

The moderating effect of CEO incentives and ideology in shaping the association between ESG performance and financial success

Maria Cristina Dorobantu, Sanjay Bissessur

Received 23 July 2024 | Accepted 3 March 2025 | Published 30 June 2025

Abstract

Financial incentives and personal ideologies play a pivotal role in shaping firm outcomes. Analyzing data from North American firms between 2010 and 2019, our results show that ESG-aligned compensation is significantly associated with ESG performance, suggesting effective incentive structuring. We also find a positive relationship between improved ESG performance and enhanced financial returns, highlighting the economic benefits of sustainable practices. CEOs with pro-sustainability values can more effectively translate ESG objectives into financial returns. Conversely, the independence of the board of directors shows a limited effect, with firms with more independent boards displaying a slightly higher relationship between ESG performance and financial outcomes.

Relevance to practice

Firms that aim to enhance their sustainability performance through compensation agreements should tie a portion of CEO remuneration to ESG targets. Our findings demonstrate that such incentive structures can significantly boost ESG performance and improve financial returns. The financial benefits derived from robust ESG practices can outweigh the initial investment costs.

Keywords

ESG performance, financial performance, CEO compensation, political ideology, corporate governance

1. Introduction

ESG performance has become a crucial metric for evaluating a company's commitment to environmental preservation and social responsibility. A strong ESG score, reflecting a company's environmental stewardship and social accountability, not only highlights its dedication to sustainable practices but also its potential to reduce market volatility and information asymmetry. Furthermore, companies that excel in ESG are likely to face lower litigation risks related to environmental damage (Chen et al. 2023). This growing emphasis on ESG matters demonstrates the critical role of sustainability performance in today's corporate landscape, emphasized by increasing stakeholder pressure for transparency and accountability in ESG disclosures.

The growing emphasis on ESG matters and the demand for sustainability performance are increasingly influencing corporate governance, specifically in how companies structure executive compensation. A study from the Harvard Law School Forum on Corporate Governance highlights this trend, showing a rise in S&P 500 companies incorporating ESG metrics into executive pay, from 66% in 2020 to 73% in 2021 (Bebchuk and Fried 2022).

Another study by Tsang et al. (2021) reveals that incorporating corporate social responsibility (CSR) criteria into executive compensation is positively associated with increased innovation output globally. The strength of this association is found to be greater in countries with weaker stakeholder orientation, weaker legal frameworks, and

the absence of mandatory CSR reporting. These results suggest that CSR-based compensation can address institutional gaps and respond to heightened stakeholder demand for CSR, thereby driving innovation within firms. Overall, this research underscores the global importance of linking executive compensation to both financial and non-financial criteria and highlights the varying impact of CSR contracting on innovation across different national contexts. Thus, we believe that the integration of ESG metrics within corporate governance frameworks underscores a shift towards sustainability, driven by global mandates and stakeholder pressures. This study examines the relation between CEO remuneration strategies and corporate sustainability performance, anchoring its analysis within agency theory and the broader discussion on incentive alignment and executive decision-making.

We find that the incorporation of ESG-oriented incentives into CEO compensation packages results in significant improvements in ESG performance. Furthermore, the research demonstrates a significant positive impact of ESG performance on a company's financial outcomes. This finding aligns with the growing discussion within corporate governance that sustainable practices are fundamental, not merely supplementary to core business strategies.

In addition, research indicates that an executive's political leanings might explain a company's commitment to ESG goals. Studies have investigated how CEOs' political ideologies (ranging from conservative to liberal) shape their approach to corporate social responsibility (CSR), revealing that a CEO's political orientation can significantly influence their organization's CSR activities (Chin et al. 2013; Markoczy et al. 2023). Such findings highlight that the political beliefs of CEOs, reflecting their core personal values and convictions, have profound effects on their management styles and, by extension, on their companies' engagement in sustainability and social responsibility initiatives. We find mixed results that the political orientations of executives are a critical element in understanding the broader spectrum of incentives that drive them towards ESG performance.

We also explore the role of board independence in shaping executive compensation frameworks. Boards composed predominantly of independent directors are considered proficient in crafting compensation schemes that align executive behaviors with shareholder interests. This alignment is expected to ensure that governance mechanisms extend beyond financial performance to encompass sustainable and socially responsible practices. We examine if the presence of independent directors enhances the oversight necessary for aligning CEO behavior with both shareholder wealth and ESG objectives. However, we find only limited evidence on the role of board independence.

Contribution to literature

This study contributes to the literature in several ways. First, it contributes to the literature on incentive contracting. Linking executive compensation to ESG performance

represents an evolution of the well-known practice of aligning executive pay with financial outcomes. Compensation mechanisms are designed to motivate executives to act in shareholders' best interests, primarily through financial incentives that enhance shareholder wealth (Bebchuk and Fried 2003; Jensen and Murphy 1990). We show that incorporating ESG metrics as part of the executive compensation framework reflects a broader understanding of value maximization that includes sustainability and corporate responsibility. Our results suggest that, just as equity-based compensation and bonuses have been used to align executives' actions with financial goals, the integration of ESG criteria serves to align executives' decisions with the growing importance of environmental, social, and governance concerns. In line with these findings, Flammer et al. (2019) also demonstrate that CSR contracting mitigates corporate short-termism, enhances business performance, and drives improvements in environmental and social outcomes, particularly regarding local communities and the environment. Their research underscores how CSR contracting can refocus management's attention on long-term, financially material stakeholders, thus improving both governance and a firm's societal and environmental impact.

