# Citation Remark of Sustainable investing in equilibrium

## **Paper Cited the Article**

• JOURNAL OF BANKING & FINANCE

YEAR Article Name		Abstract	Cited
2022	The effects of mutual fund decarbonization on stock prices and carbon emissions	This study seeks to determine whether mutual fund decarbonization affects the stock prices of divested firms and contributes to the reduction of these firms' carbon emissions. Using a new methodology to identify equity mutual funds' decarbonization trades, we calculate a metric of decarbonization selling pres -sure (DSP) on stocks. Controlling for endogeneity and selection bias, we find that high DSP sustainably pressures stock prices downwards. Furthermore, we find that divested firms experiencing a stock price decline subsequently reduce their carbon emissions compared to non-divested firms. This finding is con-sistent with theoretical predictions. Various tested alternative explanations, such as shareholder inter-vention and financial selling pressure, cannot diminish these results.  Overall, our findings support the divestment movement's hope that a critical mass of investors is able to reduce carbon emissions.	0

#### o Cited Reason :

Pástor et al build on the model created by Heinkel et al. (2001) and confirm that sustainable investors generate social impact without direct engagement by shareholders.

• JOURNAL OF CORPORATE FINANCE

YEAR	Article Name	Abstract	Cited
2021	National culture and the valueto implications of corporate environmental and social performance	We examine why environmental and social (E/S) performance vary across countries and firms, and evaluate the value implications. Using a sample of 33,021 firm-year observations representing 4587 firms from 43 countries over the 2003-2015 period and applying hierarchical linear modeling, we find that individualism is positively associated with firm-level E/S performance. We show that two country-level channels-freedom of the press and protection of equal rights-and three firm-level channelsmanagerial discretion, board diversity, and corporate trans-parency-link individualism to E/S performance. We find a positive association between firm-level E/S performance and firm value, with three firm-level channels-cash flows, cash flow variability, and cost of equity-linking E/S performance to firm value. This positive association is stronger in more individualistic countries. Finally, we find that internationalization weakens the role of national culture; however, it accentuates the positive association between firm-level E/S performance and firm value.	0

#### o Cited Reason:

- Expect E/S performance can **increase firm value** by increasing the level of cash flows and **lowering** the variability of cash flows and the **cost of capital**
- Main Conclusion :
  - positive association between firm-level E/S performance and firm value is stronger in more individualistic countries
- Measuring greenness :
  - environmental and social performance scores from the widely used Thomson Reuters ASSET4 ESG database
- REVIEW OF FINANCIAL STUDIES

YEAR	Article Name	Abstract			
2021	Get Real! Individuals Prefer More Sustainable Investments	The United Nations' Sustainable Development Goals (SDGs) have created societal and political pressure for pension funds to address sustainable investing. We run two field surveys (n = 1,669, n = 3,186) with a pension fund that grants its members a real vote on its sustainable-investment policy. Two-thirds of participants are willing to expand the fund's engagement with companies based on selected SDGs, even when they expect engagement to hurt financial performance. Support remains strong after the fund implements the choice. A key reason is participants' strong social preferences.	2		

#### o Cited Reason:

In equilibrium, **sustainable assets should have negative alphas** (Pástor, Stambaugh, and Taylor 2020), but in the short run, mispricing can occur (e.g., Edmans 2011). The return expectations of individual investors reflect these ambiguous findings regarding realized returns on sustainable investments.

- Main Conclusion :
  - Investor hold ESG assets (pension funds) due to strong social preferences even with lower return.
  - Conflict between client and fund manager
- o Data (Survey):

Survey sample:

**1.1.3** The (nonconsequential) question on portfolio screening. Next to engagement, screening portfolios based on sustainability criteria (or ESG integration) is another frequently used investment strategy (EUROSIF 2018). We therefore also asked participants the following (nonconsequential) question:

Another approach that Pensioenfonds Detailhandel considers is "best in class". With this approach Pensioenfonds Detailhandel chooses to invest more in companies that score high on environmental, social and governance criteria and less in companies that score low.

Do you prefer Pensioenfonds Detailhandel to invest more in companies that score high on environmental, social and governance factors and less in companies that score low?

- a. Yes
- b. No
- c. I do not know

## Paper being Cited in the Article

Empirical evidence of green stock under perform brown stock

## **Green stock under perform brown stock (JFE)**

YEAR	Article Name	Abstract	Cited
2009	The price of sin: The effects of social norms on markets	We provide evidence for the effects of social norms on markets by studying "sin" stocks-publicly traded companies involved in producing alcohol, tobacco, and gaming. We hypothesize that there is a societal norm against funding operations that promote vice and that some investors, particularly institutions subject to norms, pay a financial cost in abstaining from these stocks. Consistent with this hypothesis, we find that sin stocks are less held by norm-constrained institutions such as pension plans as compared to mutual or hedge funds that are natural arbitrageurs, and they receive less coverage from analysts than do stocks of otherwise comparable characteristics. Sin stocks also have higher expected returns than otherwise comparable stocks, consistent with them being neglected by norm-constrained investors and facing greater litigation risk heightened by social norms. Evidence from corporate financing decisions and the performance of sin stocks outside the US also suggest that norms affect stock prices and returns. (C) 2009 Elsevier B.V. All rights reserved.	619

- brown frims: these firms are against socail norm strongly "sin" stocks, i.e., publicly traded companies involved in the production of alcohol, tobacco, and gaming
- Social norms lead investors to demand compensation for holding sin stocks.

## **Greener firm have lower cost of capital (Management Science)**

YEAR	Article Name	Abstract		
2014	Environmental Externalities and Cost of Capital	I analyze the impact of a firm's environmental profile on its cost of equity and debt capital. Using implied cost of capital derived from analysts' earnings estimates, I find that investors demand significantly higher expected returns on stocks excluded by environmental screens (such as hazardous chemical, substantial emissions, and climate change concerns) compared to firms without such environmental concerns. Lenders also charge a significantly higher interest rate on the bank loans issued to firms with these environmental concerns. I provide evidence that the environmental profile of a firm is not simply proxying for an omitted component of its default risk. Further, firms with these environmental concerns have lower institutional ownership and fewer banks participate in their loan syndicate than firms without such environmental concerns. These results suggest that exclusionary socially responsible investing and environmentally sensitive lending can have a material impact on the cost of equity and debt capital of affected firms.	184	

- Green and brown firms is defined by the KLD data base, with dummy varaiables
- The greenness of the firm will effect the cost of capital of firms.

### \* 5. Conclusion

I provide evidence that the environmental profile of a firm has a significant effect on its cost of capital. In particular, both stock investors and private lenders, seem to take into account the environmental concerns of a firm, leading to a higher cost of equity and debt capital for the firm. Notably, firms with climate change concerns have a significantly higher cost of equity and debt capital, indicating that even though greenhouse gas emissions are not currently regulated, investors do seem to take these issues into consideration. On the other hand, in general, the cost of equity and debt capital are not lower for firms with environmental strengths. But lenders charge lower interest rates on bank loans to firms that derive significant revenue from environmentally beneficial products.