Who Cares About Diversity?

Jasmin Gider*, Luc Renneboog*, Hulai Zhang**

*Tilburg University
**Tilburg University and ESCP

Diversity, Equity and Inclusion (DEI)

- . Gender
- 。 Race
- Disability
- 。 Age
- Appearance
- 。 Religion

0 • • •

Why does DEI matter for corporations?

- . Two key dimensions:
 - Ethical/legal context defines minimum standards

Why does DEI matter for corporations?

- Regulatory Framework
 - . Civil Rights Act of 1964 (amended 1991)
 - . Age Discrimination in Employment Act (ADEA, 1967)
 - **Equal Employment Opportunity Act** (EEOA, 1972)
 - . Americans with Disabilities Act (ADA, 1990)
 - . Lilly Ledbetter Fair Pay Act (2009)
 - . Workforce Innovation and Opportunity Act (WIOA, 2014)

•

Why does DEI matter for corporations?

- . Two key dimensions:
 - Ethical/legal context defines minimum standards
 - Corporate value affects human capital quality & corporate reputation

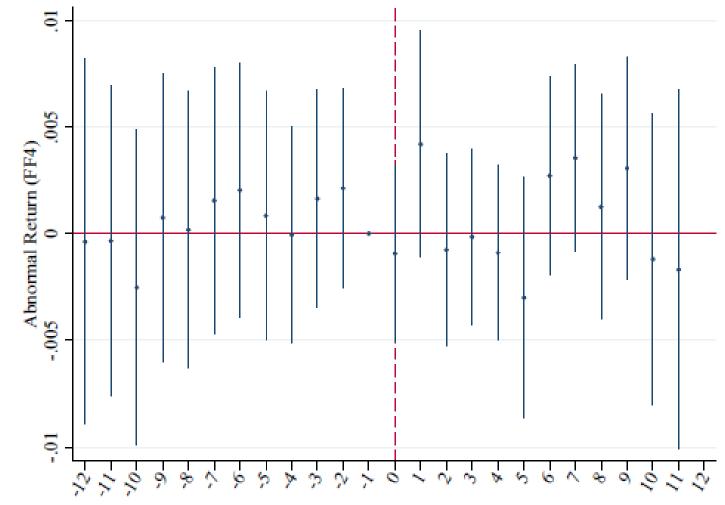
Research Design

- **Key challenge:** DEI quality is not directly observable → analyzing its perception difficult
- Existing approaches: use observable proxies such as board/ workforce diversity
 - → slow-moving and endogenous
- Our approach: estimate "causal effects" through event studies
- . Analyzing 5,586 DEI "shocks"
 - Litigation about discrimination
 - Filing date is found to represent most salient shock/first announcement date
- . Investigate implications for broad set of stakeholders

Data: CRSP

• Financial Markets Response: A.1 Stock Price Effects

 $\alpha_{it} = \sum_{t=-12}^{+12} \beta_t \times [\text{Months to Events}] + \text{Lawsuit FEs} + \text{Time FEs} + \varepsilon_{it}$



Dep. Var.: CAR[-3,+	-3] (1)	(2)	(3)	(4)	(5)	(6)
Lawsuit Shock	0.001					
Relative Penalty	(0.002)	-0.015***				
Settled		(0.005)	-0.001			
Democratic Judge			(0.002)	0.001		
${\rm Metoo\&BLM}$				(0.002)	-0.001	
Disability					(0.003)	-0.002
Gender						(0.003)
Race						(0.003) (0.003)
Controls Firm FEs Year FEs Obs.	Yes Yes Yes 4837	Yes Yes Yes 2520	Yes Yes Yes 2954	Yes Yes Yes 3417	Yes Yes Yes 4837	(0.003) Yes Yes Yes 4837
Adj. R^2) Luc Renne 0.07	0.08	0.08	0.08	0.07	0.07

Data: CRSP

- Financial Markets Response: A.1 Stock Price Effects
- Key findings:
- . No significant stock price reactions to DEI litigation events
- Cross-section test: Even controlling for case characteristics (judge orientation, type of discrimination, post-social movements)
- Exception: Cases with largest financial settlements → small negative effects

Can/should share/stakeholders be aware? Salience

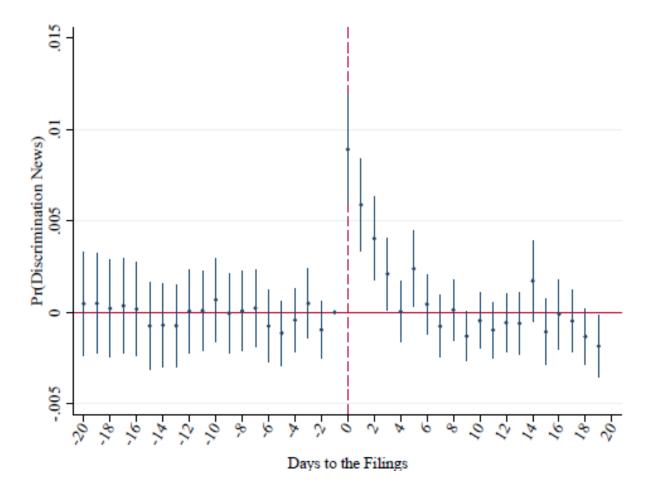
- Data: Ravenpack, RepRisk, Sustainalytics.
- Ravenpack: 40,000 media sources in real time \rightarrow daily
- RepRisk Daily ESG News: 100,000 public sources (print & online media, social media, blogs, info from gvt bodies and regulators, newsletters, and other sources at internat., nat., and local level) → daily
- RepRisk Index: Evolution of corporate reputions (same sources) → daily
- ESG score 28 ESG topics and 102 ESG risk factors, capturing how firm's reputation responds to ESG shock, such as discrimination litigation. → monthly

