Navigating ESG Storms:

ESG Incidents and Earnings-based Incentives in CEO Compensation[*]

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ABSTRACT

We investigate whether firms adjust earnings-based incentives in CEO compensation after influential media expose their involvement in environmental, social, and governance (ESG) incidents. We find that firms involved in ESG incidents significantly reduce earnings-based incentives in CEO compensation, while those in consumer-sensitive industries still maintain the constant importance of earnings-based incentives following the incidents. Furthermore, we show that these firms' adjustments to earnings-based incentives likely have a "first-order" significant effect, beyond increasing ESG targets in CEO compensation design, to improve the firms' future performance and lower their risk of future ESG incidents. Overall, our results suggest that firms' efforts to focus CEOs' attention on ESG goals in the wake of ESG incidents function to increase the efficiency of CEO contracting.

1. Introduction

Effectively implementing strategic changes is key to a firm's business success (Grossman and Cannella 2006). Firms' efficiency in aligning CEO compensation design choices with their strategic priorities critically affects the overall effectiveness of their strategic implementations (Carpenter and Sanders 2002; Pathak et al. 2014). This study focuses on a setting where firms experience high-impact media exposure of environmental, social, and governance (ESG) incidents for the first time, thereby developing a pressing need to place ESG performance as a top strategic priority. In this context, we explore how the implicated firms adjust CEO compensation design, especially the relative importance of performance-based incentives, to align with their strategic ESG priorities following the media exposure.

Our research matters, first and foremost, because of the material and economically consequential nature of ESG incidents. Extensive evidence demonstrates that ESG incidents have significant financial, reputational, and regulatory implications for the firms involved (Bolton and Kacperczyk 2023; Christensen et al. 2021; Edmans 2023). Despite the prevalence of ESG initiatives in the corporate world, ESG incidents continue to occur, which suggests that the current knowledge on how to effectively prevent and deter such incidents remains limited.[1] Specifically, we study the design of earnings-based incentives. As a ubiquitous component in CEO compensation, earnings-based incentives link financial targets to CEO pay (Bushman and Smith 2001; Carter et al. 2022; De Angelis and Grinstein 2015).[2] There are, however, potential conflicts between the short-term financial performance of a firm and realizing its ESG ambitions, suggesting firms' general desire to learn how to balance their financial objectives with business sustainability (Caskey and Ozel 2017; Liu et al. 2021). By studying adjustments

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[1] See Moody's "ESG Incidents: 2023 in Review" (available at: www.moodys.com)
[2] De Angelis and Grinstein (2015) find that 79% of performance-based incentives are attached to accounting metrics among S&P 500 firms, more than 70% of which are earnings-related. Carter et al. (2022) show that 95% of performance-based cash bonuses and 67% of performance-based equity grants with vesting schedules are tied to at least one earnings-based metric.

to earnings-based incentives in CEO pay after ESG incidents, we intend to shed new light on how firms effectively align financial goals with ESG considerations to address the challenges during the implementation of newly configured strategic priorities.

We posit that firms with a surging strategic demand for improving ESG performance will reduce earnings-based incentives in CEO compensation. Our reasoning is derived from academic knowledge that when engaging in ESG activities, firms are faced with an immediate reduction in reported performance, which indicates an orthogonal relationship between ESG and the short-term financial performance of a firm (Cohen and Simnett 2015; Moser and Martin 2012; Orlitzky et al. 2003). The behavioral economics literature has long recognized that CEOs face human and organizational limits to dedicate attention aggressively to all tasks (Cyert and March 1963; Mintzberg 1973). Performance measurements are designed to guide managerial attention orientation, while improving ESG performance requires managerial attention to be reallocated away from earnings towards ESG performance (Bouwens and Abernethy 2000; Carpenter and Sanders 2002). So, by reducing the importance of earnings-based compensation in CEO pay, firms can shift CEOs' attention from financial metrics in making corporate decisions.

Furthermore, managerial incentive literature suggests that compensation design influences how firms allocate their economic resources (Jensen and Murphy 1990; Prendergast 1999). Allocating more resources to improving ESG performance will result in fewer resources being allocated to financial profit maximization, which would be considered suboptimal by CEOs whose compensation is strongly tied to reported earnings (Bennett et al. 2017; Dechow and Sloan 1991; Ederer and Manso 2013). Relatedly, the informativeness principle argues that incorporating informative and transparent performance measures in CEO compensation, which signal the CEO's effort in contributing to the firm's business success, improves the efficiency of compensation design (Murphy 1999; Prendergast 1999). However, for firms with imminent

demand for improved ESG performance, earnings—an imprecise measurement of managerial contribution to ESG performance—provides insufficient incentive for ESG performance, leading to reduced efficiency of compensation design for these firms (e.g., Holmstrom and Milgrom 1991; Laffont and Martimort 2009). Therefore, we expect that firms will decrease the reliance on earnings-based incentives in CEO compensation following ESG incidents.

The relationship between ESG and the financial performance of a firm becomes less orthogonal when the firm operates with higher consumer sensitivity (Bhattacharya and Sen 2004; Luchs et al. 2010; Peloza and Shang 2011). That is because ESG incidents trigger consumer boycotts and the adverse effects of consumers' reactions are reflected in reduced financial results of the implicated firms that are highly consumer-sensitive (Duan et al. 2024; Houston et al. 2024). We next investigate whether firms, based on their sensitivity to consumers, perceive different needs to respond to ESG incidents by adjusting earnings-based incentives their CEO compensation design. We argue that to the extent that ESG performance is intertwined with the earnings results of a firm, financial earnings may provide an informative indicator of managerial efforts to improve the ESG performance of the firm. Then orientating managerial effort to financial performance using earning-based incentives in CEO compensation represents a valid approach to motivate higher ESG performance. We, thus, predict that consumer-sensitive firms involved in ESG incidents are less likely to reduce earnings-based incentives in CEO compensation, in comparison to their peers that are less consumer-sensitive.

To empirically examine our predictions, we acquire data on CEO compensation design from Incentive Lab, a widely used database that collects detailed information about compensation contractual terms from firms' proxy statements (Bennett et al. 2017; Bettis et al. 2018). We employ two empirical measurements—the target payout if earnings targets are achieved and the relative weight of earnings metrics in CEO pay calculations—to proxy the

importance of earnings-based incentives in CEO compensation (Carter et al. 2022; De Angelis and Grinstein 2015). We argue that firms are compelled to realign strategic priorities to ESG due to the exposure of nuanced ESG incidents by influential media outlets, where influential media outlets are defined as those with a high reach in attracting intensive public attention. We contend that a high level of negative media coverage is likely to have substantial repercussions for the firms involved, prompting them to initiate strategic change to demonstrate noteworthy improvements in ESG performance (Burke 2022; Gantchev et al. 2022).

Our findings are consistent with our expectations: following ESG incidents, firms significantly reduce earnings-based payouts and the weight of earnings metrics in CEO compensation packages. We further show that the association is attenuated by the consumer sensitivity of a firm in that firms with higher consumer sensitivity are less likely to significantly reduce earnings-based incentives in CEO pay compared to their peers with lower consumer sensitivity. In particular, firms in industries with low consumer sensitivity will decrease the weight of earnings-based incentives by nearly 13% following ESG incidents, while their peers with high consumer sensitivity will keep this weight unchanged. We test the robustness of our findings by addressing plausible endogeneity, including various difference-in-differences (DID) analyses, adopting entropy balancing (Hainmueller 2012; McMullin and Schonberger 2020), and a two-stage least squares approach using the average number of ESG incidents involving local firms in other industries as an instrumental variable (Chen et al. 2015). Our results also hold when we apply the number of incidents as an alternative measurement for the firm's urgency to respond to ESG incidents, and control for other plausible explanations for the changed CEO compensation design, such as CEO turnover, CEO ownership, and institutional ownership.

Several sets of additional analyses add nuance to these findings. Our first set of additional tests examines whether reduced earnings-based incentives are accompanied by

increased incentives tied to alternative performance metrics. We find that the aggregate amount of performance-based incentives does not change significantly after an ESG incident; Nor does the firm significantly adjusts the importance of market-based performance measures in CEO compensation. However, firms are more likely to incorporate explicit ESG performance targets into CEO compensation following ESG incidents. Our next set of additional tests dives deeper into this and explores whether reducing earnings-based incentives merely represents a secondary adjustment accompanied by increasing the importance of ESG targets in CEO compensation design. More specifically, we investigate the economic consequences of reducing earnings-based incentives, controlling for the adjustments to ESG-related incentives, in CEO pay. We show that although an ESG incident hurts a firm's long-term valuation, this undesirable effect is attenuated if the firm subsequently reduces earnings-based incentives in CEO compensation. A similar pattern is observed when we use shareholders' say-on-pay voting outcomes to proxy the market's perception. That is, the rate of dissent increases when a firm reduces earnings-based incentives in CEO compensation in years without ESG incidents but is attenuated when a reduction follows an ESG incident. We further show that reductions in earnings-based incentives appear to work: affected firms are less likely to have future ESG incidents. Importantly, increasing ESG targets does not seem to significantly affect the subsequent performance of implicated firms considering the effects of reducing earnings-based incentives in compensation design. Overall, our findings suggest that a firm's strategy to reduce CEOs' earnings-based incentives in response to ESG incidents appears to have a first-order significant role to comport with efficient contracting in CEO compensation design, which indicates that this deliberate choice of a firm in compensation design is substantial and helps effectively address the host of challenges that it is confronted with in implementing new strategic priorities following ESG incidents.

This paper contributes to the literature in several ways. First, our findings extend the current understanding of organizational strategic reorientation and organizational adaptation. Organizations face constant external pressures, which, in turn, require them to continuously adapt and evolve in response to environmental shifts (Grossman and Cannella 2006; Pettigrew 2012; Rajagopalan and Finkelstein 1992). However, strategic changes inherently involve risks and uncertainties, potentially causing operational disruptions, productivity losses, and even business failure of a firm (Pettigrew 2012; Sull and Eisenhardt 2012). We add to the literature by highlighting the importance of adjusting the CEO compensation design to align with its new strategic priorities, and our study contributes to the discussion on how to ensure a successful implementation of strategic reorientation. We also extend the current knowledge of performance incentives in CEO compensation design. Our findings indicate that firms' evaluation of CEO compensation design efficiency is continuous and ongoing (De Angelis and Grinstein 2015; Ittner et al. 1997; Jensen and Murphy 1990; Prendergast 1999). Although the compensation contract that a firm offers to its CEO before the ESG incident is not necessarily suboptimal, the ESG incident introduces new stimuli and, in response to the new situation, firms adjust CEO compensation by reducing earnings-based incentive and the adjustments undertaken vary with the degree of orthogonality between ESG performance and financial performance of a specific firm. Furthermore, we add to the risk management literature (Dionne 2013) and the recent studies on the adverse impacts of ESG incidents (Gantchev et al. 2022; Kölbel et al. 2017). We show that adjustments to CEO compensation seem to be appreciated by stakeholders as reflected by firm value appreciation, voting outcomes, and a reduced likelihood of future ESG incidents, suggesting that ESG crises can lead to better compensation structures if firms respond properly.

Our study also contributes to research that explores the role of the media in CEO compensation design, even though the news might not seem to be immediately relevant to firms'

compensation practices (Abernethy et al. 2022; Hooghiemstra et al. 2015). Different from prior studies that rely on voluntary firm disclosures or ESG commercial ratings to define ESG incidents, we use media coverage to identify ESG issues and the disclosure of ESG incidents in our sample is less likely to be influenced by a firm's reporting strategy, suggesting that our findings are less likely to be biased (Baker et al. 2024; Christensen et al. 2021). Our findings also offer practical implications. The efficacy of firms involved in ESG incidents to shift their strategic priorities to improve ESG performance is often unclear (Chakravarthy et al. 2014; Christensen et al. 2021). In 2019, the World Economic Forum published principles for climate governance and by 2021, approximately 75% of S&P 500 forms had incorporated ESG targets into their CEO compensation (Peregrine 2022). Our results indicate that by merely increasing ESG targets without reducing earnings-based incentives in pay, firms might not be able to effectively motivate their CEOs to improve ESG performance. It is the choice of reducing earnings-based incentives in CEO compensation design that helps align resource allocation decisions with a firm's long-term sustainability goals. Thus, based on our findings, market participants can better understand the effectiveness of firms' practices in responding to negative ESG events.

2. Relevant Literature and Hypothesis Development

2.1. Review of the literature

Management accounting and organizational behavioral literature studies firms' strategic choices. The literature argues that a firm's processes of refining its business strategies reflect dynamic interactions between its environmental conditions and managerial systems (Merchant and Van der Stede 2017). During these processes, firms continuously adapt their strategic priority choices according to the changing constraints, opportunities, and competition in environmental niches and markets (Pettigrew 2012). Adapting and changing in response to

dynamic environments is a crucial capability that underpins a firm's survival and sustained competitive success (Brown and Eisenhardt 1997).

