

# Do Employees Have Useful Information About Firms' ESG Practices?

**ABFER annual meeting**

**Tuesday, May 28, 2024**

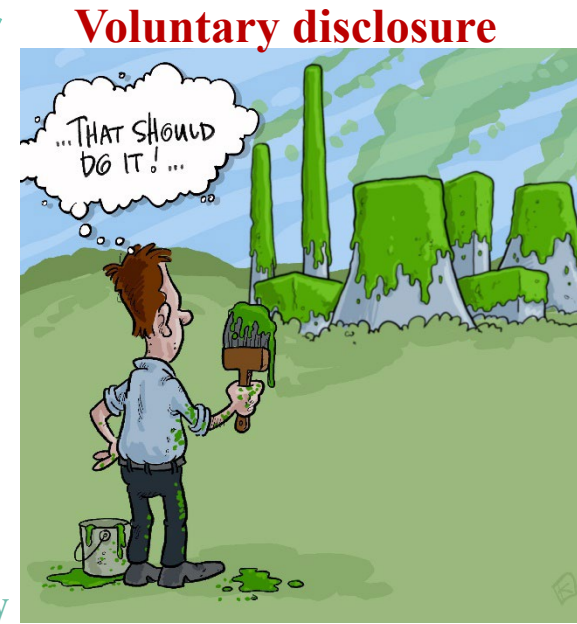
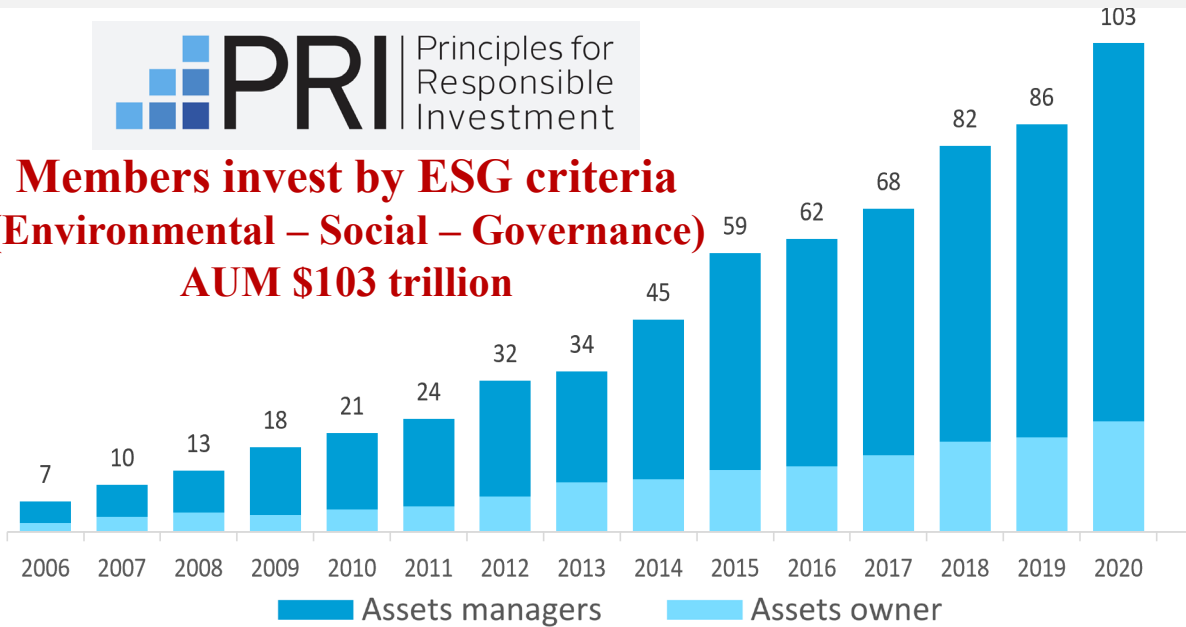
**Hoa Briscoe-Tran**



# Motivation



**Members invest by ESG criteria**  
**(Environmental – Social – Governance)**  
**AUM \$103 trillion**



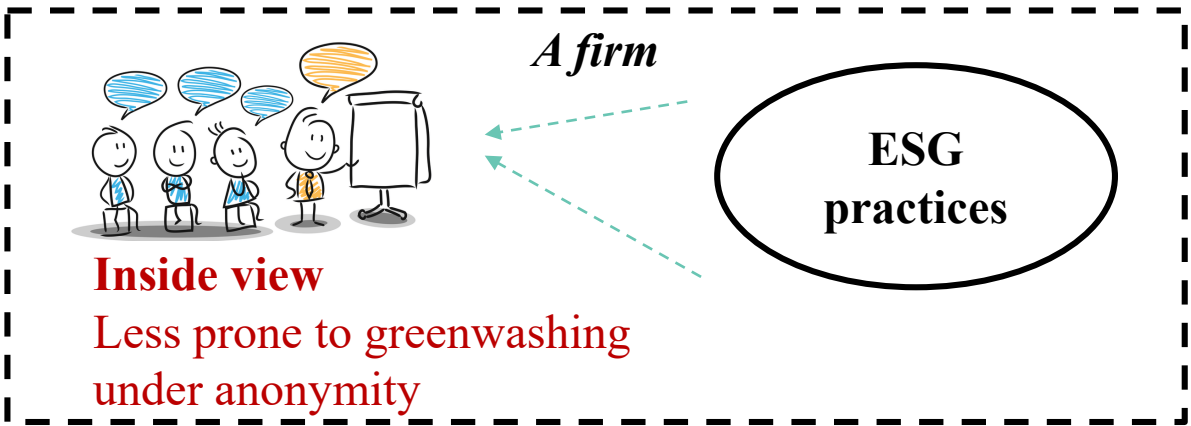
**Voluntary disclosure**



Major input

Outside view

## ESG Ratings



**Corporate greenwashing**  
 Manage ESG ratings as high as possible!  
 (e.g., Cornaggia and Cornaggia 2024)

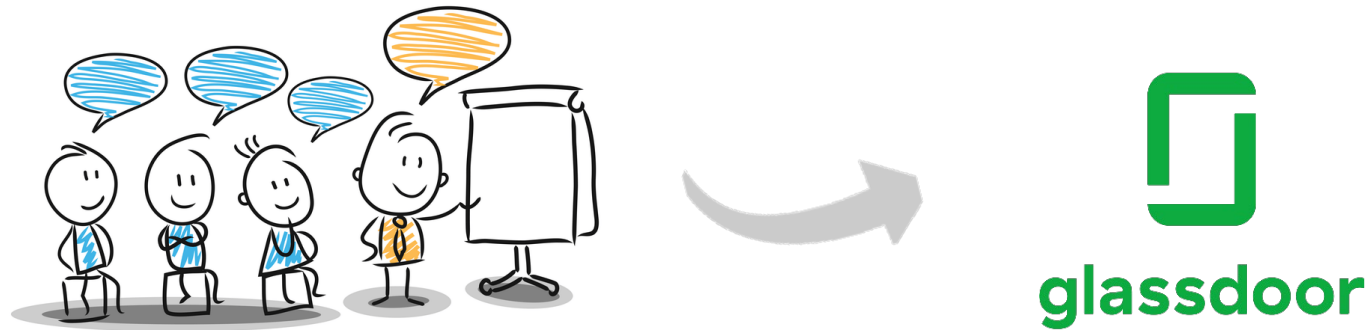
**Do employees have useful information about ESG practices?**

Research question

# Do employees have useful information about firms' ESG practices?

- **Useful: information beyond existing ESG ratings?**
  - No, if employees don't care, or simply listen to firm disclosure, just like ESG ratings
    - More likely for the E category:
    - E.g., employees don't care about emissions, or simply cite the firm's disclosed emissions estimates.
  - Yes, if employees experience ESG practices firsthand
    - More likely for the S and G categories:
    - E.g., they witness employee treatment (S), and business ethics and leadership (G)
- **Useful: information robust to greenwashing bias?**
  - Yes, if anonymity allows employees to share information without fear
    - E.g., employee reviews predict misconduct (Campbell and Shang (2021)), and stock returns (Green et al. 2019).
  - No, if employees greenwash the firm as well, for better career prospects
    - Also, firms may try to manipulate employee reviews (Gong and Thomas (2023)...) )
- **Overall, empirical questions:**
  - Whether employees have ESG information beyond existing ratings
  - Whether employees have ESG information robust to greenwashing

# Summary



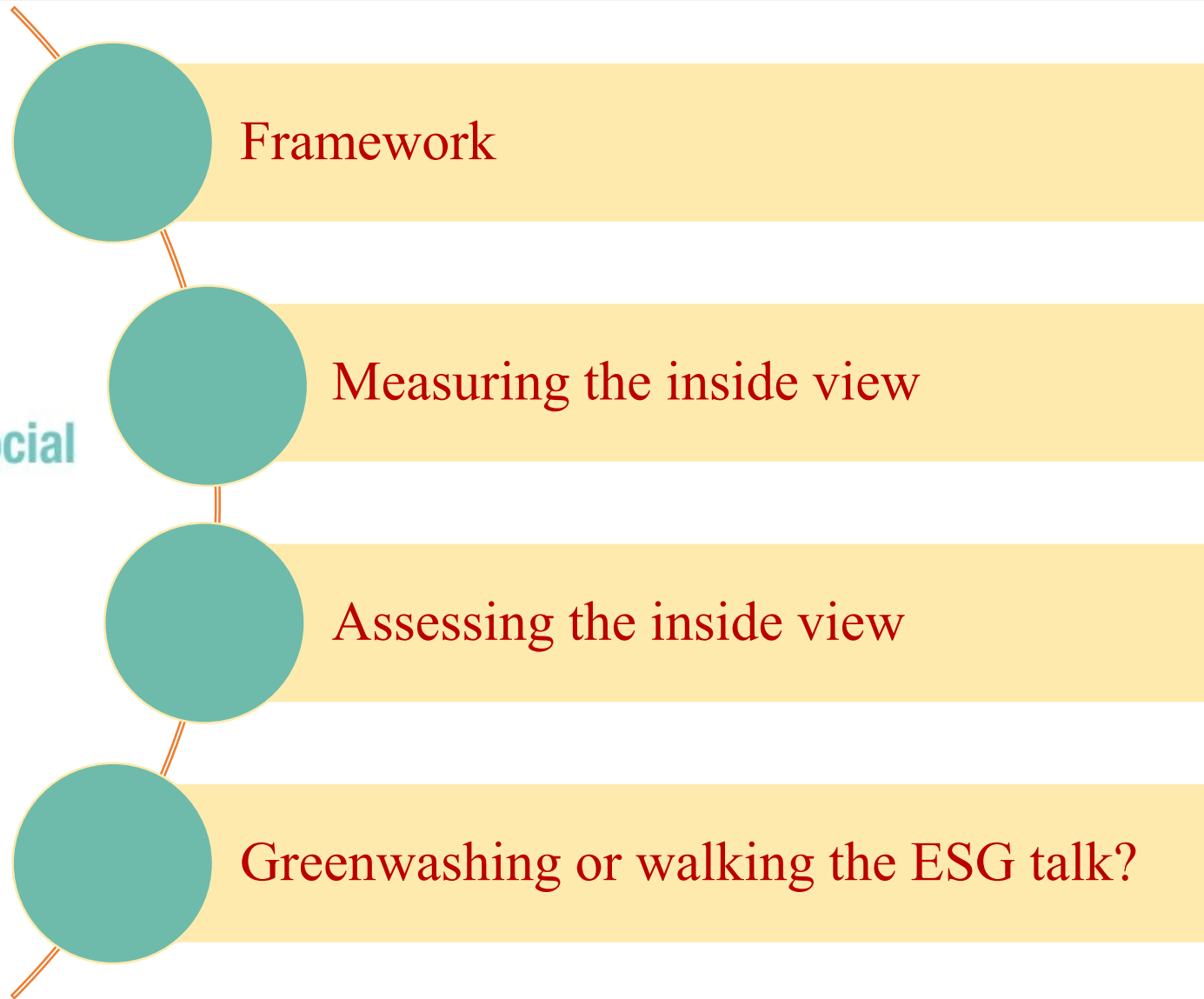
## *Extracting ESG content in 10 million reviews using a word-embedding algorithm*