Second, this study extends the literature on the consequences of CEO incentives, including the impact of their political affiliations, by investigating the underlying motivations that drive executives' pursuit of ESG achievements. Studies have investigated how CEOs' political ideologies (ranging from conservative to liberal) shape their approach to corporate social responsibility (CSR), revealing that a CEO's political orientation can significantly influence their organization's CSR activities (Chin et al. 2013; Markoczy et al. 2023). Such findings highlight that the political beliefs of CEOs, reflecting their core personal values and convictions, have profound effects on their management styles and, by extension, on their companies' engagement in sustainability and social responsibility initiatives. Our study contributes to the existing literature by examining the consequences of CEO incentives, specifically, the impact of direct compensation and political ideology, on a company's ESG performance.

Finally, our study contributes to the literature on corporate governance, with a particular focus on the effect of increased board independence in shaping executive compensation frameworks. Boards composed predominantly of independent directors noted for their impartiality and extensive experience, are considered proficient in crafting compensation schemes that align executive behaviors with shareholder interests. This alignment is expected to ensure that governance mechanisms extend beyond financial performance to encompass sustainable and socially responsible practices. Board independence, while crucial for effective governance, may not necessarily enhance the financial benefits derived from strong ESG performance. This analysis highlights that the role of board independence in influencing financial outcomes through ESG practices is complex and possibly overshadowed by broader environmental and economic conditions.

2. Overview of literature and hypothesis development

2.1. The importance of ESG performance

The significance of Environmental, Social, and Governance (ESG) matters has dramatically increased in recent years, driven by the global push for corporate social responsibility and the interconnected nature of global economies. Initiatives such as the United Nations' Principles for Responsible Investment in 2006 and the Paris Agreement in 2015 have set a global precedent, urging companies and investors to incorporate ESG factors into their decision making process.

This shift is also accentuated by the adoption of ESG disclosure mandates and guidelines by numerous stock exchanges worldwide, reflecting a broader commitment to sustainability. A total of 130 stock exchanges worldwide have become signatories to the Sustainable Stock Exchange Initiative (SSEI). Among these exchanges, 34 have mandated ESG (Environmental, Social, and Governance) disclosure for listed companies, while 72 exchanges have developed guidelines pertaining to ESG disclosure (SSEI 2024).

The ESG performance of companies is progressively becoming a key metric for assessing their dedication to environmental conservation and social accountability. ESG considerations are factored into assessments of ESG performance, wherein a company's ESG score indicates its level of environmental and social awareness. A strong ESG performance by a company not only signifies its commitment to social and environmental responsibility but also contributes to reducing information asymmetry and market volatility. Furthermore, businesses with high ESG ratings are less susceptible to litigation risks due to their initiatives aimed at mitigating environmental harm (Chen et al. 2023).

2.2. CEO incentives

2.2.1. Financial incentives

Compensation agreements incorporating equity-based instruments and incentive bonuses establish a correlation between the remuneration of senior executives and shareholder value. However, for such contracts to act as efficient incentives, there must be a link between executive compensation and firm performance (Chulkov and Barron 2023). Prior literature has shown that executive compensation is strongly and positively related to corporate performance, as measured by shareholder return and growth in firm sales (Murphy 1985).

In the light of the global emphasis on Environmental, Social, and Governance (ESG) performance, we propose that aligning executive compensation with ESG metrics may enhance a company's ESG outcomes. First, this alignment could incentivize executives to prioritize ESG objectives, potentially leading to improved sustainability practices within the organization. Second, according to the

stakeholder value maximization perspective, engaging in Environmental, Social, and Governance (ESG) activities positively impacts shareholder wealth. (Deng et al. 2013). According to the stakeholder value maximization perspective, this strategic alignment is anticipated to yield enhanced financial returns for firms. Therefore, our first hypothesis is:

H1: ESG compensation moderates the effect of ESG performance on Financial Performance.

2.2.2. Political ideology

Executives' political ideologies, particularly their orientation along the conservatism-liberalism spectrum, play a significant role in their management practices. The position of CEOs on this spectrum mirrors their fundamental personal convictions and values, encompassing a predilection for social justice, equality, and diversity at the liberal end, and a preference for market-based principles and societal hierarchy at the conservative end (Markoczy et al. 2023). Furthermore, research in political psychology indicates that business leaders, including top executives, exhibit a range of political ideologies, which for some, form an integral component of their personal convictions and identities (Chin et al. 2013). Consequently, it can be inferred that the political ideologies of CEOs are likely to have widespread implications.

Chin et al. (2013) have also explored how the political ideologies of CEOs, delineated as conservatism versus liberalism, affected organizational outcomes and found that a CEO's political orientation significantly impacts their company's engagement in corporate social responsibility (CSR) initiatives. Building on this, our second hypothesis suggests a three-way interaction, as it posits that the effect of ESG performance on financial performance is moderated by both ESG compensation and the CEO's political ideology. Specifically, the relationship between ESG performance and financial performance is influenced not only by the presence of ESG-related compensation but also by the alignment of the CEO's political orientation with ESG initiatives. Thus, the hypothesis suggests that ESG compensation will have a more pronounced impact on the relationship between ESG performance and financial performance when the CEO's political ideology supports ESG goals. This highlights the significant role of CEO political ideology in moderating this relationship, resulting in a three-way interaction among these factors.

H2: ESG compensation moderates the effect of ESG performance on Financial Performance if the CEO's political ideology supports ESG.

2.3. Board of directors

The board of directors fulfills a dual function, simultaneously overseeing the firm's management and offering guidance on critical strategic decisions. This dual role allows the board to both scrutinize managerial actions and

contribute expert advice on essential corporate matters. The principal function of the monitoring segment of the board is to elucidate information controlled by the CEO, whereas the advisory segment is tasked with identifying and acquiring incremental information pertinent to decision-making (Baldenius et al. 2014).

