

# Does Socially Responsible Investing Change Firm Behavior?

Davidson Heath, Daniele Macciocchi, Roni Michaely, and  
Matthew C. Ringgenberg

- December 15, 2022 -

# The Rise of Socially Responsible Investing

- Increasingly, investors care about SRI:

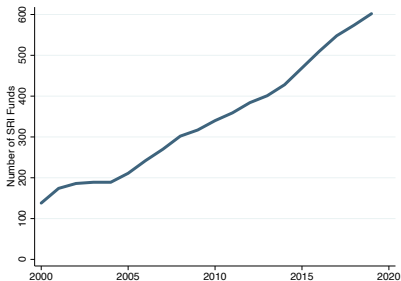
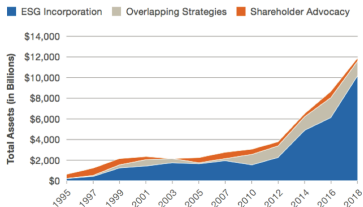


FIGURE A

## Sustainable and Responsible Investing in the United States 1995–2018



SOURCE: US SIF Foundation.

- **All** SRI funds claim to select firms based on E&S
- **81%** of SRI funds claim to engage with firms to improve E&S behavior

# Academic debate about the role of SRI

- Hart and Zingales (2017):
  - Public firms should maximize shareholder welfare
  - Institutional investors should pursue *environmental* and *social* policies consistent with the preferences of their investors
- Bebchuk and Tallarita (2020): “Stakeholderism” does not improve stakeholder welfare, it increases agency costs
- Studies show that some type of SRI funds do not even select good E&S firms (Gibson et al. 2022; Raghunandan & Rajgopal 2022)

# Public debate about the role of SRI



## Corporate Climate Efforts Lack Impact, Say Former Sustainability Executives

They're speaking out, pushing for more aggressive government policies to address societal problems.

---

OPINION | COMMENTARY

### *ESG Does Neither Much Good nor Very Well*

There's little evidence that the benefits to mankind make up for lower returns on your investment.

---

By Terrence R. Keeley  
Sept. 12, 2022 5:42 pm ET

# Research question

- Ongoing debate in academia and among practitioners
  - The SEC is considering regulatory actions
  - Investors care about SRI
  - But unclear what SRI funds actually do
- 
- ① **Do SRI funds select firms with better E&S behavior?**
  - ② **Do SRI funds improve firm E&S behavior?**

# We examine (1) portfolio choices and (2) impact

- What should we expect? Given their state objective there are 3 possibilities:
  - 1 SRI funds are not different from non-SRI funds (*greenwashing*)
  - 2 SRI funds select “good” E&S companies, but have no impact (*impact washing*)
  - 3 SRI funds improve corporate E&S behavior (*treatment effect*)

# Theoretically unclear which effect should prevail

- The increase in size of SRI funds should make them more effective monitors
  - Threat of exit (Edmans 2009)
  - Voice (Broccardo, et al. 2022; Dikolli et al., 2021)
  - Coordination with activists (Dimson et al., 2015)
- SRI funds could prefer portfolio selection
  - Engaging with portfolio firms is costly
  - SRI funds lack expertise and resources to engage (Bebchuk and Tallarita 2020)
- Pure divestment is not likely to be effective
  - The SRI funds impact on firm's cost of capital is too small (Berk & van Binsbergen, 2021)
  - Tilting is more effective than divestment (Edmans et al. 2022)

## To measure real impact we use micro-level data:

- 1 SRI funds: Morningstar, Bloomberg, US SIF, CRSP
- 2 Pollution: EPA Toxic Release Inventory
- 3 Investments: EPA Pollution Prevention (P2) database
- 4 Employee satisfaction: Glassdoor, Inc.
- 5 Workplace safety: Department of Labor – OSHA
- 6 Board diversity: BoardEx & ISS
- 7 Voting and shareholder proposals: ISS

# SRI funds portfolio choices

- Examine association between SRI investments and firm E&S behavior with OLS regressions
- This can identify two channels:
  - ① SRI funds invest in firms that already behave in a responsible manner
  - ② SRI investment may cause a positive change in firms' behavior

# SRI funds select good E&S firms

- 1 Firms that pollute less and invest more in abatement technology
- 2 Firms with higher employee satisfaction
- 3 Firms with better workplace safety
- 4 Firms with greater board gender diversity

# Identifying the Effect of SRI funds

## Problem

- Fund holdings are endogenous:
  - ① Omitted variable
  - ② Reverse causality
- Need to isolate flows of investor capital into SRI funds unrelated to the SRI funds' investing policies and performance

## Answer

- Exogenous shock to capital to SRI funds from the Morningstar funds ratings

# Morningstar “star ratings”

- Morningstar ranks funds using a proprietary algorithm
- Stars assigned based on (3-5-10 years) risk-adj returns within a category
- Reuter & Zitzewitz (2010) show that stars affect flows
- Nearly impossible for funds to manipulate their rating
- The discontinuities in “stars” lead to sharp discontinuities in capital allocation

## Morningstar Ratings



Learn ▾

Plan ▾

Research ▾

Portfolio

Markets

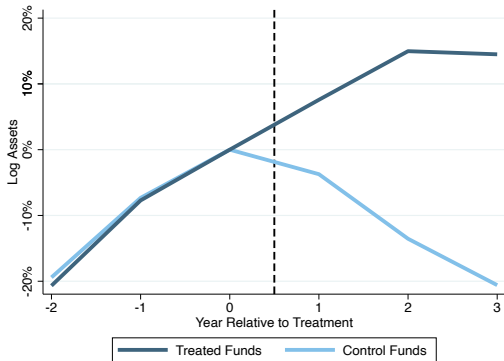
## Medalist Funds

These funds receive our analysts' highest ratings: Gold, Silver, or Bronze.