- **43% of reviews mention ESG issues → Employees care.**
  - As expected, E < S : 2% vs. 22%
  - Surprisingly, even more on G: 28%
- **Employees' inside view of ESG practices is highly informative**
  - Predicts future events: misconduct, governance issues, downside risk, and valuation.
    - Better and beyond existing ESG ratings, but strongest on S and G.
- **The inside view appears robust to greenwashing**
  - Low-cost changes in a firm's ESG policies do not affect the inside view,
  - But high-cost changes do change the inside view (such as changes due to a court ruling)

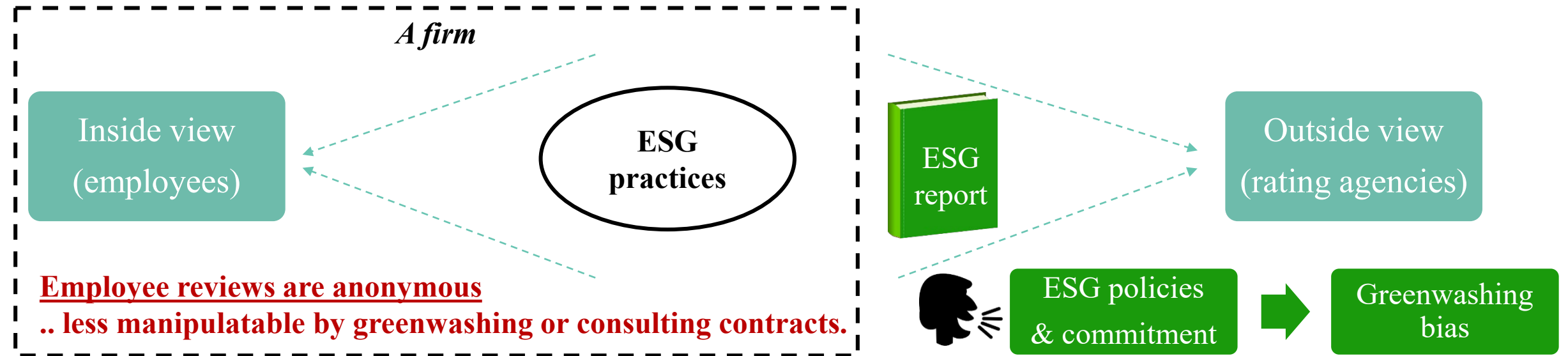
# Implications

- **Investors can**
  - Use the inside view to improve ESG investing, reduce risk, and improve returns.
- **Rating agencies can**
  - Incorporate employees and their views more in their rating processes.
- **Anyone who cares about ESG per se can**
  - Evaluate firms' greenwashing
  - Be careful with firms that look good with an outside view, but poor from an inside view
- **And the academic literature as well:**
  - CSR and ESG literature
    - Getting closer to a solution to a thorny problem of ESG ratings management.
  - Employee reviews literature
    - Quantifying the relative information contents of E, S, vs. G. Surprising on G!
  - Cheap talk literature; Management literature

# ESG investment



# Framework

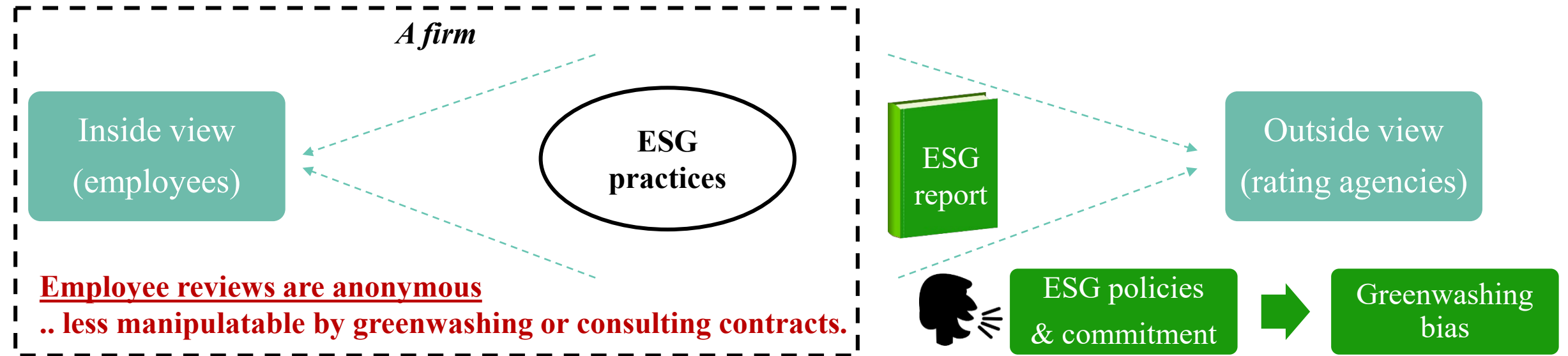


## ○ Question 1: Can employee reviews inform about ESG practices?

- No, if employees do not care about ESG practices or do not observe such practices.
- Otherwise yes: employee reviews are informative (Green et al. (2019); Campbell and Shang (2021))
  - *Less likely for E*: employees might not observe/care about the exact carbon emissions, but rating agencies do.
  - *More likely for S*: employee is a key S stakeholder;
  - *More likely for G*: employees observe internal governance (leadership, ethics...)



# Framework

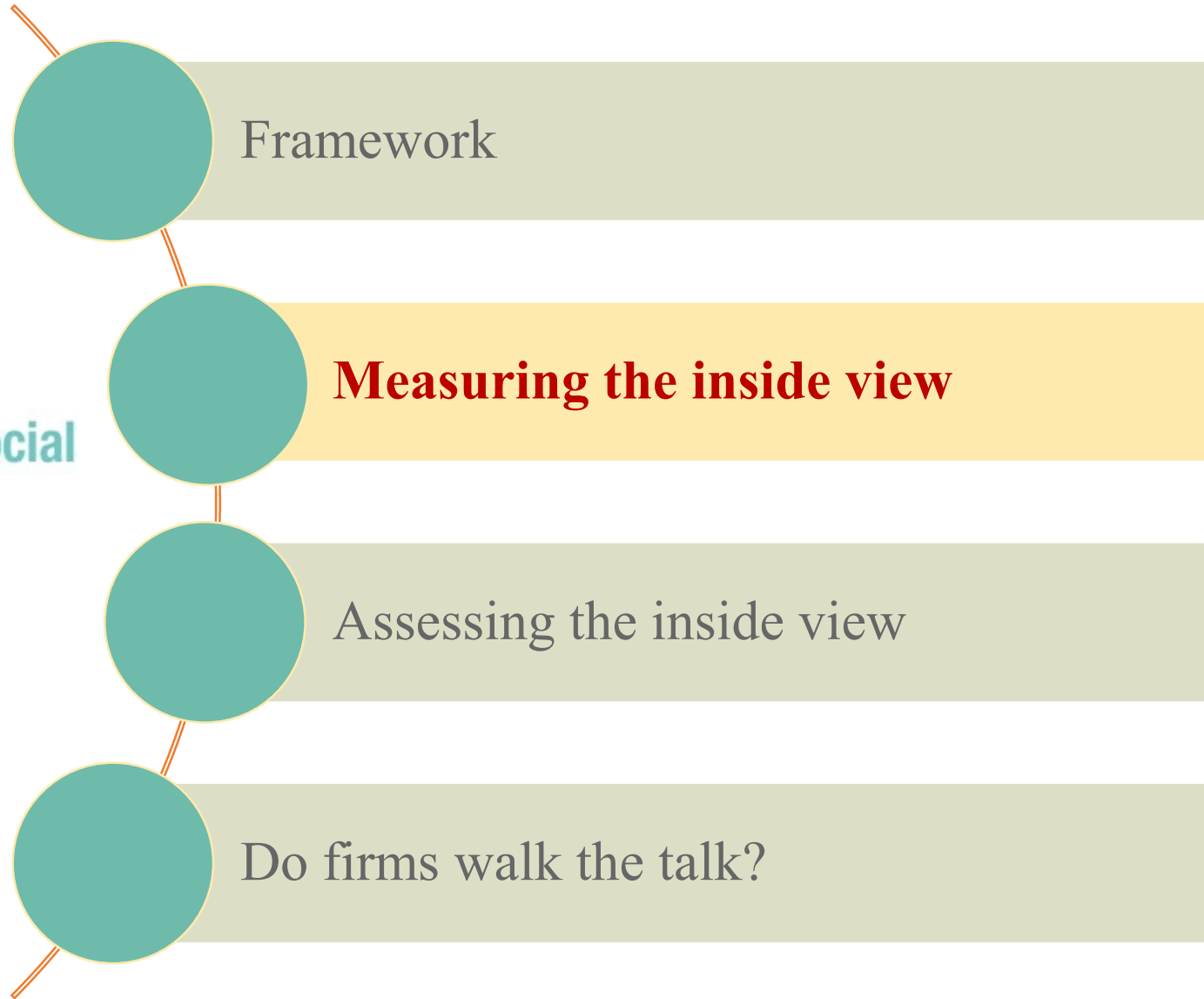


## ○ Question 2: Do firms walk the ESG talk?

- Yes, adopting ESG practices offer benefits
  - Higher firm value: Flammer (2015); Edmans (2011); Jensen & Meckling (1976), Gompers, Ishii, & Metrick (2003)...
  - Lower firm risk: (Hoepner et al. 2020)...
- No, talk is cheap (Guiso, Sapienza, and Zingales (2015), Bebchuk and Tallarita (2020))
  - Following through with the ESG talk is hard (e.g., changing corporate culture is difficult: Gorton and Zentefis (2020))
- **Do employees see a difference when firms walk the ESG talk vs. when they don't?**



