

Execution Report

Title: ESG news, future cash flows, and firm value
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Full reference: Derrien et al. "ESG news, future cash flows, and firm value" Working paper, November 6, 2024.

The structure and contents of this execution report provided by **cascad** for the certification are similar to those recommended by the [AEA Data Editor](#).

1. DATA DESCRIPTION

This study mostly uses ESG data from RepRisk to study the expected consequences of negative ESG news on firms' future profits. This dataset is supplemented with monthly analyst consensus forecasts from the Institutional Brokers Estimate System (IBES), daily US stock returns from the Center for Research in Security Prices (CRSP) and the daily stock returns of international firms and firm fundamentals from Compustat.

For a thorough description of the data, please refer to section 2 of the paper.

2. CODE DESCRIPTION

The verification materials contain five self-explanatory subfolders: *codes*, *data*, *intermediary_data*, *output* and *tex*. The *code* folder is itself divided into four subfolders, which all contain Stata and R scripts: *code_clean_data*, *code_gen_data*, *code_reg* and *code_run*. The latter stores scripts that act as masterfiles. They call the scripts in the other folders, import the raw datasets, clean and merge them, perform regressions and eventually generate the Tables and Figures.

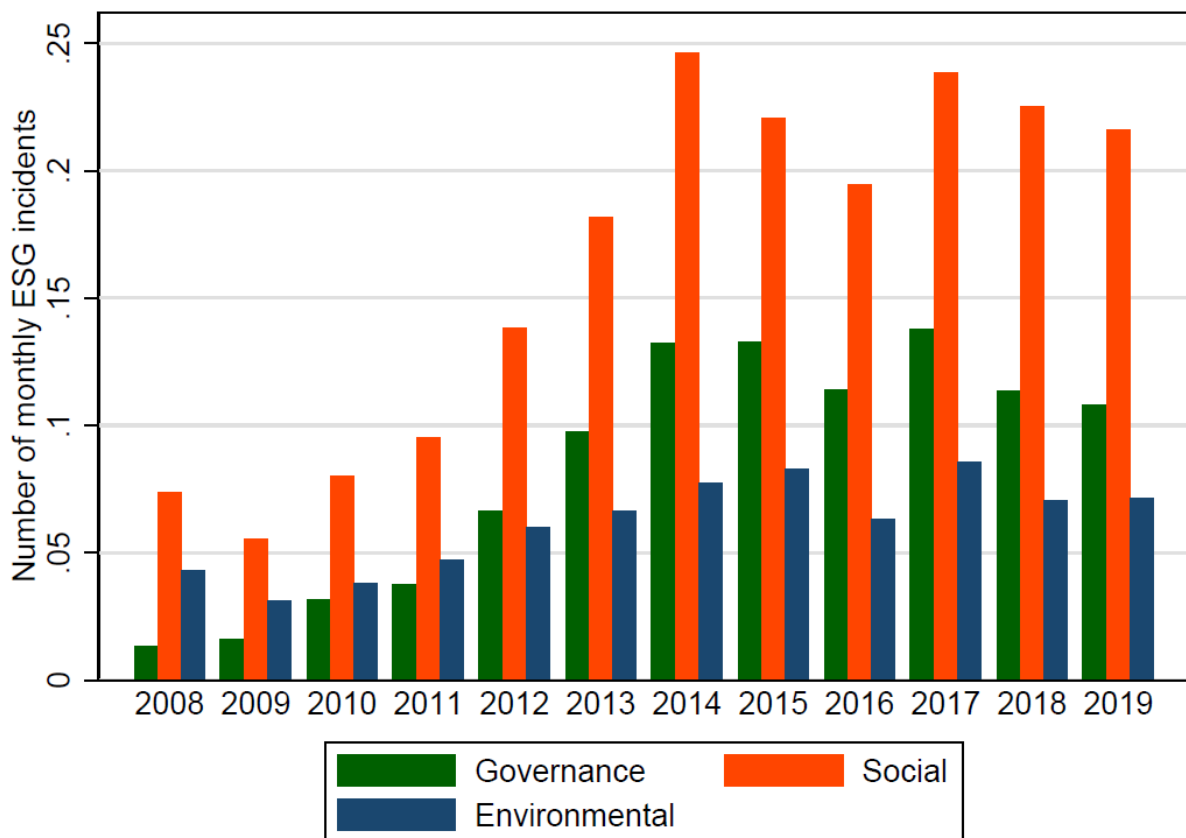
3. VERIFICATION STEPS

The verification materials were received as a zip file on November 6 and run as per readme using Stata 18 and R 4.4.2 on a computer with 256 GB RAM, Intel Xeon Silver 4210R 2.40GHz (32 cores), NVIDIA RTX™ A5000 and Windows 10 OS. Since the authors used Stata 17, we added *version 17* at the beginning of every do-file. We encountered no issues during the verification.

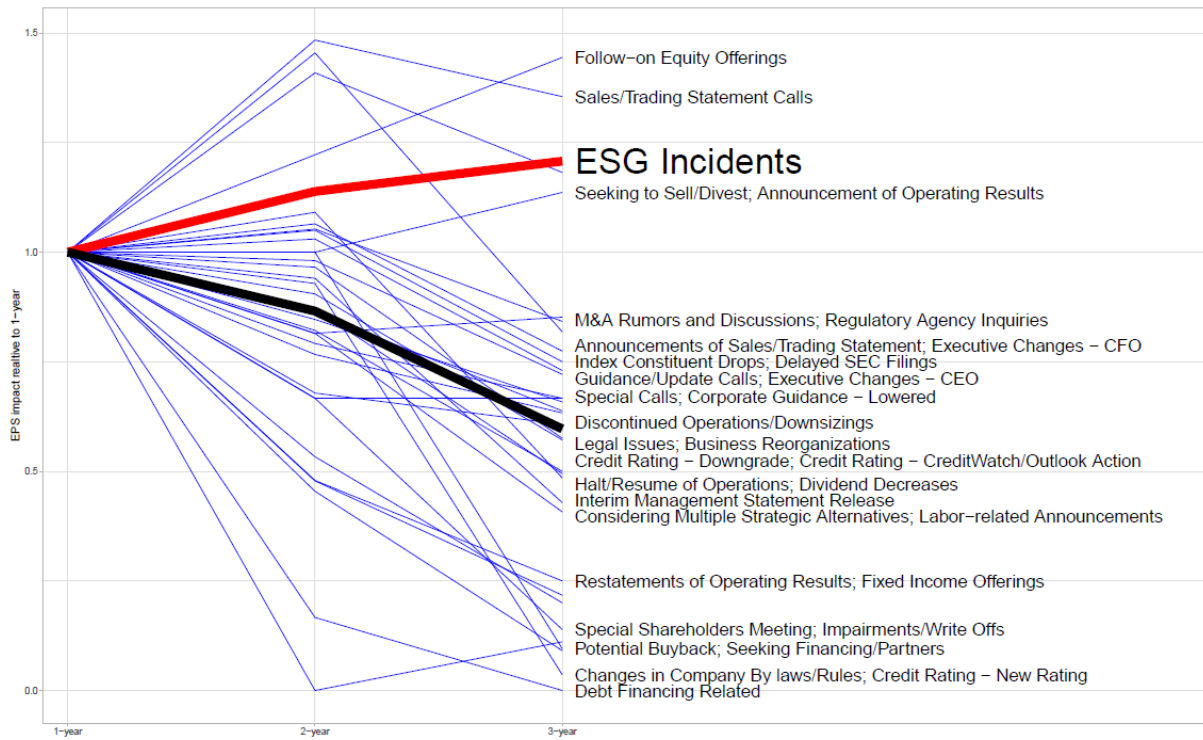
4. FINDINGS

As shown below, we reproduced Figures 1-6 and IA.1 as well as Tables 1-15, and IA.2-IA.15 with accuracy. Note that Table IA1 contains only examples and no numeric results. It is outside the scope of this verification.