Negative coverage of ESG performance by influential media outlets acts as a catalyst for firms to reassess their strategic priorities for a remedy, particularly given the substantial costs and undesirable consequences demonstrated in the literature, such as negative market reaction (Gantchev et al. 2022; Kölbel et al. 2017), reduced analyst coverage (He and Li 2022), decreased opportunism in earnings forecasts (Derrien et al. 2023), reputational damage (Edmans 2023), and an increased likelihood of consumer boycotts and whistleblowing incidents (Kölbel et al. 2017). The significant potential costs associated with ESG incident involvement explain why firms involved in ESG incidents perceive imminent urgency to react by highlighting ESG as their strategic priorities, for example, through increasing charitable contributions (Akey et al. 2024), as well as dismissing their CEOs and appointing directors with charity experience (Burke 2022; Gertsberg et al. 2024).

Firms' strategic considerations shape their executive compensation design (Aggarwal and Samwick 2006; Bloomfield 2001; Edmans et al. 2023). Prior literature on organizational adaptions and strategic choices underscores that CEO compensation design, as an integral component of the management control system, influences a firm's effectiveness in addressing the struggles, challenges, and uncertainties it encounters during strategic reorientation (Cho and Shen 2007; Rajagopalan and Finkelstein 1992). It is evident that incentive systems influence, shape, and reshape executives' mental models (Cho and Hambrick 2006), decision-making (Grossman and Hart 1992), and behavioral outcomes (Jensen and Murphy 1990; Prendergast 1999).

Furthermore, the role of performance measurements has been investigated in both managerial cognitive and managerial incentive literature. Based upon the presumption that top managers are subject to information overload, the managerial cognitive literature indicates that

managers pay attention to limited, rather than a full scape of, categories of tasks (Cyert and March 1963; Mintzberg 1973). Stimuli, coming from internally or externally, with significant strategic importance tend to attract heavy attention orientation of the managers (Albuquerque et al. 2024; Cho and Hambrick 2006). Since CEOs value their compensation, especially performance-based incentives in their pay, with high importance, they have a heavy attention orientation toward those stimuli and act accordingly (Bouwens and Abernethy 2000; Carpenter and Sanders 2002; Edmans et al. 2023). Managerial incentive literature, instead, treats CEO compensation as an outcome of efficient contracting and posits that performance incentives in compensation contracts constitute an effective mechanism for inferring unobservable CEO action and allocation of limited economic resources, even though in most cases the metrics are imperfect (Harris and Raviv 1979; Shavell 1979). In addition, the relative weight of a performance-based incentive is predicted to increase as metrics become more sensitive to the CEO's decisions but to decrease as accompanying noise unrelated to the CEO's efforts increases (Holmstrom 1979; Laffont and Martimort 2009; Lambert and Larcker 1987).

We follow the literature and argue that when firms' strategic priorities change, performance-based incentives will be adjusted accordingly (Balsam et al. 2011; Bushman et al. 1996; Feltham and Xie 1994). Importantly, we integrate both the managerial cognitive and the managerial incentive view in developing our predictions to answer how firms would adjust CEO compensation design, particularly earnings-based incentives, with strategic ESG priorities.

2.2. How do firms adjust earnings-based incentives in CEO compensation after ESG incidents?

We argue that under the public exposure of ESG incidents, firms are sharply aware of the severe consequences and thus strive to implement their ESG strategic priorities for better ESG performance. Improving ESG performance, however, often costs a firm's financial

performance and reported earnings, especially in the near term (Abernethy et al. 2019; Orlitzky et al. 2003; Moser and Martin 2012; Cohen and Simnett 2015). This seemingly orthogonal relationship between a firm's ESG performance and its short-term financial performance suggests a potential conflict a firm considers in deciding which type of performance to prioritize.

We predict that firms will reduce earnings-based incentives in CEO compensation following ESG incidents. Firstly, performance targets attached to CEO compensation function as stimuli that direct the CEO's attention orientation (Carpenter and Sanders 2002; Cho and Hambrick 2006). Subject to bounded comprehensibility, CEOs would heavily pay attention to financial performance maximization if they were heavily incentivized with earnings-based components in pay (Bouwens and Abernethy 2000; Edmans et al. 2023). As a result, these CEOs would overlook the potential adverse impacts of their decisions on ESG aspects. Firms with an urgent need for improving ESG performance will, thus, choose to reduce earnings-based incentives in CEO compensation in an attempt to shift the CEO's attention orientation towards a more balanced consideration of ESG factors.

Apart from managerial cognitive ability, corporate decisions are also bounded by available economic resources, and, in resource allocation decisions, a CEO will prioritize activities perceived to be strategically important (Milgrom and Roberts 1995). What gets measured, gets managed (Van der Oord 2021). A CEO whose pay is closely tied to earnings would choose to maximize compensation payouts by prioritizing earnings performance and allocating resources accordingly (Liu et al. 2021; Xu and Kim 2022). As such, firms' strategic ESG needs will be compromised, which is particularly concerning to firms involved in ESG incidents given their urgent need to improve ESG performance. Furthermore, earnings performance metrics are not only less timely but also less informative about a firm's progress in ESG performance (Abernethy et al. 2019; Christensen et al. 2021; Kölbel et al. 2017).

Performance metrics with high levels of noise but low levels of informativeness are less likely to be incorporated into efficient compensation designs, suggesting the reduced use of earnings-based performance targets for contracting.

Therefore, we posit that, in response to ESG incidents, firms will reduce CEOs' performance-based incentives, and we predict:

H1: Cerates paribus, firms will reduce earnings-based incentives in CEO compensation packages following ESG incidents.

The degree of orthogonality in the relationship between ESG performance and the firm's financial performance is related to its business model, especially the consumer-sensitivity dimension of firm operations (Bhattacharya and Sen 2004; Peloza and Shang 2011). We next consider how a firm's consumer sensitivity potentially moderates the association between ESG incidents and earnings-based incentives in CEO compensation.

Consumers are primary stakeholders who have vested interest in how firms handle ESG issues (Christensen et al. 2021; Peloza and Shang 2011). This interest arises not only from the consumers' values and preferences but also from their concerns over the legitimacy and sustainability of the firm's businesses (Bhattacharya and Sen 2004; Luchs et al. 2010). For firms whose business models are sensitive to consumer purchases, consumer reactions, ranging from immediate boycotts to a long-term shift in purchasing behavior, would directly impact the firms' reported earnings, indicating that the relationship between financial earnings and ESG performance of those firms become convergent, rather than strictly orthogonal (Christensen et al. 2021; Edmans 2023; Luchs et al. 2010). As such, the reduced earnings in those firms indicate their deteriorated ESG performance. Managerial attention to maintaining satisfactory financial performance and managerial efforts to improve financial performance inevitably involve developing effective actions to address consumers' surging concerns on the

ESG aspects of firm performance. That is, reported earnings in those firms carry direct relevance and informativeness to evaluate and motivate their ESG performance.

Therefore, we predict that the consumer sensitivity of a firm moderates the association between its decision to reduce earnings-based incentives in CEO pay and its involvement in ESG incidents. In comparison to their peers, firms operating with a higher degree of consumer sensitivity are less likely to significantly reduce the importance of earnings in CEO compensation following ESG incidents. Specifically, we expect that:

H2: Cerates paribus, a firm's consumer sensitivity weakens the association between ESG incidents and the firm's propensity to reduce earnings-based incentives in CEO compensation packages.

3. Empirical Methodology

3.1. Data sources and sample selection

We acquire data from multiple sources. First, we retrieve information on CEO performance metrics from the ISS Incentive Lab database. Incentive Lab collects detailed information on compensation contracts from firms' proxy statements (DEF 14A filings).[3] We identify the type and the associated weight of each performance metric attached to annual performance-based incentives in CEOs' compensation packages. Furthermore, we collect information on media coverage of negative ESG events from RepRisk, a database that has been increasingly used in academic research to track firms' ESG risks (e.g., Dai et al. 2021; Houston and Shan 2022; Kölbel et al. 2017). Using artificial intelligence and machine learning techniques, RepRisk identifies negative news on firms' ESG practices appearing in a range of media sources (e.g., print media, organizational and governance bodies, social media) daily.[4]

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[3] The transparency of CEO compensation design improved significantly after an SEC reform in 2006. The reform required U.S. firms to disclose their executive compensation policies and explain how executive compensation was tied to firm performance (Gong et al. 2011).

[4] RepRisk captures severity, novelty, and reach of ESG incidents. Severity relates to the extent of an incident's impact. Novelty indicates whether the implicated firm is experiencing a particular ESG issue for the first time. Reach reflects the significance of the reporting media: high-reach media include global and influential media

Our sample period spans from 2007 (the year RepRisk began collecting data) to 2020. Merging the RepRisk data with Incentive Lab compensation data yields 14,709 firm-year observations. We retrieve firm fundamentals from Compustat, stock information from CRSP, and CEO and board characteristics from BoardEx. We then merge these data with our sample, excluding firms in the financial and utilities industries (Standard Industry Classification codes 6000–6999 and 4900–4999) (Hayes et al. 2012). Our final sample includes 6,344 firm-year observations. Panel A of Table 1 summarizes our sample selection procedure and Panels B and C present sample distributions by year and by industry, respectively.

3.2. Definitions of major empirical variables

Based on the descriptions in proxy statements, we identify performance metrics that are earnings-based (e.g., earnings, earnings per share, and ROA).[5] For each award to CEOs, we sum up the total weight of earnings-based performance metrics and then multiply the total weight by the estimated future target payout to obtain the target payout contingent on earnings performance for each performance-based award. We classify the awards into non-equity plans, including cash payouts (i.e., annual bonuses) and long-term incentive plans with vesting periods, and equity plans, including payouts in the form of restricted shares and options. Then we aggregate the target payouts at the CEO level because a CEO may receive multiple performance-based awards in a year. In particular, we construct two measures to capture the importance of earnings-based incentives in CEO compensation: the total annual target payout based on achieving pre-specified goals for all earnings metrics (*Tgtpayout_Earnings*) and the value-weighted average of the aggregate weight placed on earnings metrics in CEO

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outlets, whereas low-reach sources include social media, local media, and media established by smaller NGOs or local governmental bodies. To ensure the validity of predictions based on machine-learning models, RepRisk analysts manually review the data and approve the final classifications.

[5] Studies estimate the sensitivity of CEO compensation to several accounting earnings ratios (e.g., ROA) to measure the use of earnings-based performance metrics (Lambert and Larcker 1987).

compensation packages (*Weight_Earnings*) (Carter et al. 2022; De Angelis and Grinstein 2015). Appendix A explains how we construct these two variables.

We use novel ESG news with high reach to proxy the occurrence of ESG incidents (*ESG_Inc*). Our empirical choice is motivated primarily by two considerations. First, compared to firms' disclosures, the media often reveal ESG events in a more timely, transparent, and unbiased manner (Baker et al. 2024; Li and Wu 2020). Media coverage of ESG incidents thus is arguably more exogenous to a firm, as it is less influenced by firms' disclosure strategies and compensation design policies. Second, the ESG incidents covered in our sample are exposed by the influential press; Such news tends to travel quickly and spread widely, triggering implicated firms' immediate responses (Akey et al. 2024; Burke 2022).[6] Our measurement for consumer sensitivity follows Burke et al. (2019) where we define industries with two-digit SIC codes of 01, 02, 20, 21, 28, 40, 45, 48, 53, 54, 58, and 99 as being highly consumer-sensitive (*Hi_ConSen*).

3.3. Empirical model

To test our H1, we examine how firms adjust the importance of earnings-based incentives in CEO compensation packages using the following OLS regression:

$$Earnings\ Incentives_{i,t+1} = \alpha_1 ESG\_Inc_{i,t} + Controls_{i,t} + Ind\ FE + Year\ FE + \varepsilon_{i,t} \quad (1)$$

where the importance of earnings-based incentives is measured by *Tgtpayout_Earnings*$_{i,t+1}$ and *Weight_Earnings*$_{i,t+1}$ and $\varepsilon_{i,t}$ represents the error term. Our main variable of interest, *ESG_Inc*$_{i,t}$, indicates whether a firm experienced at least one novel and high-reach ESG incident in year *t*. As H1 predicts that firms involved in ESG incidents reduce the importance of earnings metrics in CEO compensation, we expect the coefficient of *ESG_Inc*$_{i,t}$ to be significantly negative, i.e., $\alpha_1 < 0$ in Model (1).

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[6] We deliberately choose not to incorporate a severity dimension into our measure. The severity of an ESG incident in RepRisk is based on analysts' evaluations and is arguably subjective. In comparison, reach relates to the media source, which is objective, and the novelty of an ESG incident is defined based on a firm's historical record.

Our H2 focuses on the moderating effect of a firm's consumer sensitivity. We employ the following OLS regression to examine this:

$$Earnings\ Incentives_{i,t+1} = \beta_1 ESG\_Inc_{i,t} + \beta_2 ESG\_Inc_{i,t} \times Hi\_ConSen_{i,t} + Controls_{i,t} +$$

$$Ind\ FE + Year\ FE + \delta_{i,t} \tag{2}$$

where $Hi\_ConSen_{i,t}$ indicates that a firm operates with high consumer sensitivity and $\delta_{i,t}$ is the error term.[7] In H2, we predict that the consumer sensitivity of a firm will attenuate the relationship between ESG incidents and earnings-based incentives. We thus expect that the coefficient of the interaction between $ESG\_Inc_{i,t}$ and $Hi\_ConSen_{i,t}$ is significantly positive ($\beta_2 > 0$).

