

Dyck et al. (2019); Chen et al. (2020); Azar et al. (2021)
“Do institutional investors drive corporate social responsibility?”

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Introduction

Do institutional investors drive portfolio firm's E&S performance?

- Dyck et al. (2019): Yes, for the international sample
 - Mostly the correlation, not causality
 - Mechanisms: voice, not exit
 - For both financial and social motivations
- Chen et al. (2020): Yes, for the US sample
 - Causality but very sample sample
 - Mechanisms: mainly voice
 - Inst. investors focus more on financially material E&S
- Azar et al. (2021): Yes, for the US sample
 - Causality but only for passive institutional investors
 - On CO_2 emission reduction
 - Mechanisms: voice

Dyck et al. (2019)

“Do institutional investors drive corporate social responsibility? International evidence”

Data

- Firm level E&S performance: Thomson Reuters ASSET4 ESG Ratings
 - 2004–2013, annual
 - 45 countries
- Institutional ownership: Factset v5 Ownership
 - 2004–2013, quarterly
 - almost all countries

⇒ 19,489 observations

- 3277 firms
- 41 countries
- 2004–2013.

Does IO drive E&S performance?

$$\log(\text{Score}_{it}) = \alpha + \beta IO_{i,t-1} + X_{i,t-1}\gamma + FEs + \varepsilon_{it} \quad (1)$$

	Environmental scores		Social scores	
	Overall score (1)	ASSET4 z-score (2)	Overall score (3)	ASSET4 z-score (4)
<i>Panel A: Full sample</i>				
Total IO	0.268 (0.00)	0.403 (0.00)	0.124 (0.00)	0.491 (0.00)

- Overall score: equal weighted across subcategories of E&S
- ASSET4 z-score: value weighted across subcategories of E&S

Does IO drive E&S performance?

Two settings where IO has greater impact on firm's E&S

- 1 Institutions who sign the UN Principles for Responsible Investment
- 2 When firms have greater scope for improvement

Panel B: Institutional ownership split by UN PRI signatory status

IO UN PRI Signatories	0.773 (0.00)	1.147 (0.00)	0.271 (0.00)	1.013 (0.00)
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Panel C: Subsamples of firms with weak and strong initial E&S performance

Weak initial E&S performance subsample				
Total IO	0.259 (0.00)	0.415 (0.00)	0.128 (0.00)	0.487 (0.00)
Control variables	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Adjusted R ²	0.446	0.329	0.456	0.293
Number of observations	11,918	11,907	11,989	11,862
Strong initial E&S performance subsample				
Total IO	0.137 (0.03)	0.207 (0.01)	0.039 (0.11)	0.093 (0.26)

Does IO drive E&S performance?

A quasi-natural experiment: The BP Deepwater Horizon Oil Spill at 05/20/2010

- Institutions pay more attention to firm's E commitment
- All oil and gas firms are affected
- Oil and gas firms with more IO should improve E more

	Overall environmental score			Environmental ASSET4 z-score		
	Oil and gas extraction (SIC 13) (1)	Oil and petroleum products (FF 17) (2)	Mining (SIC Division B) (3)	Oil and gas extraction (SIC 13) (4)	Oil and petroleum products (FF 17) (5)	Mining (SIC Division B) (6)
<i>Panel A: Within-industry regressions</i>						
Total IO	0.100 (0.32)	0.093 (0.46)	0.168 (0.12)	0.394 (0.05)	0.252 (0.17)	0.337 (0.01)
Post event	-0.007 (0.88)	0.028 (0.40)	0.008 (0.78)	-0.154 (0.07)	-0.099 (0.13)	-0.125 (0.03)
Total IO × Post event	0.216 (0.02)	0.150 (0.02)	0.120 (0.00)	0.332 (0.03)	0.240 (0.03)	0.235 (0.00)

oil and gas extraction firms only

Does IO drive E&S performance?

Relative to control firms, the oil and gas extraction firms should improve E more.

