ESG Favoritism in Mutual Fund Families

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Objective

Do fund families strategically coordinate actions to enhance the performance of their ESG equity mutual funds at the expense of their non-ESG equity mutual funds?

- The net-of-style return spread of ESG compared to non-ESG funds *within* the fund family is significantly greater than the gap with non-ESG matches *outside* the family.
- The difference is 2% per year, indicating sizable cross-fund subsidization that is mainly used to avoid underperformance of ESG funds and optimize fee income.

Methodology

Inspired by Gaspar et al. (2006).

- **Idea:** Is the return differential of ESG and non-ESG funds different *within* and *outside* the fund family?

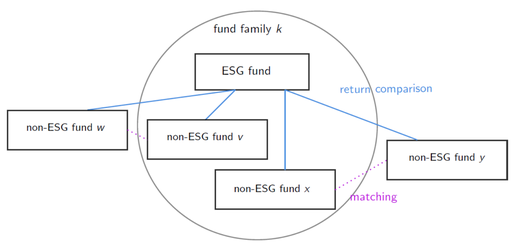

Figure 1:Fund Matching

- **Fund matching:**
  1. pair each ESG fund with all non-ESG funds in the same fund family
  2. match each non-ESG fund with the closest fund outside the fund family with the same investment style based on Mahalanobis distance using ytd performance, age, and fees
  3. pair each ESG fund additionally with all such matched funds outside the fund family
- Compute the difference in net-of-style returns

- **Data:** Monthly panel of U.S. equity open-end funds obtained from Morningstar Direct, covering 2000-2022

Univariate Analysis

	Actual Pairs	Matched Pairs
2005 - 2022	-0.006	-0.169***
2005 - 2015	-0.007	-0.143***
2016 - 2022	-0.006	-0.199***

Table 1:Univariate Analysis

$\Longrightarrow$ 2.0% annual underperformance of ESG funds compared to non-ESG funds outside the family
$\Longrightarrow$ significantly stronger effect following the Paris Agreement
$\Longrightarrow$ evidence of no in-family ESG fund outperformance

Regression Framework

$$\text{Net\_return}^{ESG}_{i,t} - \text{Net\_return}^{non\text{-}ESG}_{j,t} = \alpha + \beta\text{Same\_family}_{i,j} + \zeta\text{Same\_style}_{i,j} + \text{Controls} + \epsilon_{i,j,t}, \quad (1)$$

where Same_family (Same_style) is a dummy variable which is 1 if the ESG fund and the non-ESG fund belong to the same family (follow the same investment style).

	(1)	(2)
Same family	0.172***	0.144***
	(0.012)	(0.010)
Same style	−0.002	0.001
	(0.015)	(0.016)
Controls	No	Yes
Year FE	Yes	Yes
Family FE	Yes	Yes
Style FE	Yes	Yes
Observations	195,333	192,914
Adjusted R^2	0.012	0.016

Table 2:Test of ESG Favoritism

$\Longrightarrow$ 1.7% annual performance of ESG funds due to strategic cross-fund subsidization

Patterns of ESG Favoritism

- **ESG Fund Characteristics**
  stronger evidence for favoritism of funds that have *lower YTD return* compared to their style benchmark and *higher dollar value of fees*
- **Regular Fund Characteristics**
  stronger evidence for favoritism at the expense of funds that are *lower value* to their families, e.g.: *older* funds and funds with *lower ESG score*
- **Family Characteristics**
  stronger evidence for favoritism in families that are *smaller* (AUM & number of funds) and *older*

Strategic Timing of ESG Favoritism

$$\text{Net\_return}^{ESG}_{i,t} - \text{Net\_return}^{non\text{-}ESG}_{j,t} = \alpha + \beta\text{Same\_family}_{i,j} + \gamma\text{Same\_family}_{i,j} \times X_{i,j,t} + \zeta\text{Same\_style}_{i,j} + \text{Controls} + \epsilon_{i,j,t}, \quad (2)$$

where $X_{i,j,t}$ denotes a time-series variable representing climate change concerns or fund flow measures.

Climate Change Concerns

	(1)	(2)
Same family	0.106***	0.108***
	(0.014)	(0.011)
Same family × Post COP21	0.082***	
	(0.017)	
Same family × MA_{12} MCCC		0.101***
		(0.012)
Same style	0.001	−0.006
	(0.016)	(0.015)
Controls	Yes	Yes
Year FE	Yes	Yes
Family FE	Yes	Yes
Style FE	Yes	Yes
Observations	192,914	187,817
Adjusted R^2	0.016	0.018

Table 3:Climate Change Concerns and ESG Favoritism
MCCC denotes Media Climate Change Concerns by Ardia et al. (2023)

$\Longrightarrow$ fund families engage more in ESG favoritism in times of greater environmental awareness

Fund Flows

	(1)	(2)
Same family	0.151***	
	(0.010)	
Same family × Net Flows	−0.019***	
	(0.003)	
Same family × Flow Outperf.		0.084***
		(0.025)
Same family × Flow Underperf.		0.208***
		(0.024)
Same style	0.004	0.005
	(0.016)	(0.016)
Controls	Yes	Yes
Year FE	Yes	Yes
Family FE	Yes	Yes
Style FE	Yes	Yes
Observations	184,499	184,485
Adjusted R^2	0.019	0.016

Table 4:Fund Flows and ESG Favoritism

$\Longrightarrow$ fund families reduce the cross-subsidization at times of high ESG fund inflows

Impact of ESG Fund Inception

$$\text{Net\_return}^{non\text{-}ESG}_{i,k,t} - \text{Net\_return}^{non\text{-}ESG}_{j,l,t} = \alpha + \delta 1_{\{\tau_k>0\}} + \text{Controls} + \epsilon_{i,j,t}, \quad (3)$$

where τ_k measures the years since the inception of the ESG fund in family k. We restrict the sample to $\tau_k \in [-5, 5]$. Hence, $1_{\{\tau_k>0\}}$ is a dummy variable which is 1, if an ESG fund in family k exists in period t, and 0 otherwise.

	(1)	(2)
Post ESG Fund Inception	−0.092**	−0.094**
	(0.042)	(0.045)
Controls	No	Yes

Table 5:Impact of ESG Fund Inception

$\Longrightarrow$ 9.4 bp monthly underperformance of within-family compared to outside-family non-ESG funds after ESG fund inception

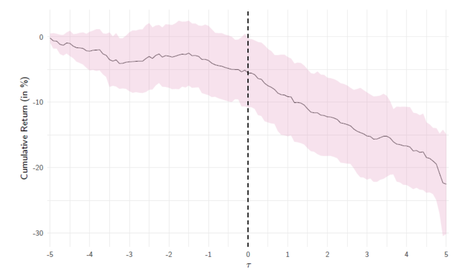

Figure 2:Cumulative Return Differential since ESG Fund Inception

Potential Mechanisms

- **Cross-trading strategies**
  - one-standard-deviation increase in opposite trades would enhance annual ESG fund performance by 0.24%
- **Preferential IPO allocations**
  - ESG funds are assigned more IPOs (11.8 IPO/fund for ESG, 2.6 IPO/fund for regular funds on average)
  - first-day return contributes significantly more to monthly performance for ESG funds

Contact Information

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References

Ardia, D., Bluteau, K., Boudt, K., and Inghelbrecht, K. (2023). Climate change concerns and the performance of green vs. brown stocks. *Management Science*, 69(12):7607–7632.

Gaspar, J.-M., Massa, M., and Matos, P. (2006). Favoritism in mutual fund families? Evidence on strategic cross-fund subsidization. *The Journal of Finance*, 61(1):73–104.