# ESG investment

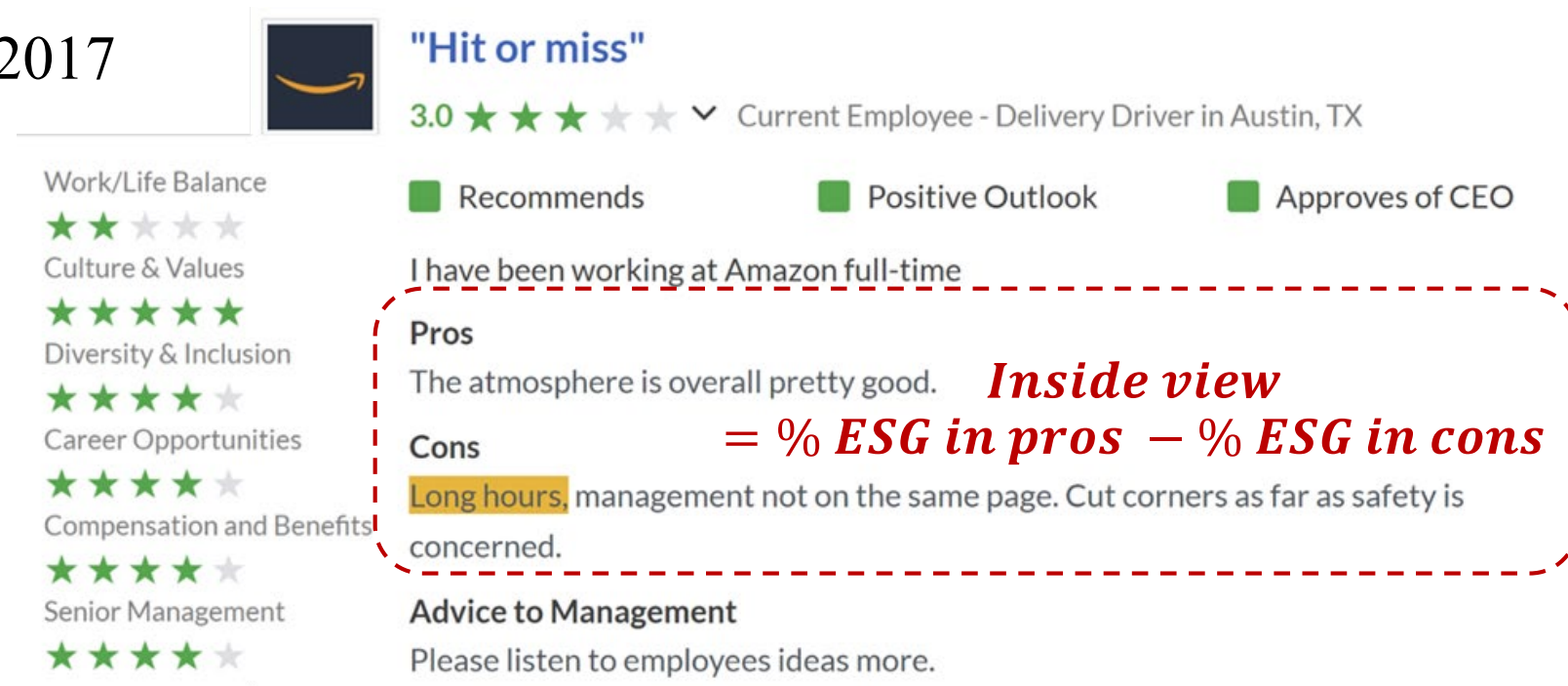


# Measuring ESG inside views: Glassdoor data

## Glassdoor.com

- Designed specifically to review employers
  - Anonymity
  - Give-to-get policy: [Reviews are balanced on Glassdoor](#)
  - Quality control: Claim to review every contribution
    - Limit: one review, per company worked at, per year
    - Employers can flag reviews
- #2 job search site in the U.S. 2017

[Source: Glassdoor](#)



**"Hit or miss"**  
3.0 ★★☆☆☆ Current Employee - Delivery Driver in Austin, TX

Work/Life Balance ★★☆☆☆  
Culture & Values ★★★★★  
Diversity & Inclusion ★★★★★  
Career Opportunities ★★★★★  
Compensation and Benefits ★★★★★  
Senior Management ★★★★★

Recommendations:  Recommends  Positive Outlook  Approves of CEO

I have been working at Amazon full-time

**Pros**  
The atmosphere is overall pretty good. *Inside view*

**Cons**  
Long hours, management not on the same page. Cut corners as far as safety is concerned. *= % ESG in pros – % ESG in cons*

**Advice to Management**  
Please listen to employees ideas more.

# Measuring ESG inside views

$$\text{Inside view} \\ = \% \text{ ESG in pros} - \% \text{ ESG in cons}$$

## ○ Comprehensive ESG word lists

### ■ Seed words:

- words most frequently used in ESG rating methodologies and academic papers

**Social:** occupational health, community involvement, racism, discrimination, harassment, human trafficking, community, philanthropy.

### ■ Expand to *similar* words: “Hey machine, **read all reviews**, find me similar words.”

- *Word2vec* represents a word by a vector based on its neighbors [Mikolov et al. \(2013\)](#), [Li et al. \(2021\)](#)

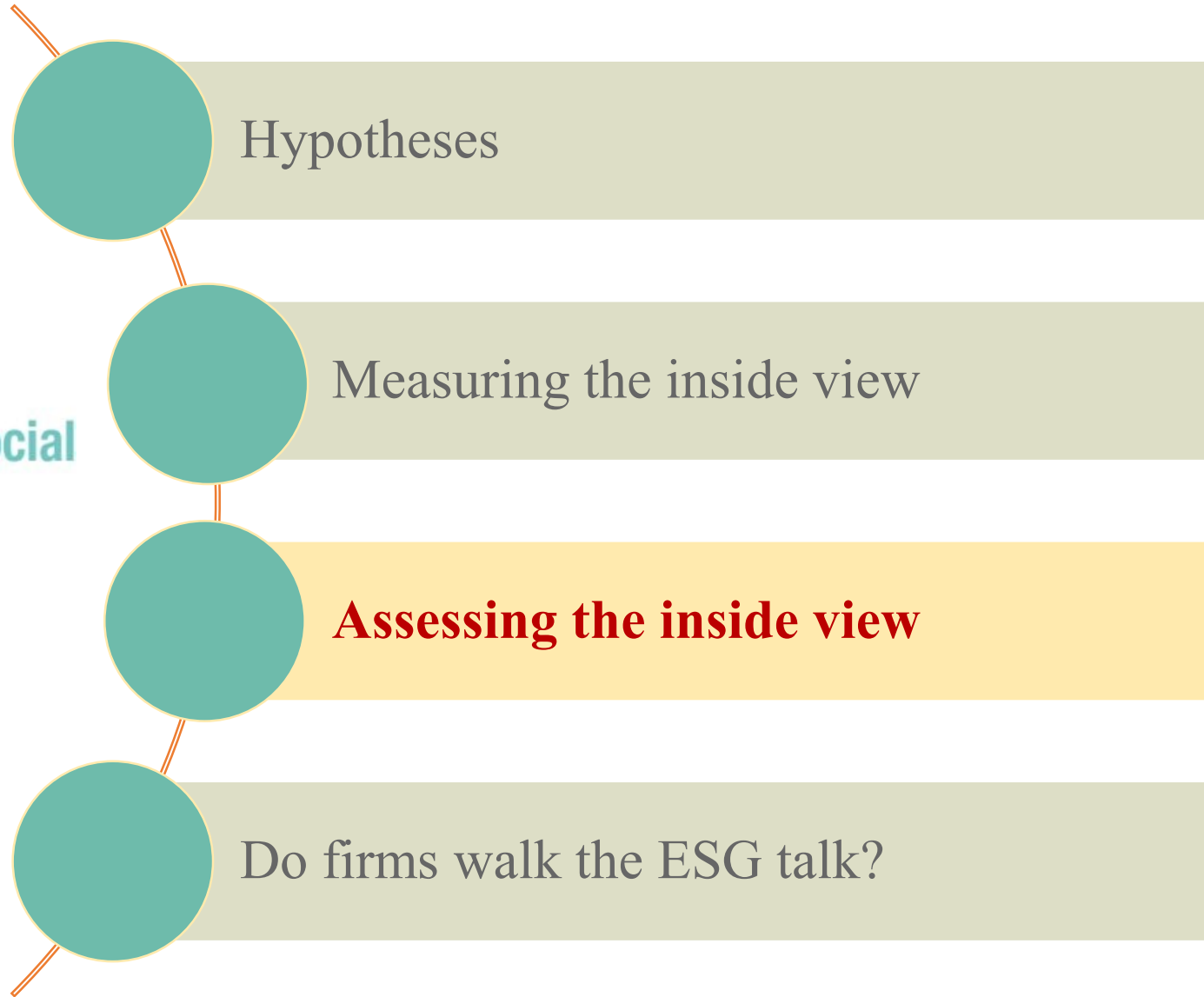


*humanitarian, awareness, diversity equality, justice, society, representation, gender equality, refugee, antidiscrimination, outreach, cultural competency, reproductive health, indigenous, antiracism, community outreach, LGBT, LGBTQ, LGBTQIA, GLBT... Comprehensive & highly specific to employee reviews*

# Method: From seed words to 1500-word ESG dictionary

	Environmental	Social	Governance
<b>Seed words</b>	environmental, emission, energy, water, carbon, biodiversity, pollution, green, packaging, renewable, recycle, footprint, disposal, greenhouse, raw material, renewable energy, carbon footprint, oil spill, global footprint, global warming, environmental protection, environmental sustainability, noise pollution, fossil fuel, electric vehicle, solar energy, solar panel, plastic bag, air pollution, wind turbine, nuclear power, natural gas	human, employee, health, safety, labor, community, labour, social, relation, philanthropy, workforce, citizenship, occupational, human capital, corporate citizenship, occupational health, community involvement, race ethnicity, discrimination harassment, medicaid medicare, collective bargaining, human resource, age discrimination, gender racial, racial ethnic, unfair dismissal, human trafficking, threat violence, charitable donation, charitable giving	board, governance, shareholder, ethic, practice, corruption, instability, bribery, committee, executive, transparency, ownership, audit, level, diversity, business, code conduct, board director, insider trading, daytoday operation, tax evasion, money laundering, policy procedure, regulatory scrutiny, track record, unethical behavior, law violation, nepotism cronyism
<b>Top 50 added</b>	co2, biofuel, hydrocarbon, irrigation, fertilizer, ethanol, agricultural, pollutant, recycling, purification, geothermal, ammonia, herbicide, fracke, ecological, thermal, forestry, electricity, dioxide, pesticide, hydroelectric, petrochemical, landfill, mining, consumption, compost, agriculture, compressor, lubricant, chemical, nuclear, biodegradable, gas turbine, polymer, lng, wastewater, aluminium, recyclable, contamination, industrial, electric utility, filtration, biomass, synthetic, vegetation, ewaste, reservoir, coolant, groundwater, stormwater	advocacy, sustainability, social justice, diversity inclusion, stewardship, equality, inclusion diversity, inclusion, eeo, humanitarian, awareness, diversity equality, justice, society, representation, gender equality, refugee, antidiscrimination, outreach, cultural competency, reproductive health, indigenous, antiracism, community outreach, glbt, stewardship, mental health, racial justice, racial equity, nondiscrimination, systemic racism, domestic violence, prevention, racial gender, safeguard, hivaid, consciousness, constitutional, hiv, participant, latino, lgbtq, antibully, cultural diversity, volunteerism, hse, dei, anticorruption	leadership, compliance, malfeasance, institutional, doj, organization, legal compliance, regulator, unethical practice, stakeholder, cronyism, integrity, embezzlement, regulatory compliance, impropriety, noncompliance, accountability, csuite, conflict interest, organizational, regulatory, strategic, fraudulent activity, partnership, due diligence, cfpb, risk aversion, operational, decisionmake, council, systemic, strategic planning, misuse fund, misconduct, irresponsibility, cronyism nepotism, political correctness, indict, discriminatory practice, ethical, opacity, mismanagement, bod, antitrust, decision making, watchdog, entity, governmental, ftc, misappropriation
		intentional and illegal use of property or funds	