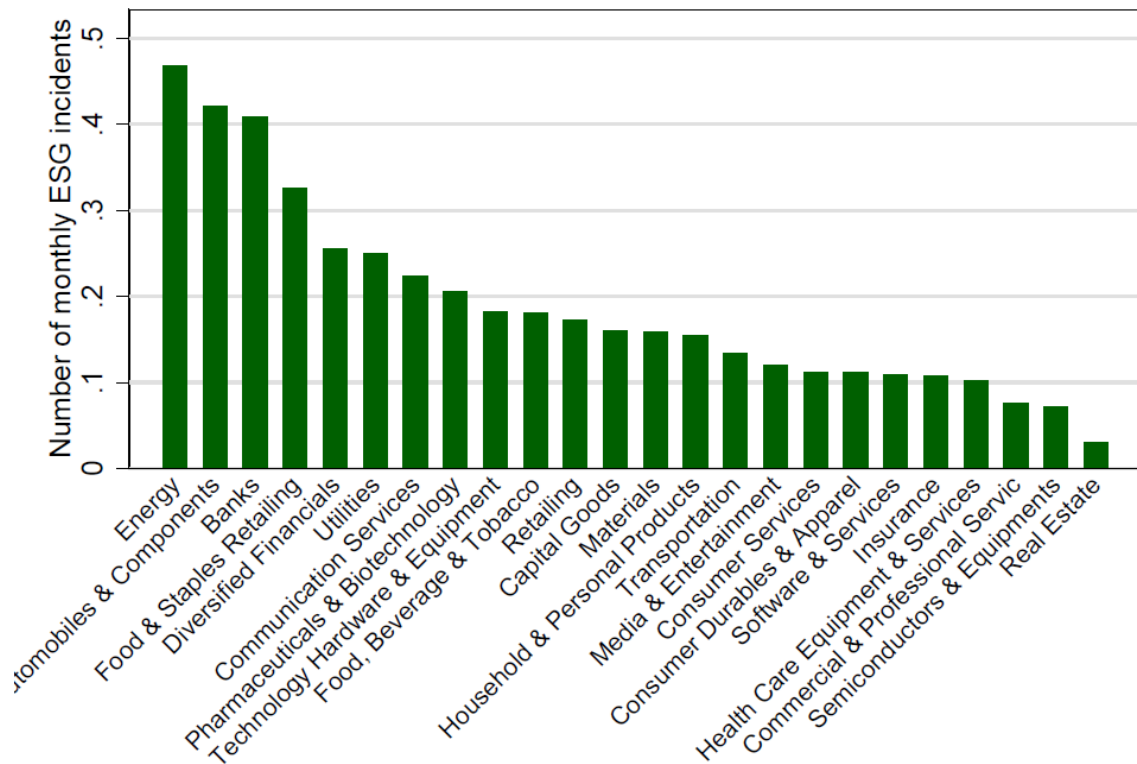
4.1. FIGURE 1: NUMBER OF REPRISK ESG INCIDENTS BY YEAR



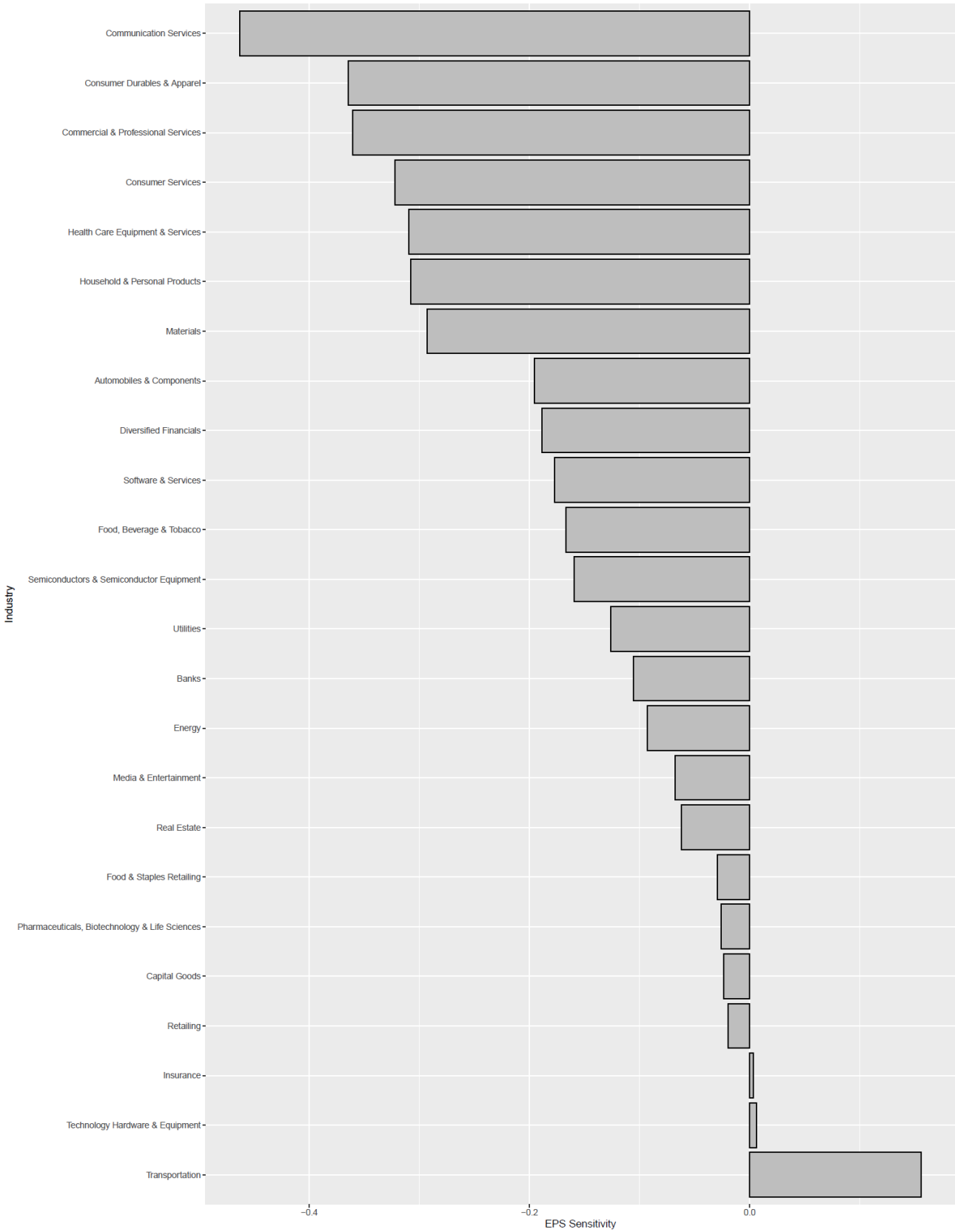
4.2. FIGURE 2: TERM STRUCTURE OF THE IMPACT OF INCIDENTS ON EARNINGS FORECASTS



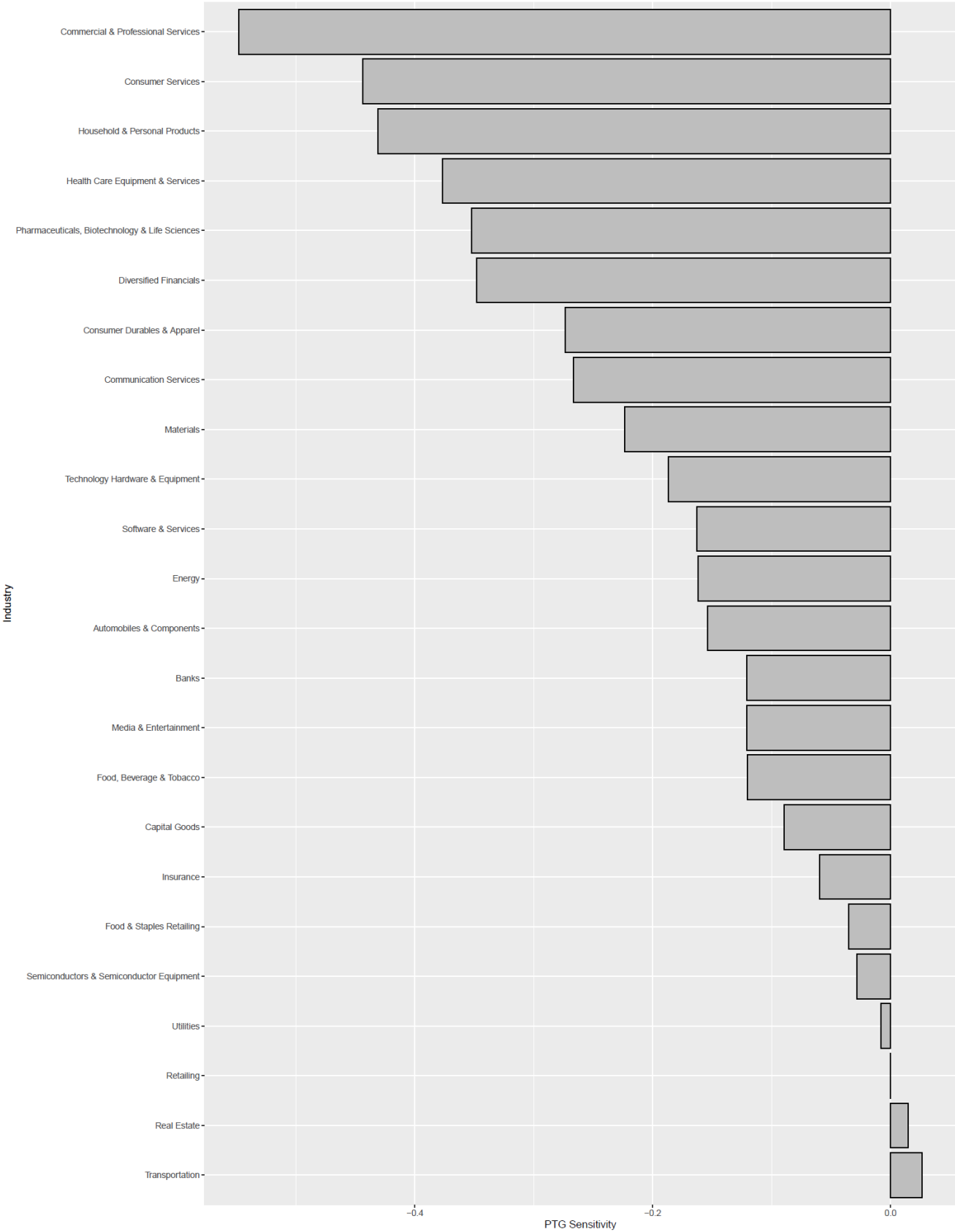
4.3. FIGURE 3: NUMBER OF INCIDENTS BY INDUSTRY



4.4. FIGURE 4: EPS SENSITIVITY BY INDUSTRY

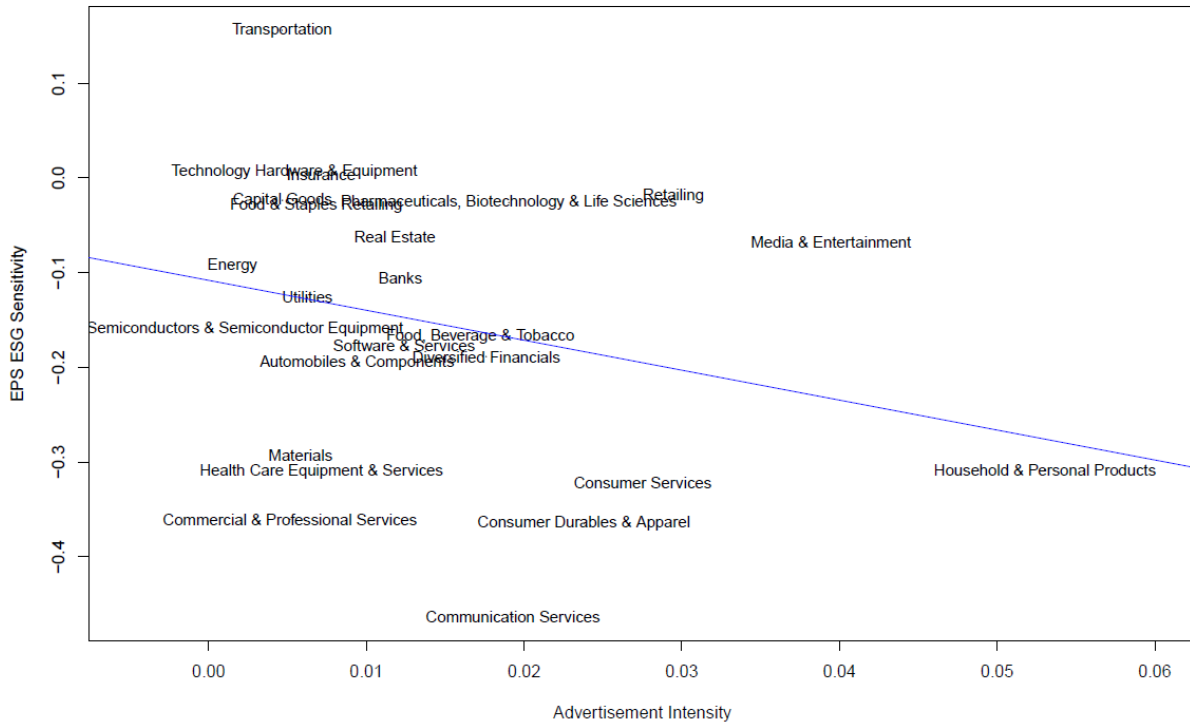


4.5. FIGURE 5: PTG SENSITIVITY BY INDUSTRY

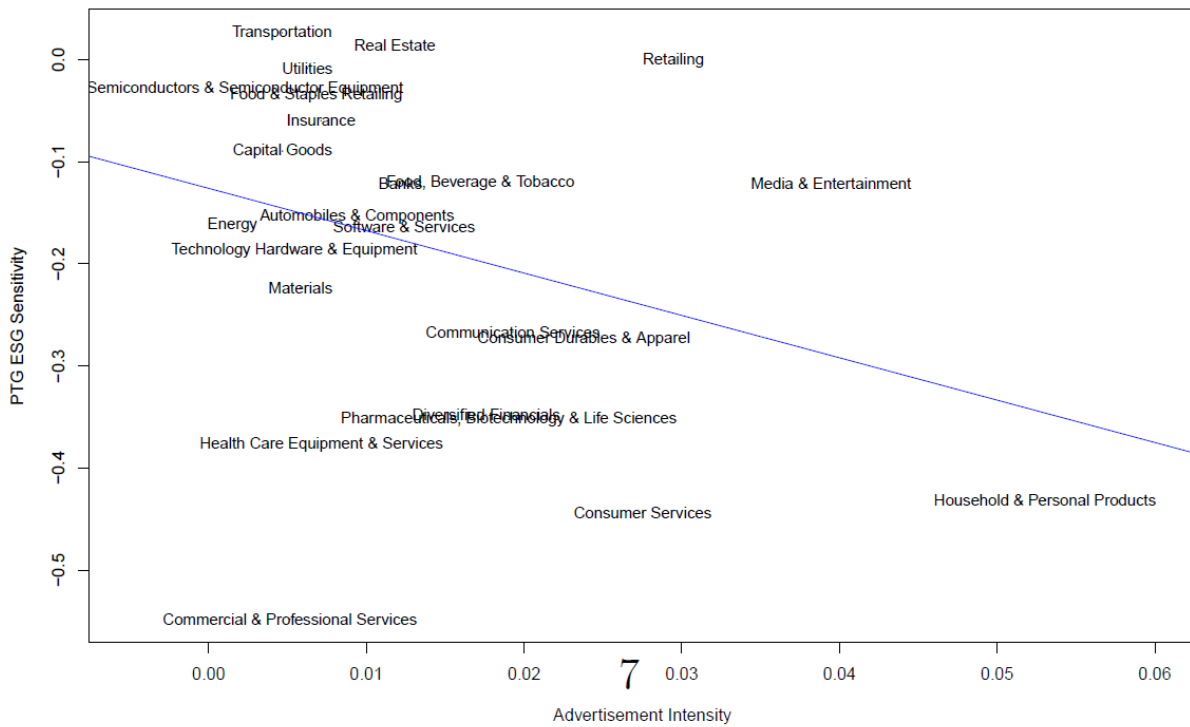


4.6. FIGURE 6: EPS/PTG SENSITIVITY AND ADVERTISING INTENSITY

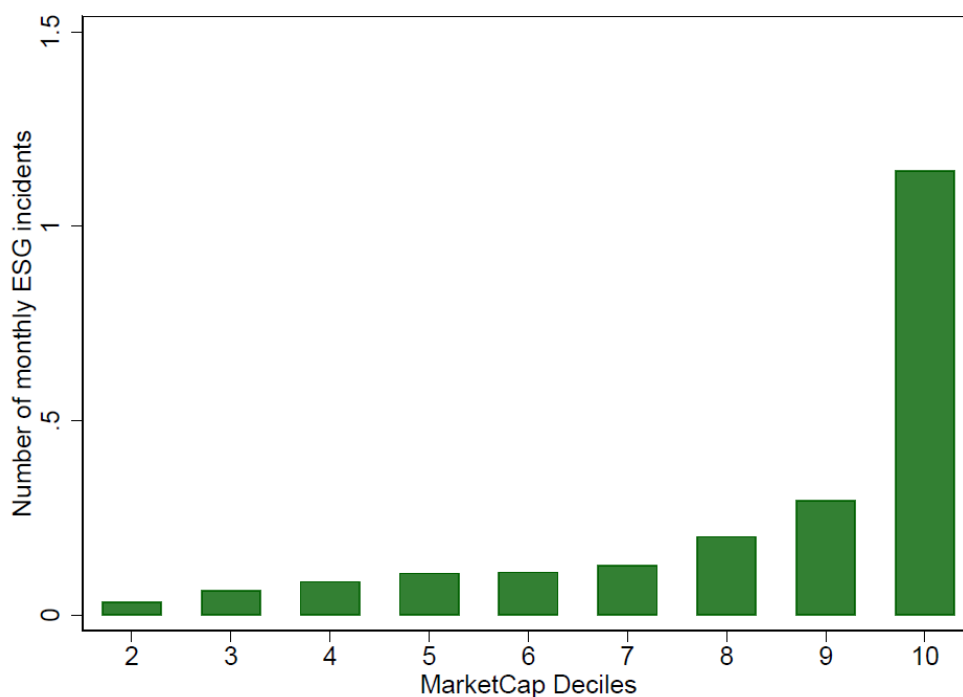
(a) EPS sensitivity



(b) PTG sensitivity



4.7. FIGURE 7: NUMBER OF INCIDENTS BY FIRM SIZE



4.8. TABLE 1: DESCRIPTIVE STATISTICS OF REPRISK DATA

Panel A: List of ESG issues

[Panel A only contains list of ESG issues and no numeric results]

Panel B: Distribution of environmental, social and governance incidents

	E	S	G	# incidents	Percent
r1	1	0	0	4,198	5.14
r2	0	1	0	28,354	34.68
r3	0	0	1	7,304	8.93
r4	1	1	0	15,933	19.49
r5	1	0	1	464	0.57
r6	0	1	1	23,044	28.19
r7	1	1	1	2,450	3.00

Panel C: Distribution of novelty, severity and reach levels

	Novelty	Severity	Reach
1	0.40	0.68	0.29
2	0.60	0.31	0.55
3	0.00	0.01	0.16

4.9. TABLE 2: SUMMARY STATISTICS

	Obs.	Mean	SD	p1	p25	p50	p75	p99
$\Delta EPS/ EPS$ (%)	2,976,889	-1.23	8.31	-32.69	-1.46	0.00	0.04	20.00
ΔLTG (%)	253,735	-0.12	1.82	-6.30	0.00	0.00	0.00	5.32
$\Delta PTG/ PTG$ (%)	688,899	0.22	5.68	-16.67	-0.56	0.00	1.45	16.67
Return (%)	737,689	0.35	9.93	-24.07	-5.18	0.55	6.13	23.42
$\Delta Sales/ Sales$ (%)	2,831,931	-0.17	2.27	-7.68	-0.43	0.00	0.19	6.44
$\Delta GrossMargin/ GrossMargin$ (%)	1,442,110	-0.13	1.94	-7.04	-0.06	0.00	0.00	5.72
Market Cap. (Bil USD)	8,193,510	10.14	28.88	0.08	0.98	2.73	8.10	133.22
ΔROA (%)	7,334,872	-0.00	0.11	-0.59	0.00	0.00	0.00	0.44
$\Delta (CapEx/ Asset)$ (%)	7,933,001	-0.01	0.21	-1.06	0.00	0.00	0.00	0.89
$\Delta (NetDebt/ Asset)$ (%)	7,915,217	0.01	0.56	-2.35	0.00	0.00	0.00	2.75
Any incidents	8,193,564	0.12	0.33	0.00	0.00	0.00	0.00	1.00
Num. of incidents	8,193,564	0.27	1.20	0.00	0.00	0.00	0.00	5.00

4.10. TABLE 3: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS

Panel A: At least one incident

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
≥ 1 incidents in months [t-6,t]	-0.142** (-2.09)	-0.124* (-1.85)	-0.074 (-1.14)	-0.049 (-0.83)	-0.130*** (-3.08)	-0.148*** (-3.76)	-0.157*** (-4.18)	0.002 (0.17)	-0.168*** (-6.20)	-0.177*** (-5.08)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: Splitting by the number of incidents

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
1 incident in months [t-6,t]	-0.082 (-1.15)	-0.068 (-0.96)	-0.001 (-0.01)	-0.020 (-0.33)	-0.090** (-2.12)	-0.110*** (-2.74)	-0.119*** (-3.11)	0.012 (0.93)	-0.132*** (-4.88)	-0.167*** (-4.83)
≥ 2 incidents in months [t-6,t]	-0.277*** (-3.03)	-0.248*** (-2.79)	-0.238** (-2.59)	-0.113 (-1.27)	-0.222*** (-3.75)	-0.236*** (-4.39)	-0.240*** (-4.59)	-0.019 (-1.21)	-0.250*** (-6.52)	-0.198*** (-3.99)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

4.11. TABLE 4: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—BY E/S/G CATEGORY