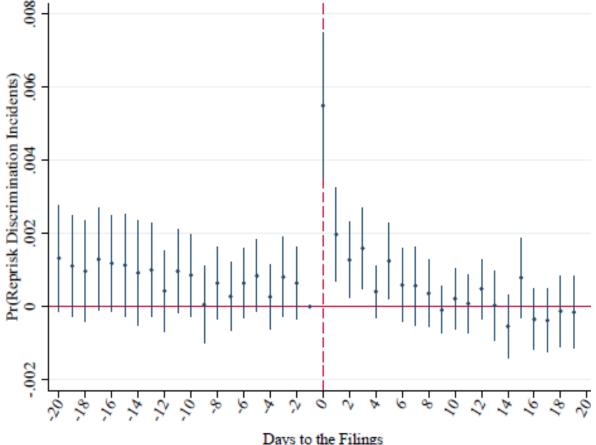
Can/should share/stakeholders be aware? Salience

$$News_{it} = \sum_{t=-20}^{+20} \beta_t \times [Days \text{ to Events}] + Lawsuit FEs + Time FEs + \varepsilon_{it}$$

Panel A: Ravenpack News Around Filings

Panel B: RepRisk News Around Filings





Can/should share/stakeholders be aware? Salience

- . **Finding**: Significant increases in discrimination news coverage around filing dates
 - RavenPack + RepRisk: similar pattern of increased coverage

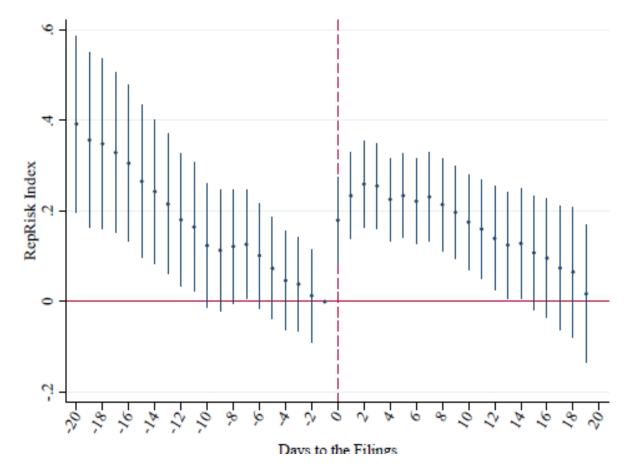
- . News coverage demonstrates that DEI information is:
 - Available
 - Salient
 - Accessible to all stakeholders

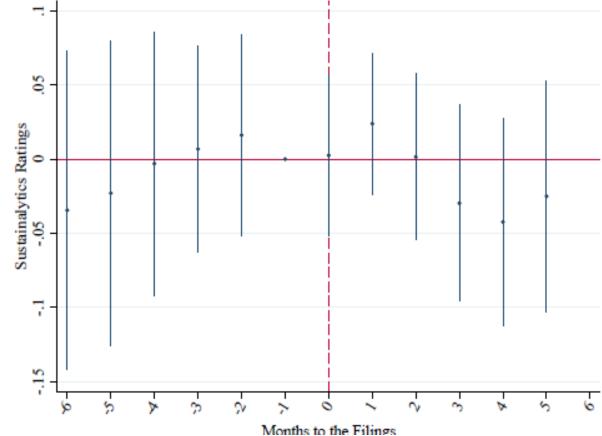
Is firm's reputation tarnished?

$$ESG_{it} = \sum_{t=-20}^{+20} \beta_t \times [Gaps \text{ to Events}] + Lawsuit FEs + Time FEs + \varepsilon_{it},$$

Panel A: RRI Around Filings

Panel B: ESG Ratings Around Filings





Is the firm's reputation tarnished?

. RepRisk Index (RRI)

- Yes, Statistically significant increase around filing dates: worsening corporate reputation on ESG issues
- Similar pattern around disposition dates

. Sustainalytics ESG ratings

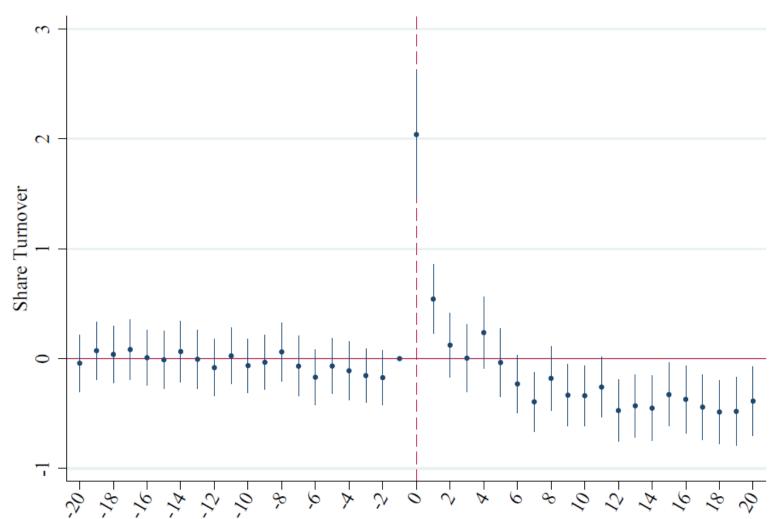
- No significant change in monthly ratings around any event dates: infrequent updates
- . Implication: Information about DEI litigation is picked up by real-time reputation metrics but may not immediately affect slow-moving aggregate ESG ratings