Panel B: Difference-in-differences regressions

Total IO	0.288 (0.00)	0.306 (0.00)	0.377 (0.00)	0.431 (0.00)	0.454 (0.00)	0.523 (0.00)
Post event	0.087 (0.00)	0.089 (0.00)	0.097 (0.00)	0.002 (0.90)	0.005 (0.78)	0.017 (0.38)
Treated firm	-0.100 (0.45)	-0.038 (0.68)	-0.122 (0.28)	-0.091 (0.68)	-0.032 (0.78)	-0.195 (0.27)
Total IO \times Post event \times Treated firm	0.156 (0.06)	0.091 (0.12)	0.116 (0.01)	0.247 (0.08)	0.149 (0.17)	0.222 (0.01)

oil and gas extraction firms + all other firms as control

Which mechanism do institutions use to push for E&S performance?

- Exit: excluding poor E&S firms affects firm's behavior
 - Granger causality tests do not support this: only $IO_{i,t-1} \Rightarrow E\&S_{i,t}$, not $E\&S_{i,t-1} \Rightarrow IO_{i,t}$
- Voice
 - Use the comprehensive Canada shareholder proposals data
 - The submission of E&S proposals is followed by an increase in E&S performance
 - Mostly private engagement

Why do institutions push firms to improve E&S performance?

Financial vs. social motivations

To test financial motivations,

- Use the 2008–09 financial crisis as a shock
 - The financial crisis revealed the financial value of firm's social capital
 - Financially motivated institutions would push more E&S after the crisis
 - Firm with higher IO would during crisis would subsequently improve E&S more

	Environmental scores		Social scores	
	Overall score (1)	ASSET4 z-score (2)	Overall score (3)	ASSET4 z-score (4)
Total IO × Post crisis	0.155 (0.00)	0.182 (0.00)	0.065 (0.00)	0.179 (0.00)
Total IO	0.268 (0.01)	0.397 (0.00)	0.155 (0.00)	0.649 (0.00)
Post crisis	0.010 (0.61)	0.002 (0.92)	0.011 (0.12)	0.039 (0.09)
Control variables	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Adjusted R ²	0.501	0.449	0.468	0.408
Number of observations	3698	3698	3698	3698
Number of firms	1849	1849	1849	1849

Why do institutions push firms to improve E&S performance?

Financial vs. social motivations

To test social motivations,

- Use institution's foreign holdings
 - Firm managers and domestic institutions are both affected by country social norms: hard to separate
 - Foreign institutions are unlikely to obtain private benefits other than through social norm channel
 - Firm with higher foreign IO from high social norm countries would subsequently improve E&S more

Why do institutions push firms to improve E&S performance?

Panel A: Environmental scores

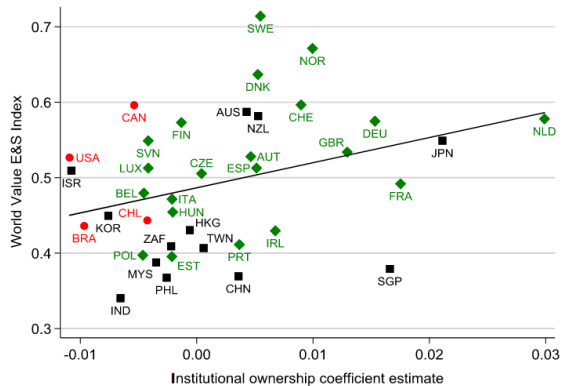
	Overall score		ASSET4 z-score	
	Environmental Performance Index	World Value E&S Index	Environmental Performance Index	World Value E&S Index
	(1)	(2)	(3)	(4)
Foreign IO				
High social norm group	0.948 (0.00)	0.885 (0.00)	1.265 (0.00)	1.171 (0.00)
Low social norm group	-0.001 (1.00)	0.065 (0.59)	0.051 (0.75)	0.132 (0.42)
Domestic IO	0.442 (0.00)	0.444 (0.00)	0.644 (0.00)	0.646 (0.00)