Panel A: Environmental incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 E incidents in months [t-6,t]	-0.121 (-1.23)	-0.029 (-0.32)	-0.195** (-2.10)	-0.138 (-1.51)	-0.100* (-1.70)	-0.109* (-1.92)	-0.094* (-1.77)	0.015 (0.89)	-0.083** (-2.46)	-0.080* (-1.70)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: Social incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 S incidents in months [t-6,t]	-0.149** (-2.15)	-0.194*** (-2.99)	-0.125* (-1.92)	-0.077 (-1.20)	-0.175*** (-4.23)	-0.189*** (-4.86)	-0.180*** (-4.77)	0.002 (0.14)	-0.169*** (-6.13)	-0.142*** (-4.08)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel C: Governance incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 G incidents in months [t-6,t]	-0.162** (-2.06)	-0.051 (-0.68)	0.020 (0.25)	0.012 (0.16)	-0.150*** (-3.13)	-0.097** (-2.23)	-0.126*** (-3.22)	-0.012 (-0.87)	-0.143*** (-4.24)	-0.142*** (-3.45)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

4.12. TABLE 5: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—BY E/S/G CATEGORY (TWO OR MORE EVENTS)

Panel A: Environmental incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
1 E incident in months [t-6,t]	-0.058 (-0.57)	0.026 (0.28)	-0.171* (-1.81)	-0.074 (-0.81)	-0.093 (-1.60)	-0.077 (-1.35)	-0.077 (-1.42)	0.027 (1.62)	-0.053 (-1.55)	-0.064 (-1.27)
>=2 E incidents in months [t-6,t]	-0.282* (-1.92)	-0.168 (-1.17)	-0.255* (-1.82)	-0.300* (-1.97)	-0.120 (-1.25)	-0.197** (-2.35)	-0.142* (-1.70)	-0.018 (-0.76)	-0.168*** (-3.19)	-0.125* (-1.94)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: Social incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
1 S incident in months [t-6,t]	-0.096 (-1.29)	-0.135* (-1.92)	-0.055 (-0.85)	-0.015 (-0.22)	-0.138*** (-3.24)	-0.155*** (-3.70)	-0.151*** (-3.90)	0.015 (1.20)	-0.141*** (-5.04)	-0.138*** (-3.98)
>=2 S incidents in months [t-6,t]	-0.267*** (-2.86)	-0.325*** (-3.64)	-0.279*** (-2.94)	-0.211** (-2.40)	-0.258*** (-4.31)	-0.266*** (-4.94)	-0.241*** (-4.74)	-0.026* (-1.69)	-0.232*** (-6.09)	-0.151*** (-3.07)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel C: Governance incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
1 G incident in months [t-6,t]	-0.121 (-1.57)	-0.004 (-0.05)	0.060 (0.73)	0.041 (0.51)	-0.108** (-2.20)	-0.073 (-1.65)	-0.127*** (-3.04)	-0.003 (-0.21)	-0.138*** (-3.93)	-0.171*** (-4.13)
>=2 G incidents in months [t-6,t]	-0.258** (-2.02)	-0.163 (-1.50)	-0.074 (-0.66)	-0.056 (-0.59)	-0.251*** (-3.42)	-0.154** (-2.44)	-0.124** (-2.26)	-0.031* (-1.70)	-0.153*** (-3.24)	-0.070 (-1.06)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

4.13. TABLE 6: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS, BY NOVELTY, SEVERITY, AND REACH

Panel A: High vs. low novelty incidents

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 low-novelty incidents in months [t-6,t]	-0.167* (-1.74)	-0.104 (-1.22)	-0.012 (-0.14)	-0.045 (-0.52)	-0.121** (-2.10)	-0.079 (-1.49)	-0.071 (-1.49)	-0.000 (-0.00)	-0.086** (-2.53)	-0.071 (-1.59)
>=1 high-novelty incidents in months [t-6,t]	-0.097 (-1.49)	-0.098 (-1.41)	-0.089 (-1.34)	-0.043 (-0.76)	-0.109** (-2.61)	-0.145*** (-3.64)	-0.152*** (-3.84)	-0.006 (-0.52)	-0.164*** (-6.10)	-0.152*** (-4.44)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: High vs. low severity incidents

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 low-severity incidents in months [t-6,t]	-0.127*** (-2.01)	-0.042 (-0.67)	0.007 (0.12)	0.044 (0.71)	-0.025 (-0.60)	-0.075* (-1.97)	-0.091*** (-2.63)	-0.005 (-0.45)	-0.117*** (-4.49)	-0.110*** (-3.07)
>=1 high-severity incidents in months [t-6,t]	-0.150* (-1.91)	-0.173** (-2.24)	-0.180** (-2.30)	-0.207*** (-2.99)	-0.195*** (-3.88)	-0.163*** (-3.66)	-0.134*** (-3.39)	-0.013 (-1.05)	-0.144*** (-4.43)	-0.108** (-2.61)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel C: High vs. low reach incidents