In both models, we include several control variables that might influence which performance metrics are used to determine CEO compensation, such as firm size, strategy (Balsam et al. 2011; Ittner et al. 1997), growth opportunities (Coles et al. 2006), firm performance, and leverage ratio. We further control for board and CEO attributes, including board size, board independence, CEO duality, and CEO tenure (Carter et al. 2022). Industry- and year-fixed effects are included to control for potential impacts of industry characteristics and time-invariant factors. Robust standard errors are adjusted for heteroskedasticity and clustered at the firm level. We winsorize all continuous variables at 1% and 99%. Detailed variable definitions are outlined in Appendix B.

Panel D of Table 1 presents descriptive statistics for the variables used in the main analysis. As Incentive Lab focuses on the 750 largest U.S. firms by market capitalization, our sample firms are larger than most firms in the Compustat universe. On average, over 47.2% of performance-based CEO compensation is explicitly related to earnings metrics, indicating substantial impacts of earnings on CEO pay (Bushman et al. 1996; Carter et al. 2022). The mean dollar amount of target payout for achieving earnings goals is $2.39 million, more than

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[7] The main effect of *Hi_ConSen* is not included due to the inclusion of industry-fixed effects.

two times the average CEO salary in our sample ($0.95 million). ESG incidents are reported in 11.8% of firm-year observations, and 18% of the observations in our sample are firms with high consumer sensitivity. The descriptive statistics of other variables are generally in line with prior literature that uses similar datasets (Abernethy et al. 2022; Burke et al. 2019). Untabulated results of Pearson pairwise correlations among control variables do not appear to raise significant multicollinearity concerns, as the variance inflation factor value is well below the threshold of 10 (Kennedy 1992).

4. Discussion of main results

4.1. Do firms reduce Earnings-based incentives in CEO compensation after ESG incidents?

To gain some preliminary insights into how firms change compensation practices following ESG incidents, we study CD&A in proxy statements of firms implicated in ESG incidents. We notice that changes are often made to CEO compensation contracts following the incidents. For example, Apache Corporation, a company that reported the most environmental and safety incidents as named by the US House Natural Resources Committee, announced its compensation actions in its 2014 proxy statement, including replacing earnings-related incentives with incentive schemes that are more future performance-oriented. Bristol Myers Squibb represents another example. The company was involved in a severe violation of the Foreign Corrupt Practices Act in 2015 and paid a settlement of $14 million. In its 2016 proxy statement, the company announced a reduction of earnings-based incentives in executive compensation. Similarly, in its 2016 proxy statement, Molson Coors Beverage reduced the weight placed on income targets attached to CEO compensation after its ESG incident. So did Hess Corp, as announced in its 2014 proxy statement, following its involvement in the "Russian Mob Problem" in 2013. Appendix C provides more details on these examples.

We next apply Model (1) using a large sample to test our H1 where we predict that firms reduce earnings-based incentives in CEO compensation following ESG incidents. Our regression results are reported in Table 2, where our variable of interest *ESG_Inc* is measured in year *t*, and the dependent variables are *Tgtpayout_Earnings* in column (1) and *Weight_Earnings* in column (2), both measured in year *t* + 1. Consistent with H1, the coefficients of *ESG_Inc* are significantly negative in both columns, suggesting that firms respond to ESG incidents by reducing the importance of earnings goals in CEO pay. In terms of the economic significance of our findings, the coefficient of *ESG_Inc* is -0.051 in column (2) where *Weight_Earnings* is the dependent variable, indicating that the weight placed on earnings metrics in CEO compensation packages decreases by 5.1% following ESG incidents. Therefore, our results are consistent with our prediction that firms respond to ESG incidents by reducing earnings-based incentives in CEO compensation as to shift managerial bounded attention away from earnings targets and motivate them to allocate economic resources away from earnings-oriented goals.

4.2. Does the consumer sensitivity of a firm attenuate the association between earnings-based incentives and ESG incidents?

We employ Model (2) and focus on the interaction term between *ESG_Inc* and *Hi_ConSen* to examine our H2, namely the potential effect of a firm's consumer-oriented business model in moderating the CEO compensation design in alignment with its ESG strategic priorities following the ESG incidents.

The empirical findings are reported in columns (3) and (4) of Table 2, where the dependent variables are *Tgtpayout_Earnings$_{t+1}$* and *Weight_Earnings$_{t+1}$*, respectively. We notice that the main effects on *ESG_Inc* remain significantly negative, consistent with our prior results on H1 that in general firms implicated in ESG incidents significantly reduce the importance of earnings targets in CEO compensation. Importantly, the coefficients on *ESG_Inc*

× *Hi_ConSen* are statistically positive in both columns to offset the main effects of *ESG_Inc*. This finding is in line with our H2 and suggests that the consumer sensitivity of a firm significantly attenuates the association between ESG incidents and decreasing earnings-based incentives in CEO pay. Specifically, the coefficient of *ESG_Inc × Hi_ConSen* is 0.067 in column (4) when *Weight_Earnings* is used as the dependent variable, and it is -0.063 on *ESG_Inc* in this column. That is, firms in industries with low consumer sensitivity will reduce the weight of earnings targets in CEO pay to 41% [= 47% - 6%] following ESG incidents, equal to a 12.77% reduction [= (47% - 41%) / 47% × 100] from 47%, the average weight of earnings targets in CEO compensation. In comparison, their peers in highly consumer-sensitive industries implicated in ESG incidents will choose to retain the weight of earnings targets nearly unchanged *pre-* and *post-*the incidents.[8] Our findings support our argument that ESG performance is embedded in reported earnings for consumer-sensitive firms (Bhattacharya and Sen 2004; Luchs et al. 2010; Peloza and Shang 2011). The convergence, rather than divergence, of financial earnings and ESG performance in these firms suggests that earnings targets remain informative and useful in assessing the CEO's efforts to promote ESG performance. Managerial effort to earnings goals inevitably encompasses effectively fulfilling the firm's ESG strategies and addressing consumers' concerns about ESG issues. As a result, in firms with high consumer sensitivity, maintaining the importance of earnings-based incentives in CEO pay aligns with efficient compensation design.

Regarding control variables, our results are generally consistent with the literature. Firms with greater growth opportunities—such as those with a higher market-to-book ratio or larger sales growth—as well as loss-making firms, tend to rely less on earnings-based incentives in CEO compensation, suggesting that financial earnings may be too noisy for

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[8] We perform an *F*-statistics test and find that the sum of the coefficients of *ESG_Inc* and *ESG_Inc × Hi_ConSen* is not significantly different from zero (*F*-stat = 0.040, with *p*-value = 0.844).

capturing managerial efforts in those firms (Bushman et al. 1996; Ittner et al. 1997). Relatedly, the positive association between ROA and the use of earnings-based incentives in CEO pay may indicate that, in firms with higher ROA, earnings-related metrics are considered more informative and thus are applied more intensively to determine CEO compensation (Prendergast 1999). Board size reflects a firm's business complexity (Boone et al. 2007). The positive association between board size and earnings-based incentives indicates that the coordination and stewardship roles of financial earnings are particularly valuable in more complex firms.

Collectively, our results are consistent with our predictions. The generally orthogonal relationship between ESG performance and earnings goals indicates that firms reduce earnings-based incentives in CEO compensation following ESG incidents. However, when this relationship becomes less orthogonal but convergent, maintaining the importance of earnings targets facilitates the firms to implement their ESG strategic priorities.

4.3. Endogeneity

Our findings might be subject to endogeneity problems. For example, unobserved firm characteristics, such as corporate culture towards ESG issues, may be correlated with both the occurrence of ESG incidents and the design of CEO compensation. In addition, firms involved in ESG incidents may differ systematically from peers not involved in ESG incidents. Furthermore, a firm's ESG profile could relate to CEO compensation, suggesting that the ESG incident measure could be endogenous. In this section, we use several methods to address the potential endogeneity in our findings.

4.3.1 Firm fixed effects

We perform a DID analysis controlling for two-way fixed effects (including firm- and year-level fixed effects) to address the plausible effects of plausible omitted, time-invariant factors that affect CEO compensation design. Specifically, we compare adjustments to

earnings-based incentives from the pre- to the post-incident period in treated firms against compensation practices in control firms where control firms are those that never experienced any ESG coverage during the RepRisk screening period. We replace *Ind FE* in Models (1) and (2) with *Firm FE* and include a list of *Post* variables in the regressions. Following Akey et al. (2024) and Hoepner et al. (2023), we construct a series of post-event variables. *Post_Y1* is a dummy variable equal to 1 if a firm was exposed to an ESG incident in the focal or previous year (i.e., a two-year window). *Post_Y2* and *Post_Y3* are defined similarly.[9] Our empirical findings are reported in Panels A and B of Table 3. Several observations emerge. First, all post-event variables are significantly negative and their interactions with *Hi_ConSen* are significantly positive, suggesting that our main findings of both hypotheses endure after controlling for firm fixed effects. Second, the effects of ESG incidents on compensation design do not seem to be transitory, as shown by the significant coefficients of *Post_Y2* and *Post_Y3* in both panels. As ESG incidents are likely to negatively and persistently affect firm value and future profitability (Akey et al. 2024), our findings indicate that firms involved in ESG incidents may continue to focus on ESG issues and modify their CEO compensation accordingly.

We further employ a staggered DID specification to accommodate the fact that firms may be exposed to ESG incidents at different times. We specifically focus on the first-time exposure during our investigation window, considering its unique significance to the implicated firms (Akey et al. 2024).[10] We further apply a propensity-score matching (PSM) to

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[9] As noted by Baker et al. (2022), as the percentage of never-treated firms rises, the likelihood of estimation bias associated with the two-way fixed effects staggered specification shrinks. In our sample, the percentage of firm-year observations among never-treated firms is 41.55% (2,636 of 6,344 observations), which alleviates the concern of estimation bias.

[10] Frequently exposed firms (i.e., those experience with more than five ESG incidents during the whole sample period) are excluded because they are less comparable to other treated firms. Results remain consistent if we use seven or nine incidents as the cutoff.

enhance the comparability of the treated and control firms included in the analysis.[11] We create

an indicator variable—*Post*, which takes the value of 1 in the year of the ESG incident and all

subsequent years and zero otherwise. Our empirical results presented in columns (1) and (2) in

Panels C and D of Table 3 suggest that our main findings are robust using the staggered PSM-

DID specification.

Furthermore, we apply this PSM sample to test the pre-treatment trend and check the

parallel trend assumption. Particularly, we replace *Post* with seven indicator variables *Before(-2)*, *Before(-1)*, *Current*, *After(+1)*, *After(+2)*, *After(+3)*, and *After(+4)*, indicating how far the

current year is before or after the incident. In columns (3) and (4) of Panels C and D, the

insignificant coefficients on *Before(-2)*, *Before(-1)*, and their interaction terms with *Hi_ConSen*

support the parallel trends assumption, suggesting that treated and control firms had similar

CEO earnings incentives before their ESG incidents.[12]

We further employ the stacked DID model design to check the robustness of our

findings using the PSM-DID sample (Baker et al. 2022). Specifically, we construct a series of

cohorts based on the years that treated firms experienced their first ESG incident. For each

cohort, we construct a cohort-specific sub-dataset, including both the observations from treated

firms and observations from the control firms, and then we stack all sub-datasets. Following

Iliev and Roth (2023), we estimate the stacked DID regression by further controlling for Cohort

× Firm fixed effect and Cohort × Year fixed effect. Panel E of Table 3 summarizes our stacked

regression results that are largely consistent with our main findings.

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[11] We first fit a logit model to estimate firms' likelihood of being exposed to ESG incidents. The independent variables include the same firm control variables as in the main regression, i.e., *Firm Size*, *Leverage*, *Market-to-book*, *Loss*, *Strategy*, *Sales Growth*, *ROA*, *Stock Return*, *CEO Duality*, *CEO Tenure*, *Board Size*, and *Board Independence*. We include the prior year earnings-based incentive as an additional control. We then match treatment firm-year observations with control firm-year observations based on the estimated propensity score using one-to-one nearest neighbor matching without replacement.

[12] We notice that the significance of the coefficients on *After* variables and their interactions with *Hi_ConSen* varies with the choice of the dependent variable. Our findings are, thus, drawn from generally consistent results that firms, especially those in industries with low consumer sensitivity reduce earnings-based incentives following ESG incidents.

4.3.2 Entropy balancing

Because a firm's involvement in ESG incidents might not be random (Bebchuk and Tallarita 2022; Edmans 2023; Liu et al. 2021), we apply entropy balancing to balance covariates within a binary treatment (i.e., whether experience ESG incidents during the sample period) (Hainmeuller 2012; McMullin and Schonberger 2020) and adjust inequalities in all control variables at the first (mean), second (variance), and third (skewness) moments. Panel A of Table 4 shows large differences in the descriptive statistics of control variables between firms with and without ESG incidents, while these differences in the covariate distributions disappear after entropy balancing as shown in Panel B, indicating that the method achieved a sufficient balance between firms with ESG incidents and those without. We rerun Models (1) and (2) using the entropy-balanced sample and Panel C summarizes the results that are consistent with our prior findings.