 © Luc Renneboog

。 Data: FactSet, LSEG S12

• Financial Markets Response: A.2 Share turnover

$$Turnover_{it} = \sum_{t=-20}^{+20} \beta_t \times [Days \text{ to Filings}] + Lawsuit FEs + Time FEs + \varepsilon_{it}$$



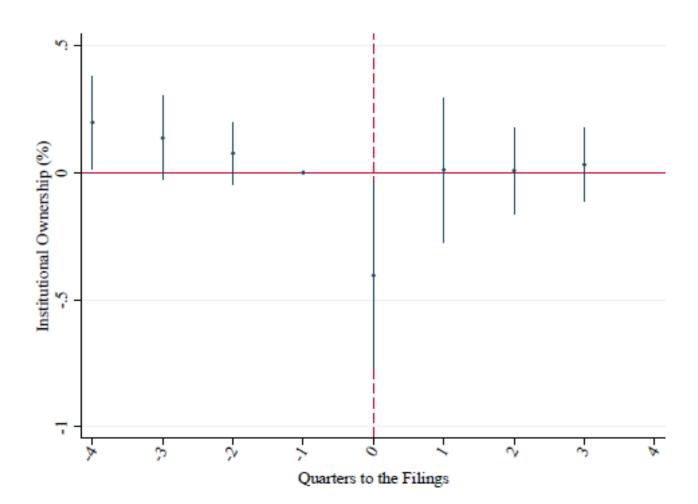
Who cares? Institutional Investors?

- 。 Data: FactSet, LSEG S12
- Financial Markets Response: B. Institutional Investor Reaction investment advisors (mutual funds), banks, hedge funds, LT investors (pension funds, insurance co's, and gov entities).

Who cares? Institutional Investors?

$$MF_{it} = \sum_{t=-6}^{+6} \beta_t \times [\text{Months to Filings}] + \text{Lawsuit FEs} + \text{Time FEs} + \varepsilon_{it}$$

Panel B: Investment Advisors (Mutual Funds)



Who cares? Institutional Investors?

- 。 Data: FactSet, LSEG S12
- Financial Markets Response: B. Institutional Investor Reaction investment advisors (mutual funds), banks, hedge funds, LT investors (pension funds, insurance co's, and gov entities).
- Key findings:
- Some institutional investors (mainly mutual funds) decrease holdings
- . Average equity stake held by institutions decreases by 1.1% after filing
- . Effect is temporary rebounds in subsequent quarter

Who cares? Bondholders?

- Data: WRDS Bond Return Database
- Financial Markets Response: C. Bond Market Reaction
- Key findings:
- No significant impact on bond prices
- . Default risk appears unaffected by DEI litigation
- . Bond holders do not consider DEI events as financially material

- Data: Indeed = platform with ratings by current and former employees
- Employee Response: A. General Employee Perception (overall rating, management ratings, company culture)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	[-3,3]	[-6,6]	[-12,12]	[-3,3]	[-6,6]	[-12,12]	[-3,3]	[-6,6]	[-12,12]	
	Total			For	Former Employees			Senior Employees		
Panel A: Overall Ratings										
Post	-0.002 (0.019)	-0.017 (0.013)	-0.001 (0.009)	0.004 (0.021)	-0.018 (0.014)	-0.006 (0.010)	0.002 (0.025)	-0.013 (0.018)	0.005 (0.014)	
Obs.	11456	21304	41064	11068	20603	`39787	9011	16918	32692	
Adj. R^2	0.48	0.48	0.45	0.45	0.46	0.44	0.41	0.39	0.36	
Lawsuit FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

- Data: Indeed platform with ratings by current and former employees
- Employee Response: A. General Employee Perception (overall rating, management ratings, company culture)
- Key findings:
- . No significant change in overall employee ratings after DEI litigation
- . No significant change by level of employees (senior, workers)
- . Neither current nor former employees adjust their perception of the employer

- Data: USTPO; Rosenman et al., Scientific Data
- Employee Response B. Highly Skilled Employees (innovators; R&D)

	(1)	(2)	(3)	(4)	(5)	(6)
	[-3,3] Months		[-12,12] Months			
Dep. Var.: #Movers	Total	Female	Black&Hispanic	Total	Female	Black&Hispanic
Post	0.020	0.063**	0.072	0.011*	0.032*	0.018
# Inventors	(0.012) -0.000 (0.000)	(0.030)	(0.052)	(0.007) $-0.000***$ (0.000)	(0.017)	(0.022)
#Female Inventors	(0.000)	-0.003*** (0.001)		(0.000)	-0.001^* (0.000)	
#Black&Hispanic Inventors		(/	-0.002 (0.001)		()	-0.000 (0.001)
Obs.	7806	4640	3492	43188	27821	23125
Pseudo R^2	0.92	0.68	0.61	0.93	0.70	0.65
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year-Month FEs	Yes	Yes	Yes	Yes	Yes	Yes