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 low-reach incidents in months [t-6,t]	-0.005 (-0.07)	-0.079 (-1.20)	-0.062 (-0.94)	-0.083 (-1.32)	-0.025 (-0.53)	-0.010 (-0.23)	-0.037 (-0.87)	0.017 (1.58)	-0.092*** (-3.05)	-0.071* (-1.74)
>=1 high-reach incidents in months [t-6,t]	-0.208*** (-2.93)	-0.108 (-1.59)	-0.078 (-1.21)	-0.066 (-0.93)	-0.151*** (-3.63)	-0.184*** (-4.69)	-0.159*** (-4.56)	-0.017 (-1.31)	-0.159*** (-5.69)	-0.153*** (-4.56)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

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4.14. TABLE 7: IMPACT OF ESG INCIDENTS AND OTHER INCIDENTS ON EPS FORECASTS

	(1)	(2)	(3)	(4)	(5)
	1 year	2 year	3 year	1&2 year	1&3 year
>=1 ESG Incidents in months [t-6,t]	-0.126*** (-3.03)	-0.145*** (-3.75)	-0.156*** (-4.23)	-0.126*** (-3.04)	-0.126*** (-3.04)
>= 1 KD Negative Incidents in months [t-6,t]	-0.482*** (-11.26)	-0.387*** (-10.51)	-0.288*** (-8.13)	-0.482*** (-11.35)	-0.482*** (-11.36)
>=1 ESG Incidents in months [t-6,t] × 2-year				-0.019 (-0.59)	
>= 1 KD Negative Incidents in months [t-6,t] × 2-year				0.095*** (3.39)	
>=1 ESG Incidents in months [t-6,t] × 3-year					-0.030 (-0.74)
>= 1 KD Negative Incidents in months [t-6,t] × 3-year					0.194*** (5.21)
$\beta_{ESG \times h-year} - \beta_{KD \times h-year}$				-0.115	-0.224
F-stat				7.049	16.661
P value				0.009	0.000
Month × Industry × Country FE	YES	YES	YES	NO	NO
Firm FE	YES	YES	YES	NO	NO
Month × Industry × Country × Horizon FE	NO	NO	NO	YES	YES
Firm × Horizon FE	NO	NO	NO	YES	YES
adj R2	0.084	0.100	0.079	0.092	0.082
Obs.	661466	649616	500617	1311082	1162083

4.15. TABLE 8: REACTION OF SALES AND GROSS MARGIN FORECASTS TO ESG INCIDENTS

Panel A: At least one incident

	Sales							GrossMargin						
	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) Q1	(9) Q2	(10) Q3	(11) Q4	(12) 1 year	(13) 2 year	(14) 3 year
>=1 incidents in months [t-6,t]	-0.018 (-1.17)	-0.035** (-2.05)	-0.037** (-2.28)	-0.019 (-1.22)	-0.036*** (-3.81)	-0.055*** (-4.75)	-0.061*** (-5.04)	-0.033* (-1.78)	-0.025 (-1.35)	0.008 (0.41)	0.020 (1.26)	-0.027** (-2.53)	-0.028** (-2.26)	-0.013 (-1.04)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.096	0.098	0.096	0.098	0.084	0.097	0.083	0.055	0.046	0.044	0.051	0.055	0.049	0.044
Obs.	287848	257668	229055	132583	635184	622496	480707	133105	121208	106544	62080	348421	337610	222117

Panel B: Splitting by the number of incidents

	Sales							GrossMargin						
	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) Q1	(9) Q2	(10) Q3	(11) Q4	(12) 1 year	(13) 2 year	(14) 3 year
1 incident in months [t-6,t]	-0.006 (-0.36)	-0.014 (-0.78)	-0.010 (-0.63)	-0.013 (-0.75)	-0.028*** (-2.90)	-0.038*** (-3.23)	-0.043*** (-3.30)	-0.038** (-2.11)	-0.019 (-1.03)	0.018 (0.88)	0.021 (1.29)	-0.030** (-2.35)	-0.026** (-1.98)	-0.000 (-0.02)
>=2 incidents in months [t-6,t]	-0.045** (-2.04)	-0.081*** (-3.74)	-0.096*** (-4.29)	-0.033 (-1.60)	-0.054*** (-3.93)	-0.095*** (-5.74)	-0.099*** (-5.88)	-0.021 (-0.78)	-0.039 (-1.57)	-0.015 (-0.61)	0.019 (0.80)	-0.021 (-1.56)	-0.033** (-2.14)	-0.041** (-2.38)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.096	0.098	0.096	0.098	0.084	0.097	0.083	0.055	0.046	0.044	0.051	0.055	0.049	0.044
Obs.	287848	257668	229055	132583	635184	622496	480707	133105	121208	106544	62080	348421	337610	222117

4.16. TABLE 9: EVENT STUDY: ANALYSTS AND MARKET REACTION AFTER AN ESG INCIDENT

Window	$\widehat{\Delta PV}/PV$		Return		$\Delta r/r$	
	(1) Coef.	(2) t-stat	(3) Coef.	(4) t-stat	(5) Coef.	(6) t-stat
$[t,t]$	-0.08	-1.41	-0.24	-3.51	0.05	2.08
$[t,t+1]$	-0.13	-1.19	-0.32	-2.99	0.06	1.63
$[t,t+2]$	-0.24	-1.63	-0.36	-2.68	0.04	0.79
$[t,t+3]$	-0.41	-2.16	-0.30	-1.84	-0.01	-0.11
$[t,t+4]$	-0.58	-2.49	-0.29	-1.51	-0.03	-0.41
$[t,t+5]$	-0.76	-2.82	-0.23	-1.05	-0.06	-0.94
$[t,t+6]$	-0.86	-2.74	-0.36	-1.45	-0.07	-1.11

4.17. TABLE 10: VARIATION ACROSS REGIONS

Panel A: EPS/PTG forecasts and Returns

	(1)	(2)	(3)	(4)	(5)	(6)
	1 year	2 year	3 year	LTG	PTG	Return
≥ 1 incidents in months $[t-6,t]$	-0.082 (-1.21)	-0.126** (-2.02)	-0.233*** (-3.73)	-0.009 (-0.66)	-0.180*** (-3.95)	-0.112* (-1.82)
≥ 1 incidents in months $[t-6,t] \times$ EU15	-0.080 (-0.67)	-0.077 (-0.77)	0.101 (1.15)	0.038 (1.33)	-0.042 (-0.54)	-0.185* (-1.85)
≥ 1 incidents in months $[t-6,t] \times$ Asia	-0.100 (-1.06)	-0.042 (-0.55)	0.099 (1.22)	0.016 (0.54)	0.011 (0.18)	-0.091 (-1.16)
≥ 1 incidents in months $[t-6,t] \times$ Others	-0.003 (-0.03)	0.031 (0.26)	0.173* (1.80)	0.019 (0.40)	0.103 (1.25)	-0.050 (-0.49)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
adj R2	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	661466	649616	500617	226021	645591	638384

Panel B: Sales forecasts

	(1)	(2)	(3)
	1 year	2 year	3 year
≥ 1 incidents in months $[t-6,t]$	-0.027* (-1.78)	-0.056*** (-3.17)	-0.073*** (-3.68)
≥ 1 incidents in months $[t-6,t] \times$ EU15	0.015 (0.59)	-0.008 (-0.28)	0.003 (0.09)
≥ 1 incidents in months $[t-6,t] \times$ Asia	-0.022 (-1.10)	0.011 (0.46)	0.045 (1.64)
≥ 1 incidents in months $[t-6,t] \times$ Others	-0.022 (-0.73)	-0.010 (-0.29)	-0.029 (-0.69)
Month \times Industry \times Country FE	YES	YES	YES
Firm FE	18	YES	YES
adj R2	0.084	0.097	0.083
Obs.	635184	622496	480707

4.18. TABLE 11: INTERACTION WITH ADVERTISING INTENSITY

Panel A: EPS/PTG forecasts and returns

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 incidents in months [t-6,t]	-0.087 (-0.95)	-0.052 (-0.57)	-0.022 (-0.26)	-0.086 (-1.10)	-0.091 (-1.58)	-0.119** (-2.29)	-0.172*** (-3.54)	-0.005 (-0.33)	-0.144*** (-4.37)	-0.162*** (-3.68)
>=1 incidents in months [t-6,t] × High Ad Intensity	-0.142 (-1.09)	-0.180 (-1.41)	-0.131 (-1.21)	0.092 (0.88)	-0.100 (-1.32)	-0.076 (-1.13)	0.037 (0.63)	0.017 (0.74)	-0.062 (-1.34)	-0.038 (-0.56)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: Sales forecasts

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year
>=1 incidents in months [t-6,t]	-0.008 (-0.41)	-0.016 (-0.67)	-0.024 (-1.03)	0.006 (0.27)	-0.024** (-2.01)	-0.042*** (-2.93)	-0.047*** (-3.06)
>=1 incidents in months [t-6,t] × High Ad Intensity	-0.025 (-0.84)	-0.047 (-1.51)	-0.031 (-0.98)	-0.060* (-1.94)	-0.031* (-1.85)	-0.034* (-1.69)	-0.037 (-1.62)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES
adj R2	0.096	0.098	0.096	0.098	0.084	0.097	0.083
Obs.	287848	257668	229055	132583	635184	622496	480707

4.19. TABLE 12: INTERACTION WITH FIRM SIZE

Panel A: EPS/PTG forecasts and returns

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 incidents in months [t-6,t]	-0.193 (-1.65)	-0.177 (-1.57)	-0.197 (-1.65)	-0.184* (-1.69)	-0.222*** (-3.36)	-0.248*** (-4.00)	-0.238*** (-3.63)	-0.011 (-0.42)	-0.205*** (-5.10)	-0.216*** (-3.84)
>=1 incidents in months [t-6,t] × LargeFirm	0.082 (0.59)	0.086 (0.68)	0.197 (1.46)	0.214* (1.74)	0.168** (2.36)	0.180*** (2.77)	0.134* (1.90)	0.017 (0.61)	0.068 (1.52)	0.066 (0.90)
LargeFirm	0.670*** (5.39)	0.701*** (5.31)	0.629*** (4.72)	0.575*** (4.55)	0.642*** (8.57)	0.663*** (8.83)	0.616*** (8.63)	0.034 (1.54)	0.549*** (9.50)	-1.422*** (-12.17)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.094	0.084	0.100	0.079	0.072	0.174	0.374
Obs.	295231	272345	249829	150188	661461	649610	500615	226021	645589	638383

Panel B: Sales forecasts

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year
>=1 incidents in months [t-6,t]	-0.020 (-0.87)	-0.030 (-1.25)	-0.044* (-1.75)	-0.046* (-1.82)	-0.041*** (-3.20)	-0.070*** (-3.94)	-0.056*** (-2.94)
>=1 incidents in months [t-6,t] × LargeFirm	0.004 (0.13)	-0.008 (-0.27)	0.011 (0.36)	0.042 (1.46)	0.010 (0.61)	0.027 (1.31)	-0.007 (-0.31)
LargeFirm	0.100*** (3.64)	0.118*** (4.18)	0.136*** (4.72)	0.053* (1.85)	0.085*** (5.30)	0.141*** (6.94)	0.166*** (7.54)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES
adj R2	0.096	0.099	0.096	0.098	0.084	0.097	0.083
Obs.	287847	257667	229055	132583	635159	622474	480705

4.20. TABLE 13: IMPACT OF ESG INCIDENTS ON REALIZED EARNINGS, SALES, AND GROSS MARGIN

Panel A: At least one incident

	Earnings			Sales			GrossMargin		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	$t-1$ to t	$t-1$ to $t+1$	$t-1$ to $t+2$	$t-1$ to t	$t-1$ to $t+1$	$t-1$ to $t+2$	$t-1$ to t	$t-1$ to $t+1$	$t-1$ to $t+2$
>=1 incidents year [t-1,t]	-0.088*** (-4.79)	-0.118*** (-4.79)	-0.091*** (-3.17)	-0.012*** (-5.43)	-0.026*** (-6.66)	-0.042*** (-8.06)	-0.003 (-1.41)	-0.005 (-1.37)	-0.002 (-0.38)
Year × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.063	0.101	0.124	0.263	0.336	0.394	0.036	0.087	0.139
Obs.	83420	79549	73309	85293	81247	75107	73582	70077	64519