# ESG investment



# Does the inside view appear useful? – Top/bottom firms

## ○ Ranked by employees' views of ESG practices during 2014-2018

### Ranked by employees' inside view of ESG practices

	Environmental	Social	Governance
	Top 5		
<div style="border: 1px dashed teal; padding: 5px; display: inline-block;">                     Renewable energy firm                 </div> 	Sunedison	Umpqua Bank	Linkedin
	American Water	Old National Bancorp	Salesforce
	Nextera Energy, Inc.	Gap Inc.	Yum!
	Portland General Electric	Investors Bank	Microchip Technology
	Albemarle	CNO Financial Group	Ceridian
	Bottom 5		
	ConocoPhillips	Opus Bank	FirstEnergy
	Alpha Natural Resources	Intercontinental Exchange	Laureate Education
	Freeport-Mcmoran	Tenneco	FirstMerit
	Altria	Precision Castparts	Capital Bank
<div style="border: 1px dashed red; padding: 5px; display: inline-block;">                     Oil and Gas company                 </div>	Pioneer Natural Resources	Pepco Holdings	Sterling Bancorp

Example reviews



# Is the inside view informative beyond the ESG ratings?

- **Would the inside view predict future ESG-related outcomes well?**
  - Maybe for E: employees care little, e.g., carbon emissions number.
  - Likely for S: employees are a key social stakeholder.
  - Likely for G: employees observe governance often and closely

*Cho et al. (2024) argue that disclosing Scope 3 emissions is a sign of environmental stewardship.*

**(E) Panel A: Predicting whether a firm discloses Scope 3 emissions.**

	(1) t+1	(2) t+1	(3) t+1	(4) t+2	(5) t+2	(6) t+2	(7) t+3	(8) t+3	(9) t+3
Inside view E	.07** (.03)	.08** (.03)	.09*** (.03)	.05 (.03)	.07** (.03)	.08** (.03)	.06* (.03)	.06* (.03)	.06** (.03)
MSCI E		.6*** (.05)	.59*** (.05)		.54*** (.05)	.53*** (.05)		.49*** (.05)	.47*** (.05)
Overall rating			.27*** (.06)			.28*** (.06)			.25*** (.06)
Observations	15653	10789	10789	14235	10788	10788	12798	9632	9632
Pseudo R <sup>2</sup>	.34	.37	.38	.33	.36	.36	.33	.35	.35
Year FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes

*Controlling for industry and year fixed effects; and firm characteristics as in Li et al. (2021)*

- *Data: Emission from Refinitiv;*



# Is the inside view informative?

- **Would the inside view predict future ESG-related outcomes well?**
  - Maybe for E: employees care little, e.g., carbon emissions number.
  - Likely for S: employees are a key stakeholder;
  - Likely for G: employees observe governance often and closely.

**(S) Panel B: Predicting whether firm lands in Best Companies for Diversity list.**

	(1) t+1	(2) t+1	(3) t+1	(4) t+2	(5) t+2	(6) t+2	(7) t+3	(8) t+3	(9) t+3
Inside view S	0.91*** (0.14)	0.93*** (0.16)	0.67*** (0.17)	0.87*** (0.13)	0.82*** (0.15)	0.54*** (0.14)	0.66*** (0.12)	0.69*** (0.14)	0.47*** (0.14)
MSCI S		0.27 (0.18)	0.31 (0.20)		0.30 (0.19)	0.33 (0.21)		0.31 (0.21)	0.28 (0.22)
Overall rating			1.48*** (0.23)			1.50*** (0.24)			1.09*** (0.19)
Observations	4843	3523	3523	4820	3418	3418	4722	3209	3209
Pseudo R <sup>2</sup>	0.19	0.20	0.27	0.19	0.19	0.26	0.17	0.17	0.22
Year FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes

*Controlling for industry and year fixed effects; and firm characteristics as in Li et al. (2021)*

- *Data: Fortune's Best Company for Diversity List – a survey of diverse employees (woman, people of color, ...)*

# Is the inside view informative?

- **Would the inside view predict future ESG-related outcomes well?**
  - Maybe for E: employees care little, e.g., carbon emissions number.
  - Likely for S: employees are a key stakeholder;
  - Likely for G: employees observe governance often and closely

**(G) Panel A: Predicting Number of Internal Control Weaknesses.**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	t+1	t+1	t+1	t+2	t+2	t+2	t+3	t+3	t+3
Inside view G	-.39*** (0.06)	-.27*** (0.08)	-.24*** (0.08)	-.26*** (0.06)	-.21*** (0.07)	-0.15* (0.08)	-.25*** (0.06)	-.23*** (0.08)	-0.20** (0.08)
MSCI G		0.00 (0.11)	0.01 (0.11)		0.14* (0.08)	0.15** (0.08)		0.01 (0.10)	0.01 (0.10)
Overall rating			-0.12 (0.08)			-0.20** (0.09)			-0.12 (0.09)
Observations	15411	10453	10453	13689	10306	10306	12013	8815	8815
Pseudo R <sup>2</sup>	0.11	0.12	0.12	0.11	0.11	0.12	0.10	0.11	0.11
Year FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry FE	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes

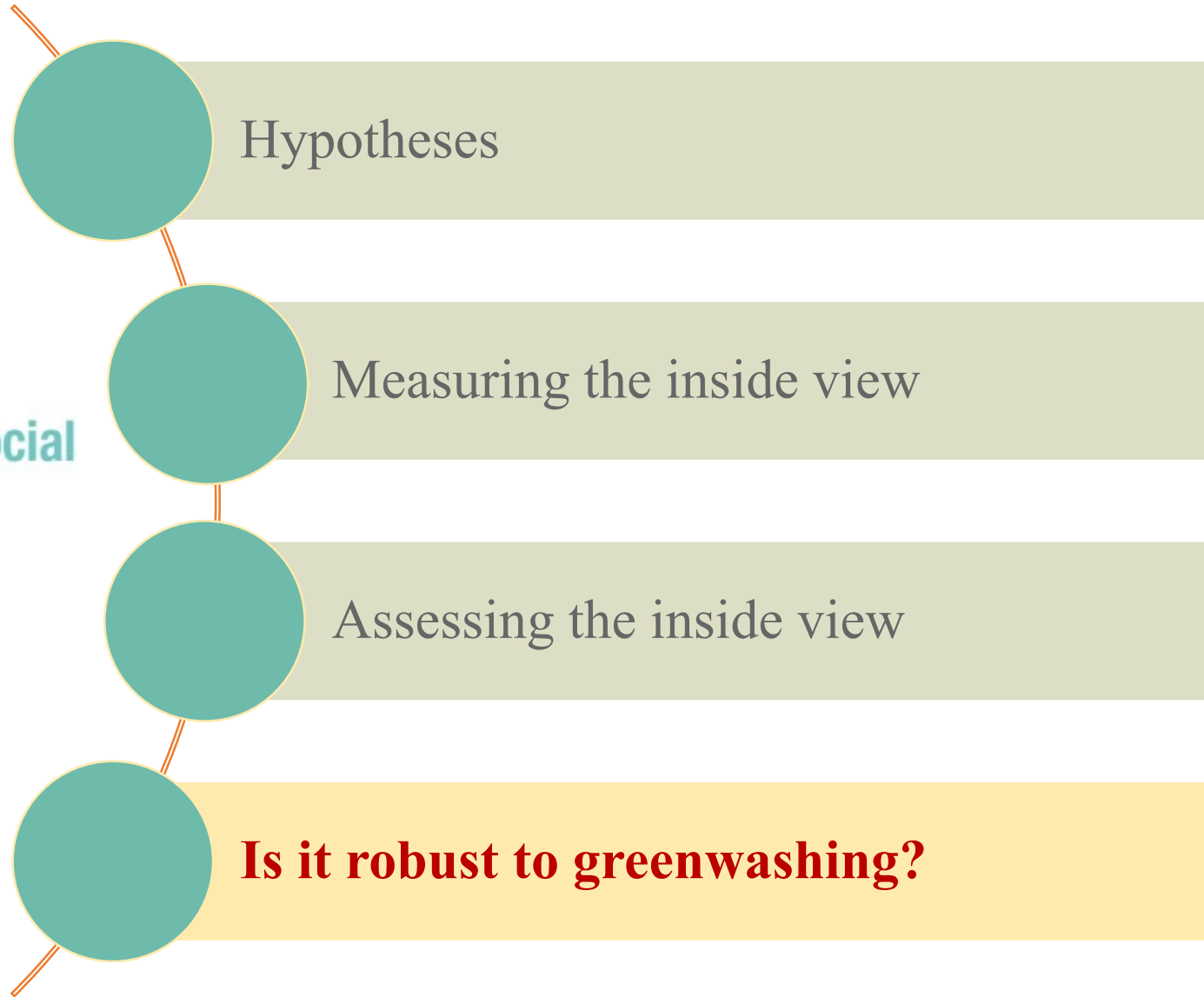
*Controlling for industry and year fixed effects; and firm characteristics as in Li et al. (2021)*

- *Data: Audit Analytics.*

# Is the inside view informative? Summary

- **The inside view also predicts**
  - social violations, shareholder activism, growth, downside risk, and valuation.
  - beyond the MSCI ratings and lagged dependent variables
- **In summary, the inside view is informative**
  - Beyond the existing ESG ratings.
  - $E < S < G$  in that order.

# ESG investment



# Is the inside view robust to cheap talk?

- **Cheap talk hypothesis**
  - Firms create ESG policies and talk about those policies, but
  - They do not follow through with the policies.
- **Is the inside view robust to cheap talk?**
  - Yes: employees have less incentive to greenwash under anonymity
  - No: employees may still be influenced by corporate cheap talk.
- **To test this hypothesis, I examine how the inside view changes**
  - When firms make a costly ESG commitment (subject to external validation, regulation, ...)  
Vs.
  - When firms make a costless ESG commitment (cheap talk).

# Do firms follow through with ESG commitments?

Compare 2 settings: with vs. without high cost of talking ESG.

○ **Business Roundtable (BRT)**: association of CEOs in America's largest firms

1997 - 2018

- “corporations exist principally to serve their shareholders”

Since 2019

- companies share “a fundamental commitment to all stakeholders”

Walmart 

amazon 

Coca-Cola 

 Chevron

- Bebachuk and Tallarita (2020) “mostly for show... no board approval”

○ **UN Global Compact (UNGC)**: world's largest corporate ESG initiative

- **High reputation cost & compliance cost**
- publicly expelled (40% historically) if failing to report progress

○ If costly signaling theory holds **and** the inside view is robust to greenwashing:

- Spence (1973), Riley (1979), then:
- **Inside view is more likely to improve after UNGC than BRT**



THE CLOROX COMPANY 



Kellogg's 

# Does the inside view improve after an ESG commitment?

- **Business Roundtable (BRT) commitment.**
  - Y variable: the change in E, S, or G inside view between 2018 and 2020
  - X variable: BRT indicator for firms signing the Business Roundtable's 2019 statement.
  - Controls: size, ROA, leverage, sales growth, Tobin's Q, and institutional ownership

	Full sample			Sub-sample					
	(1)	(2)	(3)	(1)	(2)	(3)	(4)	(5)	(6)
	E	S	G	High E	Low E	High S	Low S	High G	Low G
BRT	-0.12	-0.04	0.01	0.02	-0.40	0.19	0.01	0.06	0.05
	(0.17)	(0.12)	(0.11)	(0.19)	(0.24)	(0.21)	(0.14)	(0.13)	(0.14)
Observations	1022	1022	1022	665	349	300	713	452	565
R-squared	0.07	0.04	0.06	0.23	0.17	0.17	0.07	0.10	0.14
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry F.E.	yes	yes	yes	yes	yes	yes	yes	yes	yes

- **No. Employees do not view ESG practices to improve after the BRT commitment.**



# Does the inside view improve after an ESG commitment?

## ○ UN Global Compact (UNGC) commitment.

- Y variable: the change in E, S, or G inside view three years before and after UNGC commitment
- X variable: UNGC indicator for firms joining the UNGC
  - Control firms are matched within industry-year on lagged ESG inside views and control variables
  - Control variables are size, ROA, leverage, sales growth, Tobin's Q, and institutional ownership

	Full sample			Sub-sample						
	(1)	(2)	(3)	(1)	(2)	(3)	(4)	(5)	(6)	
	E	S	G	High E	Low E	High S	Low S	High G	Low G	
UNGC	-0.20	0.17***	0.20*	UNGC	-0.15	-0.20	0.29***	-0.09	0.09	0.21*
	(0.13)	(0.05)	(0.10)		(0.14)	(0.16)	(0.09)	(0.06)	(0.15)	(0.11)
Observations	632	632	632	Observations	232	397	290	342	286	344
R-squared	0.07	0.10	0.10	R-squared	0.24	0.20	0.30	0.20	0.30	0.18
Controls	no	no	no	Controls	yes	yes	yes	yes	yes	yes
Industry F.E.	yes	yes	yes	Industry F.E.	yes	yes	yes	yes	yes	yes

- Yes. Employees view ESG practices to improve after the UNGC commitment.