Prior research (Cornett et al. 2008; Ryan and Wiggins 2004) supports the prevalent belief that the independence of a board of directors enhances shareholder welfare. Independent directors possess a better bargaining position over the CEO, leading to a compensation structure that is more closely aligned with the objectives of shareholders. In a scenario where the shareholders' objective is to enhance sustainability performance, a more independent board can facilitate a closer alignment of shareholder objectives with those of the CEO through equitable compensation agreements. Thus, our third hypothesis posits a three-way interaction: ESG compensation moderates the effect of ESG performance on financial performance, contingent upon the strength of the board of directors. Specifically, the hypothesis suggests that the presence of strong board independence will amplify the effect of ESG compensation on the relationship between ESG performance and financial performance. This implies that a more independent board plays a crucial role in moderating the relationship, creating a dynamic interaction among ESG compensation, ESG performance, and board strength.

H3: ESG compensation moderates the effect of ESG performance on Financial Performance if the company has a strong Board of Directors.

3. Research design

Data is collected from the Wharton Research Data Services (WRDS) database. ESG performance and executive compensation data comes from Sustainalytics, while financial data comes from Compustat. Data pertaining to the composition of a company's Boards of Directors comes from BoardEx, while insights into executives' political ideologies are extracted from previous research (Christensen et al. 2015; Graffin et al. 2020). The sample consists of 3,999 observations, representing 556 distinct firms, analyzed through the period 2010 to 2019. The research is confined to the year 2019 due to a methodological change by Sustainalytics in 2020, which excluded ESG Compensation from their datasets. This research focuses exclusively on North American companies due to the availability of data on executives' political orientation, which is categorized as either Democrat-leaning or Republican-leaning.

ESG performance is measured through ESG scores ranging from 0 to 100, where higher scores signify higher performance. Financial Performance is calculated as Return on Assets (ROA). ESG Compensation is implemented as a dummy variable which takes the value of 1 for firms incorporating ESG-related targets into their

executive compensation schemes, and 0 otherwise. Executive political orientation is operationalized as a dummy variable where 1 indicates a Democratic-leaning executive and 0 represents a Republican-leaning executive, reflecting the hypothesis that ESG compensation's effectiveness may vary with the executive's political alignment towards sustainability. Data regarding executive political ideology is derived from the methodology outlined in the study by Christensen et al. (2015), where political ideology is quantified using a score based on the CEO's financial contributions to either the Democratic or Republican Party. Based on these contributions, Christensen et al. (2015) classify CEOs as either Democrat-leaning or Republican-leaning, providing a framework for assessing the political orientation of executives. Additionally, the independence of the board of directors is evaluated based on the proportion of independent directors relative to the total board size. This proportion is dichotomized, assigning a value of 1 to boards with above-median levels of independence (deemed stronger) and 0 to those below (considered weaker).

We control for seven variables to account for exogenous factors that could influence the relationship between the dependent and independent variables. Firstly, in alignment with previous research (Hong et al. 2016), we consider the most widely recognized determinant of executive compensation, specifically firm size measured by the natural logarithm of the firm's total assets. Additionally, existing literature identifies book-to-market ratio and leverage as critical control variables (Deng et al. 2013). We also control for the dual role of the CEO as both the Chief Executive Officer and the Chairman of the Board. This duality may compromise the independence and effectiveness of the board of directors, as suggested by prior research (Ryan and Wiggins 2004). This variable is represented as a dummy variable, with a value of 1 indicating that the CEO also serves as the Chairman of the Board, and 0 otherwise. Additionally, board size is controlled for and quantified as the total number of directors. Furthermore, we control for the auditor of the company in our analysis. The variable Big 4 is a dummy variable that takes the value of 1 if the company is audited by one of the Big 4 accounting firms (PricewaterhouseCoopers, KPMG, Ernst & Young, and Deloitte Touche Tohmatsu), and 0 otherwise. Lastly, enterprises operating within environmentally sensitive industries face widespread societal taboos, moral debates, and political pressures. In addition to this, they are regularly confronted with claims of greenwashing. As a result, they are highly motivated to achieve a better Environmental, Social, and Governance (ESG) score, and, in turn, they are more likely to incentivize their executives to achieve these goals. According to prior research (Ruiz-Blanco et al. 2022), environmentally sensitive industries include pharmaceuticals, chemicals, mining, metals, paper, transportation, petroleum, and utilities. Therefore, the variable ESI is included in the analysis, taking the value of 1 for companies that operate within these industries and 0 otherwise.

Table 1. Variable descriptions.

Variable Name	Variable Description	Source	Data Code
ESG Performance	Total ESG Score	Sustainalytics Historical Weighted Scores	total_esg_score
Financial Performance	Return on Assets, calculated as the net income of the company divided by the total assets	Compustat North America	roa
ESG Compensation	A dummy variable that takes the value of 1 for companies incorporating ESG Compensation and 0 otherwise	Sustainalytics Historical Weighted Scores	G_2_6
Political Orientation	A dummy variable that takes the value of 1 for CEOs who are Democrat-leaning and 0 otherwise	Christensen et al. (2015); Graffin et al. (2020)	Politics
Board Independence	A dummy variable that takes the value of 1 for stronger boards of directors and 0 otherwise	BoardEx	NED
Firm Size	The natural logarithm of total assets	Compustat North America	at
Book to Market	The book value of equity divided by the market value of equity	Compustat North America	bm
Leverage	Total long-term debt of the firm divided by the total assets	Compustat North America	debt_assets
CEO Duality	A dummy variable that takes the value of 1 if the CEO is also chairman of the board and 0 otherwise	Compustat North America	ceoann
Board Size	Total number of directors	BoardEx	directorid
Big4	A dummy variable that takes the value of 1 if the company is audited by a Big4 auditor and 0 otherwise	Compustat North America	au
ESI	A dummy variable that takes the value of 1 if the company operates in an environmentally sensitive industry and 0 otherwise	Compustat North America	sic