Name	Ticker	Morningstar Category	Morningstar Rating	Morningstar Analyst Rating	Total 1-Year Return (%)	Total 3-Year Return (%)	Total 5-Year Return (%)
Western Asset Core Plus Bond I	WACPX	Intermediate Core-Plus Bond	★★★★★	Gold	5.40	4.31	3.74
Western Asset Core Bond I	WATFX	Intermediate Core Bond	★★★★★	Gold	5.95	4.36	3.52
Wasatch Small Cap Growth Investor	WAAEX	Small Growth	★★★★	Gold	-11.08	8.61	5.52
Wasatch Core Growth	WGROX	Small Growth	★★★★★	Gold	-12.13	5.25	5.40
VY® T. Rowe Price Capital Apprec S	ITCSX	Allocation-50% to 70% Equity	★★★★★	Gold	-2.15	6.34	6.87
VY® JPMorgan Mid Cap Value I	UMIX	Mid-Cap Value	★★★★	Gold	-24.84	-5.95	-1.39
Vanguard Wellington™ Inv	VWELX	Allocation-50% to 70% Equity	★★★★★	Gold	-2.79	4.20	5.21
Vanguard Wellesley® Income Inv	VWINX	Allocation-30% to 50% Equity	★★★★★	Gold	0.94	4.22	4.57
Vanguard Total Intl Stock Index Inv	VGTSX	Foreign Large Blend	★★★	Gold	-16.64	-2.61	-0.74
Vanguard Tax-Managed Small Cap Adm	VMSX	Small Blend	★★★★	Gold	-25.30	-5.09	0.47
Vanguard Tax-Managed Capital App I	VTCIX	Large Blend	★★★★★	Gold	-7.69	4.88	6.49
Vanguard Tax-Managed Balanced Adm	VTMFX	Allocation-30% to 50% Equity	★★★★★	Gold	-1.93	4.33	4.68
Vanguard Small Cap Index Inv	NAESX	Small Blend	★★★★★	Gold	-23.44	-3.39	0.30
Vanguard PRIMECAP Inv	VPMCX	Large Growth	★★★	Gold	-7.90	6.14	7.52
Vanguard PRIMECAP Core Inv	VPCCX	Large Blend	★★★	Gold	-11.38	3.15	5.60
Vanguard Mid Cap Index Institutional	VMCIX	Mid-Cap Blend	★★★★★	Gold	-16.63	-0.25	2.10
Vanguard Long-Term Tax-Exempt	VWLTX	Muni National Long	★★★★	Gold	4.62	4.58	3.70

# First Stage: Morningstar change affects SRI ownership

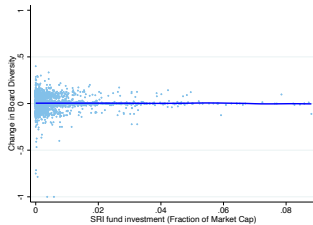
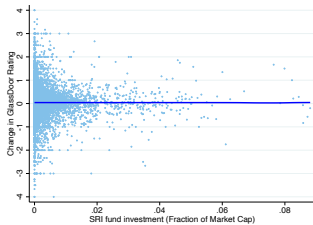
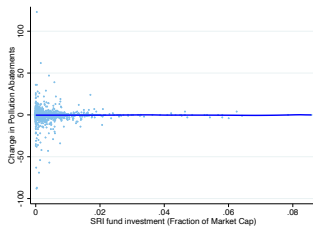
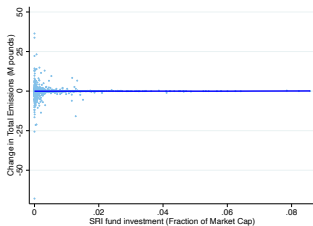
- For each set of matched funds per year (“cohort year”) we examine their AUM for three years before and after the cohort-year



# Overview of our DiD methodology

- We compute the fitted value of the DiD estimate for fund assets, and
- We multiply that change by that fund's December (*ex ante*) holdings of each U.S. firm
- DiD regressions in a firm-year panel. Fitted values of SRI ownership are:
  - ① 0 for firms that were never held by a treated SRI fund
  - ② 0 in pretreatment years for firms held by any treated SRI fund
  - ③ positive in post-treatment years for firms held by at least one treated SRI fund

# SRI funds do not change firm E&S behavior:



# What could explain lack of impact?

- ① Limited size of investment by SRI funds
- ② SRI funds try to impact E&S conduct but are not successful
- ③ A short time horizon in our estimates
- ④ Limited scope for improvement at SRI portfolio firms
- ⑤ Weak statistical power

**We address all these concerns and continue to find a lack of impact**

# Conclusions

- SRI funds do invest differently than non-SRI funds
  - Invest in companies with good E&S conduct
  - Offer investors a portfolio consistent with their stated objective
- **But the actual impact of SRI funds is inconsistent with their claimed impact. Why?**
  - SRI funds respond to incentives  $\implies$  negative net benefits
  - Holding “good” and divesting “bad” E&S firms could be insufficient to change behavior (Edmans et al. 2022)