	(4)	(5)	(6)	(10)	(11)	(12)	
		Gender			Age, Appearance, and Religion		
Dep. Var.: #Movers	Total	Female	Black&Hispanic	Total	Female	Black&Hispanic	
Post	0.106***	0.242***	0.019	-0.029	0.132*	0.350*	
#Inventors	$(0.037) \\ 0.000$	(0.091)	(0.144)	(0.030) -0.000	(0.069)	(0.179)	
#Female Inventors	(0.000)	-0.002		(0.000)	-0.002		
#Black&Hispanic Inventors		(0.005)	0.008		(0.002)	-0.004	
Obs.	1756	1082	$(0.008) \\ 784$	1395	800	$(0.002) \\ 603$	
Pseudo R^2	0.91	0.65	0.56	0.95	0.77	0.69	
Firm FEs Year-Month FEs	$_{ m Yes}^{ m Yes}$	$_{ m Yes}^{ m Yes}$	$\operatorname*{Yes}$ $\operatorname*{Yes}$	$_{ m Yes}^{ m Yes}$	$_{ m Yes}^{ m Yes}$	$_{ m Yes}^{ m Yes}$	

- Data: USTPO; Rosenman et al., Scientific Data
- Employee Response B. Highly Skilled Employees (innovators; R&D)
- Key findings:
- . Significant increase in departures of highly skilled employees
- . Strong effect for female researchers after gender discrimination
 - 6.3% increase in female researcher departures overall
 - 24% increase in departures after gender-specific litigation
- LT negative impact: 1.7% decrease in patent applications in subsequent 2 years

Who cares? Business partners?

- Data: Factset Revere
- Supply Chain Response
- Key findings:
- . No significant change in business relationships after DEI litigation
- . Supply chain connections remain stable
- . Corporate customers and suppliers continue business as usual
- . Reputational damage doesn't extend to business relationships

• Data: GfK Aimark

Consumer Response: A. Short-term Effects

	(1)	(2)	(3)	(4)
	[0,2] vs. $[-3]$	[0,2] vs. $[-3,-1]$ Months		3,-1] Months
	\$Sales	\$Sales Adj.	\$Sales	\$Sales Adj.
Post	0.091	0.089	0.083	0.087
$Post{\times}Litigated$	(0.110) $-0.211**$ (0.099)	(0.111) $-0.212**$ (0.101)	$(0.206) \\ -0.171 \\ (0.175)$	$(0.209) \\ -0.171 \\ (0.178)$
N	508265149	508263890	509395923	509395048
R^2 Lawsuit FE Firm FE Brand FE	$egin{array}{c} 0.016 \ \mathrm{Yes} \ \mathrm{Yes} \ \mathrm{Yes} \end{array}$	$egin{array}{c} 0.014 \ \mathrm{Yes} \ \mathrm{Yes} \ \mathrm{Yes} \end{array}$	$egin{array}{c} 0.018 \ \mathrm{Yes} \ \mathrm{Yes} \ \mathrm{Yes} \end{array}$	$\begin{array}{c} 0.016 \\ \mathrm{Yes} \\ \mathrm{Yes} \\ \mathrm{Yes} \end{array}$

• Data: GfK Aimark

Consumer Response: A. Short-term Effects

- Key findings:
- . Short-term decline in consumption of litigated firms' brands
- Reduction of \$0.21 per household (1% of average monthly consumption)
- . Effect primarily for frequently purchased products (top 20% of consumption)

• Data: GfK Aimark

Consumer Response : B. Long-term Effects

- Key findings:
- . Consumption effect disappears after 3 months
- . Consumers have "short memory" regarding DEI incidents
- . No lasting change in consumption patterns

- Data: GfK Aimark
- Consumer Response: C. Consumer Heterogeneity (household level)
- . Household income type
- . Household composition: single (with or without children), married (with or without children), by age of children
- . Household head by age (young, middle-aged, older)
- . Household head by educational level
- . Household head race: white, Hispanic, black, Asian, other
- . Household consumption: bio / organic consumers

- Data: US census data; US religion census data & association of religion data archives
- Consumer Response: C. Consumer Heterogeneity (county level)
- . Household geography: urban, rural, close to metropolitan area
- . Household location: distance to firm with DEI problem
- Household's religous values: counties with strong presence of Catholics, Protestants (evangelicals, baptists,), Christians, Jews, agnostics, wide diversity of beliefs.
- Household's political leaning: living in Democrat-leaning vs Republican areas (presidential elections).

- Groups with stronger negative consumption response:
- . Middle-aged and senior household heads
- . Urban households
- . White households
- . Democrat-leaning households
- . Catholic households

Who cares? The government?

- Data: Subsidy Tracker Database
- Government Response: subsidies: reimbursement of investments, tax credit benefits, loans with favorable terms.
- Key findings:
- . No change in government subsidies after DEI litigation
- . No impact on loans, reimbursements, or tax credits
- . No effect at federal, state, or local levels
- . Government as stakeholder appears indifferent to DEI issues

Who cares? The firm itself?