All continuous variables are winsorized at the 1% and 99% percentiles. Industry-fixed effects and year-fixed effects have been included in the analysis to control for unobserved heterogeneity and to capture temporal and sectoral variations that could influence the dependent variable. Industry-fixed effects account for unobserved, time-invariant factors unique to each industry, such as regulations, competitive dynamics, technological advancements, or market structure. Year-fixed effects account for unobserved, industry-invariant factors that vary over time, including macroeconomic trends, inflation, regulatory changes, and global economic events. In addition to including fixed effects, the observations have been clustered by Firm ID in the regression model to adjust for within-firm error correlation (Petersen 2009).

We believe that the use of a contemporaneous model is appropriate for examining the relationship between ESG compensation and ESG performance, as it captures how variables are related within the same time period, reflecting immediate or simultaneous associations. In this context, the structure of ESG compensation packages is often closely tied to the current state of ESG performance metrics, with boards and executives adjusting compensation incentives in real-time to align with organizational goals. Furthermore, the existence of ESG-linked compensation can encourage executives to adopt behaviors that enhance ESG performance in the short term. Given that ESG compensation policies are typically designed to motivate improvements within the current fiscal year, a contemporaneous approach is particularly relevant for analyzing these immediate effects. Additionally, CEOs are often aware of their performance targets for the current year at the outset, as these metrics are typically defined and communicated at the beginning of the compensation cycle. This foresight provides executives with clear objectives tied directly to their compensation packages, making them more inclined to focus

on achieving their current-year targets. Consequently, ESG-linked incentives are likely to influence real-time decision-making and actions, reinforcing the appropriateness of a contemporaneous model for analyzing the association between ESG compensation and ESG performance. By adopting this approach, we aim to capture the immediate dynamics between these variables, shedding light on how incentive structures drive short-term organizational outcomes. Table 1 provides the variable names along with their descriptions.

4. Results

4.1. Descriptive statistics

The summary statistics presented in Table 2 provide a comprehensive snapshot of the sampled firms, indicating varied practices and outcomes in environmental, social, and governance (ESG) efforts. The average ESG performance score of 56.732, with a broad range from 40 to 77.8, highlights the disparity in ESG practices among firms, reflecting varied commitment levels and execution strategies. Notably, approximately 22% of companies incorporate ESG metrics into their compensation schemes, suggesting an emerging trend to align executive incentives with sustainability goals. The average financial performance (Return on Assets) is 0.134 (13,4%). The political orientation variable, with an average of 0.338, suggests that a significant portion of executives may favor policies supportive of ESG principles, which could influence corporate strategies toward sustainability. Board independence is notably high, with a mean score of 0.733, suggesting that the governance structures of most firms support unbiased decision making and oversight, a crucial factor in effective ESG integration.

Table 2. Descriptive statistics.

	N	Mean	SD	Min	p25	Median	p75	Max
Financial Performance	3999	0.134	0.084	-0.019	0.08	0.125	0.18	0.388
ESG Performance	3999	56.732	8.708	40	49.63	56	63.28	77.8
ESG Compensation	3999	0.221	0.415	0	0	0	0	1
Political Orientation	3999	0.338	0.473	0	0	0	1	1
Board Independence	3999	0.733	0.442	0	0	1	1	1
Board Size	3999	10.449	2.780	3	9	10	12	29
CEO Duality	3999	0.416	0.493	0	0	0	1	1
Firm Size	3999	9.815	1.427	6.961	8.759	9.68	10.71	14.045
Book to Market	3999	0.532	0.430	0.019	0.218	0.405	0.738	2.373
Leverage	3999	0.629	0.194	0.134	0.499	0.635	0.776	0.976
Big4	3999	0.989	0.102	0	1	1	1	1
ESI	3999	0.266	0.442	0	0	0	1	1

All variable descriptions are presented in Table 1.

Untabulated pairwise correlations, presented in Table 3, reveal several nuanced relationships among financial performance and ESG performance, compensation, and governance variables. Financial performance shows a statistically significant positive correlation with ESG performance (0.040), suggesting that higher ESG scores might enhance financial outcomes. However, there is a moderate negative correlation between financial performance and ESG Compensation (-0.129), indicating that the integration of ESG metrics into compensation might slightly detract from financial outcomes, potentially due to the upfront costs or strategic adjustments involved in ESG initiatives. A strong positive correlation between ESG Compensation and ESG Performance (0.391) confirms the effectiveness of ESG-oriented compensation policies in boosting ESG outcomes. Furthermore, the slight positive correlation between Political Orientation and ESG Performance (0.079) suggests that leadership with pro-ESG values modestly favors better ESG practices.

Table 3. Correlation matrix between independent and dependent variables.

Variables	(1)	(2)	(3)	(4)	(5)
(1) Financial Performance	1.000				
(2) ESG Performance	0.040** (0.010)	1.000			
(3) ESG Compensation	-0.129*** (0.000)	0.391*** (0.000)	1.000		
(4) Political Orientation	0.012 (0.465)	0.079*** (0.000)	-0.032** (0.041)	1.000	
(5) Board Independence	0.051*** (0.001)	0.086*** (0.000)	0.024 (0.126)	0.003 (0.839)	1.000

p-values in parentheses. Significance levels are presented as: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All variable descriptions are presented in Table 1.