Panel B: Social scores

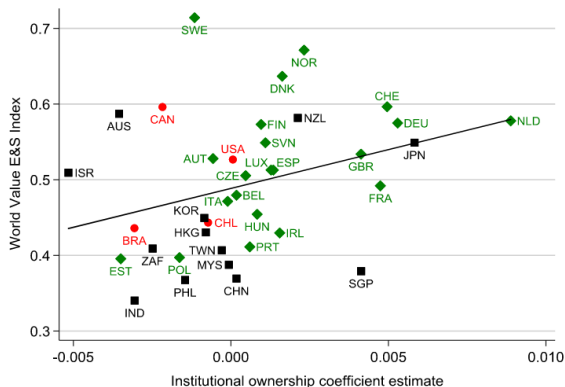
	Overall score		ASSET4 z-score	
	Employment Laws Index	World Value E&S Index	Employment Laws Index	World Value E&S Index
	(1)	(2)	(3)	(4)
Foreign IO				
High social norm group	0.556 (0.00)	0.285 (0.00)	1.449 (0.00)	0.962 (0.00)
Low social norm group	0.063 (0.04)	0.056 (0.29)	0.359 (0.00)	0.291 (0.18)
Domestic IO _{t-1}	0.175 (0.00)	0.186 (0.00)	0.702 (0.00)	0.733 (0.00)

Why do institutions push firms to improve E&S performance?

(a) Overall environmental score



(b) Overall social score



Why do institutions push firms to improve E&S performance?

The second test of social motivations,

- Investment companies and advisors are more concerned about E&S since they raise fund locally
- Long term investors such as pension funds are also more concerned about E&S
- Firms with higher foreign IO from these institutions would subsequently improve E&S more

Panel A: Environmental scores

	Overall score		ASSET4 z-score	
	Environmental Performance Index (1)	World Value E&S Index (2)	Environmental Performance Index (3)	World Value E&S Index (4)
Foreign IO, high social norm group				
Independent institutional investors	0.615 (0.00)	0.563 (0.01)	0.864 (0.00)	0.771 (0.00)
Pension funds	2.668 (0.00)	2.030 (0.00)	3.217 (0.00)	2.418 (0.00)
Hedge funds	-0.501 (0.87)	-2.573 (0.10)	-0.295 (0.95)	-3.428 (0.13)
Foreign IO, low social norm group				
Independent institutional investors	0.005 (0.97)	0.089 (0.42)	0.049 (0.74)	0.152 (0.30)
Pension funds	1.433 (0.07)	3.868 (0.00)	1.638 (0.09)	5.131 (0.01)
Hedge funds	-0.743 (0.26)	-0.856 (0.23)	-0.640 (0.35)	-0.808 (0.29)
Domestic IO	0.416 (0.00)	0.418 (0.00)	0.617 (0.00)	0.619 (0.00)

Chen et al. (2020)

“Institutional shareholders and corporate social responsibility”

Data

- Firm level ESG performance: MSCI KLD database
 - 2003–2006, annual
- Institutional ownership: Thomson Reuters Institutional Holdings
 - 2003–2006, quarterly
 - US only
- Russell 1000/2000 index
 - Prior to 2007, Russell does not implement "banding" methodology for reconstitution
 - Sharp RDD before 2007

Azar et al. (2021)

“The big three and corporate carbon emissions around the world”

Conclusion

References

- Azar, J., M. Duro, I. Kadach, and G. Ormazabal (2021). The big three and corporate carbon emissions around the world. *Journal of Financial Economics* 142(2), 674–696.
- Chen, T., H. Dong, and C. Lin (2020). Institutional shareholders and corporate social responsibility. *Journal of Financial Economics* 135(2), 483–504.
- Dyck, A., K. V. Lins, L. Roth, and H. F. Wagner (2019). Do institutional investors drive corporate social responsibility? international evidence. *Journal of Financial Economics* 131(3), 693–714.