# Does the inside view improve after an ESG commitment? Summary

- **The answer is**
  - Yes: if the commitment is likely costly (UNGC)
  - No: if the commitment is likely cheap talk (BRT)
- **So, the inside view appears robust to cheap talk**
  
- **These are comparisons, however, are across different firms making different commitments.**
- **How about within-firm comparisons?**
  - Let's examine exogenous shocks to within-firm changes in ESG practices.

# A shock by a court ruling



## Sexual/racial harassment

UNITED STATES FEDERAL COURTS  
Seventh Circuit



### In the United States:

**An employer could be held liable** for an employee harassing another (sexually, racially...) **when the harasser has a supervisory role over the victim.**

### July 2013: 7<sup>th</sup> circuit court

**which set legal precedents for Wisconsin, Illinois, Indiana:**

**... liable even when the harasser has no supervisory role, i.e., simply co-worker**

→ increased legal risk of poor social (S) practices

### **Importantly:**

**... liable even when employer had established harassment/complaint policies**

→ adding more social (S) policies won't do

→ stronger incentive to *truly improve S practices (but not E or G)*

### ■ Difference-in-Differences around 2013 [Trends around the shock](#)

- Treatment firms located in IN, WI, IL; control firms located in other states

	E inside view	S inside view	G inside view
Treat * Post	-0.02 (0.03)	0.09*** (0.03)	-0.06 (0.07)
Observations	16353	16353	16353
R-squared	0.21	0.29	0.41
Controls	No	No	No
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

- The S inside view improves after the D&I court ruling
- **Overall, the inside view reflects costly changes in a firm's ESG practices, and on the correct dimension as well.**

# Comparing with existing ESG ratings: Correlation

## ○ Low correlation with existing ratings

<b>Correlation with the MSCI ESG rating</b>	
ESG	0.15***
E	0.00
S	0.14***
G	0.08***

<b>Correlation with the Refinitiv ESG rating</b>	
ESG	0.07***
E	0.00
S	0.11***
G	0.01

## ○ Even lower than the well-known low correlation among existing ESG ratings

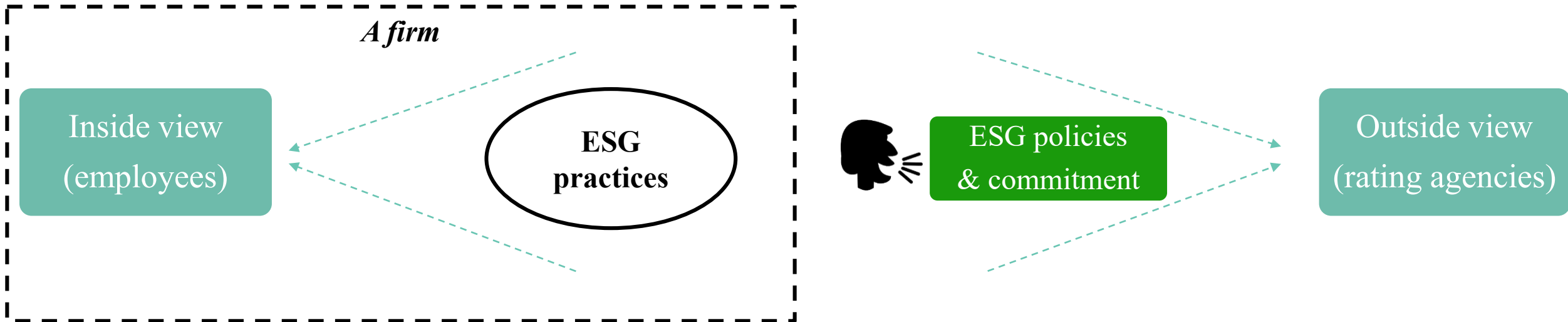
- Berg et al. (2022): correlation among existing ESG ratings is low
  - range between -0.01 and 0.81
  - average at **0.60**

## ○ Suggesting that greenwashing may be very pervasive!

# If time permits, what else do we learn?

- **A shock to cheap talk: within-firm changes in low-cost ESG policies**
  - Does the inside view change with such a shock?
  - compared with high-cost within-firm changes studied earlier with the circuit court ruling
- **Interesting time series**
  - Attention to ESG issues over time
  - Aggregate ESG practices over time
- **Distribution of the inside view**
  - All bell-shaped
  - Addressing halo effect and selection issues with extreme reviews.
- **Predicting performance**
  - Downside risk Sales growth Tobin's Q
- **Robustness:**
  - Dynamic trends around the court ruling on D&I practices.
  - Addressing endogeneity concerns.

# Conclusion



- **The inside view has useful ESG information**
  - beyond the existing ESG ratings.
  - robust to greenwashing

- **Inside view is vastly different from an outside view**
  - Correlation 0.15 with existing ratings
  - Greenwashing appears pervasive!

- **Implications: Use the inside view to**
  - improve ESG screening
  - identify value, growth, and risk.

- **Implications: Be careful with firms that**
  - look good from an outside view, *but*
  - look poor from an inside view.



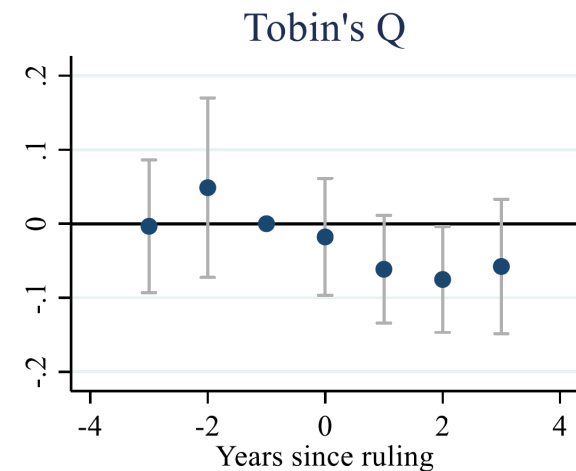
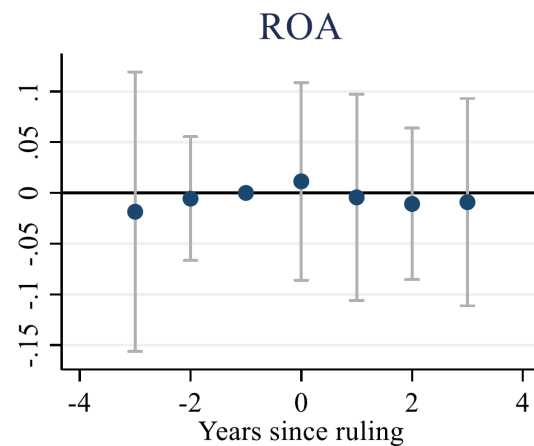
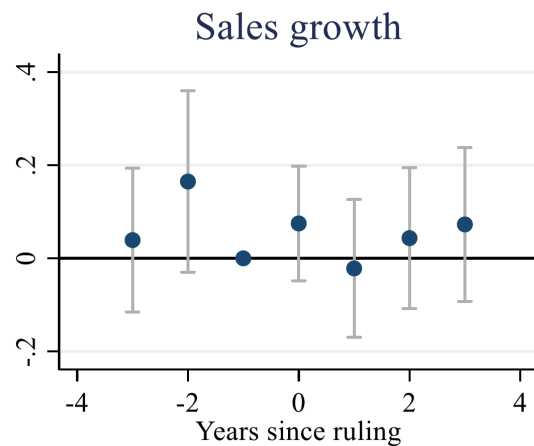
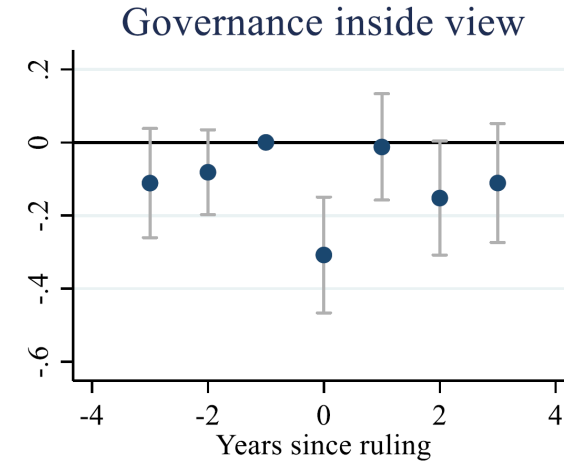
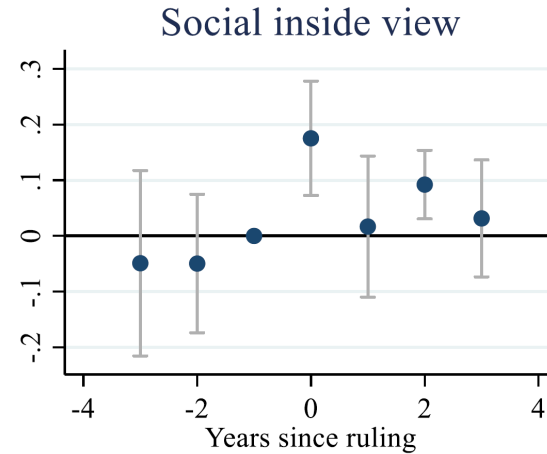
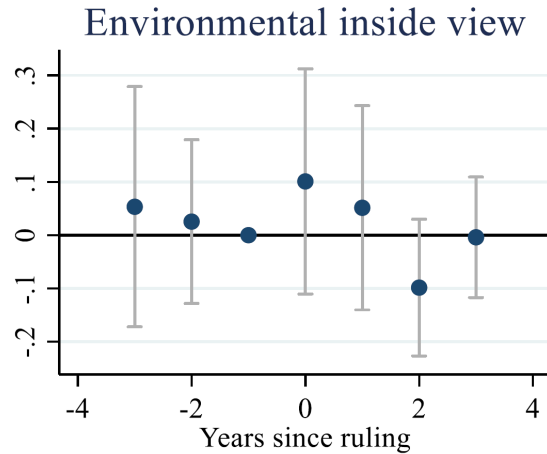
A scenic view of a university campus. A paved walkway leads from the foreground into a lush green lawn. Large, mature trees with dense foliage frame the path and cast shadows on the grass. In the background, a multi-story building with large windows is visible. The scene is bathed in bright sunlight, creating a vibrant and peaceful atmosphere.