We have also conducted an analysis of the differences in mean and median values, the results of which are presented in Table 4. All variables show significant differences in means and medians for firms with ESG Compensation (ESG Compensation = 1) versus those without (ESG Compensation = 0).

4.2. Regression results – role of incentives

The first hypothesis of this study examines the moderating role of ESG compensation in the relationship between ESG performance and financial performance. It explores whether tying executive compensation to ESG targets influences the extent to which sustainability outcomes translate into financial success. In analyzing the effects of ESG Compensation on ESG Performance, the results in model (2) of Table 5 indicate a positive and significant relationship. Specifically, the inclusion of ESG targets in executive compensation significantly enhances ESG performance, with a coefficient of 4.2850 at a 1% significance level. Additionally, the model reveals that larger firms exhibit superior ESG performance, as indicated by a positive and significant coefficient for Firm Size (1.855 at $p < 0.01$). However, the Book to Market ratio shows a negative association with ESG performance, suggesting that firms perceived as undervalued by the market may focus less on sustainability initiatives. Other factors like Board Size and the use of Big 4 auditors also positively influence ESG performance, indicating that better governance and stringent auditing standards correlate with improved ESG outcomes. Other variables such as Leverage and CEO Duality do not significantly affect ESG performance, highlighting that financial structure and executive governance might not play a decisive role in ESG dynamics within this model. The inclusion of Year and Industry Fixed Effects significantly increases the explanatory power of the model (Adjusted R-squared of 0.586), suggesting that controlling for these factors provides a more accurate depiction of the variables impacting ESG performance. This analysis underscores the effectiveness of ESG-focused compensation in enhancing a firm's sustainability performance, especially when adjusting for industry and temporal influences.

Building upon the theoretical underpinnings previously discussed, we next investigate the relationship between ESG Performance and Financial Performance in models (3–4) of Table 5. Our results indicate that there is a statistically significant positive relationship between ESG Performance and Financial Performance, evidenced by a coefficient of 0.013 at a 1% significance level. This

Table 4. Test of differences in means and medians between companies that incorporate ESG Compensation and companies that do not.

	ESG Compensation = 1			ESG Compensation = 0			Difference	
	Mean	Median	N	Mean	Median	N	Mean	Median
Financial Performance	0.113	0.101	882	0.139	0.132	3117	-0.026*** (0.000)	-0.031*** (0.000)
ESG Performance	63.135	63.390	882	54.920	54.000	3117	8.215*** (0.000)	9.390*** (0.000)
Political Orientation	0.310	0.000	882	0.346	0.000	3117	-0.036** (0.041)	0.000** (0.041)
Board Independence	0.786	1.000	882	0.719	1.000	3117	0.067*** (0.000)	0.000*** (0.000)
Board Size	11.685	12.000	882	10.099	10.000	3117	1.586*** (0.000)	2.000*** (0.000)
CEO Duality	0.458	0.000	882	0.404	0.000	3117	0.054*** (0.004)	0.000*** (0.004)
Firm Size	10.605	10.535	882	9.591	9.396	3117	1.014*** (0.000)	1.139*** (0.000)
Book to Market	0.630	0.561	882	0.504	0.369	3117	0.126*** (0.000)	0.192*** (0.000)
Leverage	0.674	0.683	882	0.616	0.622	3117	0.058*** (0.000)	0.061*** (0.000)
Big 4	0.995	1.000	882	0.988	1.000	3117	0.007** (0.049)	0.000** (0.049)
ESI	0.552	1.000	882	0.184	0.000	3117	0.368*** (0.000)	1.000*** (0.000)

p-values in parentheses. Significance levels are presented as: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All variable descriptions are presented in Table 1.

suggests that higher ESG scores are associated with better financial outcomes, potentially due to improved reputation, customer loyalty, and operational efficiencies driven by sustainable practices.

Finally, we explore the moderating role of ESG Compensation on the relationship between ESG Performance and Financial Performance in Models (5–6) in Table 5. Our results reveal that ESG Performance continues to have a positive and significant effect on Financial Performance, at a statistically significant at the 1% level, indicating that ESG performance is positively associated with financial outcomes. However, ESG Compensation alone does not show a significant direct effect on Financial Performance, suggesting that the mere presence of ESG-linked compensation schemes does not automatically enhance financial metrics. Furthermore, the interaction term between ESG Performance and ESG Compensation does not exhibit significance. This absence of a significant moderating effect could imply several explanations. Firstly, it may be that the structure and specific conditions of ESG-related incentives are too complex or not aligned closely enough with the financial goals to make a measurable impact on financial outcomes. Secondly, the direct benefits of high ESG performance, such as increased market appeal and operational efficiencies, might already provide significant financial benefits, thus rendering the additional motivational boost from ESG-linked compensation redundant. As a result, we must reject H1, as our analysis does not support the hypothesis that ESG Compensation influences the impact of ESG Performance on Financial Performance.

These results underscore the need for careful design and implementation of ESG incentives within corporate compensation strategies, emphasizing that not all ESG-linked compensation schemes may effectively enhance financial outcomes. They highlight the importance of understanding the broader organizational and economic context in which these incentives operate to ensure they drive meaningful impact.

4.3. Regression results – role of ideology

Next, we delve into the role of ideology in enhancing ESG performance, specifically examining how the political orientation of executives might interact with ESG Compensation to influence sustainability outcomes. The results for Models 1 and 2 presented in Table 6 show that ESG Compensation and Political Orientation both have positive and statistically significant effects on ESG Performance with coefficients of 3.629 and 1.090, respectively, suggesting that both the presence of ESG-related incentives and the political leaning of executives towards sustainability individually enhance ESG performance. However, the interaction term between ESG Compensation and Political Orientation, although positive, is not statistically significant. This outcome suggests that while both ESG Compensation and a supportive political ideology positively influence ESG performance, their combined effect does not significantly exceed their individual contributions. The lack of a significant interaction effect could indicate that while ESG incentives are effective on their own, aligning them with the political orientation of executives does not

Table 5. H1: Effect of ESG Compensation on ESG Performance.