- Data: BoardEx; Rosenan et al., Scienitific Data
- Does the firm adjust its corporate governance? More women, minorities on board, more DEI responsibilities for mgt/board?

Who cares? The firm itself?

	(1)	(2)	(3)	(4)	(5)	(6)
	[-3,3]	[-12,12]	[-3,3]	[-12,12]	[-3,3]	[-12,12]
	#Female	Addition	#Race M	inority Addition	#Minorit	y Addition
Post	0.188***	0.077**	0.059*	0.022	0.077**	0.029*
	(0.062)	(0.034)	(0.034)	(0.017)	(0.033)	(0.017)
Obs.	19403	113057	28237	125971	31226	132460
Pseudo \mathbb{R}^2	0.15	0.16	0.31	0.33	0.32	0.33
Lawsuit FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year-Month FEs	Yes	Yes	Yes	Yes	Yes	Yes

Who cares? The firm itself?

- Data: BoardEx; Rosenan et al., Scientific Data
- Does the firm adjust its corporate governance? More women, minorities on board, more DEI responsibilities for mgt/board?
- Key findings:
- . Significant increase in female directors after DEI litigation
 - 20% of firms add female director within 3 months
- . Increase in racial minority directors (though less pronounced)
- . Board/management concerns about organizational DEI: more DEI managers/directors

Summary

- Key Findings: Summary
- Financial markets: Limited reaction (modest institutional investor response)
- . **Employees**: Highly skilled employees (especially women) more likely to leave
- . Business partners: No change in relationships
- . Consumers: Short-term decrease in consumption, quickly rebounds
- . Government: No effect on subsidies or other benefits
- . Corporate boards: Significant increase in diversity after litigation

Caveats

- Limitations of the Study
- . Only publicly visible cases examined ("tip of iceberg"?)
 - Many DEI conflicts settled outside court with confidentiality agreements
- . Focus on litigation rather than positive DEI initiatives
- . Limited to publicly traded US companies
- . Potential measurement limitations in identifying discrimination by type

Implications

- Research Implications
- . For investors: Limited financial materiality in DEI litigation
- . For management:
 - . Retention risk for highly skilled employees, especially women
 - . Temporarily loss of market share (loss of sales volume)
- . For policy: Limited spontaneous market discipline for DEI violations; regulatory role
- . For boards: Governance response to address DEI concerns

Why does DEI matter for corporations?

Business Benefits of DEI

- Innovation & creativity through diverse perspectives (Edmans, Flammer and Glossner, 2024)
- . Problem-solving capabilities enhanced with varied viewpoints (Hamilton et al. 2012)
- . Understanding customer needs across diverse markets (Balakrishnan et al. 2024).
- Employee engagement & retention through inclusive practices (Presbitero et al., 2025).
- Corporate reputation with stakeholders (Baselga-Pascual et al. 2020)
- Corporate Performance: higher acc. performance, higher future earnings surprises, higher valuation ratios (Edmans, Flammer and Glossner, 2024; Goldman and Zhang 2024)

Why does DEI matter for corporations?

- Business Disadvantages of DEI
 - * **Diversity washing / tokenism**: superficial DEI initiatives without substantial changes (Baker et al, 2024)
 - Potential productivity costs: coordination costs within teams (Lazear, 1999)
 - **Potential market inefficiencies**: mandatory diversity quotas and suboptimal allocation of talent (Ahern & Dittmar, 2012)
 - **Institutional investor concerns**: do DEI initiatives create shareholder value (Liang and Vansteenkiste, 2022)

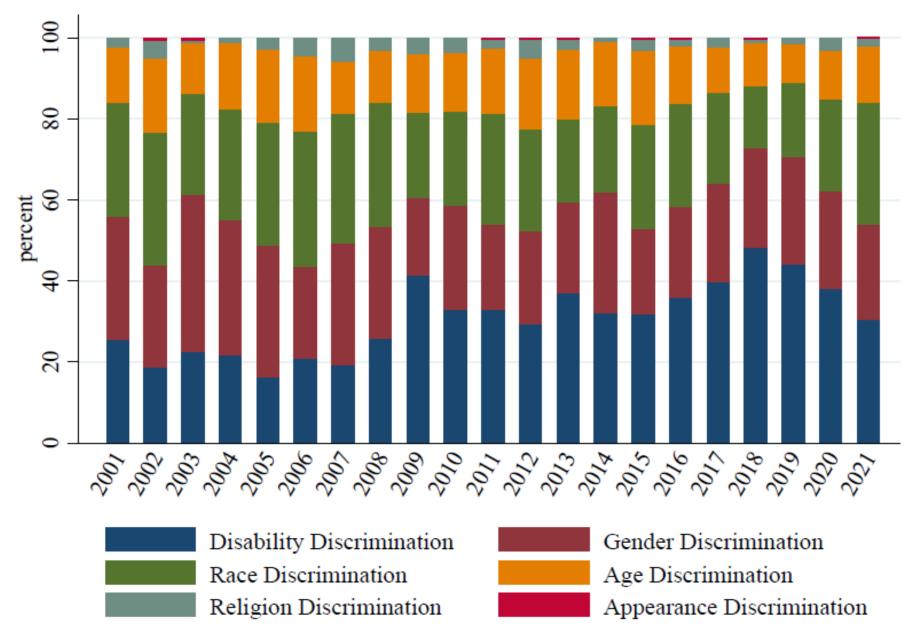
DEI Shocks: Litigation

- Examples of DEI Litigation
- . **IBM** Age discrimination (2018+)
 - Replacement of older workers with younger employees; many legal actions e.g. a 61-y old manager receives \$1.5M in verdict
- . Pinterest Gender discrimination
 - Female COO fired after speaking up (\$22.5M settlement)
- . Werner Inc. Disability Discrimination of deaf truckers when recruiting
 - . Conviction \$ 36M