THANK YOU

For more detail, visit:  
[briscoe-tran.com](http://briscoe-tran.com)



# Graphing trends after the court ruling



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# Do firms walk the ESG talk? Top-down ESG policies

- Does having more ESG policies mean a better inside view?
  - Yes: if those policies are effective or reflective of internal ESG practices
  - No: if firms set ESG policies to greenwash, or policies are not effective
- Regress  $Inside\ View_{it+1} = \beta_0 + \beta_1 \times Policies_{it} + Controls$ 
  - *Policies*: number of E, S, or G strengths recorded by MSCI raters.
  - *Controls*: firm characteristics, past ESG controversies, industry and year FE.
  - All coefficients standardized

- **E dimension:**

	(1)	(2)	(3)
Policies	0.00	0.02	0.01
	(0.01)	(0.02)	(0.10)
Policies x High institutional ownership			-0.00
			(0.03)
Policies x High analyst coverage			0.06
			(0.08)
Policies x High complexity			-0.04
			(0.05)
Policies x High advertising intensity			-0.03
			(0.03)
Policies x High E inside view			0.00
			(0.01)
Controversies		0.01	0.01
		(0.02)	(0.02)
Observations	11444	10432	10065
R-squared	0.03	0.03	0.04

# Do firms walk the ESG talk? Top-down ESG policies

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  - *Policies*: number of E, S, or G strengths recorded by MSCI raters.
  - *Controls*: firm characteristics, past ESG controversies, industry and year FE.
  - All coefficients standardized

## ○ S dimension:

	(1)	(2)	(3)
Policies	0.08***	0.07***	0.02
	(0.01)	(0.01)	(0.04)
Policies x High institutional ownership			0.07***
			(0.02)
Policies x High analyst coverage			0.03
			(0.04)
Policies x High complexity			0.01
			(0.03)
Policies x High advertising intensity			-0.02
			(0.02)
Policies x High S inside view			0.01
			(0.01)
Controversies		-0.06***	-0.04***
		(0.01)	(0.01)
Observations	11449	10438	10071
R-squared	0.03	0.03	0.05

# Do firms walk the ESG talk? Top-down ESG policies

- Does having more ESG policies mean a better inside view?
  - Yes: if those policies are effective or reflective of internal ESG practices
  - No: if firms set ESG policies to greenwash, or policies are not effective
- Regress  $Inside\ View_{it+1} = \beta_0 + \beta_1 \times Policies_{it} + Controls$ 
  - *Policies*: number of E, S, or G strengths recorded by MSCI raters.
  - *Controls*: firm characteristics, past ESG controversies, industry and year FE.
  - All coefficients standardized

## ○ G dimension:

	(1)	(2)	(3)
Policies	0.03** (0.01)	0.01 (0.01)	-0.05 (0.05)
Policies x High institutional ownership			0.01 (0.03)
Policies x High analyst coverage			0.09* (0.05)
Policies x High complexity			-0.06* (0.03)
Policies x High advertising intensity			0.02 (0.02)
Policies x High G inside view			-0.01 (0.01)
Controversies		-0.03** (0.01)	-0.02* (0.01)
Observations	6588	5920	5566
R-squared	0.03	0.04	0.07

# A shock to the ESG talk – cyber-attack shocks

- **Cyber-attacks: shock to the benefit of ESG talks.**
  - Likely exogenous (Akey et al. 2021)
    - especially about the timing of an attack
  - ESG talks can help firms regain reputation
    - Firms increase charitable donations and ESG ratings (Akey et al. 2021, Kamiya et al. 2021)
    - However, the benefit of walking the talk, is only likely for the G category:
      - improving risk management – part of governance – helps with handling future attacks.

## Do firms truly improve ESG practices?

$$\begin{aligned}
 & \textit{Inside view}_{it} \\
 & = \alpha + \beta \times \textit{PostAttack}_{it} + \gamma_{jt} + \omega_i + \epsilon_{it}
 \end{aligned}$$

### Inside view around a cyber-attack

	E	S	G
Post (t)	-.004 (.004)	-.016 (.011)	-0.035** (0.016)
Post (t+1)	0 (.002)	-.01 (.012)	-0.020 (0.017)
Post (t+2)	.003 (.002)	-.001 (.011)	0.013 (0.018)
Post (t+3)	.001 (.002)	-.017 (.015)	0.007 (0.018)
Observations	2762	2762	2762
R-squared	.311	.348	0.380
Controls	Y	Y	Y

- **The inside view hardly improves after a cyber-attack**
  - If anything, only on governance, when walking the talk offers benefit.

Note: All regressions include firm and industry-year fixed effects.

- Control firms are selected using propensity score matching by firm characteristics and prior ESG inside views within industry-year.
- **Stacked Panel:** 3 years before and 3 years after a cyber-attack.

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# How reliable is the inside view?– Top/bottom firms Reviews (E)

Company	Employee title	Year	Glassdoor overall rating	Select text
Top E - Sunedison	Business Development	2015	5.0	The company has excellent potential to capture market share in a rapidly growing sector ( <b>renewable energy</b> ). With the recent acquisition of First Wind the company is now expanding beyond <b>solar into wind energy</b> . Combined with our work on <b>energy storage technology ...</b>
	Project Engineer	2014	1.0	<b>It's solar.</b> Great way to help <b>the world's energy shortage and go green.</b> Some very excellent and helpful employees...
Bottom E - Pioneer Natural Resources	Anonymous Employee	2016	4.0	They need to do more core analysis and research for better <b>reservoir characterization.</b>
	Operations Technician	2015	4.0	<b>Poor management in Field Operations.</b> Going through a change in focus currently by shifting focus to <b>horizontal drilling...</b>

# How reliable is the inside view?– Top/bottom firms Reviews (S)

Company	Employee title	Year	Glassdoor overall rating	Select text
Top S - Umpqua Bank	Universal Associate	2015	4.0	Listens to <b>employees, community involvement</b> , rewards for performance.
	Accountant III	2017	5.0	<b>Paid 40 Hours</b> Annually to <b>Volunteer in the Community</b> . Treats you like a professional not Micro-managing.
Bottom S - Pepco Holdings	Anonymous Employee	2015	4.0	Work ethics and bad management . <b>No gender equality</b> .
	Tax Accountant	2016	5.0	Management doesn't listen to lower-level employees, <b>too many hours</b> are required to be worked, <b>bad work life balance</b>

# How reliable is the inside view?– Top/bottom firms Reviews (G)

Company	Employee title	Year	Glassdoor overall rating	Select text
Top G - Linkedin	Sales	2014	4.0	... Jeff Weiner is an inspiration, and the other execs are all driving towards a <b>shared vision</b> . The <b>culture and values</b> of the company are held in high esteem and they're <b>felt throughout</b> the organizations...
	Anonymous Employee	2017	5.0	<b>Company values and adherence</b> to them (be open, honest & constructive). <b>Transparency</b> is not just a word; it's shown in actions by the executive team. The <b>outstanding leadership</b> team and commitment to <b>developing leaders</b> within the company...
Bottom G - Sterling Bancorp	Client Service Associate	2018	2.0	Too much <b>pressure for sales</b> ; Don't care about employees; Horrendous <b>leadership</b>
	Client Service	2016	1.0	Very <b>disorganized</b> . Your <b>work ethic</b> will not go a long way

[Back to firm ranking](#)

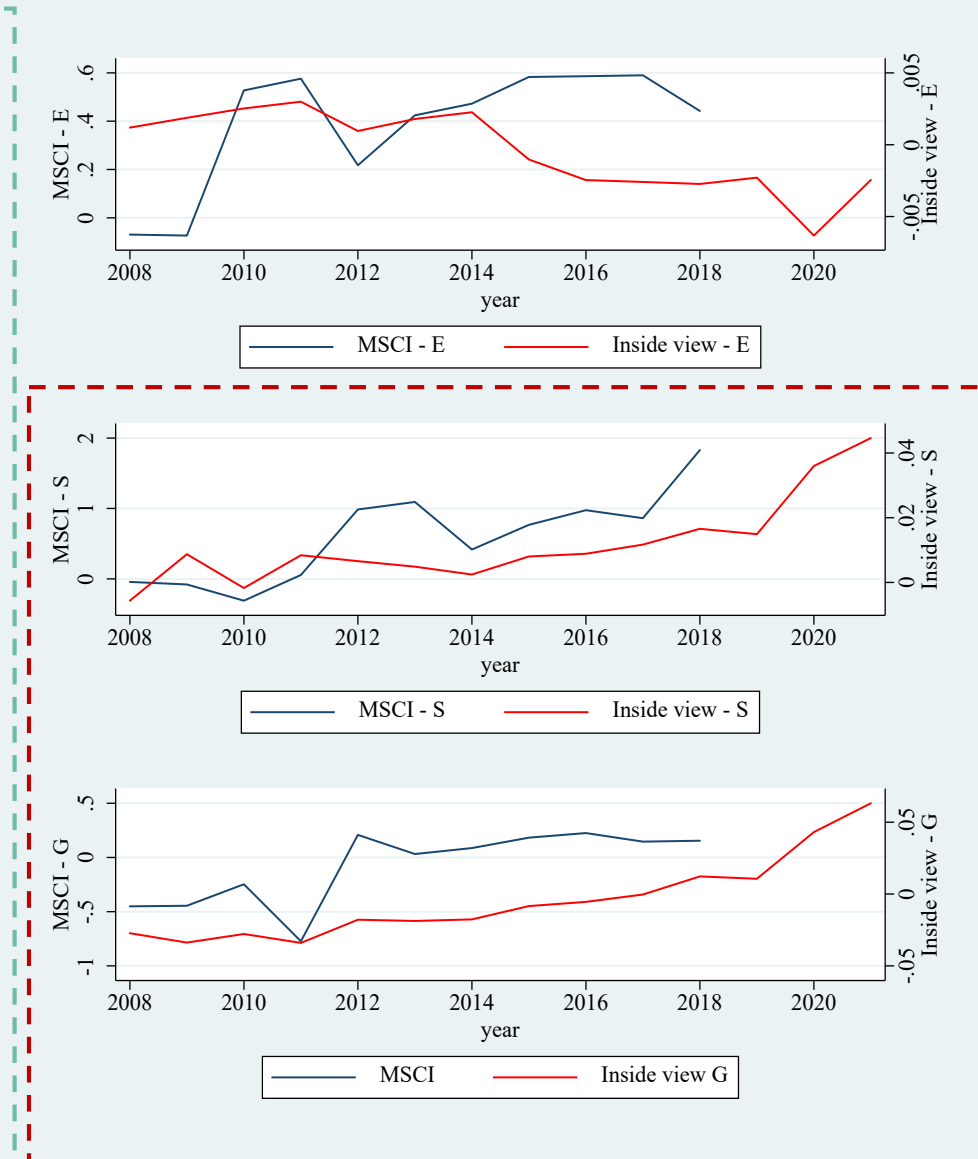
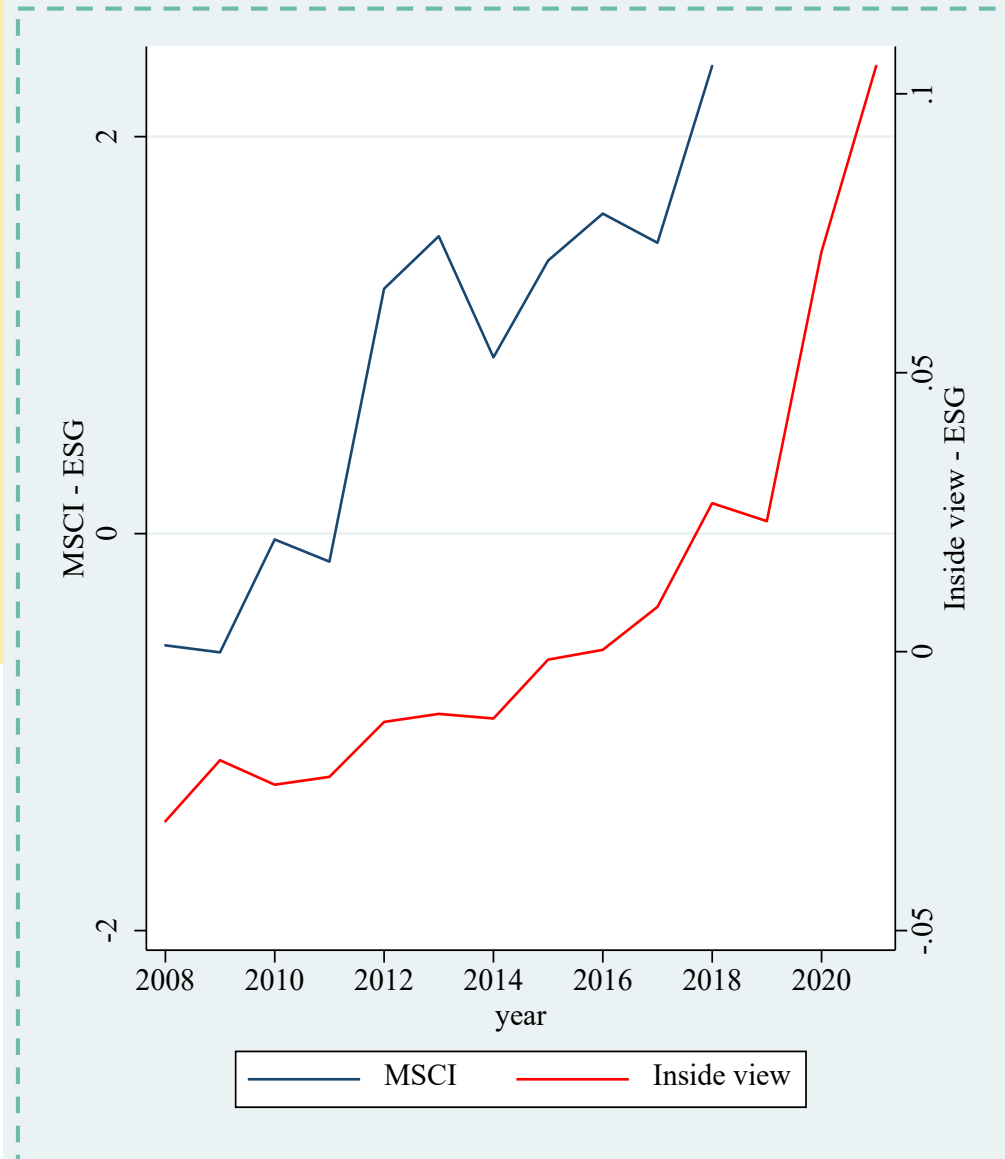
# Comparing with existing ESG ratings: Aggregate Trend