Variables	(1) ESG Performance	(2) ESG Performance	(3) Financial Performance	(4) Financial Performance	(5) Financial Performance	(6) Financial Performance
ESG Compensation	6.362*** (19.840)	4.285*** (6.475)			-0.002 (-0.354)	-0.002 (-0.321)
ESG Performance			0.014*** (6.444)	0.013*** (3.267)	0.017*** (6.932)	0.013*** (2.937)
ESG Performance * ESG Compensation					-0.008 (-1.282)	-0.000 (-0.028)
Firm Size	1.205*** (10.685)	1.855*** (6.495)	-0.008*** (-8.734)	-0.003 (-1.181)	-0.008*** (-8.225)	-0.003 (-1.107)
Book to Market	-4.043*** (-13.511)	-1.466*** (-2.710)	-0.088*** (-35.065)	-0.070*** (-13.607)	-0.088*** (-35.053)	-0.070*** (-13.602)
Leverage	-3.350*** (-4.750)	2.922 (1.539)	-0.134*** (-23.019)	-0.142*** (-7.255)	-0.134*** (-22.874)	-0.142*** (-7.246)
Board Size	0.704*** (12.911)	0.454*** (4.923)	-0.001 (-1.623)	-0.001* (-1.842)	-0.001 (-1.580)	-0.001* (-1.855)
CEO Duality	-1.452*** (-5.566)	-0.505 (-0.997)	-0.002 (-0.920)	-0.004 (-1.022)	-0.002 (-0.897)	-0.004 (-1.026)
Big4	4.295*** (3.659)	3.749*** (2.859)	0.023** (2.369)	0.035** (2.138)	0.022** (2.251)	0.035** (2.139)
ESI	0.716** (2.457)	2.524 (0.884)	0.006** (2.430)	-0.015 (-0.649)	0.008*** (3.163)	-0.015 (-0.639)
	6.362***	4.285***			-0.002	-0.002
Observations	3,999	3,995	3,999	3,995	3,999	3,995
Adj-R ²	0.257	0.586	0.454	0.653	0.455	0.653
Year FE	N	Y	N	Y	N	Y
Industry FE	N	Y	N	Y	N	Y

ESG Performance represents the total ESG Score of the company. ESG Compensation is a dummy variable that takes the value of 1 for companies incorporating ESG Compensation and 0 otherwise. Political Orientation is a dummy variable that takes the value of 1 for CEOs who are Democrat-leaning (CEO (D)) and 0 for CEOs who are Republican-leaning (CEO (R)). The control variables are: Firm Size, Book to Market, Leverage, Board Size, CEO Duality, Big 4, and ESI, and follow the variable description presented in Table 1. Clustered t-statistics in parentheses. Significance levels are presented as: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

necessarily compound their effectiveness. This outcome might reflect the robustness of ESG Compensation structures in motivating sustainability efforts irrespective of executives' personal ideological alignments, or it could highlight that the effect of political orientation is already embedded within the direct impacts of ESG Compensation and does not additionally enhance it when combined.

We then investigate the interaction between ESG Performance and Political Orientation on Financial Performance. The findings in Models 3 and 4 are consistent with the idea that ESG Performance positively impacts Financial Performance, suggesting that better ESG practices contribute to improved financial results. This aligns with the broader narrative that sustainable practices can enhance a company's reputation, operational efficiency, and market positioning, which in turn may boost financial performance. Political Orientation, however, has a statistically significant negative effect on Financial Performance. This indicates that executives with a pro-ESG political orientation might prioritize long-term sustainability goals over short-term financial gains. The interaction term between ESG Performance and Political Orientation is both positive and statistically significant,

suggesting that the financial benefits of ESG practices are stronger in firms where the executives' political orientation is supportive of ESG initiatives. This interaction implies that in companies led by executives with a pro-ESG political orientation, the financial benefits of ESG practices are enhanced, potentially due to a more effective integration of these practices into the firm's core business strategies. However, it is important to note that this effect is reported at the aggregate level and is not split by specific political affiliation (e.g., Democrat or Republican CEOs). Therefore, the result reflects a broader trend where pro-ESG political orientation generally amplifies the financial benefits of strong ESG performance.

Finally, we investigate the interaction between ESG Performance, ESG Compensation, and Financial Performance, with a focus on the political orientation of CEOs to determine if a CEO's support for ESG practices, as indicated by their political ideology, enhances the financial benefits of these practices. To examine this, we split the sample between firms led by Democratic-leaning CEOs and Republican-leaning CEOs in the four models presented in Table 6. Models 5 and 7 represent firms with Democratic-leaning CEOs (presumed to support ESG

practices), while Models 6 and 8 focus on firms with Republican-leaning CEOs.

In Models 5 and 7, ESG Performance shows a positive and statistically significant effect on Financial Performance in firms with Democratic-leaning CEOs (coefficients of 0.024 and 0.025, both $p < 0.01$), suggesting that ESG practices enhance financial outcomes when executives align with sustainability goals. However, in Model 8, with Republican-leaning leadership, the effect of ESG Performance is much weaker and statistically insignificant (coefficient = 0.006), indicating that ESG practices have a less pronounced financial impact under such leadership.