Panel B: Splitting by the number of incidents

	Earnings			Sales			GrossMargin		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	$t-1$ to t	$t-1$ to $t+1$	$t-1$ to $t+2$	$t-1$ to t	$t-1$ to $t+1$	$t-1$ to $t+2$	$t-1$ to t	$t-1$ to $t+1$	$t-1$ to $t+2$
lower number of incidents year [t-1,t]	-0.071*** (-3.65)	-0.086*** (-3.34)	-0.069** (-2.33)	-0.011*** (-4.60)	-0.023*** (-5.72)	-0.038*** (-7.27)	-0.003 (-1.30)	-0.002 (-0.60)	-0.000 (-0.05)
higher number of incidents year [t-1,t]	-0.145*** (-5.20)	-0.233*** (-6.07)	-0.179*** (-3.80)	-0.017*** (-5.06)	-0.037*** (-6.09)	-0.057*** (-6.63)	-0.004 (-1.01)	-0.014** (-2.51)	-0.007 (-1.02)
Year × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.063	0.101	0.124	0.263	0.336	0.394	0.036	0.087	0.139
Obs.	83420	79549	73309	85293	81247	75107	73582	70077	64519

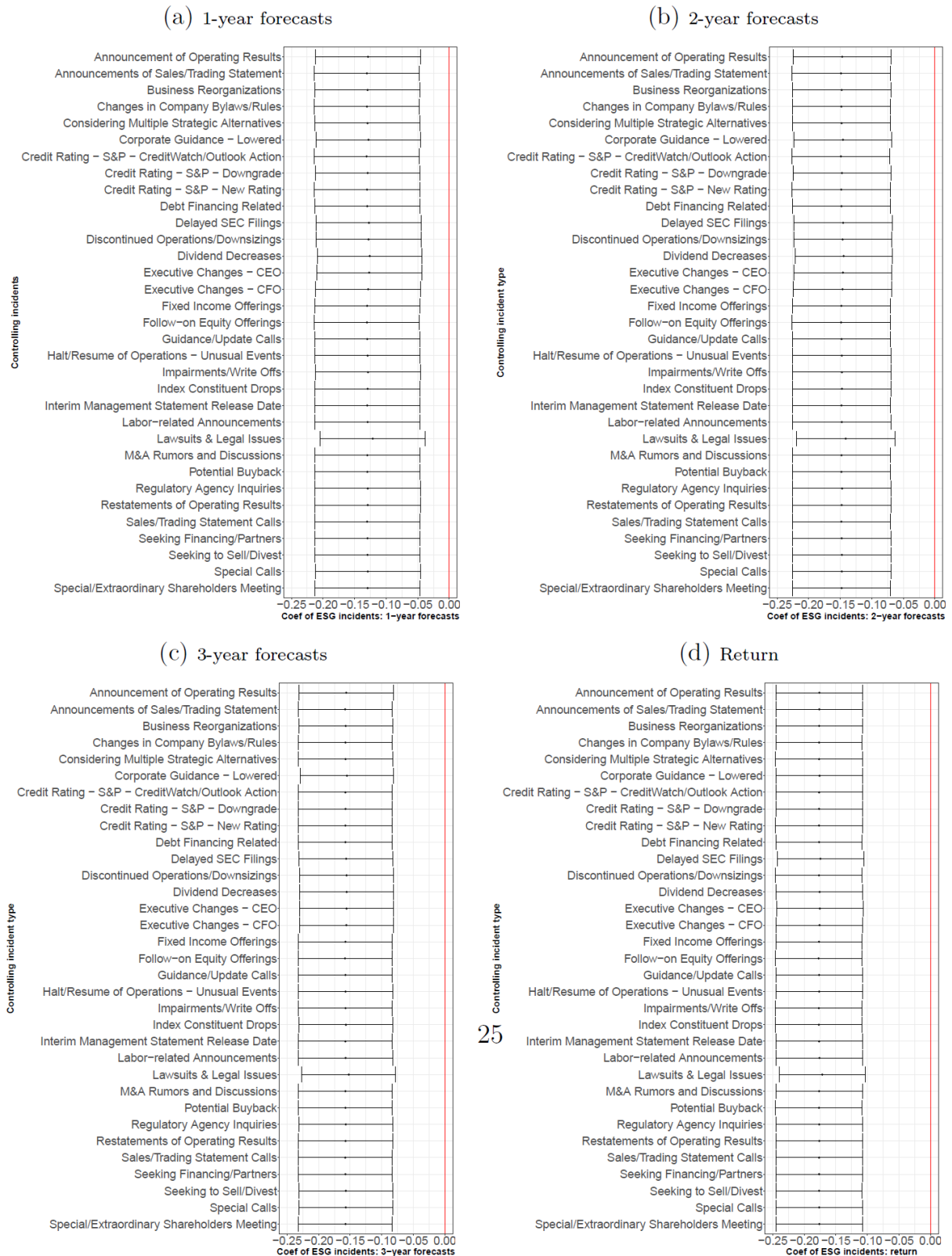
4.21. TABLE 14: ANALYST-LEVEL FORECAST REVISIONS AND FORECAST ERRORS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year
Downward Adjustment	-0.005*** (-6.21)	-0.012*** (-9.92)	-0.015*** (-11.33)	-0.012*** (-9.33)	-0.014*** (-16.77)	-0.022*** (-19.76)	-0.024*** (-21.13)
>=1 incidents in months [t-6,t] × Downward Adjustment	-0.001 (-0.91)	-0.002* (-1.83)	-0.002* (-1.79)	-0.003** (-2.33)	-0.002*** (-2.84)	-0.003*** (-3.56)	-0.004*** (-3.98)
Firm × Earnings Announcement × Month	YES	YES	YES	YES	YES	YES	YES
adj R2	0.303	0.272	0.263	0.219	0.225	0.214	0.198
Obs.	2656113	2222054	1741710	860246	8693747	7434766	3248309

4.22. TABLE 15: ESG INCIDENTS PREDICT ESG SCORES

	ESG Score			log(ESG Score)		
	(1) Asset4	(2) MSCI	(3) Sustainalytics	(4) Asset4	(5) MSCI	(6) Sustainalytics
log(num. incidents) in month t	-0.740*** (-6.82)	-0.807*** (-6.21)	-0.040 (-1.23)	-0.019*** (-5.55)	-0.026*** (-5.34)	-0.001** (-2.32)
log(num. incidents) in month t-1	-0.736*** (-6.91)	-0.791*** (-6.78)	-0.087*** (-2.68)	-0.019*** (-5.63)	-0.024*** (-5.76)	-0.002*** (-3.71)
log(num. incidents) in month t-2	-0.664*** (-6.74)	-0.778*** (-6.99)	-0.063** (-2.17)	-0.017*** (-5.47)	-0.025*** (-6.41)	-0.002*** (-3.14)
log(num. incidents) in month t-3	-0.679*** (-6.83)	-0.800*** (-7.70)	-0.053* (-1.91)	-0.018*** (-5.62)	-0.023*** (-6.15)	-0.001*** (-2.86)
log(num. incidents) in month t-4	-0.627*** (-6.49)	-0.807*** (-7.95)	-0.047* (-1.75)	-0.017*** (-5.32)	-0.023*** (-6.15)	-0.001*** (-2.73)
log(num. incidents) in month t-5	-0.615*** (-6.18)	-0.855*** (-8.79)	-0.068** (-2.37)	-0.017*** (-5.29)	-0.025*** (-6.90)	-0.001*** (-3.10)
log(num. incidents) in month t-6	-0.601*** (-6.05)	-0.867*** (-9.10)	-0.074** (-2.43)	-0.017*** (-5.24)	-0.025*** (-6.84)	-0.002*** (-3.05)
log(num. incidents) in month t-7	-0.635*** (-6.33)	-0.850*** (-8.85)	-0.064** (-2.12)	-0.019*** (-5.69)	-0.024*** (-6.52)	-0.001*** (-2.86)
log(num. incidents) in month t-8	-0.669*** (-6.42)	-0.911*** (-9.20)	-0.078** (-2.60)	-0.020*** (-5.92)	-0.027*** (-6.97)	-0.002*** (-3.32)
log(num. incidents) in month t-9	-0.750*** (-6.76)	-0.953*** (-9.45)	-0.079** (-2.41)	-0.022*** (-6.41)	-0.027*** (-6.75)	-0.002*** (-3.26)
log(num. incidents) in month t-10	-0.769*** (-6.88)	-1.018*** (-9.45)	-0.076** (-2.07)	-0.023*** (-6.65)	-0.030*** (-7.13)	-0.002*** (-2.89)
log(num. incidents) in month t-11	-0.859*** (-7.27)	-1.075*** (-9.55)	-0.105*** (-2.70)	-0.026*** (-7.32)	-0.031*** (-7.15)	-0.002*** (-3.46)
log(num. incidents) in month t-12	-0.906*** (-7.14)	-1.167*** (-9.31)	-0.147*** (-3.43)	-0.028*** (-7.55)	-0.032*** (-6.67)	-0.003*** (-4.16)
Month * Industry FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
Sum of Coef.	-9.250	-11.680	-0.982	-0.261	-0.341	-0.023
F-stat	150.662	95.884	9.443	188.172	64.558	16.778
p-value	0.000	0.000	0.003	0.000	0.000	0.000
Adj. R2	0.889	0.767	0.903	0.867	0.674	0.904
Obs.	325458	281059	184332	325458	281059	184332

4.23. FIGURE IA.1: IMPACT OF ESG INCIDENTS ON EARNINGS FORECASTS AND STOCK PRICES, CONTROLLING FOR ONE KEY DEVELOPMENT AT A TIME