4.3.3 Instrumental variable approach

Next, we employed a two-stage instrumental variable approach to address the potential endogeneity of the ESG incident measure, using the average number of ESG incidents in other local industries (*ESG_Inc_Local*) as the instrumental variable in the first stage regression to explicitly model a firm's likelihood of being involved in ESG incidents (Chen et al. 2015). Then, we replicate Models (1) and (2) by including the fitted value from the first-stage regression as instruments for *ESG_Inc* and its interaction with *Hi_ConSen*.[13] Table 5 presents our empirical results of the two-stage least squares analysis, where the first-stage results are reported in Panel A, and the second-stage findings are presented in Panel B. In Panel A, the coefficient for *ESG_Inc_Local* is significantly positive in column (1); So is the coefficient of

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[13] The relative performance evaluation literature shows that firms often benchmark their compensation designs against pay practices in other firms within the same industry (Aggarwal and Samwick 1999). We argue that ESG incidents in a region, including those in other industries, relate positively to a firm's likelihood of being involved in ESG incidents, whereas ESG profiles of firms in other industries do not seem to directly impact a focal firm's CEO compensation design.

ESG_Inc_Local × *Hi_ConSen* in column (2). These findings are consistent with our prediction and meet the relevance condition of including instrumental variables. More importantly, when regressing the use of earnings metrics on fitted value of *ESG_Inc* and its interaction with *Hi_ConSen* from the first-stage regression, our prior findings still hold as reported in Panel B.[14]

4.4. Other robustness tests

We create an alternative variable to capture a firm's involvement in ESG incidents by counting the number of high-reach and novel ESG incidents in a year. We replicate Models (1) and (2) using this alternatively constructed variable as our key variable of interest, and our findings are consistent with our main results. Additionally, we split our sample into high- vs. low-consumer sensitivity groups and perform Model (1) in the two groups, respectively. We find that less consumer-sensitive businesses choose to significantly reduce the importance of earnings in CEO compensation following ESG incidents, while it does not hold for firms operating with high consumer sensitivity. We further follow Delgado and Mills (2017) and identify industries that are highly consumer-sensitive (B2C). Our results remain largely consistent with our main findings.

We also examine the robustness of our main findings using two alternatively constructed samples. First, we exclude firms involved in ESG incidents that are either nonnuanced or not high-reach during the current year. This way, our newly constructed sample consists of firms implicated in ESG incidents that are nuanced and high-reach as well as firms without any type of ESG incidents during this year (3,977 observations). In another robustness test, we exclude years following a CEO turnover event (300 observations). CEO dismissal likely significantly increases following negative media coverage of ESG (Burke 2022). In that case, the reduced use of earnings-based incentives in CEO compensation may be implemented

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[14] We notice the large magnitude of the coefficient on *Fitted* (*ESG_Inc* × *Hi_ConSen*) in column (3) of Panel B. Literature shows that large instrumental variable estimates are not uncommon (Jiang 2017).

due to CEO turnover, rather than the ESG incidents *per se* (Qin and Yang 2022). We replicate

our prior analysis using these alternative samples and obtain empirical findings consistent with

our main results. Furthermore, we confirm the robustness of our findings after including

additional control variables, including CEO turnover, CEO ownership, and institutional

ownership at the firm.[15]

Taken together, the additional robustness tests suggest that our main findings on CEO

compensation design remain consistent.

5. Additional analyses

5.1. What other adjustments do firms make to CEO compensation designs?

Reductions in earnings-based incentives shift CEOs' attention away from boosting

short-term financial performance (Balsam et al. 2011; Ittner et al. 1997). Would firms increase

other performance incentives in the CEO compensation design? To examine this question, we

define market-based and ESG-related performance metrics and construct additional variables

accordingly (Carter et al. 2022; Cohen et al. 2023). That is, *Tgtpayout_Total* captures the total

target payout of a CEO's performance-based incentives in a year; *Tgtpayout_Market* relates to

the importance of market-based targets; *Tgtpayout_ESG* indicates the importance associated

with ESG targets in CEO pay. We replicate Model (1) using these alternative dependent

variables, respectively, and Table 6 presents our empirical results.

Column (1) shows that the coefficient for *ESG_Inc* is statistically insignificant,

indicating that the overall level of performance-based incentives does not change in firms

involved in ESG incidents. Furthermore, the insignificant coefficient of *ESG_Inc* in column (2)

indicates that firms implicated in ESG incidents do not significantly vary the importance of

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[15] Furthermore, we follow Burke (2022) and identify CEO turnover that is performance-driven using information on reasons for the turnover event acquired from the Audit Analytics Director and Officer Changes database. We again obtain consistent results. Additionally, we find that earnings-based incentives in CEO compensation are associated with an increased likelihood of future ESG incidents, which validates our assumption and suggests that attaching earnings targets to CEO compensation increases ESG risk.

market-based targets in compensation design. However, *ESG_Inc* is significantly positive in column (3) when *Tgtpayout_ESG* is employed as the dependent variable, suggesting that firms appear to replace earnings-based incentives with ESG-based targets in CEO pay in response to ESG incidents, as reported in prior literature (Christensen et al. 2021; Cohen et al. 2023; Qin and Yang 2022).[16]

5.2. Does reducing earnings-based incentives represent a first-order measure?

It is plausible that the reduced weight on earnings-based incentives is a logical outcome of a firm's compensation design choice in increasing the importance of ESG targets. In that case, what we have documented previously on earnings-based incentives would represent a secondary measure or a logical decision that follows through the first-order measure that is about increasing the importance of ESG targets in CEO pay. To probe into this, we examine the economic consequences of CEO compensation contracts. The market appreciates design choices that improve the efficiency of CEO compensation contracts and align a CEO's interests with firm value (Grossman and Hart 1992; Prendergast 1999). If reducing earnings-based incentives merely represents a secondary measure, then these adjustments associated with earnings-based incentives are unlikely to improve the subsequent performance of a firm, after considering the adjustments made to ESG-related components in CEO compensation design.

We employ several measures to capture firms' subsequent performance: $\Delta Tobin's\ Q_{i,t+1}$, which is the change in Tobin's Q from year $t + 1$ to year t ($Tobin's\ Q_{i,t+1}$ - $Tobin's\ Q_{i,t}$) to capture a firm's long-term valuation (Abernethy et al. 2022; Kale et al. 2009); $\Delta Dissent_{i,t+1}$, the change in the say-on-pay dissent rate from $t + 1$ to t which directly reflects shareholders' opinions about a firm's compensation practices (Ertimur et al. 2013); and $Avg\_Incidents_{i,t+2}$, the average number of ESG incidents in the subsequent two years, to capture the occurrence of

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[16] We further find that firms significantly decrease earnings-based targets in the non-equity part of CEO pay (e.g., cash bonuses), especially those operating with low consumer sensitivity.

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[16] We further find that firms significantly decrease earnings-based targets in the non-equity part of CEO pay (e.g., cash bonuses), especially those operating with low consumer sensitivity.

future ESG incidents.[17] Furthermore, we construct measures to capture the adjustments to performance targets in year $t + 1$ from year t. Specifically, *Earnings_Down* takes a value of 1 if the change in the importance of earnings metrics (*Tgtpayout_Earnings$_{i,t+1}$* - *Tgtpayout_Earnings$_{i,t}$*) is in the bottom quartile of the sample (i.e., the largest reduction in earnings-based incentives in CEO compensation) and 0 otherwise. Similarly, *ESG_Up* captures the increases in the importance of ESG metrics (*Tgtpayout_ESG$_{i,t+1}$* - *Tgtpayout_ESG$_{i,t}$*) in the top quartile of the sample. We apply Model (1) using firm performance as the dependent variable, and in the model, we also include the variables of a firm's compensation design adjustments and their interactions with the occurrences of ESG incidents.

Table 7 summarizes the regression results. In columns (1) to (3), *Earnings_Down* and its interaction with *ESG_Inc* are included. When *ΔTobin's Q$_{t+1}$* is used as the dependent variable, column (1) shows that *ESG_Inc* is significantly negative, indicating the detrimental effects of ESG events on firm value (Akey et al. 2024). Furthermore, the interaction term *Earnings_Down × ESG_Inc* is significantly positive in this column, suggesting that decreasing the importance of earnings metrics in CEO compensation significantly attenuates the negative impacts of ESG incidents on firm value. The significantly negative coefficient of *Earnings_Down* in column (2) where *ΔDissent$_{t+1}$* is used as the dependent variable, indicates that, in years without ESG incidents, shareholders are more likely to vote against a reduction in earnings-based incentives. However, if the reduction in earnings-based incentives is adopted following ESG incidents, the say-on-pay dissent rate declines significantly. *Avg_Incidents$_{t+2}$* is used as the dependent variable in column (3). The coefficient on *ESG_Inc* is significantly positive, suggesting that firms currently exposed to ESG incidents are more likely to be involved in future incidents (Glossner 2021). In addition, the significantly negative coefficient

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[17] We obtain consistent results when expanding the window till year $t + 3$ to measure a firm's future performance in Tobin's Q and subsequent ESG incidents. say-on-pay voting outcomes are acquired from ISS.

on *Earnings_Down* × *ESG_Inc* implies that reducing earnings-based incentives in CEO compensation mitigates the risk of future ESG incidents. We also perform *F*-tests to examine the statistical significance of combined coefficients of *ESG_Inc* and *Earnings_Down* × *ESG_Inc*. As reported in Table 7, the future value of implicated firms remains stable from pre- to post-the incidents if they choose to largely lower earnings-based incentives in CEO pay following the incidents. However, these firms still have a higher tendency to be involved in future ESG incidents and appear subject to a significantly reduced say-on-pay dissent rate.

We next incorporate the importance of ESG targets into the analysis and present our empirical results in columns (4) to (6). The interaction term *ESG_Up* × *ESG_Inc* is consistently insignificant, suggesting by increasing ESG-based incentives alone, firms are not able to significantly address subsequent consequences following the ESG incidents. This finding is also consistent with anecdotes that firms are continuously involved in ESG incidents even after incorporating ESG-related metrics into CEO compensation. For example, in 2021, legal action was initiated against Chevron for alleged environmental damage in the Amazon rainforest, despite major incentives in the CEO's compensation plan based on health, environmental, and safety performance. Likewise, Johnson & Johnson has been sued repeatedly related to allegations that its talc-based products can cause cancer, even though the firm emphasizes product quality and safety as critical factors affecting its performance (Hsu, 2023).

Importantly, empirical results in columns (4) to (6) of Table 7 show that our prior results on the economic effects of reducing earnings-based incentives remain consistent after considering the potential impacts of increasing the importance of ESG targets in CEO pay. So, although firms largely increase the weight of ESG targets following the incidents, our findings on the insignificant coefficient of *ESG_Up* × *ESG_Inc* suggest that these adjustments alone do not significantly affect the implicated firms' subsequent performance as measured by firm value or future ESG incidents. Therefore, reducing earnings-based incentives, rather than

increasing ESG incentives, in CEO pay appears to have a first-order impact on firm value and future ESG performance.[18]

Collectively, the adjustments firms make to earnings-based incentives in CEO compensation in response to ESG incidents are associated with subsequent improvements in firm performance. Reducing the importance of earnings in CEO pay is in line with optimal compensation contracting, as it helps guide CEOs' decisions regarding the allocation of effort and resources to support the interests of firms' various stakeholders.

6. Conclusion

Firms involved in ESG incidents have an imminent need to demonstrate ESG performance improvement and thus consider ESG goals as strategic priorities (Akey et al. 2024; Christensen et al. 2021). Based on prior evidence on the orthogonal relationship between financial earnings and ESG performance of a firm, we predict firms to reduce earnings-based incentives in CEO compensation following ESG incidents. Furthermore, consumers' boycotts following ESG incidents are directly reflected in reduced financial earnings, which indicates that financial earnings and ESG performance tend to converge in firms with high consumer sensitivity. We thus predict that the consumer sensitivity of implicated firms moderates this association so that firms with high consumer sensitivity are less likely to reduce earnings-based incentives following the incidents.

Our findings are in line with our expectations, as we show that firms involved in ESG incidents significantly cut back on earnings-based incentives for their CEOs, while those in consumer-sensitive industries tend to keep the same level of earnings-based incentives after such incidents. Our additional tests also show that firms implicated in ESG incidents

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[18] It also shows that increasing ESG targets in CEO pay is appreciated by shareholders and is associated with reduced dissent on pay, while this measure does not appear to significantly affect the firm's future value. Furthermore, the significantly positive coefficient of *ESG_Up* in column (6) possibly indicates that firms may increase ESG targets in CEO pay to strategically 'greenwash' their anti-ESG behavior, and without motivating managerial real efforts to address ESG issues, such compensation design potentially relates to an increased likelihood of future ESG incidents.

significantly increase the importance of ESG targets in CEO compensation. Importantly, reducing earnings-based incentives demonstrates a first-order effect, beyond enhancing the importance of ESG targets, in affecting future performance of firms implicated in ESG incidents. However, increasing ESG-related incentives without adjusting earnings targets in CEO pay does not seem to be effective in alleviating the undesirable economic consequences that firms encounter following their involvement in ESG incidents.