- **Aggregate ESG practices have improved over time**
  - S and G
  - Not E
- **Inside view and MSCI rating agree on aggregate**
  - Despite low correlation at the firm level

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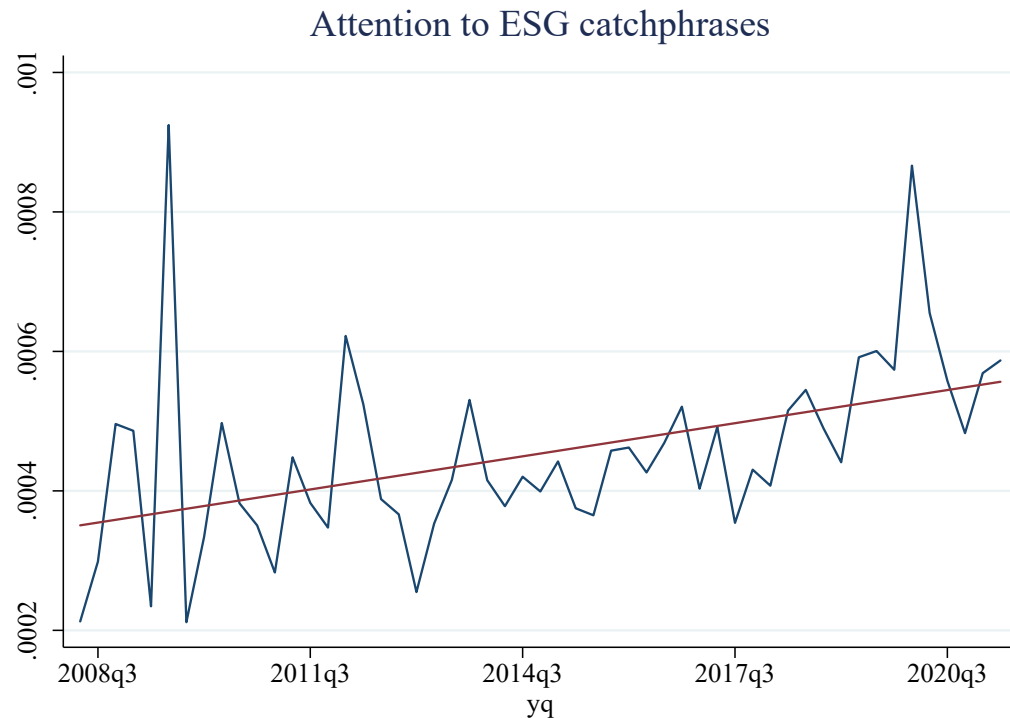
Note:

- Average across firms in each year;
- Sample: 1,936 public firms

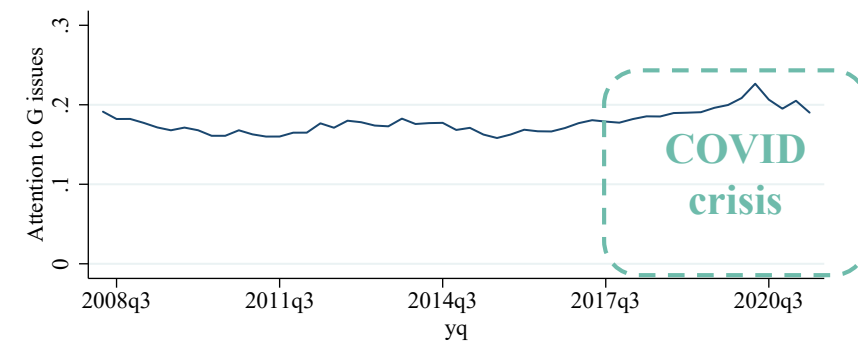
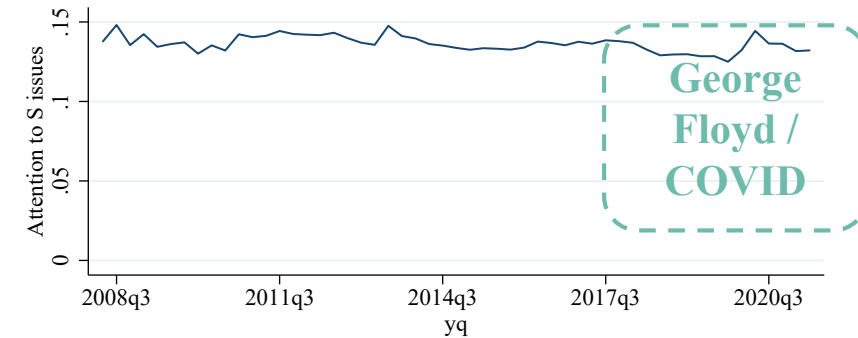
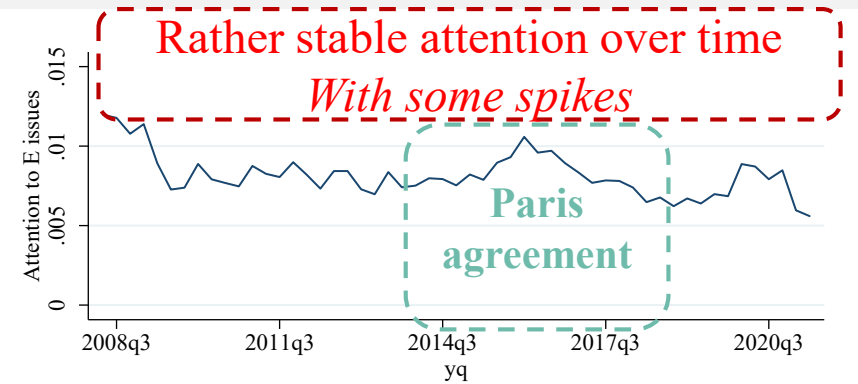


# Trends in employees' attention to ESG issues

- **Given trend in ESG investing, attention to ESG catchphrases likely show an increasing trend**
  - Catchphrases: *ESG*, *sustainable*, *sustainability*, and *CSR* (corporate social responsibility)
- **Attention to ESG issues more broadly, however, might not show an increasing trend**
  - E.g., employees always care about employee treatment and business ethics.
  - Regardless of whether investors care about these issues or not.