4.24. TABLE IA.2: DISTRIBUTION OF OBSERVATIONS ACROSS COUNTRIES

Country	(1)	(2)	(3)	(4)	(5)	(6)
	Obs. Total	Perc. Total (%)	Obs. Annual	Perc. Annual (%)	Obs. Quarter	Perc. Quarter (%)
USA	3,254,955	39.73	1,623,875	28.27	1,631,080	66.58
JPN	578,774	7.06	492,361	8.57	86,413	3.53
CHN	537,275	6.56	516,901	9.00	20,374	0.83
KOR	349,563	4.27	223,208	3.89	126,355	5.16
CAN	335,410	4.09	198,717	3.46	136,693	5.58
GBR	281,633	3.44	274,294	4.78	7,339	0.30
IND	249,221	3.04	224,733	3.91	24,488	1.00
TWN	218,623	2.67	114,596	2.00	104,027	4.25
AUS	191,532	2.34	191,334	3.33	198	0.01
DEU	173,406	2.12	142,390	2.48	31,016	1.27
FRA	156,415	1.91	147,993	2.58	8,422	0.34
BRA	140,427	1.71	102,056	1.78	38,371	1.57
CYM	115,095	1.40	106,877	1.86	8,218	0.34
SWE	114,881	1.40	72,412	1.26	42,469	1.73
CHE	95,773	1.17	85,510	1.49	10,263	0.42
MYS	90,307	1.10	87,759	1.53	2,548	0.10
NOR	88,389	1.08	56,094	0.98	32,295	1.32
FIN	88,085	1.08	54,614	0.95	33,471	1.37
ESP	73,269	0.89	66,208	1.15	7,061	0.29
ITA	72,621	0.89	67,039	1.17	5,582	0.23
HKG	69,653	0.85	67,307	1.17	2,346	0.10
ZAF	67,969	0.83	66,572	1.16	1,397	0.06
NLD	67,422	0.82	58,118	1.01	9,304	0.38
IDN	66,629	0.81	63,260	1.10	3,369	0.14
BMU	61,883	0.76	58,823	1.02	3,060	0.12
THA	61,880	0.76	57,262	1.00	4,618	0.19
MEX	56,505	0.69	40,530	0.71	15,975	0.65
DNK	51,316	0.63	35,352	0.62	15,964	0.65
SGP	48,575	0.59	44,822	0.78	3,753	0.15
PHL	43,961	0.54	41,392	0.72	2,569	0.10
TUR	43,065	0.53	38,327	0.67	4,738	0.19
POL	39,631	0.48	37,618	0.65	2,013	0.08
BEL	33,962	0.41	31,221	0.54	2,741	0.11
RUS	32,435	0.40	31,861	0.55	574	0.02
AUT	29,276	0.36	25,074	0.44	4,202	0.17
NZL	24,413	0.30	24,413	0.43	0	0.00
CHL	24,081	0.29	19,839	0.35	4,242	0.17
ISR	21,154	0.26	16,914	0.29	4,240	0.17
NGA	19,235	0.23	19,212	0.33	23	0.00
PRT	19,206	0.23	17,591	0.31	1,615	0.07
PAK	17,414	0.21	17,206	0.30	208	0.01
GRC	15,868	0.19	14,793	0.26	1,075	0.04
IRL	15,816	0.19	14,629	0.25	1,187	0.05
LUX	15,751	0.19	12,889	0.22	2,862	0.12
EGY	14,607	0.18	14,462	0.25	145	0.01
KEN	8,531	0.10	8,531	0.15	0	0.00
COL	6,929	0.08	6,115	0.11	814	0.03
ARG	6,217	0.08	6,066	0.11	151	0.01
VNM	4,526	0.06	4,526	0.08	0	0.00

4.25. TABLE IA.3: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—DIFFERENT LAGS

Panel A: Incidents with a 3-month lag

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 incidents in months [t-3,t]	-0.102 (-1.44)	-0.135** (-2.19)	-0.062 (-1.00)	0.019 (0.29)	-0.137*** (-3.35)	-0.130*** (-3.35)	-0.155*** (-4.02)	-0.009 (-0.76)	-0.146*** (-5.75)	-0.194*** (-4.99)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: Incidents with a 9-month lag

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 incidents in months [t-9,t]	-0.089 (-1.28)	-0.109* (-1.69)	-0.054 (-0.78)	-0.038 (-0.60)	-0.148*** (-3.71)	-0.159*** (-4.15)	-0.180*** (-4.93)	-0.006 (-0.52)	-0.158*** (-5.67)	-0.193*** (-5.35)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel C: Incidents with a 12-month lag

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 incidents in months [t-12,t]	-0.054 (-0.77)	-0.121* (-1.83)	-0.023 (-0.32)	-0.005 (-0.08)	-0.150*** (-3.61)	-0.161*** (-4.17)	-0.187*** (-5.04)	-0.005 (-0.46)	-0.167*** (-6.09)	-0.187*** (-4.97)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

4.26. TABLE IA.4: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—ALTERNATIVE FIXED EFFECTS

Panel A: At least one incident

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	1 year	2 year	3 year	1 year	2 year	3 year	1 year	2 year	3 year
>=1 incidents in months [t-6,t]	-0.161*** (-3.94)	-0.188*** (-5.12)	-0.176*** (-4.76)	-0.160*** (-3.91)	-0.171*** (-4.64)	-0.162*** (-4.58)	-0.176*** (-4.23)	-0.190*** (-5.02)	-0.180*** (-4.85)
Month × Country FE	YES	YES	YES	NO	NO	NO	NO	NO	NO
Month × Industry FE	NO	NO	NO	YES	YES	YES	NO	NO	NO
Month FE	NO	NO	NO	NO	NO	NO	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.063	0.073	0.060	0.063	0.079	0.065	0.052	0.059	0.049
Obs.	690241	678462	529552	690284	678508	529631	690284	678508	529631

Panel B: Splitting by the number of incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	1 year	2 year	3 year	1 year	2 year	3 year	1 year	2 year	3 year
1 incident in months [t-6,t]	-0.113*** (-2.76)	-0.124*** (-3.32)	-0.120*** (-3.18)	-0.116*** (-2.83)	-0.118*** (-3.17)	-0.115*** (-3.10)	-0.125*** (-3.00)	-0.125*** (-3.26)	-0.121*** (-3.19)
>=2 incidents in months [t-6,t]	-0.268*** (-4.55)	-0.329*** (-6.46)	-0.292*** (-5.97)	-0.257*** (-4.36)	-0.286*** (-5.54)	-0.256*** (-5.56)	-0.286*** (-4.75)	-0.330*** (-6.27)	-0.297*** (-6.08)
Month × Country FE	YES	YES	YES	NO	NO	NO	NO	NO	NO
Month × Industry FE	NO	NO	NO	YES	YES	YES	NO	NO	NO
Month FE	NO	NO	NO	NO	NO	NO	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.063	0.073	0.060	0.063	0.079	0.065	0.052	0.059	0.049
Obs.	690241	678462	529552	690284	678508	529631	690284	678508	529631

4.27. TABLE IA.5: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—TIME-VARYING CONTROLS WITHOUT FIRM FIXED EFFECTS

Panel A: At least one incident

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 incidents in months [t-6,t]	-0.392*** (-6.26)	-0.219*** (-3.66)	-0.141** (-2.48)	-0.135** (-2.32)	-0.287*** (-7.31)	-0.217*** (-6.10)	-0.205*** (-6.16)	-0.008 (-0.90)	-0.209*** (-9.02)	-0.169*** (-4.24)
Quintile MarketCap=2	0.460*** (3.71)	0.469*** (4.05)	0.403*** (3.76)	0.027 (0.29)	0.533*** (7.85)	0.485*** (7.80)	0.416*** (6.27)	0.068*** (3.41)	0.394*** (10.52)	0.284*** (3.67)
Quintile MarketCap=3	0.892*** (6.44)	0.841*** (6.99)	0.757*** (6.74)	0.246** (2.36)	0.840*** (11.66)	0.762*** (11.43)	0.690*** (9.57)	0.073*** (3.76)	0.498*** (11.12)	0.347*** (3.43)
Quintile MarketCap=4	1.351*** (8.80)	1.208*** (9.04)	1.005*** (8.47)	0.370*** (3.58)	1.124*** (14.30)	0.932*** (12.67)	0.835*** (10.87)	0.101*** (5.10)	0.567*** (10.69)	0.330*** (2.85)
Quintile MarketCap=5	1.764*** (10.16)	1.518*** (10.46)	1.168*** (9.10)	0.422*** (3.49)	1.409*** (15.49)	1.134*** (13.19)	1.031*** (11.86)	0.116*** (5.37)	0.624*** (10.93)	0.359** (2.59)
Quintile B/M Ratio=2	-0.180** (-2.24)	-0.019 (-0.26)	0.052 (0.81)	0.056 (0.99)	-0.115** (-2.58)	-0.110** (-2.46)	-0.056 (-1.34)	-0.003 (-0.28)	-0.379*** (-11.32)	-0.028 (-0.51)
Quintile B/M Ratio=3	-0.737*** (-6.80)	-0.486*** (-5.28)	-0.266*** (-3.33)	-0.160** (-2.46)	-0.401*** (-6.65)	-0.401*** (-7.04)	-0.243*** (-4.69)	-0.002 (-0.14)	-0.673*** (-14.56)	-0.095 (-1.14)
Quintile B/M Ratio=4	-1.409*** (-11.18)	-1.033*** (-9.13)	-0.839*** (-7.71)	-0.551*** (-5.99)	-0.962*** (-12.67)	-0.892*** (-11.52)	-0.627*** (-9.38)	-0.024* (-1.70)	-0.994*** (-17.24)	-0.010 (-0.09)
Quintile B/M Ratio=5	-1.996*** (-11.99)	-1.817*** (-12.07)	-1.622*** (-11.18)	-1.175*** (-9.17)	-1.811*** (-17.17)	-1.687*** (-15.71)	-1.308*** (-13.80)	-0.046** (-2.53)	-1.466*** (-19.14)	-0.089 (-0.50)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
adj R2	0.070	0.078	0.075	0.082	0.065	0.086	0.070	0.077	0.172	0.371
Obs.	293625	270839	248466	149583	657651	645913	498722	225522	641461	634912

Panel B: Splitting by the number of incidents

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
1 incident in months [t-6,t]	-0.233*** (-3.50)	-0.112* (-1.71)	-0.036 (-0.60)	-0.098* (-1.66)	-0.213*** (-5.38)	-0.179*** (-4.85)	-0.164*** (-4.47)	-0.000 (-0.02)	-0.171*** (-7.23)	-0.178*** (-4.83)
>=2 incidents in months [t-6,t]	-0.566*** (-6.61)	-0.335*** (-4.21)	-0.255*** (-3.41)	-0.174** (-2.20)	-0.373*** (-6.79)	-0.262*** (-5.32)	-0.250*** (-5.80)	-0.016 (-1.56)	-0.255*** (-7.95)	-0.158*** (-2.85)
Quintile MarketCap=2	0.467*** (3.78)	0.473*** (4.10)	0.408*** (3.80)	0.029 (0.31)	0.538*** (7.91)	0.488*** (7.85)	0.418*** (6.30)	0.069*** (3.44)	0.396*** (10.55)	0.283*** (3.68)
Quintile MarketCap=3	0.904*** (6.55)	0.849*** (7.09)	0.765*** (6.82)	0.249** (2.38)	0.847*** (11.75)	0.766*** (11.53)	0.694*** (9.61)	0.073*** (3.78)	0.502*** (11.18)	0.346*** (3.44)
Quintile MarketCap=4	1.377*** (9.00)	1.225*** (9.22)	1.021*** (8.62)	0.376*** (3.62)	1.137*** (14.44)	0.939*** (12.80)	0.843*** (10.93)	0.102*** (5.17)	0.575*** (10.76)	0.328*** (2.85)
Quintile MarketCap=5	1.849*** (10.77)	1.575*** (10.95)	1.224*** (9.46)	0.441*** (3.64)	1.448*** (15.79)	1.154*** (13.41)	1.052*** (12.06)	0.120*** (5.62)	0.644*** (11.04)	0.355** (2.59)
Quintile B/M Ratio=2	-0.177** (-2.19)	-0.017 (-0.23)	0.054 (0.84)	0.057 (1.00)	-0.113** (-2.53)	-0.109** (-2.43)	-0.055 (-1.31)	-0.002 (-0.25)	-0.378*** (-11.29)	-0.028 (-0.52)
Quintile B/M Ratio=3	-0.725*** (-6.68)	-0.479*** (-5.20)	-0.258*** (-3.24)	-0.158** (-2.42)	-0.396*** (-6.56)	-0.398*** (-6.97)	-0.240*** (-4.64)	-0.001 (-0.07)	-0.671*** (-14.53)	-0.096 (-1.15)
Quintile B/M Ratio=4	-1.390*** (-11.01)	-1.020*** (-8.98)	-0.827*** (-7.58)	-0.547*** (-5.96)	-0.954*** (-12.53)	-0.888*** (-11.41)	-0.622*** (-9.31)	-0.023 (-1.61)	-0.989*** (-17.21)	-0.011 (-0.10)
Quintile B/M Ratio=5	-1.963*** (-11.80)	-1.795*** (-11.93)	-1.601*** (-11.01)	-1.168*** (-9.08)	-1.795*** (-16.94)	-1.679*** (-15.54)	-1.300*** (-13.70)	-0.045** (-2.43)	-1.457*** (-19.09)	-0.091 (-0.52)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
adj R2	0.070	0.078	0.075	0.082	0.065	0.086	0.070	0.077	0.172	0.371
Obs.	293625	270839	248466	149583	657651	645913	498722	225522	641461	634912