Our study provides potentially fruitful avenues for future research. For example, as stakeholders' ESG objectives and power to influence corporate decisions vary, future research could investigate how stakeholders with incompatible objectives, especially for a short term, influence corporate ESG decisions. Our study also highlights that a firm's contracting environment changes after ESG incidents. In future research, scholars might investigate factors shaping firms' responses to intensified ESG concerns among stakeholders involved in different contracts.

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Appendix A.
How to measure the importance of earnings performance using Incentive Lab data?

Step 1: Identify performance-based grants
We focus on performance-based awards granted to CEOs, which are paid to the CEO conditional on achieving a predetermined performance goal. To collect information on performance-based awards, we start with all firms covered by the ISS Incentive Lab database. First, we get the basic details on each grant in the Incentive Lab "GPBAGRANT" file, which contains information on the classification of the award, performance type (i.e., performance-vesting or time-vesting), vesting schedule, and target payout. We keep a sample of CEOs with at least one performance-vesting grant. Then we drop performance-vesting grants with only accelerated performance measures, which account for less than 1% of overall grants, as those grants are generally related to abnormal corporate activities. Furthermore, we drop grants with missing information on the award type and classify the performance-based awards as cash (non-equity) incentive plans, performance-vesting restricted shares, and performance-vesting stock options.

Step 2: Classify the attached performance measures
We then collect information on individual performance metrics used for each performance contingent award from two other Incentive Lab files "GPBAABS" and "GPBAREL", which include information on the metric type, vesting period, and weight associated with each absolute and relative performance metrics, respectively. As Incentive Lab expands the values of *metricType* after 2018, we modify the classification of Carter et al. (2022) accordingly. All performance measures are classified into four categories: 1) *Earnings-based metric*, including Earnings, EBIT, EBITDA, EBT, EPS, EVA, Operating Income, Profit Margin, ROA, ROE, ROI, Earnings/Profit-related, Economic Value and Financial/Investment return ratios, 2) *Market-based metric* including Stock Price or Market-related, and 3) *ESG metric* that includes ESG-related information, such as environmental related, carbon emissions, CSR, safety and health, diversity and inclusion, reduction of injury rate, governance, compliance and sustainability (Cohen et al. 2023).

Step 3: Aggregate weights and target payouts on each category of performance measures
At the grant level, we use the percentage of the award that vests conditional on achieving the metric (Incentive Lab variable, *PercentVest*) as the weight attached to the performance metric. Following Carter et al. (2022), in the case of missing value on *PercentVest* or when the total percentage of all performance metrics under one grant does not sum up to 1, we replace the weight on each metric with equal weight. Then, we sum up the total weights based on the four categories of performance measures, and multiply the relative weights of earnings-based metric by the target payout of cash compensation (Incentive Lab variable *NonEquityTarget*) or the grant date fair value of equity compensation (Incentive Lab variable *EquityTarget*) to get the dollar amount the CEO will receive upon achieving earnings targets. We further drop grants with missing target payout or the reported target payout of less than $1,000.
Since there can be multiple grants under one CEO, we aggregate all grants to a single CEO for a given year. We sum up the target payouts of all grants based on each category of performance measures to define *Tgtpayout_Earnings*; a weighted average of the weights on earnings measures based on the magnitude of the target payout for each performance-based grant defines *Weight_Earnings*.

An example:

William R. Klesse, the CEO of VALERO ENERGY CORP (ticker: VLO), received three performance-based grants in 2013 as follows:

N	Grant Type	$Target Payout	$Tgtpayout Earnings Metrics	Weight Earnings Metrics
1	Cash bonus	2,250,000	375,000	0.167
2	Option	1,171,332	0	0
3	RSUs	1,147,715	0	0

The variable *Tgtpayout_Earnings* for the CEO in 2013 is the logarithm of one plus the sum of the target payout on achieving earnings goals from all performance-based awards: $\ln(1+ (375,000 + 0 + 0)) = 12.835$. The value of *Weight_Earnings* for the CEO in 2013 is the weighted average of the weights on earnings metrics: 0.082 (0.167 × 2,250,000 / (2,250,000 + 1,171,332 + 1,147,715) + 0 × 1,171,332 / (2,250,000 + 1,171,332 + 1,147,715) + 0 × 1,147,715 / (2,250,000 + 1,171,332 + 1,147,715)).

Appendix B.
Variable definitions

Variables	Description	Data Source
Compensation Variables		
Tgtpayout_Earnings	The logarithm of one plus the aggregate target payout from performance-based awards (including both non-equity and equity awards) based on earnings performance measures. The target payout for each performance contingent award is based on the Incentive Lab variable *NonEquityTarget* for non-equity plans, and *EquityTarget* for equity plans. We multiply the weight on *Earnings based* measures by the target payout of each performance-based award to get the target payout on earnings measures for each award. Then sum up the target payout on earnings measures for all performance-based awards offered to a CEO during a fiscal year as the aggregate target payout on earnings measures.	Incentive Lab
Weight_Earnings	Aggregate weight on the performance metrics categorized as *Earnings_based* in terms of performance-based awards. To be classified as *Earnings based* measures, the metric should be one of the following: Earnings, EBIT, EBITDA, EBT, EPS, EVA, Operating Income, Profit Margin, ROA, ROE, ROI, Earnings/Profit-related, Economic Value and Financial/Investment return ratios based on the Incentive Lab variable *metric* and *metricType,* following Carter et al. (2022). We first sum up the weight of *Earnings based* metric at the individual grant level and then aggregate to the CEO level by value-weighted average based on the target payout of each grant.	Incentive Lab
Tgtpayout_Total	The logarithm of one plus the aggregate target payout from all performance-based awards.	Incentive Lab
Tgtpayout_Market	The logarithm of one plus the aggregate target payout from performance-based awards (including both non-equity and equity awards), based on market performance measures. To be classified as *Market_based* measures, the metric should be one of the following: Stock Price or Market-related based on the Incentive Lab variable *metric* and *metricType,* following Carter et al. (2022).	Incentive Lab
Tgtpayout_ESG	The logarithm of one plus the aggregate target payout from performance-based awards (including both non-equity and equity awards), based on ESG-related performance measures. To be classified as *ESG based* measures, we identify metrics related to environmental related, carbon emissions, CSR, safety and health, diversity and inclusion, reduction of injury rate, governance, compliance and sustainability from Incentive Lab variable *metricOther* on metric description, following Cohen et al. (2023).	Incentive Lab
Earnings_Down	A dummy variable that takes the value of 1 if the change to *Tgtpayout_Earnings in t+1 from t* ($Tgtpayout\_Earnings_{t+1}$ - $Tgtpayout\_Earnings_t$) is in the bottom quartile of the sample in a given year.	Incentive Lab
ESG_Up	A dummy variable that takes the value of 1 if the change to *Tgtpayout_ESG in t+1 from t* ($Tgtpayout\_ESG_{t+1}$ - $Tgtpayout\_ESG_t$) is in the top quartile of the sample in a given year.	Incentive Lab
ESG Incident Variables		
ESG_Inc	A dummy variable that takes the value of 1 if a firm is exposed to at least one high-reach and novel incident by RepRisk in the current fiscal year.	RepRisk

Variables	Description	Data Source
ESG_Inc_Local	The average number of ESG incidents in other local industries based on two-digit Zip Code area following Chen et al. (2015).	RepRisk
Post_Y1	A dummy variable that takes the value of 1 if a firm is exposed to at least one high-reach and novel incident by RepRisk in the current or previous fiscal year.	RepRisk
Post_Y2	A dummy variable that takes the value of 1 if a firm is exposed to at least one high-reach and novel incident by RepRisk in the current or previous two fiscal years.	RepRisk
Post_Y3	A dummy variable that takes the value of 1 if a firm is exposed to at least one high-reach and novel incident by RepRisk in the current or previous three fiscal years.	RepRisk
Post	A dummy variable that takes the value of 1 in the year of a firm exposed to the first-time high-reach and novel incident by RepRisk and all the subsequent years.	RepRisk
Before(-2)	A dummy variable that takes the value of 1 two years before a firm exposed to the first-time high-reach and novel incident.	RepRisk
Before(-1)	A dummy variable that takes the value of 1 one year before a firm exposed to the first-time high-reach and novel incident.	RepRisk
Current	A dummy variable that takes the value of 1 in the current year that a firm exposed to the first-time high-reach and novel incident.	RepRisk
After(+1)	A dummy variable that takes the value of 1 one year after a firm exposed to the first-time high-reach and novel incident.	RepRisk
After(+2)	A dummy variable that takes the value of 1 two years after a firm exposed to the first-time high-reach and novel incident.	RepRisk
After(+3)	A dummy variable that takes the value of 1 three years after a firm exposed to the first-time high-reach and novel incident.	RepRisk
After(+4)	A dummy variable that takes the value of 1 four years after a firm exposed to the first-time high-reach and novel incident.	RepRisk
$Avg\_Incidents_{t+2}$	The logarithm of one plus the average number of ESG-related incidents covered by RepRisk in the next two fiscal years.	RepRisk

Control and Outcome Variables

Variables	Description	Data Source
Board Independence	The percentage of independent directors out of the total number of directors on board. Independent director is identified using the role description RoleName.	BoardEx
Board Size	Number of directors on board.	BoardEx
CEO Duality	Dummy variable that takes the value of 1 if the CEO is also the chairman of the board, based on the role description RoleName.	BoardEx
CEO Tenure	Number of years a CEO in this role, using variable TimeRole.	BoardEx
Dissent	Dissent rate on shareholder Say-on-Pay voting, calculated as the sum of 'against' and 'abstain' votes divided by total votes.	ISS
Firm Size	The logarithm of one plus total asset using $ln(1+at)$.	Compustat
Hi_ConSen	Dummy variable that takes the value of 1 if firm is in high consumer-sensitive industry based two-digit SIC code following Burke et al. (2019).	Compustat
Leverage	Firm total debt to total asset ratio using $(dlc+dltt)/at$.	Compustat
Loss	Following Carter et al. (2022), a dummy variable that takes the value of 1 if the firm reported losses in each of the previous two years based on ib.	Compustat
Market-to-book	The market value of equity to book value of equity ratio using $(csho \times prcc\_c)/ceq$.	Compustat
ROA	Firm earnings before interest and tax to asset ratio using ib/at.	Compustat
Sales Growth	The percentage change in firm total sales using $(sales_t/sales_{t-1})-1$.	Compustat
Stock Return	Firm annual stock return, calculated using monthly holding period returns where ordinary dividends are reinvested at month-end.	CRSP

Variables	Description	Data Source
Strategy	Firm investment policy based on capital intensity ratio using *ppent/at.*	Compustat
Tobin's Q	The ratio of the market value of assets to the book value of assets using *(at-ceq+csho×prcc_f)/at.*	Compustat

Appendix C.
Examples of ESG incidents and change in compensation design

Company Name	News Summary	Compensation Change
Apache Corp	In 2013, Apache Corp., one major oil and gas producer exploring in delicate Cook Inlet, Alaska spilled 2.5 million gallons of toxic waste in Alberta, Canada and raised significant concerns of local residents. Moreover, U.S. District Court Judge which is based in Alaska authorized the federal government's decision that Apache Alaska's oil and gas exploration violated three UNGC Principles.	The performance measures used in Apache's 2012 CEO compensation include earnings, production growth, reserve growth, cash flow, BOE and strategic management objectives. Apache redesign CEO compensation plan in 2013 and 2014, corporate performance element includes growth in drilling program (70%), reserve increase (10%), EH&S performance goals (10%), cost reduction (5%) and LOE goal (5%).
Bristol Myers Squibb	In 2015, Bristol-Myers Squibb was charged more than $14 million for its violation of the Foreign Corrupt Practices Act (FCPA) that it reaped more than $11 million in profits from its misconduct. This incident raised public concern on the effectiveness of BMS's internal control system.	Bristol-Myers Squibb redesigned the long-term CEO incentives. For 2015, the performance share units are measured by both one-year and three-year period relative TSR modifier, while performance metrics include non-GAAP EPS (70%) and total revenue (30%). For 2016, performance metrics include Non-GAAP Operating Margin (33%) and total revenue (33%), and relative 3-year TSR (34%).
Molson Coors Beverage Co	Molson Coors was challenged in a Senate hearing due to the $107 billion mega-merger of Anheuser-Busch InBev and SABMiller. The merge could violate Antitrust, Competition Policy and Consumer Rights and generated concern on the competitive pricing environment on craft brewers and independent wholesalers.	The company-wide performance objectives for CEO annual incentive plans remain unchanged, but the weights on earnings are adjusted downward. For 2015, performance components are pretax income (60%), adjusted NSR (20%) and FCF (20%). For 2016, performance components are pretax income (33%), adjusted NSR (33%) and FCF (33%).
Hess Corp	In 2013, Hess's "Russian Mob Problem" has brought to public attention. A powerful local mob organization controlled the oil industry in Novokuibyshevsk, which seemed to be the affiliation with Hess Corp.	Hess's 2013 cash bonus plan include net income (33%), business unit related metrics such as profitability and cost control (33%), and individual results (33%). The 2014 compensation plan transforms the whole enterprise metrics: Proved Reserve Additions (18%), Production (18%), Environment, Health and Safety (18%), Controllable Operated Cash Costs (18%), Capital and Exploratory Spend (18%) and Cash Return on Capital Employed (10%).