The t-test for the difference in the coefficients of the interaction effect between ESG Performance and ESG Compensation in Models 5 and 6 (Democratic vs. Republican CEOs) yields a p-value of 0.368, and in Models 7 and 8, the p-value is 0.176. Both p-values are greater than 0.05, indicating that the interaction effect does not significantly differ between Democratic-leaning and Republican-leaning CEOs. This suggests that the combination of ESG Performance and ESG Compensation has a similar impact on financial performance, regardless of CEO political orientation, leading to the rejection of Hypothesis 2.

In conclusion, while both ESG Compensation and Political Ideology independently contribute to better ESG Performance, the interaction between ESG Performance and ESG Compensation does not significantly enhance financial outcomes differently across leadership ideologies, leading to the rejection of the hypothesis that CEO political alignment with ESG amplifies the financial benefits of these practices.

4.4. Regression results – role of monitoring

In this section, we evaluate the role of monitoring by examining the interaction between ESG Compensation and Board Independence on ESG Performance. First, results in Table 7 show that the impact of Board Independence on ESG Performance, while significant in Model 1 (coefficient of 1.402), lose their significance in Model 2 (coefficient of 0.343). This suggests that the positive influence of board independence observed in the less controlled model may be confounded by industry-specific or temporal factors, which when controlled for, diminish its apparent impact. Furthermore, the interaction between ESG Compensation and Board Independence again shows a significant negative effect in Model 1, while not significant in Model 2, implying that when accounting for year and industry-specific variations, the negative moderating role of board independence on the effectiveness of ESG Compensation does not persist.

Next, we examine the potential moderating effect of Board Independence on the relationship between ESG Performance and Financial Performance. The results in Table 7 show that for models 3 and 4, while ESG Performance has a consistently positive impact on Financial Performance (coefficient of 0.016), the direct influence of Board Independence is not significant (coefficient of -0.002). Moreover, the interaction between ESG Performance and Board Independence also lacks statistical significance, suggesting that the presence of a stronger board does not significantly alter the financial returns from ESG practices when industry and temporal factors are accounted for. The results indicate that board independence, while crucial for effective governance, may not necessarily enhance the financial benefits derived from strong ESG performance.

Table 6. H2: Effect of political ideology on ESG Compensation and ESG Performance.

Variables	(1) ESG Performance	(2) ESG Performance	(3) Financial Performance	(4) Financial Performance	(5) Financial Performance CEO (D)	(6) Financial Performance CEO (R)	(7) Financial Performance CEO (D)	(8) Financial Performance CEO (R)
ESG Compensation	6.190*** (16.489)	3.629*** (4.858)			0.024* (1.895)	-0.009 (-1.483)	0.013 (0.865)	-0.008 (-1.165)
Political Orientation	1.706*** (5.993)	1.090** (1.975)						
ESG Compensation * Political Orientation	0.357 (0.580)	1.752 (1.625)						
ESG Performance			0.010*** (4.095)	0.008* (1.936)	0.024*** (5.653)	0.013*** (4.442)	0.025*** (2.644)	0.006 (1.360)
Political Orientation			-0.010*** (-3.317)	-0.011** (-2.068)				
ESG Performance * Political Orientation			0.011*** (2.755)	0.015** (2.263)				
ESG Performance * ESG Compensation					-0.044*** (-2.342)	-0.007 (-0.455)	-0.019 (-1.188)	0.007 (0.755)
T-test (p-value)					(0.368)		(0.176)	
Observations	3,999	3,995	3,999	3,995	1,353	2,646	1,345	2,639
Adj-R2	0.266	0.591	0.455	0.655	0.456	0.464	0.705	0.672
Controls	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	N	Y	N	Y	N	N	Y	Y
Industry FE	N	Y	N	Y	N	N	Y	Y

Table 7. H3: Effect of monitoring on ESG Compensation and ESG Performance.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	ESG Performance	ESG Performance	Financial Performance	Financia Performance	Financial Performance (Yes Board Independ)	Financial Performance (No Board Independ)	Financial Performance (Yes Board Independ)	Financial Performance (No Board Independ)
ESG Compensation	7.974*** (12.915)	4.374*** (3.824)			-0.008 (-1.366)	0.026** (2.177)	-0.004 (-0.595)	0.008 (0.843)
Board Independence	1.402*** (3.511)	0.343 (0.651)						
ESG Compensation * Board Independence	-2.127*** (-3.105)	-0.131 (-0.123)						
ESG Performance			0.021*** (5.257)	0.016*** (3.138)	0.014*** (4.910)	0.028*** (5.933)	0.013** (2.362)	0.012* (1.870)
Board Independence			0.004 (1.173)	-0.002 (-0.381)				
ESG Performance * Board Independence			-0.009** (-2.094)	-0.005 (-0.812)				
ESG Performance * ESG Compensation					-0.006 (-0.824)	-0.025* (-1.892)	0.001 (0.184)	-0.01 (-0.871)
T-test (<i>p-value</i>)					(0.1752)		(0.6073)	
Observations	3,999	3,995	3,999	3,995	2,933	1,066	2,922	1,055
Adj-R ²	0.26	0.586	0.454	0.654	0.463	0.449	0.649	0.764
Controls	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	N	Y	N	Y	N	N	Y	Y
Industry FE	N	Y	N	Y	N	N	Y	Y

ESG Performance represents the total ESG Score of the company. ESG Compensation is a dummy variable that takes the value of 1 for companies incorporating ESG Compensation and 0 otherwise. Board Independence is a dummy variable that takes the value of 1 for stronger boards of directors (Yes Board Independ) and 0 otherwise (No Board Independ). The control variables are: Firm Size, Book to Market, Leverage, Board Size, CEO Duality, Big 4, and ESI, and follow the variable description presented in Table 1. Clustered t-statistics in parentheses. Significance levels are presented as: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Finally, we evaluate the influence of board independence on the relationship between ESG Performance, ESG Compensation, and Financial Performance. The dataset is split into two groups: firms with a more independent board (Models 5 and 7) and firms with a less independent board (Models 6 and 8), to assess the differential impacts. The t-tests for the difference in coefficients for the interaction terms across these models are not statistically significant, suggesting that board independence does not meaningfully alter the financial returns from ESG initiatives through compensation structures, and thus, rejecting our third hypothesis.