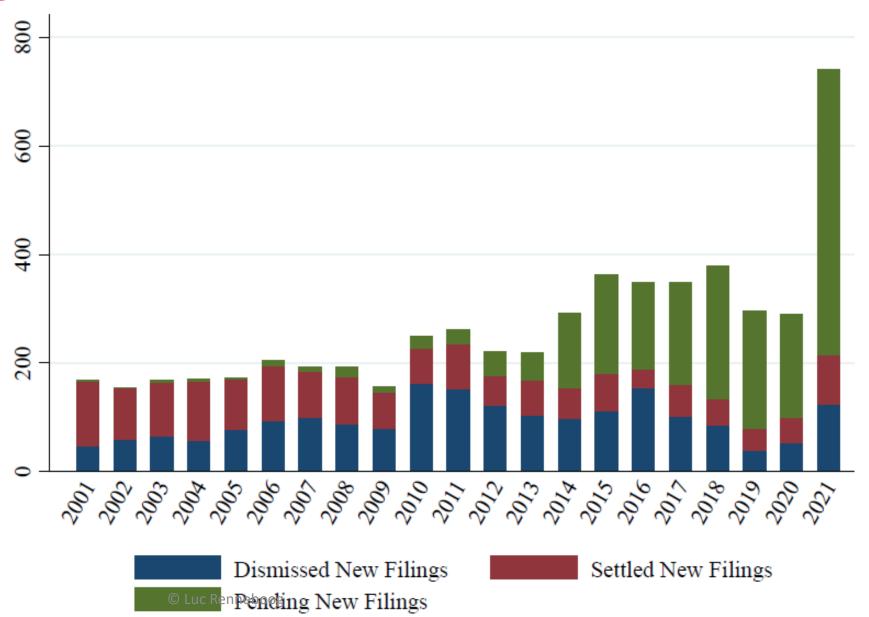
DEI Shocks: Litigation

- Examples of DEI Litigation
- . Goldman Sachs Gender discrimination
 - Class action by 2,800 female associates/VP's
 - Settlement \$ 215M
- Gannett Company (The Democrat and Chronicle (Rochester)) Race
 - white employees sue owner for discrimination against non-minorities and the firm's aim to achieve diversity goals

Litigation cases



Litigation cases



Litigation cases

Year	#Total	#Disbility	#Gender	#Race	# Age	#Religion	#Appearance
Automobiles	233	73	66	66	18	10	
Chemicals	42	16	6	12	8		
Construction and materials	265	84	71	70	31	9	
Consumer Durable	40	10	13	10	7		
Drugs, soap, perfume, tobacco	85	23	19	21	19	3	
Fabricated products	19	8	6	3	2		
Financials	496	142	136	120	86	11	1
Food	259	86	65	82	23	3	
Machinery and business eqpm	226	57	51	57	55	6	
Mining and Minerals	30	17	7	2	3	1	
Oil and petroleum	102	21	31	36	13	1	
Other	1525	475	389	360	254	42	5
Retail	1306	457	364	289	161	33	2
Steel	53	18	10	17	8		
Textile, apparel and footware	20	5	9	3	3		
Transportation	689	261	136	190	82	19	1
Utilities	196	54	36	73	32	1	
Total	5586	1807	1415	1411	805	139	9

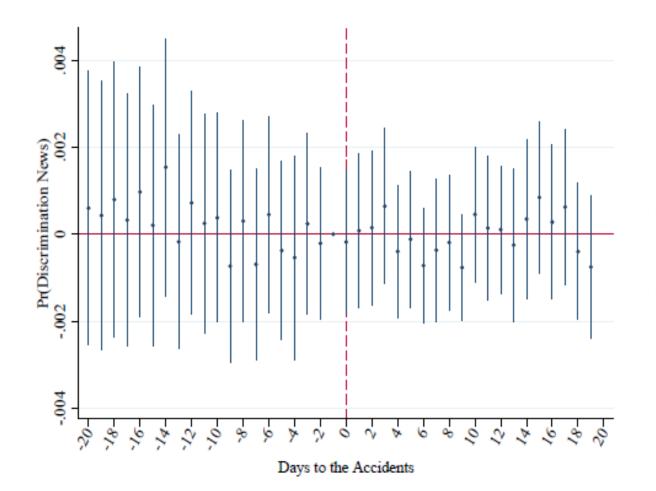
Can/should share/stakeholders be aware? Salience