Table 1 Sample Selection, Sample Distribution, and Descriptive Statistics

Panel A: Sample selection procedure

Selection Procedure		N
All performance-based awards to CEOs with available performance measures data in Incentive Lab		45,335
Minus: target payout is missing or smaller than 1,000	-7,167	38,168
Aggregate to CEO level		19,895
Merge with RepRisk ESG incidents data (sample period: 2007 – 2021)	-5,186	14,709
Minus: financial firms (SIC codes 6000–6999)	-3,105	11,604
Minus: utility firms (SIC codes 4900–4999)	-2,110	9,494
Minus: missing lead target payout and control variables from Compustat, CRSP and BoardEx	-3,150	6,344
Final sample		6,344

Panel B: Sample distribution by year

Year	N	Percentage
2007	385	6.07%
2008	387	6.10%
2009	397	6.26%
2010	418	6.59%
2011	420	6.62%
2012	450	7.09%
2013	458	7.22%
2014	463	7.30%
2015	493	7.77%
2016	470	7.41%
2017	491	7.74%
2018	499	7.87%
2019	513	8.09%
2020	500	7.88%
Total	6,344	100%

Panel C: Sample distribution by industry

Fama-French 12 Industry Classification	N	Percentage
Consumer non-durables – tobacco, textiles, apparel and toys	489	7.71%
Consumer durables – cars, TV's, furniture, household appliances	243	3.83%
Manufacturing – machinery, trucks, planes, paper	1,131	17.83%
Oil, gas, and coal extraction and products	410	6.46%
Chemicals and allied products	352	5.55%
Business equipment – computers, software	1,670	26.32%
Wholesale, retail, and some services	269	4.24%
Healthcare, medical equipment, and drug	730	11.51%
Other – mines, construction, transportations, hotels, entertainment	1,050	16.55%
Total	6,344	100%

Panel D: Descriptive statistics

Variables	N	Mean	SD	Q1	Median	Q3
$Tgtpayout\_Earnings_{t+1}$	6,344	12.879	4.052	12.835	13.998	14.914
$Weight\_Earnings_{t+1}$	6,344	0.472	0.328	0.181	0.473	0.757
ESG_Inc	6,344	0.118	0.323	0	0	0
Hi_ConSen	6,344	0.180	0.384	0	0	0
Firm Size	6,344	8.520	1.373	7.615	8.447	9.374
Strategy	6,344	0.250	0.227	0.085	0.166	0.342
ROA	6,344	0.051	0.093	0.022	0.058	0.097
Loss	6,344	0.220	0.414	0	0	0
Sales Growth	6,344	0.083	0.233	-0.016	0.059	0.149
Market-to-book	6,344	4.511	9.738	1.793	3.052	5.309
Leverage	6,344	0.284	0.202	0.143	0.264	0.394
Stock Return	6,344	0.164	0.425	-0.083	0.123	0.351
Board Size	6,344	9.833	1.984	8	10	11
Board Independence	6,344	0.823	0.106	0.778	0.857	0.900
CEO Tenure	6,344	4.917	4.742	1.600	3.500	6.800
CEO Duality	6,344	0.451	0.498	0	0	1

Notes: This table reports the sample selection procedure, sample distributions, and descriptive statistics. Panel A describes the sample construction starting from the Incentive Lab database. Panel B shows sample distribution by year during the sample period of 2007 - 2020. Panel C shows the sample distribution by industry. Panel D displays the descriptive statistics of the variables used in the main regression analysis. N represents the CEO-firm-year observations. Percentage provides the number of observations out of the total sample size.

Table 2 Empirical Results of Main Regressions

Variables	Tgtpayout_Earnings$_{t+1}$	Weight_Earnings$_{t+1}$	Tgtpayout_Earnings$_{t+1}$	Weight_Earnings$_{t+1}$
	(1)	(2)	(3)	(4)
ESG_Inc	-0.636***	-0.051***	-0.770***	-0.063***
	(-3.572)	(-3.390)	(-3.770)	(-3.832)
ESG_Inc × Hi_ConSen			0.714**	0.067*
			(2.070)	(1.714)
Firm Size	0.706***	0.011	0.709***	0.011
	(7.761)	(1.382)	(7.796)	(1.418)
Leverage	0.471	0.036	0.458	0.034
	(1.068)	(0.858)	(1.037)	(0.831)
Market-to-book	-0.016***	-0.001**	-0.016***	-0.001**
	(-2.744)	(-2.308)	(-2.719)	(-2.292)
Loss	-0.588***	-0.059***	-0.589***	-0.059***
	(-3.195)	(-4.080)	(-3.200)	(-4.092)
Strategy	-0.011	0.061	-0.004	0.062
	(-0.014)	(0.871)	(-0.006)	(0.880)
Sales Growth	-1.835***	-0.100***	-1.839***	-0.100***
	(-5.238)	(-5.480)	(-5.251)	(-5.512)
ROA	9.284***	0.430***	9.281***	0.429***
	(7.753)	(6.429)	(7.748)	(6.429)
Stock Return	0.078	-0.004	0.077	-0.004
	(0.532)	(-0.429)	(0.526)	(-0.438)
CEO Duality	0.118	0.040**	0.114	0.039**
	(0.669)	(2.426)	(0.646)	(2.405)
CEO Tenure	0.009	0.004**	0.009	0.004**
	(0.554)	(2.526)	(0.555)	(2.526)
Board Size	0.140***	0.013***	0.140***	0.012***
	(2.593)	(2.670)	(2.590)	(2.666)
Board Independence	0.650	-0.254***	0.651	-0.254***
	(0.588)	(-2.832)	(0.590)	(-2.832)

Variables	Tgtpayout_Earnings$_{t+1}$	Weight_Earnings$_{t+1}$	Tgtpayout_Earnings$_{t+1}$	Weight_Earnings$_{t+1}$
	(1)	(2)	(3)	(4)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	6,344	6,344	6,344	6,344
R-squared	0.300	0.214	0.301	0.214

Notes: This table reports empirical findings on the relationship between ESG Incidents and the importance of earnings measures in CEO compensation. Columns (1) and (2) display the baseline OLS regression results. Variable *ESG_Inc* equals one if a firm is exposed to a high-reach and novel ESG incident in year *t*. Columns (3) and (4) show the regression results among firms in the highly vs. less consumer-sensitive industries. *Hi_ConSen* equals to one if a firm is in highly consumer-sensitive industries based on two-digit SIC code. All regressions are estimated with industry- and year-fixed effects included. The standard errors in all specifications are clustered by firm, and the robust *t* statistics are reported in parentheses. *, **, and ***, represent significance at the 10%, 5%, and 1% levels, respectively. All variable definitions are summarized in Appendix B.

Table 3 Empirical Results of DID Analyses

Panel A: Two-way fixed effect DID analyses for H1

Variables	$Tgtpayout\_Earnings_{t+1}$			$Weight\_Earnings_{t+1}$		
	(1)	(2)	(3)	(4)	(5)	(6)
Post_Y1	-0.313**			-0.024**		
	(-2.229)			(-2.056)		
Post_Y2		-0.419***			-0.028**	
		(-2.914)			(-2.412)	
Post_Y3			-0.387***			-0.028**
			(-2.707)			(-2.255)
Firm Size	0.307*	0.319*	0.316*	-0.011	-0.011	-0.011
	(1.654)	(1.728)	(1.709)	(-0.846)	(-0.797)	(-0.802)
Leverage	-0.842	-0.858	-0.868	-0.031	-0.032	-0.033
	(-1.482)	(-1.511)	(-1.527)	(-0.716)	(-0.741)	(-0.760)
Market-to-book	-0.005**	-0.005**	-0.005**	-0.001	-0.001	-0.001
	(-2.091)	(-2.092)	(-2.077)	(-1.641)	(-1.633)	(-1.633)
Loss	-0.102	-0.105	-0.098	-0.032***	-0.032***	-0.031**
	(-0.765)	(-0.789)	(-0.734)	(-2.600)	(-2.606)	(-2.570)
Strategy	0.984	0.956	0.940	0.014	0.013	0.012
	(0.731)	(0.708)	(0.694)	(0.144)	(0.130)	(0.114)
Sales Growth	0.121	0.118	0.114	0.021	0.021	0.021
	(0.535)	(0.523)	(0.508)	(1.627)	(1.616)	(1.594)
ROA	2.579***	2.590***	2.579***	0.152**	0.152**	0.152**
	(2.829)	(2.843)	(2.829)	(2.499)	(2.511)	(2.498)
Stock Return	0.209**	0.208**	0.210**	-0.004	-0.004	-0.004
	(2.162)	(2.157)	(2.169)	(-0.568)	(-0.572)	(-0.562)
CEO Duality	-0.079	-0.082	-0.086	0.002	0.002	0.002
	(-0.574)	(-0.600)	(-0.626)	(0.152)	(0.136)	(0.116)
CEO Tenure	0.012	0.012	0.012	0.003*	0.003*	0.003*
	(1.119)	(1.080)	(1.087)	(1.852)	(1.832)	(1.833)
Board Size	-0.017	-0.018	-0.018	0.006	0.006	0.006
	(-0.430)	(-0.452)	(-0.450)	(1.549)	(1.524)	(1.523)
Board Independence	-0.514	-0.482	-0.477	-0.054	-0.052	-0.052
	(-0.645)	(-0.607)	(-0.600)	(-0.807)	(-0.775)	(-0.765)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,344	6,344	6,344	6,344	6,344	6,344
R-squared	0.699	0.700	0.700	0.665	0.665	0.665

Panel B: Two-way fixed effect DID analyses for H2

Variables	$Tgtpayout\_Earnings_{t+1}$			$Weight\_Earnings_{t+1}$		
	(1)	(2)	(3)	(4)	(5)	(6)
Post_Y1	-0.464***			-0.032**		
	(-2.871)			(-2.388)		
Post_Y1 × Hi_ConSen	0.890***			0.044*		
	(3.043)			(1.671)		
Post_Y2		-0.574***			-0.039***	
		(-3.539)			(-3.036)	
Post_Y2 × Hi_ConSen		0.990***			0.070**	
		(3.277)			(2.545)	
Post_Y3			-0.534***			-0.042***
			(-3.340)			(-3.108)
Post_Y3 × Hi_ConSen			0.970***			0.093***
			(3.152)			(3.087)
Firm Size	0.315*	0.328*	0.321*	-0.011	-0.010	-0.010
	(1.693)	(1.778)	(1.738)	(-0.818)	(-0.751)	(-0.765)
Leverage	-0.866	-0.886	-0.888	-0.032	-0.034	-0.035
	(-1.530)	(-1.570)	(-1.570)	(-0.744)	(-0.787)	(-0.804)
Market-to-book	-0.005**	-0.005**	-0.005**	-0.001	-0.001	-0.001
	(-2.020)	(-2.051)	(-2.069)	(-1.622)	(-1.616)	(-1.631)
Loss	-0.096	-0.095	-0.091	-0.031**	-0.031**	-0.031**
	(-0.723)	(-0.715)	(-0.680)	(-2.581)	(-2.554)	(-2.518)
Strategy	0.935	0.898	0.897	0.012	0.009	0.007
	(0.697)	(0.667)	(0.664)	(0.119)	(0.089)	(0.073)
Sales Growth	0.123	0.113	0.110	0.021	0.021	0.020
	(0.546)	(0.502)	(0.489)	(1.637)	(1.589)	(1.563)
ROA	2.566***	2.600***	2.585***	0.151**	0.153**	0.152**
	(2.820)	(2.859)	(2.841)	(2.490)	(2.524)	(2.507)
Stock Return	0.211**	0.212**	0.215**	-0.004	-0.004	-0.004
	(2.183)	(2.196)	(2.230)	(-0.558)	(-0.543)	(-0.494)
CEO Duality	-0.080	-0.084	-0.087	0.002	0.002	0.002
	(-0.582)	(-0.611)	(-0.636)	(0.149)	(0.129)	(0.107)
CEO Tenure	0.012	0.012	0.012	0.003*	0.003*	0.003*
	(1.133)	(1.088)	(1.075)	(1.857)	(1.836)	(1.827)

Variables	Tgtpayout_Earnings$_{t+1}$			Weight_Earnings$_{t+1}$		
	(1)	(2)	(3)	(4)	(5)	(6)
Board Size	-0.017	-0.017	-0.017	0.006	0.006	0.006
	(-0.422)	(-0.433)	(-0.418)	(1.558)	(1.544)	(1.562)
Board Independence	-0.528	-0.478	-0.471	-0.055	-0.052	-0.051
	(-0.666)	(-0.605)	(-0.596)	(-0.819)	(-0.773)	(-0.760)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,344	6,344	6,344	6,344	6,344	6,344
R-squared	0.700	0.700	0.700	0.665	0.665	0.666

