studying TDFs

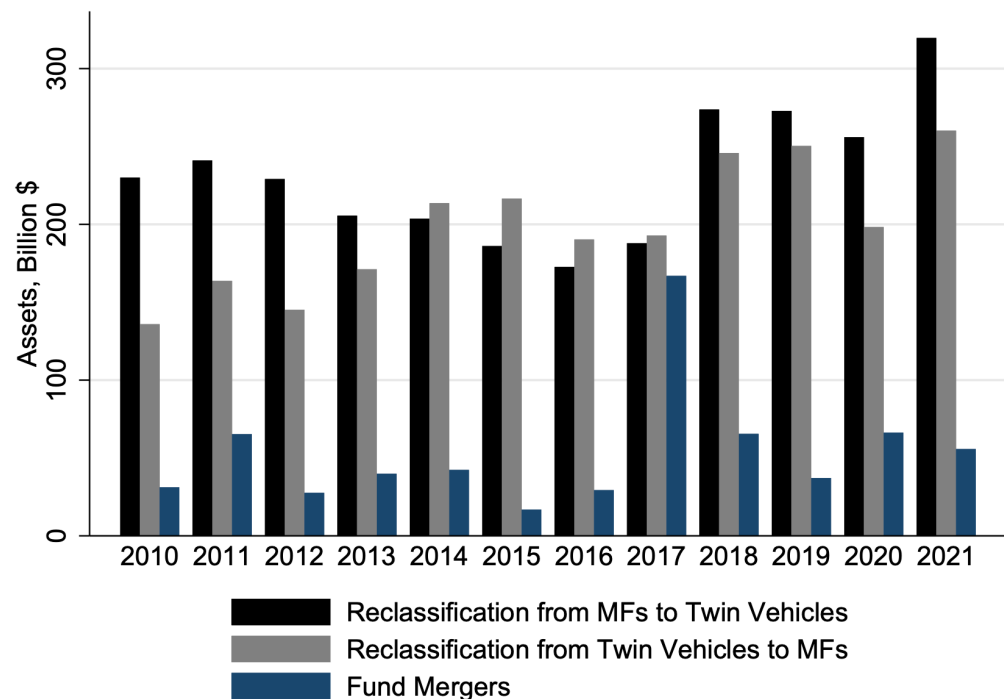
2nd Empirical Strategy

- Dataset based on Morningstar and eVestment similar to Huang, et al. (2026)
- Estimate one set of regressions using actual MF flows, another set after adjusting for predicted reclassifications
- At aggregate level, adjustments are modest



2nd Empirical Strategy

- Dataset based on Morningstar and eVestment similar to Huang, et al. (2026)
- Estimate one set of regressions using actual MF flows, another set after adjusting for predicted reclassifications
- At aggregate level, adjustments are modest...
- ... and predict many more reclassifications from IV to MF than first strategy... **which is puzzling**



2nd Empirical Strategy

- Paper makes convincing arguments about potential biases and revisits two famous regressions
- **Flow-perf.:** Actual MF flows vs adjusted MF flows
 - Regress **actual flows** on lagged returns? **0.241*****
 - Regress **adjusted flows** on lagged returns? **0.327*****
- Unclear difference in coef. is stat. sign., but larger diff. for MFs with instl share classes and during 2017-2023
- Tests for smart money insignificant using either measure
- **Main comment?** Simpler to follow Huang et al. (2026) and compare regressions coef. when using actual MF flows versus actual MF+IV flows for effected MF

In the End

- Paper makes a simple but important point...
- ... and does a ton of data work to illustrate that reclassifications bias flow-performance relations...
- ... at least for a subset of MFs in recent data
- Evidence of reclassifications in plan data are convincing...
- ... but I'm not entirely convinced by model used to adjust MF flows for reclassifications
- Going forward, academic literature needs to directly study portfolio-level (MF+IV) flows... despite the annoying data work it will require