4.28. TABLE IA.6: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—TIME-VARYING CONTROLS

Panel A: At least one incident

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
>=1 incidents in months [t-6,t]	-0.112* (-1.71)	-0.097 (-1.51)	-0.051 (-0.82)	-0.032 (-0.55)	-0.100** (-2.46)	-0.119*** (-3.14)	-0.136*** (-3.76)	0.002 (0.15)	-0.144*** (-5.60)	-0.189*** (-5.51)
Quintile MarketCap=2	-0.066 (-0.39)	-0.073 (-0.45)	-0.052 (-0.34)	-0.202 (-1.51)	0.109 (1.21)	0.137 (1.61)	0.186* (1.91)	0.059 (1.51)	0.253*** (5.19)	-1.142*** (-11.35)
Quintile MarketCap=3	-0.019 (-0.09)	-0.122 (-0.59)	0.108 (0.53)	-0.118 (-0.62)	0.306** (2.56)	0.353*** (3.12)	0.440*** (3.46)	0.058 (1.31)	0.368*** (4.75)	-2.199*** (-13.87)
Quintile MarketCap=4	0.200 (0.80)	0.116 (0.45)	0.277 (1.12)	-0.004 (-0.02)	0.519*** (3.47)	0.460*** (3.27)	0.590*** (4.02)	0.096* (1.91)	0.482*** (4.56)	-3.275*** (-14.90)
Quintile MarketCap=5	0.611** (2.10)	0.492* (1.72)	0.613** (2.19)	0.262 (1.14)	0.794*** (4.43)	0.760*** (4.37)	0.835*** (5.22)	0.101* (1.73)	0.651*** (4.50)	-4.347*** (-14.50)
Quintile B/M Ratio=2	-0.590*** (-5.78)	-0.539*** (-5.76)	-0.453*** (-5.20)	-0.311*** (-3.98)	-0.634*** (-10.87)	-0.669*** (-11.18)	-0.513*** (-10.07)	-0.020 (-1.32)	-0.740*** (-16.44)	0.310*** (4.04)
Quintile B/M Ratio=3	-1.381*** (-9.05)	-1.300*** (-9.17)	-1.082*** (-8.51)	-0.831*** (-7.41)	-1.254*** (-13.78)	-1.340*** (-15.31)	-1.028*** (-13.97)	-0.029 (-1.45)	-1.306*** (-19.88)	0.595*** (4.77)
Quintile B/M Ratio=4	-2.365*** (-12.94)	-2.194*** (-12.51)	-1.948*** (-11.09)	-1.529*** (-10.29)	-2.206*** (-18.80)	-2.206*** (-19.19)	-1.712*** (-17.62)	-0.057*** (-2.15)	-1.877*** (-22.27)	1.008*** (5.87)
Quintile B/M Ratio=5	-3.435*** (-14.36)	-3.342*** (-14.36)	-3.103*** (-13.02)	-2.494*** (-11.63)	-3.577*** (-22.40)	-3.475*** (-23.43)	-2.717*** (-21.51)	-0.077*** (-2.13)	-2.623*** (-24.79)	1.442*** (6.22)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.094	0.096	0.089	0.098	0.091	0.107	0.084	0.072	0.180	0.378
Obs.	293494	270761	248378	149328	657581	645854	498586	225397	641415	634869

Panel B: Splitting by the number of incidents

	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) LTG	(9) PTG	(10) Ret.
1 incident in months [t-6,t]	-0.071 (-1.02)	-0.054 (-0.79)	0.009 (0.14)	-0.014 (-0.23)	-0.077* (-1.85)	-0.095** (-2.44)	-0.111*** (-2.97)	0.012 (0.90)	-0.118*** (-4.50)	-0.165*** (-4.81)
>=2 incidents in months [t-6,t]	-0.205** (-2.29)	-0.193** (-2.18)	-0.185** (-2.07)	-0.072 (-0.81)	-0.153*** (-2.66)	-0.172*** (-3.29)	-0.192*** (-3.73)	-0.018 (-1.20)	-0.204*** (-5.56)	-0.243*** (-4.81)
Quintile MarketCap=2	-0.066 (-0.39)	-0.074 (-0.45)	-0.051 (-0.34)	-0.202 (-1.51)	0.109 (1.21)	0.137 (1.61)	0.186* (1.91)	0.059 (1.51)	0.253*** (5.20)	-1.142*** (-11.35)
Quintile MarketCap=3	-0.021 (-0.10)	-0.123 (-0.60)	0.105 (0.52)	-0.119 (-0.62)	0.306** (2.56)	0.353*** (3.11)	0.441*** (3.46)	0.057 (1.29)	0.368*** (4.74)	-2.199*** (-13.87)
Quintile MarketCap=4	0.197 (0.79)	0.113 (0.44)	0.272 (1.10)	-0.006 (-0.03)	0.518*** (3.46)	0.458*** (3.26)	0.589*** (4.02)	0.095* (1.88)	0.481*** (4.55)	-3.276*** (-14.91)
Quintile MarketCap=5	0.607** (2.09)	0.488* (1.71)	0.607** (2.17)	0.259 (1.12)	0.792*** (4.42)	0.758*** (4.36)	0.832*** (5.21)	0.100* (1.70)	0.649*** (4.49)	-4.349*** (-14.51)
Quintile B/M Ratio=2	-0.589*** (-5.77)	-0.538*** (-5.76)	-0.453*** (-5.20)	-0.311*** (-3.97)	-0.633*** (-10.86)	-0.669*** (-11.18)	-0.512*** (-10.06)	-0.020 (-1.30)	-0.740*** (-16.45)	0.310*** (4.05)
Quintile B/M Ratio=3	-1.380*** (-9.04)	-1.299*** (-9.17)	-1.080*** (-8.51)	-0.831*** (-7.41)	-1.253*** (-13.78)	-1.340*** (-15.31)	-1.028*** (-13.97)	-0.029 (-1.44)	-1.305*** (-19.88)	0.596*** (4.78)
Quintile B/M Ratio=4	-2.363*** (-12.93)	-2.192*** (-12.50)	-1.946*** (-11.08)	-1.528*** (-10.29)	-2.206*** (-18.80)	-2.206*** (-19.18)	-1.712*** (-17.61)	-0.056*** (-2.14)	-1.876*** (-22.27)	1.009*** (5.88)
Quintile B/M Ratio=5	-3.434*** (-14.37)	-3.340*** (-14.36)	-3.102*** (-13.03)	-2.494*** (-11.63)	-3.576*** (-22.39)	-3.474*** (-23.42)	-2.716*** (-21.51)	-0.077*** (-2.12)	-2.622*** (-24.78)	1.443*** (6.22)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.094	0.096	0.089	0.098	0.091	0.107	0.084	0.072	0.180	0.378
Obs.	293494	270761	248378	149328	657581	645854	498586	225397	641415	634869

4.29. TABLE IA.7: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS—CONTROLLING FOR FUNDAMENTALS

Panel A: At least one incident

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 incidents in months [t-6,t]	-0.161** (-2.28)	-0.107 (-1.53)	-0.062 (-0.93)	-0.063 (-1.05)	-0.108** (-2.37)	-0.146*** (-3.46)	-0.160*** (-4.01)	-0.007 (-0.50)	-0.165*** (-5.86)	-0.160*** (-4.42)
Δ ROA	1.802*** (9.17)	1.505*** (8.59)	1.241*** (7.17)	1.635*** (3.22)	1.751*** (15.58)	1.394*** (13.89)	0.875*** (6.04)	-0.561*** (-10.26)	0.688*** (10.25)	0.694*** (8.50)
Δ CapEx/Asset	0.043 (0.13)	0.191 (0.80)	0.260 (1.04)	0.169 (0.20)	0.169 (1.37)	0.131 (1.03)	0.368 (1.60)	0.029 (0.49)	-0.310*** (-3.47)	-0.302*** (-2.85)
Δ NetDebt/Asset	-0.181*** (-3.03)	-0.121** (-2.50)	-0.045 (-0.87)	0.016 (0.08)	-0.103*** (-3.51)	-0.096*** (-3.02)	-0.098* (-1.70)	-0.015 (-1.42)	-0.105*** (-4.69)	-0.115*** (-4.06)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.092	0.096	0.088	0.096	0.086	0.102	0.078	0.071	0.164	0.354
Obs.	269829	249770	230120	139719	568032	557592	427451	194405	549999	543515

Panel B: Splitting by the number of incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
1 incident in months [t-6,t]	-0.103 (-1.41)	-0.060 (-0.81)	0.005 (0.07)	-0.034 (-0.54)	-0.069 (-1.49)	-0.104** (-2.43)	-0.120*** (-2.94)	0.004 (0.26)	-0.128*** (-4.51)	-0.153*** (-4.27)
>=2 incidents in months [t-6,t]	-0.288*** (-3.03)	-0.213** (-2.26)	-0.209** (-2.22)	-0.129 (-1.40)	-0.196*** (-3.09)	-0.244*** (-4.11)	-0.245*** (-4.39)	-0.028 (-1.63)	-0.251*** (-6.19)	-0.177*** (-3.21)
Δ ROA	1.802*** (9.17)	1.505*** (8.59)	1.241*** (7.17)	1.634*** (3.22)	1.751*** (15.58)	1.394*** (13.89)	0.875*** (6.04)	-0.561*** (-10.26)	0.687*** (10.24)	0.694*** (8.50)
Δ CapEx/Asset	0.042 (0.13)	0.190 (0.80)	0.259 (1.04)	0.168 (0.20)	0.169 (1.37)	0.131 (1.03)	0.369 (1.60)	0.029 (0.49)	-0.310*** (-3.47)	-0.302*** (-2.84)
Δ NetDebt/Asset	-0.181*** (-3.03)	-0.121** (-2.50)	-0.045 (-0.86)	0.016 (0.08)	-0.103*** (-3.51)	-0.096*** (-3.01)	-0.098* (-1.70)	-0.015 (-1.42)	-0.105*** (-4.69)	-0.115*** (-4.06)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.092	0.096	0.088	0.096	0.086	0.102	0.078	0.071	0.164	0.354
Obs.	269829	249770	230120	139719	568032	557592	427451	194405	549999	543515

4.30. TABLE IA.8: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS - SCALED BY BOOK VALUE PER SHARE

Panel A: At least one incident

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year
≥ 1 incidents in months [t-6,t]	-0.011** (-2.14)	-0.010** (-2.08)	-0.003 (-0.66)	-0.010* (-1.86)	-0.020*** (-3.33)	-0.027*** (-4.26)	-0.031*** (-4.60)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES
adj R2	0.052	0.042	0.040	0.039	0.075	0.093	0.072
Obs.	262608	242564	223236	134426	589371	582043	467440

Panel B: Splitting by the number of incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year
1 incident in months [t-6,t]	-0.008 (-1.33)	-0.007 (-1.41)	0.002 (0.34)	-0.009* (-1.67)	-0.015** (-2.45)	-0.021*** (-3.32)	-0.023*** (-3.38)
≥ 2 incidents in months [t-6,t]	-0.018*** (-2.78)	-0.016** (-2.57)	-0.012** (-2.00)	-0.011 (-1.56)	-0.032*** (-3.82)	-0.039*** (-4.52)	-0.050*** (-5.03)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES
adj R2	0.052	0.042	0.040	0.039	0.075	0.093	0.072
Obs.	262608	242564	223236	134426	589371	582043	467440