Panel C: Staggered PSM-DID analyses on the first-time ESG incident for H1

Variables	Tgtpayout_Earnings (1)	Weight_Earnings (2)	Tgtpayout_Earnings (3)	Weight_Earnings (4)
Post	-0.395**	-0.037**		
	(-2.178)	(-2.103)		
Before(-2)			0.032	-0.015
			(0.162)	(-0.755)
Before(-1)			0.156	-0.023
			(0.705)	(-1.231)
Current			0.026	-0.035**
			(0.155)	(-2.115)
After(+1)			-0.325	-0.044**
			(-1.322)	(-2.497)
After(+2)			-0.492*	-0.039**
			(-1.839)	(-2.189)
After(+3)			-0.467**	-0.045**
			(-2.086)	(-2.577)
After(+4)			-0.442*	-0.043**
			(-1.920)	(-2.151)
Firm Size	0.397**	-0.007	0.415**	-0.003
	(2.119)	(-0.504)	(2.205)	(-0.198)
Leverage	-1.363**	-0.048	-1.339**	-0.053
	(-2.360)	(-0.992)	(-2.321)	(-1.103)
Market-to-book	-0.005	-0.000	-0.005	-0.000
	(-1.005)	(-1.298)	(-0.930)	(-1.297)
Loss	-0.365***	-0.048***	-0.366***	-0.048***
	(-2.703)	(-3.750)	(-2.714)	(-3.752)
Strategy	0.836	0.124	0.763	0.126
	(0.629)	(1.242)	(0.577)	(1.264)
Sales Growth	-0.086	0.001	-0.091	-0.001
	(-0.334)	(0.093)	(-0.355)	(-0.062)
ROA	1.529*	0.080	1.404	0.083
	(1.748)	(1.232)	(1.617)	(1.279)
Stock Return	-0.086	0.000	-0.104	0.000
	(-0.735)	(0.037)	(-0.871)	(0.040)
CEO Duality	-0.081	0.004	-0.110	0.004
	(-0.560)	(0.297)	(-0.791)	(0.285)
CEO Tenure	0.001	0.001	0.002	0.001
	(0.068)	(0.699)	(0.161)	(0.755)
Board Size	0.047	0.004	0.041	0.004
	(1.052)	(1.010)	(0.904)	(1.073)
Board Independence	-0.705	-0.113	-0.921	-0.117
	(-0.730)	(-1.513)	(-0.942)	(-1.560)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	5,306	5,306	5,306	5,306
R-squared	0.720	0.672	0.723	0.672

Panel D: Staggered PSM-DID analyses on the first-time ESG incident for H2

Variables	*Tgtpayout_Earnings* (1)	*Weight_Earnings* (2)	*Tgtpayout_Earnings* (3)	*Weight_Earnings* (4)
Post	-0.485**	-0.056***		
	(-2.430)	(-3.011)		
Post × Hi_ConSen	0.902**	0.126***		
	(2.461)	(3.162)		
Before(-2)			-0.065	-0.022
			(-0.291)	(-0.991)
Before(-1)			0.343	-0.017
			(1.480)	(-0.877)
Current			-0.034	-0.036**
			(-0.177)	(-2.017)
After(+1)			-0.523*	-0.056***
			(-1.849)	(-2.919)
After(+2)			-0.658**	-0.042**
			(-2.150)	(-2.151)
After(+3)			-0.594**	-0.060***
			(-2.314)	(-3.282)
After(+4)			-0.518*	-0.057***
			(-1.949)	(-2.657)
Before(-2) × Hi_ConSen			0.733	0.046
			(1.638)	(0.757)
Before(-1) × Hi_ConSen			-1.046	-0.028
			(-1.594)	(-0.507)
Current × Hi_ConSen			0.419	0.010
			(1.211)	(0.205)
After(+1) × Hi_ConSen			1.220***	0.075
			(2.924)	(1.633)
After(+2) × Hi_ConSen			1.090**	0.018
			(2.341)	(0.394)
After(+3) × Hi_ConSen			0.847**	0.104**
			(2.387)	(2.057)
After(+4) × Hi_ConSen			0.556*	0.103*
			(1.693)	(1.886)

Variables	Tgtpayout_Earnings (1)	Weight_Earnings (2)	Tgtpayout_Earnings (3)	Weight_Earnings (4)
Firm Size	0.395**	-0.007	0.412**	-0.003
	(2.091)	(-0.489)	(2.191)	(-0.180)
Leverage	-1.353**	-0.056	-1.367**	-0.054
	(-2.360)	(-1.150)	(-2.367)	(-1.131)
Market-to-book	-0.004	-0.000	-0.005	-0.000
	(-0.909)	(-1.247)	(-0.943)	(-1.344)
Loss	-0.371***	-0.048***	-0.376***	-0.049***
	(-2.768)	(-3.815)	(-2.790)	(-3.803)
Strategy	0.746	0.123	0.711	0.124
	(0.559)	(1.226)	(0.537)	(1.235)
Sales Growth	-0.082	0.001	-0.097	-0.001
	(-0.320)	(0.071)	(-0.379)	(-0.090)
ROA	1.435*	0.082	1.438*	0.085
	(1.654)	(1.273)	(1.656)	(1.314)
Stock Return	-0.096	0.001	-0.091	0.001
	(-0.803)	(0.132)	(-0.768)	(0.099)
CEO Duality	-0.106	0.005	-0.110	0.004
	(-0.768)	(0.306)	(-0.790)	(0.258)
CEO Tenure	0.002	0.001	0.001	0.001
	(0.157)	(0.694)	(0.130)	(0.734)
Board Size	0.039	0.005	0.044	0.004
	(0.882)	(1.103)	(0.976)	(1.065)
Board Independence	-0.871	-0.109	-0.904	-0.114
	(-0.892)	(-1.465)	(-0.923)	(-1.522)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	5,306	5,306	5,306	5,306
R-squared	0.723	0.673	0.725	0.673

Panel E: Stacked PSM-DID analysis on the first-time ESG incident for H1 and H2

Variables	Tgtpayout_Earnings	Weight_Earnings	Tgtpayout_Earnings	Weight_Earnings
	(1)	(2)	(3)	(4)
Post	-0.455***	-0.033*	-0.569**	-0.057**
	(-2.765)	(-1.914)	(-2.515)	(-2.427)
Post × Hi_ConSen			0.862**	0.117**
			(2.437)	(2.496)
Firm Size	0.715***	0.024***	0.642**	0.015
	(7.533)	(3.619)	(2.438)	(0.795)
Leverage	-0.479*	-0.028	-0.631	-0.034
	(-1.660)	(-1.166)	(-0.821)	(-0.515)
Market-to-book	-0.001	-0.000	-0.000	-0.000
	(-0.324)	(-0.652)	(-0.116)	(-0.465)
Loss	-0.252***	-0.043***	-0.259*	-0.046***
	(-4.562)	(-7.070)	(-1.817)	(-2.721)
Strategy	1.916***	0.114**	1.446	0.126
	(3.031)	(2.333)	(0.822)	(0.917)
Sales Growth	-0.347***	-0.008	-0.259	-0.007
	(-2.880)	(-1.119)	(-0.761)	(-0.358)
ROA	1.856***	0.102***	1.581	0.112
	(4.596)	(3.238)	(1.434)	(1.261)
Stock Return	-0.123**	-0.002	-0.094	-0.001
	(-2.552)	(-0.527)	(-0.785)	(-0.118)
CEO Duality	-0.132	-0.003	-0.142	0.000
	(-1.607)	(-0.386)	(-0.595)	(0.017)
CEO Tenure	0.000	0.000	-0.001	0.000
	(0.021)	(0.132)	(-0.105)	(0.193)
Board Size	-0.033	0.004**	-0.019	0.005
	(-1.641)	(2.080)	(-0.349)	(0.827)
Board Independence	-0.343	-0.10***	-0.523	-0.107
	(-0.827)	(-2.991)	(-0.456)	(-1.163)
Cohort × Firm FE	Yes	Yes	Yes	Yes
Cohort × Year FE	Yes	Yes	Yes	Yes

Variables	Tgtpayout_Earnings	Weight_Earnings	Tgtpayout_Earnings	Weight_Earnings
	(1)	(2)	(3)	(4)
Observations	26,860	26,860	26,860	26,860
R-squared	0.780	0.712	0.750	0.681

Notes: This table reports the regression results of DID analyses. Panel A shows the result of the two-way fixed effect DID regression using all the ESG incident events and Panel B displays the effect of whether firms are in consumer-sensitive industries. Variable *Post_Y1* takes the value of one if a firm experiences at least one high-reach and novel ESG incident in the current year or the previous year. Variables *Post_Y2* and *Post_Y3* are constructed accordingly. Panels C and D present the staggered PSM-DID regression results on the first-time ESG incident after PSM on previous-year earnings and firm characteristics, as well as the parallel trend tests. Variable *Post* takes the value of one in the year of the first-time ESG incident and all subsequent years, and zero otherwise. Panel E reports the results of stacked DID regressions after PSM. Two-way fixed effect DID and staggered PSM-DID regressions are estimated with the firm- and year-fixed effects included while stacked DID regressions are estimated with cohort*firm- and cohort*year-fixed effects. The standard errors in all specifications are clustered by firm, and the robust *t* statistics are reported in parentheses. *, **, and ***, represent significance at the 10%, 5%, and 1% levels, respectively. All variable definitions are summarized in Appendix B.

Table 4 Empirical Results of Entropy Balancing Approach

Panel A: Descriptive statistics before entropy balancing

Variables	ESG Incident firms			Non-ESG incident firms		
	Mean	Variance	Skewness	Mean	Variance	Skewness
Firm Size	9.011	1.792	0.061	7.829	1.202	-0.145
Leverage	0.297	0.039	0.928	0.266	0.043	0.779
Market-to-book	4.372	101.900	1.509	4.706	84.840	1.838
Loss	0.213	0.168	1.396	0.229	0.177	1.292
Strategy	0.256	0.055	1.236	0.243	0.047	1.323
Sales Growth	0.073	0.049	1.467	0.098	0.062	1.898
ROA	0.055	0.008	-1.497	0.046	0.010	-1.858
Stock Return	0.152	0.168	1.242	0.181	0.197	1.255
CEO Duality	0.483	0.250	0.068	0.406	0.241	0.385
CEO Tenure	4.725	22.360	1.892	5.187	22.540	1.592
Board Size	10.280	3.992	0.057	9.199	3.168	0.198
Board Independence	0.829	0.010	-1.598	0.813	0.012	-1.466

Panel B: Descriptive statistics after entropy balancing

Variables	ESG Incident firms			Non-ESG incident firms		
	Mean	Variance	Skewness	Mean	Variance	Skewness
Firm Size	9.011	1.792	0.061	9.011	1.795	0.059
Leverage	0.297	0.039	0.928	0.297	0.039	0.928
Market-to-book	4.372	101.900	1.509	4.374	102.000	1.510
Loss	0.213	0.168	1.396	0.214	0.168	1.395
Strategy	0.256	0.055	1.236	0.256	0.055	1.236
Sales Growth	0.073	0.049	1.467	0.073	0.049	1.467
ROA	0.055	0.008	-1.497	0.055	0.008	-1.499
Stock Return	0.152	0.168	1.242	0.152	0.168	1.243
CEO Duality	0.483	0.250	0.068	0.483	0.250	0.068
CEO Tenure	4.725	22.360	1.892	4.726	22.380	1.892
Board Size	10.280	3.992	0.057	10.280	3.994	0.057
Board Independence	0.829	0.010	-1.598	0.829	0.010	-1.598

Panel C: Regression results after entropy balancing

Variables	Tgtpayout_Earnings$_{t+1}$ (1)	Weight_Earnings$_{t+1}$ (2)	Tgtpayout_Earnings$_{t+1}$ (3)	Weight_Earnings$_{t+1}$ (4)
ESG_Inc	-0.706***	-0.076***	-0.864***	-0.091***
	(-3.898)	(-3.434)	(-4.174)	(-3.715)
ESG_Inc × Hi_ConSen			0.868**	0.079**
			(2.539)	(1.967)
Firm Size	0.764***	0.017	0.765***	0.017
	(9.583)	(1.557)	(9.621)	(1.573)
Leverage	0.722*	0.047	0.716*	0.047
	(1.838)	(0.856)	(1.820)	(0.848)
Market-to-book	-0.016***	-0.001**	-0.016***	-0.001**
	(-3.143)	(-2.206)	(-3.107)	(-2.182)
Loss	-0.581***	-0.094***	-0.582***	-0.094***
	(-3.278)	(-3.938)	(-3.283)	(-3.936)
Strategy	-0.354	-0.044	-0.354	-0.044
	(-0.489)	(-0.549)	(-0.490)	(-0.550)
Sales Growth	-1.459***	-0.031	-1.465***	-0.031
	(-3.687)	(-0.700)	(-3.706)	(-0.712)
ROA	9.208***	0.383***	9.211***	0.383***
	(7.121)	(3.047)	(7.123)	(3.044)
Stock Return	0.108	0.002	0.108	0.002
	(0.592)	(0.114)	(0.588)	(0.108)
CEO Duality	0.063	0.030	0.061	0.029
	(0.371)	(1.388)	(0.359)	(1.379)
CEO Tenure	0.003	0.004**	0.003	0.004**
	(0.180)	(2.128)	(0.182)	(2.129)
Board Size	0.139***	0.017**	0.138***	0.017**
	(2.628)	(2.250)	(2.628)	(2.250)
Board Independence	0.910	-0.202**	0.908	-0.203**
	(0.942)	(-2.013)	(0.941)	(-2.018)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	6,344	6,344	6,344	6,344

Variables	Tgtpayout_Earnings$_{t+1}$ (1)	Weight_Earnings$_{t+1}$ (2)	Tgtpayout_Earnings$_{t+1}$ (3)	Weight_Earnings$_{t+1}$ (4)
R-squared	0.283	0.204	0.283	0.205

Notes: This table reports the regression results after entropy balancing. Panels A and B show the descriptive statistics on firm characteristics on three moments (mean, variance and skewness) between firms with vs. without ESG incidents before and after entropy balancing, respectively. Panel C displays the regression result after entropy balancing. All regressions are estimated with industry- and year-fixed effects included. The standard errors in all specifications are clustered by firm, and the robust *t* statistics are reported in parentheses. *, **, and ***, represent significance at the 10%, 5%, and 1% levels, respectively. All variable definitions are summarized in Appendix B.