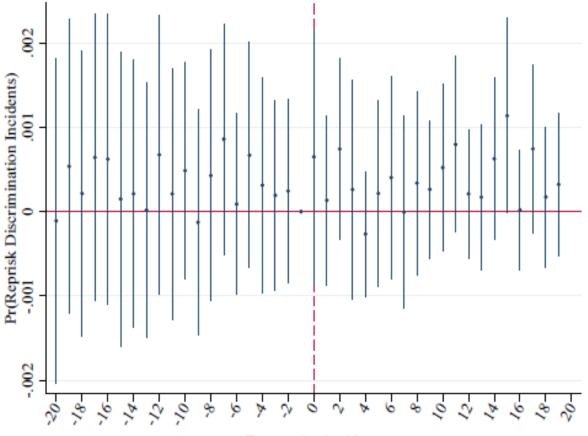
- . **Finding**: Significant increases in discrimination news coverage around filing dates
 - RavenPack + RepRisk: similar pattern of increased coverage
- . Filing dates are most salient events
 - Accident dates: no significant news coverage
 - Disposition dates: RepRisk shows increase, RavenPack not
- . News coverage demonstrates that DEI information is:
 - Available
 - **Salient**
 - . Accessible to all stakeholders

Can/should share/stakeholders be aware? Salience

$$News_{it} = \sum_{t=-20}^{+20} \beta_t \times [Days \text{ to Events}] + Lawsuit FEs + Time FEs + \varepsilon_{it}$$

Panel C: Ravenpack News Around Accidents Panel D: RepRisk News Around Accidents



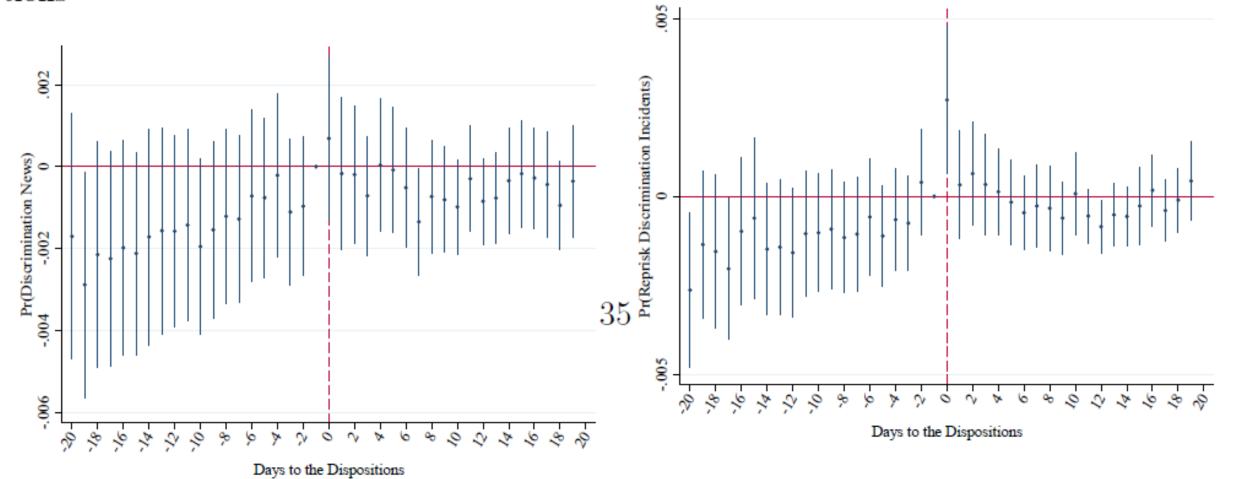


Days to the Accidents

Can/should share/stakeholders be aware? Salience

$$News_{it} = \sum_{t=-20}^{+20} \beta_t \times [Days \text{ to Events}] + Lawsuit FEs + Time FEs + \varepsilon_{it}$$

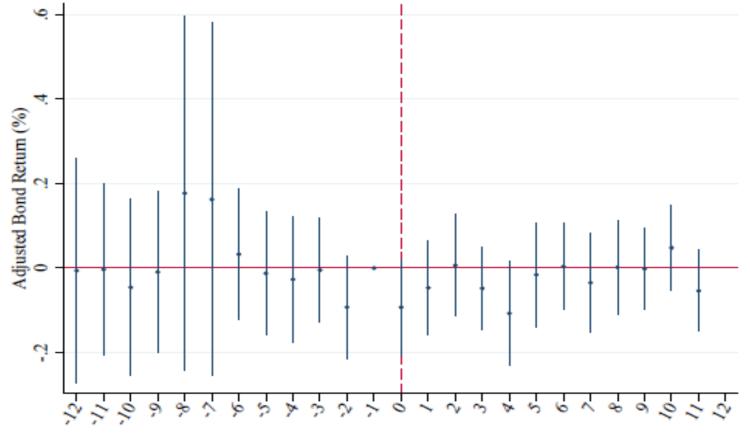
Panel E: Ravenpack News Around Disposi- Panel F: RepRisk News Around Dispositions tions



Who cares? Bondholders?

$$\alpha_{it} = \sum_{t=-12}^{+12} \beta_t \times [\text{Months to Filings}] + \text{Lawsuit FEs} + \text{Time FEs} + \varepsilon_{it}.$$

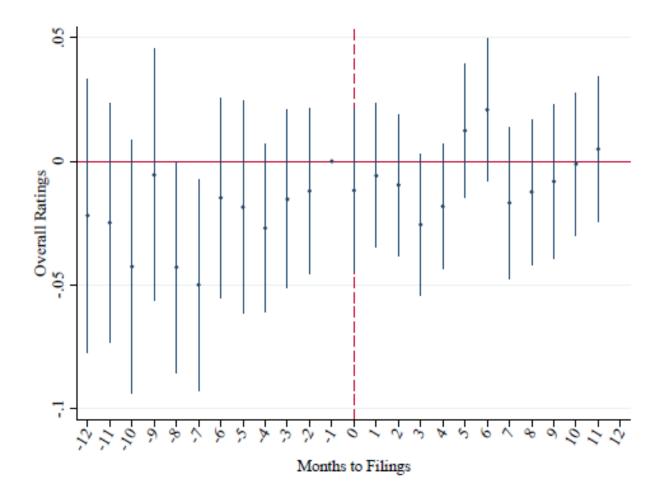
Panel A: All Discrimination Types



Who cares? Employees?