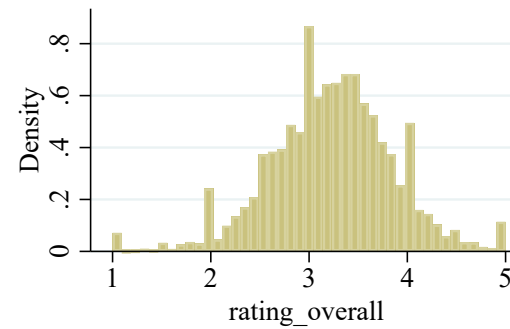
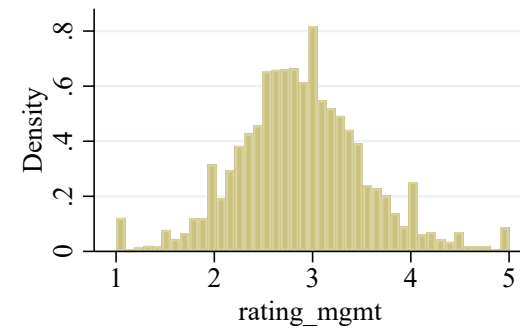
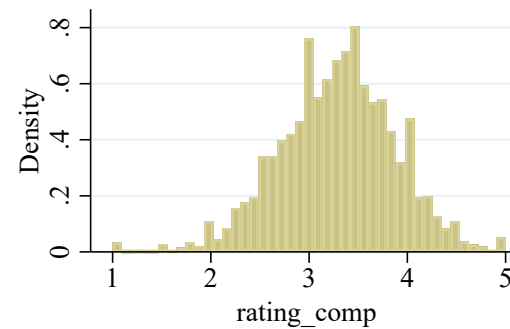
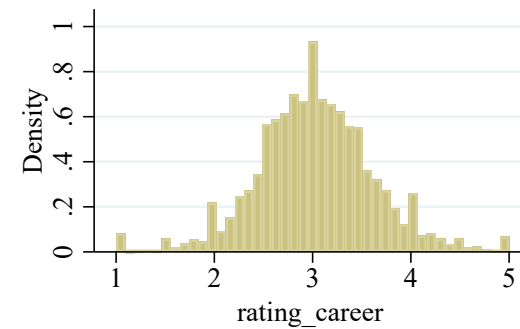
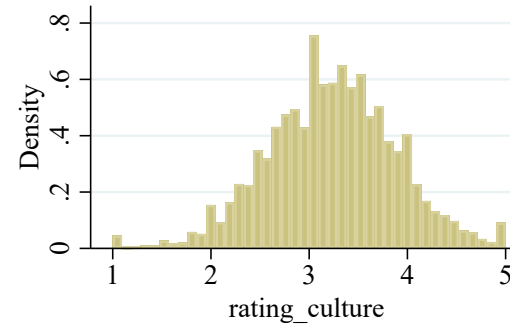
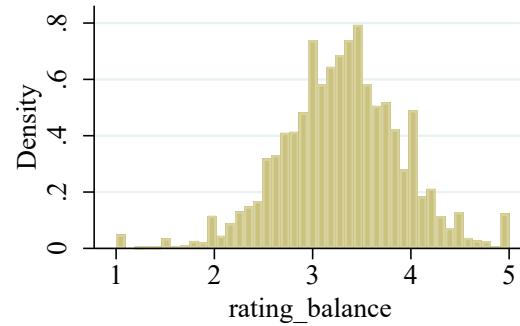


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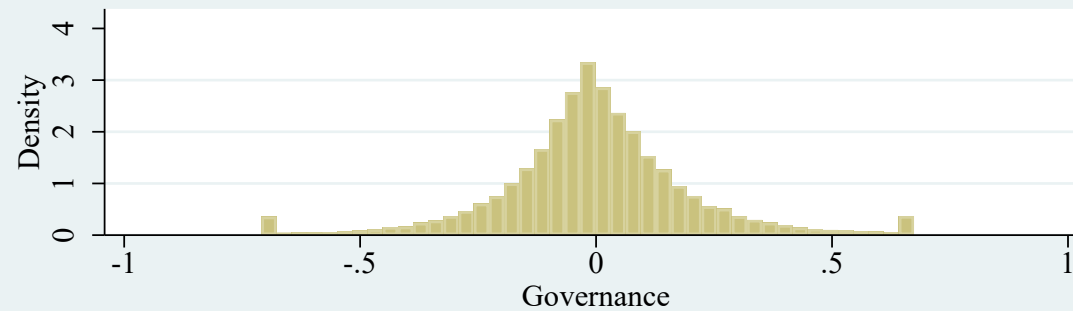
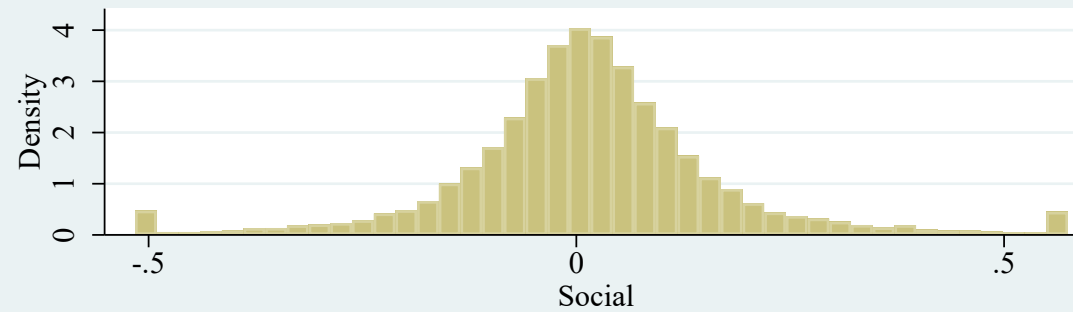
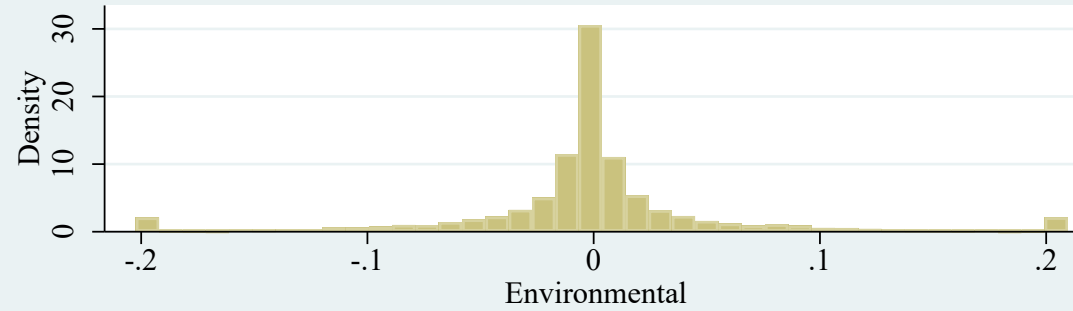


# Distribution of numerical ratings on Glassdoor



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# Distribution of the inside view



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# Halo effect: is it prevalent?

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## Panel C: The percentage of all positive or all negative reviews

	N	Percentage
Mentioning at least one ESG word	2,444,040	42.74
All positive on E, S, and G	2,444,040	0.03
All negative on E, S, and G	2,444,040	0.10
Positive 2 out of 3 E-S-G	2,444,040	1.91
Negative 2 out of 3 E-S-G	2,444,040	2.92
All numerical ratings are 5	2,444,040	9.05
All numerical ratings are 1	2,444,040	2.60
All ratings above 3	2,444,040	24.99
All ratings below 3	2,444,040	6.18

# Predicting downside risk

Back

## ○ ESG as risk mitigation

- **E&S:** Godfrey, Merrill, and Hansen, 2009; ... Hoepner et al. (2020)
- **G:** good governance, by definition, lowers chance of bad outcomes (holding risk-taking constant)

## ○ Regress Tail risk (5% lowest daily returns) on ESG measures

- control for FF 48 industries, year FE, size, leverage, Tobin's Q, sale growth, ROA, and institutional ownership (t)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	One year ahead ( $Y_{t+1}$ )			Two years ahead ( $Y_{t+2}$ )			Three years ahead ( $Y_{t+3}$ )		
E Inside view <sub>t</sub>	-0.00 (0.01)		-0.00 (0.01)	-0.00 (0.01)		-0.00 (0.01)	0.00 (0.01)		-0.00 (0.01)
S Inside view <sub>t</sub>	-0.00 (0.01)		-0.00 (0.01)	0.00 (0.01)		0.00 (0.01)	0.01 (0.01)		0.00 (0.01)
G Inside view <sub>t</sub>	-0.02*** (0.01)		-0.01** (0.01)	-0.02*** (0.01)		-0.01 (0.01)	-0.01** (0.01)		-0.02** (0.01)
E MSCI <sub>t</sub>		-0.01* (0.01)	-0.02** (0.01)		0.01 (0.01)	0.00 (0.01)		0.01* (0.01)	0.01 (0.01)
S MSCI <sub>t</sub>		0.01 (0.01)	0.01 (0.01)		-0.01 (0.01)	-0.00 (0.01)		-0.01 (0.01)	-0.00 (0.01)
G MSCI <sub>t</sub>		-0.01 (0.01)	-0.02 (0.01)		-0.00 (0.01)	-0.01 (0.01)		-0.00 (0.01)	-0.01 (0.01)
Y <sub>t</sub>	0.46*** (0.01)	0.46*** (0.01)		0.34*** (0.01)	0.31*** (0.02)		0.28*** (0.02)	0.28*** (0.02)	
Observations	13335	6457	5676	11727	6391	5621	10153	5630	4903
R-squared	0.54	0.52	0.34	0.50	0.53	0.49	0.49	0.49	0.45

## ○ Inside view informs about downside risk

- complementing MSCI ratings
- Longer-lasting

# Predicting sales growth

Back

## Panel E: Dependent variable (Y) is Sales Growth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	One year ahead ( $Y_{t+1}$ )			Two years ahead ( $Y_{t+2}$ )			Three years ahead ( $Y_{t+3}$ )		
Inside view <sub>t</sub>	0.05*** (0.01)	0.03*** (0.01)	0.03*** (0.01)	0.05*** (0.01)	0.02** (0.01)	0.02** (0.01)	0.03*** (0.01)	0.01 (0.01)	0.01 (0.01)
MSCI <sub>t</sub>		0.01 (0.01)	0.01 (0.01)		-0.00 (0.01)	-0.01 (0.01)		0.01 (0.01)	0.00 (0.01)
Y <sub>t</sub>			0.17*** (0.02)			0.01 (0.02)			0.10*** (0.02)
Obs.	13210	5622	5620	11599	5542	5539	10037	4866	4864
R <sup>2</sup>	0.21	0.22	0.25	0.17	0.18	0.18	0.15	0.16	0.17
Year F.E.	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry F.E.	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes

# Predicting Tobin's Q

Back

## Panel F: Dependent variable (Y) is Tobin's Q

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	One year ahead ( $Y_{t+1}$ )			Two years ahead ( $Y_{t+2}$ )			Three years ahead ( $Y_{t+3}$ )		
Inside view <sub>t</sub>	0.10*** (0.01)	0.05*** (0.01)	0.01 (0.01)	0.10*** (0.01)	0.05*** (0.01)	0.00 (0.01)	0.08*** (0.01)	0.04*** (0.01)	0.00 (0.01)
MSCI <sub>t</sub>		-0.03*** (0.01)	-0.00 (0.00)		-0.04*** (0.01)	-0.01* (0.01)		-0.02 (0.01)	-0.00 (0.01)
Y <sub>t</sub>			0.91*** (0.02)			0.88*** (0.05)			0.80*** (0.07)
Obs.	13326	5644	5522	11733	5585	5438	10168	4909	4792
R <sup>2</sup>	0.22	0.28	0.79	0.21	0.26	0.66	0.19	0.25	0.57
Year F.E.	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry F.E.	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes



# Court ruling detailed results: dynamic trends

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	E	E	E	S	S	S	G	G	G
Treat * Post	-.025 (.03)			.069** (.033)			-.069 (.071)		
Treat * Post (t)		.044 (.037)	.08 (.079)		.183*** (.062)	.126*** (.041)		-.246*** (.078)	-.292*** (.082)
Treat * Post (t+1)		.018 (.046)	.055 (.093)		.044 (.09)	-.013 (.06)		.038 (.059)	-.009 (.066)
Treat * Post (t+2)		-.127 (.101)	-.091 (.074)		.101*** (.028)	.044 (.036)		-.096 (.078)	-.142* (.076)
Treat * Post (t+3)		-.027 (.04)	.009 (.053)		.047 (.039)	-.01 (.054)		-.052 (.072)	-.098 (.078)
Treat * Pre (t-3)			.075 (.1)			-.085 (.096)			-.092 (.068)
Treat * Pre (t-2)			.023 (.06)			-.085 (.06)			-.036 (.061)
Observations	16353	16353	16353	16353	16353	16353	16353	16353	16353
R-squared	.22	.221	.221	.279	.279	.279	.4	.4	.4
Controls	No	No	No	No	No	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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