Table 5 Empirical Results of Instrumental Variable Approach

Panel A: First-stage regressions

Variables	ESG_Inc (Pobit) (1)	ESG_Inc × Hi_ConSen (2)
ESG_Inc_Local	3.465***	-0.029
	(2.623)	(-0.630)
ESG_Inc_Local × Hi_ConSen		1.480***
		(2.812)
Firm Size	0.463***	0.013***
	(13.497)	(3.740)
Leverage	-0.087	0.008
	(-0.450)	(0.586)
Market-to-book	-0.002	-0.000
	(-0.780)	(-0.457)
Loss	-0.004	0.003
	(-0.046)	(0.466)
Strategy	-0.382	-0.041**
	(-1.637)	(-2.153)
Sales Growth	-0.394**	0.002
	(-2.491)	(0.289)
ROA	0.926*	-0.001
	(1.748)	(-0.058)
Stock Return	0.051	0.001
	(0.563)	(0.244)
CEO Duality	-0.004	0.006
	(-0.069)	(1.179)
CEO Tenure	0.002	0.000
	(0.330)	(0.677)
Board Size	0.022	0.002*
	(1.163)	(1.688)
Board Independence	-0.184	-0.026
	(-0.579)	(-1.186)
Industry FE	Yes	Yes
Year FE	Yes	Yes
Observations	5,947	6,172
(pseudo) R-squared	0.256	0.291

Panel B: Second-stage regressions

Variables	$Tgtpayout\_Earnings_{t+1}$ (1)	$Weight\_Earnings_{t+1}$ (2)	$Tgtpayout\_Earnings_{t+1}$ (3)	$Weight\_Earnings_{t+1}$ (4)
Fitted (ESG_Inc)	-3.977**	-0.241*	-4.888**	-0.362***
	(-2.368)	(-1.822)	(-2.437)	(-2.758)
Fitted (ESG_Inc × Hi_ConSen)			11.463*	1.529**
			(1.959)	(2.091)
Firm Size	2.494***	0.119*	2.751***	0.153***
	(3.200)	(1.925)	(3.197)	(2.628)
Leverage	0.432	0.045	0.295	0.027
	(0.897)	(0.995)	(0.581)	(0.581)
Market-to-book	-0.024***	-0.002***	-0.024***	-0.002***
	(-3.286)	(-2.810)	(-3.329)	(-2.943)
Loss	-0.620***	-0.061***	-0.656***	-0.066***
	(-3.370)	(-4.083)	(-3.570)	(-4.363)
Strategy	-1.293	-0.018	-1.108	0.007
	(-1.303)	(-0.206)	(-1.158)	(0.076)
Sales Growth	-3.353***	-0.187***	-3.740***	-0.239***
	(-4.538)	(-3.520)	(-4.342)	(-4.466)
ROA	13.344***	0.682***	14.175***	0.793***
	(6.917)	(5.101)	(6.585)	(6.012)
Stock Return	0.219	0.005	0.249	0.009
	(1.205)	(0.438)	(1.325)	(0.768)
CEO Duality	0.086	0.039**	0.023	0.030*
	(0.500)	(2.285)	(0.128)	(1.715)
CEO Tenure	0.023	0.005***	0.024	0.005***
	(1.388)	(2.895)	(1.405)	(2.915)
Board Size	0.225***	0.017***	0.223***	0.017***
	(3.300)	(3.032)	(3.365)	(3.132)
Board Independence	-0.261	-0.298***	-0.145	-0.283***
	(-0.236)	(-3.180)	(-0.131)	(-3.008)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	5,947	5,947	5,947	5,947

Variables	Tgtpayout_Earnings$_{t+1}$ (1)	Weight_Earnings$_{t+1}$ (2)	Tgtpayout_Earnings$_{t+1}$ (3)	Weight_Earnings$_{t+1}$ (4)
R-squared	0.300	0.206	0.302	0.210

Notes: This table shows the empirical results of 2SLS regression using local other-industry firms' average number of ESG incidents (*ESG_Inc_Local*) as instrumental variable. Panel A summarizes the first-stage regression results, and Panel B summarizes the second-stage regressions using the fitted values from first-stage regressions as independent variable. All regressions are estimated with industry- and year-fixed effects included. The standard errors in all specifications are clustered by firm, and the robust *t* statistics are reported in parentheses. *, **, and ***, represent significance at the 10%, 5%, and 1% levels, respectively. All variable definitions are summarized in Appendix B.

Table 6 Empirical Results of Other Compensation Design Choices

Variables	Tgtpayout_Total$_{t+1}$	Tgtpayout_Market$_{t+1}$	Tgtpayout_ESG$_{t+1}$
	(1)	(2)	(3)
ESG_Inc	0.009	0.437	0.817***
	(0.260)	(1.252)	(2.696)
Firm Size	0.390***	0.793***	0.162
	(20.399)	(4.447)	(1.079)
Leverage	0.040	-1.235	-0.141
	(0.378)	(-1.406)	(-0.188)
Market-to-book	0.003**	0.003	0.000
	(2.055)	(0.286)	(0.042)
Loss	0.001	-0.106	0.013
	(0.029)	(-0.346)	(0.049)
Strategy	-0.202*	2.038	1.542
	(-1.693)	(1.447)	(1.343)
Sales Growth	-0.231***	-1.434***	0.172
	(-3.614)	(-3.193)	(0.429)
ROA	0.699***	-1.905	-1.439
	(3.802)	(-1.282)	(-1.170)
Stock Return	0.149***	0.198	-0.283
	(4.865)	(0.934)	(-1.591)
CEO Duality	0.038	-0.288	-0.478*
	(0.951)	(-0.825)	(-1.691)
CEO Tenure	0.004	-0.076**	-0.034
	(1.012)	(-2.419)	(-1.323)
Board Size	0.018	-0.072	0.061
	(1.565)	(-0.698)	(0.754)
Board Independence	1.171***	8.458***	4.727***
	(5.653)	(5.698)	(3.547)
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	6,344	6,344	6,344

Variables	Tgtpayout_Total$_{t+1}$	Tgtpayout_Market$_{t+1}$	Tgtpayout_ESG$_{t+1}$
	(1)	(2)	(3)
Wald chi2	0.470	0.176	0.133

Notes: This table reports empirical results on other elements in CEO compensation design choices following ESG incidents. *Tgtpayout_Total* represents the total target payout of a CEO's performance-based grants. *Tgtpayout_Market* represents the target payout that a CEO receives from achieving market-related goals. *Tgtpayout_ESG* represents the target payout that a CEO receives from achieving ESG-related goals. All regressions are estimated with industry- and year-fixed effects included. The standard errors in all specifications are clustered by firm, and the robust *t* statistics are reported in parentheses. *, **, and ***, represent significance at the 10%, 5%, and 1% levels, respectively. All variable definitions are summarized in Appendix B.

Table 7 Empirical Results of Shareholder Value and Future Performance

Variables	$\Delta Tobin's\ Q_{t+1}$	$\Delta Dissent_{t+1}$	$Avg\_Incidents_{t+2}$	$\Delta Tobin's\ Q_{t+1}$	$\Delta Dissent_{t+1}$	$Avg\_Incidents_{t+2}$
	(1)	(2)	(3)	(4)	(5)	(6)
Earnings_Down × ESG_Inc	0.091**	-0.037**	-0.137**	0.091**	-0.036**	-0.139**
	(1.985)	(-2.032)	(-2.008)	(1.995)	(-2.002)	(-2.042)
ESG_Up × ESG_Inc				-0.009	-0.001	-0.027
				(-0.211)	(-0.033)	(-0.353)
Earnings_Down	-0.039**	0.014**	0.017	-0.039**	0.014**	0.016
	(-2.421)	(2.333)	(0.963)	(-2.427)	(2.353)	(0.908)
ESG_Inc	-0.051*	0.004	0.721***	-0.049	0.004	0.725***
	(-1.787)	(0.563)	(11.946)	(-1.510)	(0.544)	(10.898)
ESG_Up				0.001	-0.009*	0.085***
				(0.029)	(-1.820)	(3.262)
Firm Size	-0.020**	-0.000	0.439***	-0.020**	-0.000	0.439***
	(-2.252)	(-0.137)	(19.230)	(-2.251)	(-0.143)	(19.303)
Leverage	0.102	0.003	-0.227**	0.102	0.003	-0.227**
	(1.412)	(0.382)	(-2.455)	(1.409)	(0.348)	(-2.454)
Market-to-book	-0.000	-0.000	0.002*	-0.000	-0.000	0.002*
	(-0.160)	(-0.367)	(1.767)	(-0.159)	(-0.356)	(1.769)
Loss	-0.035*	-0.016**	0.113***	-0.036*	-0.016**	0.113***
	(-1.797)	(-2.504)	(3.977)	(-1.800)	(-2.460)	(3.999)
Strategy	-0.119**	-0.019**	0.049	-0.118**	-0.018**	0.045
	(-2.210)	(-2.245)	(0.347)	(-2.210)	(-2.115)	(0.317)
Sales Growth	-0.179***	0.006	-0.129***	-0.178***	0.007	-0.134***
	(-2.977)	(0.512)	(-2.687)	(-2.966)	(0.579)	(-2.785)
ROA	-0.289*	-0.005	-0.048	-0.290*	-0.006	-0.042
	(-1.962)	(-0.186)	(-0.288)	(-1.962)	(-0.216)	(-0.252)
Stock Return	-0.076**	-0.022***	0.021	-0.076**	-0.023***	0.022
	(-2.063)	(-3.204)	(1.128)	(-2.065)	(-3.213)	(1.155)
CEO Duality	-0.007	-0.003	0.066**	-0.007	-0.003	0.069**
	(-0.370)	(-0.789)	(2.011)	(-0.370)	(-0.866)	(2.097)
CEO Tenure	-0.000	0.001**	-0.005*	-0.000	0.001**	-0.004*
	(-0.078)	(2.142)	(-1.861)	(-0.081)	(2.032)	(-1.738)

Variables	ΔTobin's Q_{t+1}	ΔDissent$_{t+1}$	Avg_Incidents$_{t+2}$	ΔTobin's Q_{t+1}	ΔDissent$_{t+1}$	Avg_Incidents$_{t+2}$
	(1)	(2)	(3)	(4)	(5)	(6)
Board Size	-0.002	-0.001	0.013	-0.002	-0.001	0.013
	(-0.430)	(-0.546)	(1.208)	(-0.426)	(-0.502)	(1.164)
Board Independence	0.037	-0.040**	0.477***	0.038	-0.038**	0.457***
	(0.537)	(-2.269)	(3.267)	(0.534)	(-2.138)	(3.129)
F-stat for (coef. on Earnings_Down × ESG_Inc + coef. on ESG_Inc = 0)	1.04	4.18	80.44	1.07	3.63	74.51
Prob > F	0.309	0.041	0.000	0.301	0.058	0.000
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,336	4,089	6,340	6,336	4,089	6,340
R-squared	0.130	0.036	0.665	0.130	0.037	0.666

Notes: This table provides empirical results on future ESG incidents and shareholder value. *Earnings_Down* equals to 1 if the change in the importance of earnings metrics is in the bottom quartile of the sample, while *ESG_Up* equals to 1 if the change in the importance of ESG-related metrics is in the top quartile of the sample, and zero otherwise. All regressions are estimated with industry- and year-fixed effects included. The standard errors in all specifications are clustered by firm, and the robust *t* statistics are reported in parentheses. *, **, and ***, represent significance at the 10%, 5%, and 1% levels, respectively. All variable definitions are summarized in Appendix B.