Employee Ratings_{it} = $\sum_{t=-12}^{+12} \beta_t \times [\text{Months to Filings}] + \text{Lawsuit FEs} + \text{Time FEs} + \varepsilon_{it}$

Panel A: All Discrimination Types

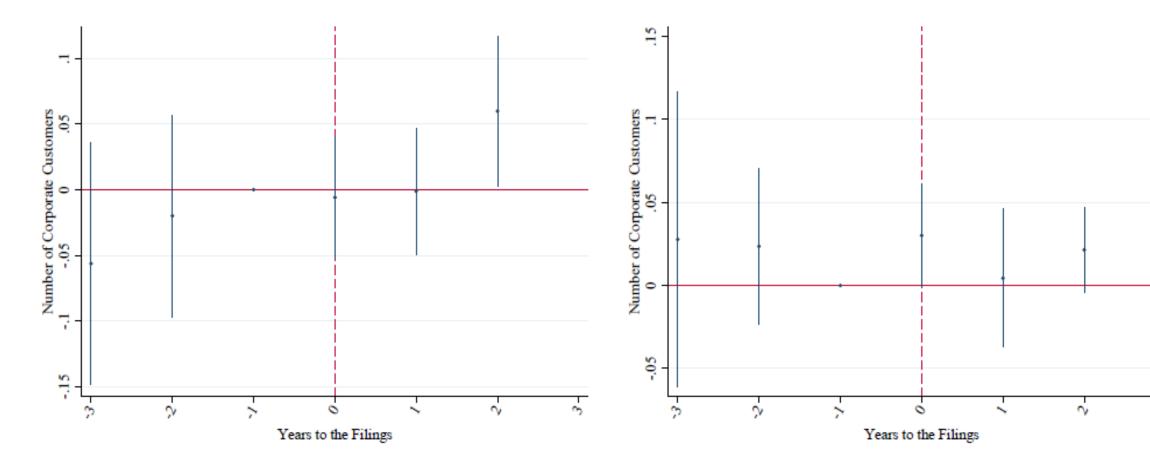


Who cares? Business partners?

$$y_{it} = \sum_{t=-3}^{+3} \beta_t \times [\text{Years to Events}] + \text{Lawsuit FEs} + \text{Time FEs} + \varepsilon_{it}$$

Panel A: Customers Around Filings

Panel B: Suppliers Around Filings



Who cares? Consumers?

	(1)	(2)	(3)	(4)	
	Top 20%	in Sales	Bottom 80% in Sales		
Post	0.121	0.117	0.028	0.032	
	(0.139)	(0.141)	(0.143)	(0.140)	
$Post \times Litigated$	-0.224^*	-0.224*	-0.254	-0.258	
	(0.121)	(0.124)	(0.169)	(0.170)	
Obs.	420859441	420858472	87405708	87405418	
R^2	0.014	0.012	0.018	0.016	
Lawsuit FE	Yes	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	Yes	
Brand FE	Yes	Yes	Yes	Yes	

Who cares? Consumers?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Age of Household Head			Race o	of Head	HH zip: Democrat Leaning	
	Young	Middle	Senior	White	Non-white	Yes	No
$Post \times Litigated$	-0.151 (0.212)	-0.280* (0.153)	-0.540*** (0.174)	-0.399*** (0.141)	-0.266* (0.146)	-0.532*** (0.141)	-0.166 (0.154)
Obs.	77064904	130713246	167331409	303874853	$7\dot{1}2347\acute{0}6$	210904675	$16\overline{4204884}$
R^2	0.020	0.025	0.028	0.025	0.021	0.022	0.028
Lawsuit FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brand FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Who cares? The government?

Panel A: The Number of Subsidies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	$\overline{\text{\#Total}}$	#Federal	#State	#Local	#Loan	# Reimbursement	#Tax Credit
Post	0.007 (0.007)	0.013 (0.037)	-0.000 (0.008)	-0.001 (0.013)	0.020 (0.044)	0.004 (0.018)	0.009 (0.008)
Obs.	28767	`9097	$27588^{'}$	21317	10225	23418	27494
Pseudo \mathbb{R}^2	0.06	0.15	0.07	0.11	0.15	0.10	0.08
Lawsuit FEs Year FEs	$_{\rm Yes}^{\rm Yes}$	$_{\rm Yes}^{\rm Yes}$	$_{\rm Yes}^{\rm Yes}$	$_{\rm Yes}^{\rm Yes}$	$_{\rm Yes}^{\rm Yes}$	$\mathop{ m Yes} olimits$	$_{\rm Yes}^{\rm Yes}$