4.31. TABLE IA.9: IMPACT ON EARNINGS FORECASTS BY TYPE OF NEGATIVE EVENT

Event	1-year horizon	2-year horizon	3-year horizon
ESG Incidents	-0.13	-0.15	-0.16
Announcement of Operating Results	-0.22	-0.22	-0.25
Announcements of Sales/Trading Statement	-0.11	-0.16	-0.09
Business Reorganizations	-0.28	-0.19	-0.17
Changes in Company By laws/Rules	-0.11	-0.05	-0.01
Considering Multiple Strategic Alternatives	-0.84	-0.79	-0.36
Corporate Guidance - Lowered	-2.02	-1.71	-1.33
Credit Rating - CreditWatch/Outlook Action	-0.42	-0.38	-0.24
Credit Rating - Downgrade	-1.46	-1.41	-0.84
Credit Rating - New Rating	-0.28	-0.26	-0.01
Debt Financing Related	-0.12	-0.02	0.00
Delayed SEC Filings	-1.00	-1.03	-0.73
Discontinued Operations/Downsizings	-0.58	-0.50	-0.37
Dividend Decreases	-0.93	-0.81	-0.46
Executive Changes - CEO	-0.48	-0.38	-0.32
Executive Changes - CFO	-0.31	-0.33	-0.24
Fixed Income Offerings	-0.23	-0.11	-0.05
Follow-on Equity Offerings	-0.18	-0.22	-0.26
Guidance/Update Calls	-1.04	-1.02	-0.75
Halt/Resume of Operations	-0.84	-0.69	-0.42
Impairments/Write Offs	-0.36	-0.24	-0.05
Index Constituent Drops	-0.20	-0.21	-0.15
Interim Management Statement Release	-0.33	-0.36	-0.16
Labor-related Announcements	-0.27	-0.22	-0.11
Legal Issues	-0.30	-0.23	-0.19
M&A Rumors and Discussions	-0.27	-0.22	-0.23
Potential Buyback	-0.18	0.04	-0.02
Regulatory Agency Inquiries	-0.38	-0.40	-0.32
Restatements of Operating Results	-0.48	-0.23	-0.12
Sales/Trading Statement Calls	-0.31	-0.46	-0.42
Seeking Financing/Partners	-0.21	-0.21	-0.02
Seeking to Sell/Divest	-0.22	-0.31	-0.26
Special Calls	-0.21	-0.14	-0.14
Special Shareholders Meeting	-0.15	-0.08	-0.03

4.32. TABLE IA.10: REACTION OF EARNINGS FORECASTS TO ESG INCIDENTS - CONTROLLING FOR ALL KD INCIDENTS

Panel A: At least one incident

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	PTG	Ret.
>=1 ESG Incidents in months [t-6,t]	-0.121*	-0.103	-0.058	-0.039	-0.107***	-0.129***	-0.144***	-0.157***	-0.168***
	(-1.86)	(-1.60)	(-0.91)	(-0.68)	(-2.62)	(-3.38)	(-3.95)	(-5.94)	(-4.98)
KeyDev Incidents Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.094	0.094	0.086	0.095	0.088	0.103	0.081	0.175	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	645591	638384

Panel B: Splitting by the number of incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	PTG	Ret.
1 ESG Incident in months [t-6,t]	-0.059	-0.046	0.016	-0.010	-0.070*	-0.094**	-0.109***	-0.122***	-0.160***
	(-0.85)	(-0.67)	(0.25)	(-0.16)	(-1.69)	(-2.39)	(-2.89)	(-4.60)	(-4.71)
>=2 ESG Incidents in months [t-6,t]	-0.259***	-0.230***	-0.223**	-0.105	-0.192***	-0.211***	-0.220***	-0.236***	-0.187***
	(-2.96)	(-2.66)	(-2.47)	(-1.21)	(-3.30)	(-4.02)	(-4.31)	(-6.28)	(-3.84)
KeyDev Incidents Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.094	0.094	0.086	0.095	0.088	0.104	0.081	0.175	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	645591	638384

4.33. TABLE IA.11: REACTION OF SALES FORECASTS TO ESG INCIDENTS - FORECAST REVISIONS SCALED BY BOOK VALUE

Panel A: At least one incident

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year
>=1 incidents in months [t-6,t]	-0.032*	-0.029	-0.028	-0.014	-0.063***	-0.111***	-0.130***
	(-1.74)	(-1.52)	(-1.44)	(-0.80)	(-2.80)	(-4.24)	(-4.37)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES
adj R2	0.069	0.059	0.055	0.063	0.085	0.098	0.083
Obs.	253868	227214	202351	117170	561609	553651	443884

Panel B: Splitting by the number of incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year
1 incident in months [t-6,t]	-0.026	-0.014	-0.014	-0.012	-0.052**	-0.084***	-0.104***
	(-1.37)	(-0.71)	(-0.68)	(-0.61)	(-2.33)	(-3.20)	(-3.28)
>=2 incidents in months [t-6,t]	-0.047*	-0.061**	-0.058**	-0.018	-0.088***	-0.172***	-0.187***
	(-1.85)	(-2.46)	(-2.42)	(-0.86)	(-2.68)	(-4.63)	(-4.65)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES
adj R2	0.069	0.059	0.055	0.063	0.085	0.098	0.083
Obs.	253868	227214	202351	117170	561609	553651	443884

4.34. TABLE IA.12: REACTION OF SALES AND MARGIN FORECASTS TO ESG INCIDENTS, BALANCED SAMPLE

Panel A: At least one incident

	Sales							GrossMargin						
	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) Q1	(9) Q2	(10) Q3	(11) Q4	(12) 1 year	(13) 2 year	(14) 3 year
>=1 incidents in months [t-6,t]	-0.052** (-2.25)	-0.045** (-2.05)	-0.039* (-1.82)	-0.002 (-0.13)	-0.023* (-1.91)	-0.037*** (-2.82)	-0.052*** (-3.25)	-0.033* (-1.81)	-0.026 (-1.37)	0.006 (0.33)	0.018 (1.12)	-0.027** (-2.49)	-0.028** (-2.21)	-0.013 (-1.04)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.110	0.112	0.112	0.105	0.100	0.115	0.091	0.056	0.047	0.044	0.050	0.055	0.049	0.044
Obs.	132628	120672	105915	61519	347954	337317	221502	132628	120672	105915	61519	347954	337317	221502

Panel B: Splitting by the number of incidents

	Sales							GrossMargin						
	(1) Q1	(2) Q2	(3) Q3	(4) Q4	(5) 1 year	(6) 2 year	(7) 3 year	(8) Q1	(9) Q2	(10) Q3	(11) Q4	(12) 1 year	(13) 2 year	(14) 3 year
1 incident in months [t-6,t]	-0.038 (-1.65)	-0.033 (-1.44)	-0.023 (-1.07)	0.015 (0.87)	-0.017 (-1.42)	-0.023* (-1.72)	-0.035** (-2.15)	-0.040** (-2.18)	-0.021 (-1.12)	0.015 (0.75)	0.019 (1.13)	-0.030** (-2.32)	-0.026* (-1.94)	-0.000 (-0.02)
>=2 incidents in months [t-6,t]	-0.084*** (-2.63)	-0.073** (-2.45)	-0.075** (-2.56)	-0.040* (-1.76)	-0.036** (-2.15)	-0.068*** (-3.77)	-0.088*** (-3.96)	-0.019 (-0.72)	-0.036 (-1.47)	-0.014 (-0.57)	0.017 (0.75)	-0.020 (-1.51)	-0.032** (-2.07)	-0.041** (-2.39)
Month × Industry × Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.110	0.112	0.112	0.105	0.100	0.115	0.091	0.056	0.047	0.044	0.050	0.055	0.049	0.044
Obs.	132628	120672	105915	61519	347954	337317	221502	132628	120672	105915	61519	347954	337317	221502

4.35. TABLE IA.13: IMPACT ON SALES FORECASTS OF NEGATIVE ESG INCIDENTS AND OTHER NEGATIVE INCIDENTS

	(1) 1 year	(2) 2 year	(3) 3 year	(4) 1&2 year	(5) 1&3 year
>=1 ESG Incidents in months [t-6,t]	-0.035*** (-3.84)	-0.054*** (-4.79)	-0.060*** (-5.10)	-0.035*** (-3.85)	-0.035*** (-3.85)
>= 1 KD Negative Incidents in months [t-6,t]	-0.054*** (-5.81)	-0.060*** (-5.51)	-0.032*** (-2.66)	-0.054*** (-5.96)	-0.054*** (-5.96)
>=1 ESG Incidents in months [t-6,t] × 2-year				-0.019** (-2.58)	
>= 1 KD Negative Incidents in months [t-6,t] × 2-year				-0.006 (-0.86)	
>=1 ESG Incidents in months [t-6,t] × 3-year					-0.025** (-2.37)
>= 1 KD Negative Incidents in months [t-6,t] × 3-year					0.022** (2.07)
$\beta_{ESG \times h-year} - \beta_{KD \times h-year}$				-0.013	-0.047
F-stat				1.745	10.121
P value				0.189	0.002
Month × Industry × Country FE	YES	YES	YES	NO	NO
Firm FE	YES	YES	YES	NO	NO
Month × Industry × Country × Horizon FE	NO	NO	NO	YES	YES
Firm × Horizon FE	NO	NO	NO	YES	YES
adj R2	0.084	0.097	0.083	0.091	0.085
Obs.	635164	622480	480707	1257644	1115871

4.36. TABLE IA.14: REACTION OF EARNINGS FORECASTS EXCLUDING EMPLOYEE-RELATED INCIDENTS

Panel A: At least one incident

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
>=1 employee-unrelated ESG incidents in months [t-6,t]	-0.137** (-2.07)	-0.119* (-1.78)	-0.075 (-1.16)	-0.053 (-0.91)	-0.144*** (-3.43)	-0.153*** (-3.82)	-0.160*** (-4.14)	-0.001 (-0.12)	-0.165*** (-5.86)	-0.171*** (-4.83)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

Panel B: Splitting by the number of incidents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Q1	Q2	Q3	Q4	1 year	2 year	3 year	LTG	PTG	Ret.
1 employee-unrelated ESG incident in months [t-6,t]	-0.076 (-1.07)	-0.058 (-0.82)	-0.006 (-0.09)	-0.031 (-0.53)	-0.105** (-2.47)	-0.113*** (-2.70)	-0.125*** (-3.06)	0.010 (0.79)	-0.128*** (-4.50)	-0.160*** (-4.56)
>=2 employee-unrelated ESG incidents in months [t-6,t]	-0.275*** (-3.06)	-0.257*** (-2.86)	-0.232** (-2.58)	-0.102 (-1.17)	-0.234*** (-3.95)	-0.246*** (-4.58)	-0.237*** (-4.57)	-0.026 (-1.58)	-0.250*** (-6.46)	-0.196*** (-3.81)
Month \times Industry \times Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
adj R2	0.090	0.091	0.084	0.093	0.084	0.100	0.079	0.072	0.173	0.373
Obs.	295232	272346	249829	150188	661466	649616	500617	226021	645591	638384

4.37. TABLE IA.15: DIVIDEND DISCOUNT MODEL AND FIRM VALUATION

	$\Delta r_{i,t}(bps)$	$\frac{\Delta r_{i,t}}{r_{i,t-1}}(bps)$	$\frac{\Delta PV_{i,t}}{PV_{i,t-1}}$	Ret.	$\frac{\Delta PTG_{i,t}}{PTG_{i,t-1}}$
	(1)	(2)	(3)	(4)	(5)
>=1 incidents in months [t-6,t]	0.004 (0.03)	-0.456 (-0.25)	-0.191** (-2.41)	-0.118* (-1.81)	-0.156*** (-3.13)
Month \times Industry FE	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES
adj R2	0.362	0.380	0.039	0.342	0.165
Obs.	160152	160152	160152	160152	160152