

Consistency or Transformation? Finance in Climate Agreements

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Paris Agreement Article 2.1c

"make financial flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development"



Impact Channels

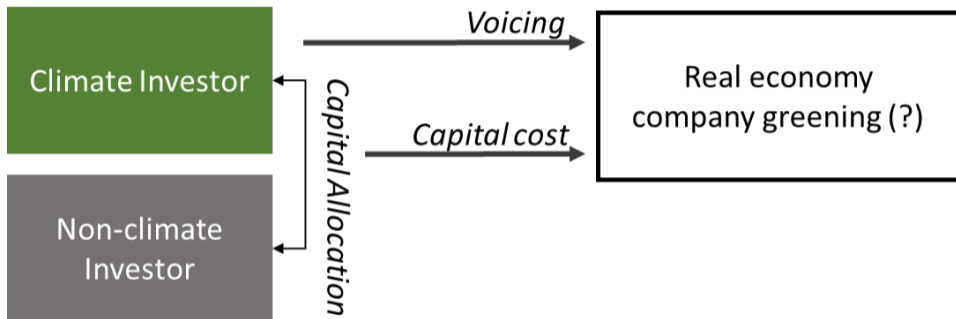


Figure: Impact Channels of Responsible Investors

- Define responsible investors in accordance with UN PRI membership
- Green ownership relation to past company climate performance:

$$y_{i,t} = \beta_0 + \beta_1 \text{log_Scope1}_{i,t-1} + \beta_2 \text{ESG}_{i,t-1} + \beta_{3\dots n} X_{i,t-1} + \text{FE} + \epsilon_{i,t} \quad (1)$$

- Company future climate performance in relation to green ownership

$$y_{i,t} = \beta_0 + \beta_1 \text{Responsible Investor}_{i,t-2} + \beta_2 \text{Institutional Investor}_{i,t-2} + \beta_{3\dots n} X_{i,t-2} + \text{FE} + \epsilon_{i,t} \quad (2)$$

	count	mean	std	min	25%	50%	75%	max
log(Total Assets)	255827	12.92	1.81	10.53	11.50	12.73	14.08	19.36
log(Free Float)	259955	0.62	0.22	0.00	0.48	0.58	0.79	1.00
log(Scope 1 Emissions)	27815	10.99	3.39	0.00	8.81	11.00	13.23	19.75
log(Scope 1 Intensity)	27676	0.19	0.42	0.00	0.00	0.02	0.14	8.51
Climate Investor Ratio	262344	0.21	0.28	0.00	0.00	0.08	0.35	1.00
Climate Investor Share	249879	0.05	0.09	0.00	0.00	0.01	0.05	0.98
CA100+ Ratio	262344	0.05	0.14	0.00	0.00	0.00	0.01	1.00
Institutional Investor Share	253202	0.22	0.26	0.00	0.02	0.11	0.31	1.00
North America	262519	0.17	0.38	0.00	0.00	0.00	0.00	1.00
European Union	262519	0.13	0.34	0.00	0.00	0.00	0.00	1.00
Rest of World	262519	0.70	0.46	0.00	0.00	1.00	1.00	1.00
ESG Score (MSCI)	45049	4.64	2.28	0.00	2.90	4.60	6.30	10.00

Table: Summary Statistics

Result I: High-Emitter Shunning

	Climate Investor (UN PRI)				Institutional Investor			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
log(Scope 1 Emissions)	-0.003*** (0.001)				-0.003*** (0.001)			
log(Scope 1 Intensity)		-0.033*** (0.004)				-0.010* (0.005)		
Climate Sector			-0.007*** (0.002)				-0.001 (0.003)	
High Emitter				-0.023*** (0.004)				-0.013** (0.005)
ESG Rating (MSCI)	0.006*** (0.001)	0.005*** (0.001)	0.006*** (0.000)	0.006*** (0.000)	0.011*** (0.001)	0.011*** (0.001)	0.014*** (0.001)	0.014*** (0.001)
Observations	16337	16337	37476	37476	16320	16320	37436	37436
Adjusted R^2	0.225	0.228	0.204	0.204	0.435	0.435	0.486	0.486

Note: Standard errors in parentheses and significance levels at * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table: Climate Investors, Institutional Investors, and Corporate Emissions

Result II: No Company Decarbonization

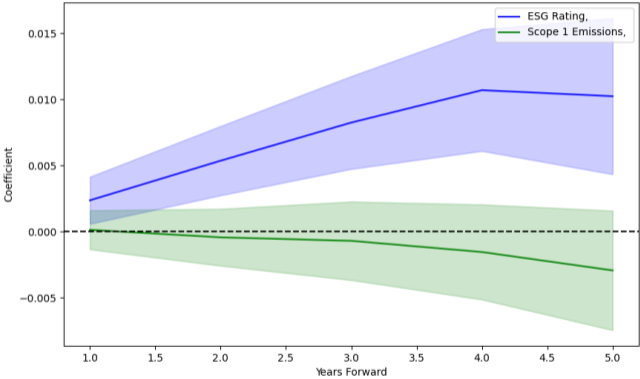


Figure: Sustainability Change in Companies over Time

Potential explanations:

- Wrong responsible investor definition → robust for CA100+ Investors
- Too early, effects will only unfold later → Berk and van Binsbergen [2021] or Hartzmark and Shue [2023] would disagree
- **Responsible investors aim for climate consistency (if at all) not for real economy change**

Jonathan B. Berk and Jules H. van Binsbergen. The Impact of Impact Investing. *SSRN Electronic Journal*, 2021. doi: 10.2139/ssrn.3909166.

Samuel M. Hartzmark and Kelly Shue. Counterproductive Sustainable Investing: The Impact Elasticity of Brown and Green Firms. *SSRN Electronic Journal*, 2023. doi: 10.2139/ssrn.4359282.