The analysis also reveals that, when controlling for year and industry fixed effects (Models 7 and 8), ESG Performance consistently shows a positive and statistically significant impact on Financial Performance. In Model 7, where firms have a more independent board, the coefficient is 0.013 ($p < 0.05$), while in Model 8, with less independent boards, the coefficient is 0.012 ($p < 0.1$). These findings suggest that a more independent board may slightly enhance the effectiveness of ESG practices in improving financial outcomes, likely due to stronger oversight and a greater focus on sustainability initiatives. However, the difference in the coefficients between firms with more and less independent boards is not large enough to suggest that Board Independence plays a substantial or moderating role in this relationship.

5. Conclusions

This paper explores the dynamic intersection of agency theory and corporate sustainability, investigating how the integration of Environmental, Social, and Governance (ESG) metrics into executive compensation influences both ESG and financial performance within firms. As demand for robust ESG performance escalates, an increasing number of companies are embedding these metrics into variable compensation packages. This integration raises pivotal questions about the extent to which shareholders are prepared to align executive incentives with ESG goals and whether these incentives genuinely drive financial returns.

The findings of this study reveal that ESG-focused compensation structures are positively associated with improved ESG performance. The analysis shows that the inclusion of ESG targets in executive compensation leads to a significant enhancement of sustainability practices. However, while ESG performance positively influences financial performance, ESG compensation itself does not directly impact financial outcomes. This suggests that while ESG-linked compensation schemes may motivate executives to prioritize sustainability, they do not automatically translate into better financial

results. The absence of a moderating effect between ESG performance and compensation indicates that other organizational or market factors may drive the financial benefits of ESG initiatives.

Shifting the focus to the role of ideology, the results show that both ESG compensation and the political orientation of executives positively influence ESG performance, with ESG compensation being a better driver. However, the interaction between ESG compensation and political ideology does not significantly amplify the effectiveness of sustainability practices. These findings suggest that while ESG incentives are effective on their own, aligning them with executives' political ideologies does not provide a significant compounded effect. Moreover, the relationship between ESG performance and financial outcomes is positively moderated by executives' pro-ESG political orientation, with firms led by Democratic-leaning CEOs experiencing stronger financial returns from ESG practices. However, the interaction effect of ESG Compensation and ESG Performance is not significantly different across political orientations, leading

to the rejection of the hypothesis that political ideology enhances the financial benefits of ESG performance through compensation structures.

Finally, regarding the role of board independence, the results indicate that while more independent boards are associated with slightly enhanced financial outcomes from ESG performance, board independence does not significantly moderate the relationship between ESG practices and financial results.

In conclusion, this study underscores the importance of well-structured ESG compensation schemes and executive leadership in driving sustainability outcomes but highlights the complexity of the relationships between governance structures, political ideology, and financial performance. While more independent boards and pro-ESG political orientations show slight advantages in aligning sustainability efforts with financial outcomes, the overall impact remains modest, indicating that achieving meaningful ESG integration requires a more nuanced approach that goes beyond compensation and governance structures alone.

■ **M.C. Dorobantu – Maria Cristina** is a financial auditor at Deloitte. She obtained her MSc in Accountancy and Control from the University of Amsterdam.

■ **Dr. S. Bissessur – Sanjay** is an Assistant Professor of Accounting at the University of Amsterdam.

Acknowledgements

We appreciate the helpful comments of Susanne Preuss. This paper is based on Maria Cristina Dorobantu's master thesis, which makes her one of the winners of the MAB Thesis Award 2024.

References

- Baldenius T, Melumad N, Meng X (2014) Board composition and CEO power. *Journal of Financial Economics* 112(1): 53–68. <https://doi.org/10.1016/j.jfineco.2013.10.004>
- Bebchuk L, Fried J (2003) Executive Compensation as an Agency Problem. *Journal of Economic Perspectives* 17(3): 71–92. <https://doi.org/10.1257/089533003769204362>
- Bebchuk L, Fried JM (2022) Linking Executive Compensation to ESG Performance. *Harvard Law School Forum on Corporate Governance*. <https://corpgov.law.harvard.edu/2022/11/27/linking-executive-compensation-to-esg-performance/>
- Chen S, Song Y, Gao P (2023) Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of Environmental Management* 345: 118829. <https://doi.org/10.1016/j.jenvman.2023.118829>
- Chin MK, Hambrick DC, Trevin LK (2013) Political ideologies of CEOs: The influence of executives' values on corporate social responsibility. *Administrative Science Quarterly* 58(2): 197–232. <https://doi.org/10.1177/0001839213486984>
- Christensen DM, Dhaliwal DS, Boivie S, Graffin SD (2015) Top management conservatism and corporate risk strategies: Evidence from managers' personal political orientation and corporate tax avoidance. *Strategic Management Journal* 36(12): 1918–1938. <https://doi.org/10.1002/smj.2313>
- Chulkov DV, Barron JM (2023) Incentive pay sensitivity to firm performance prior to anticipated CEO turnover. *Heliyon* 9(11): e22163. <https://doi.org/10.1016/j.heliyon.2023.e22163>
- Cornett MM, Marcus AJ, Tehranian H (2008) Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics* 87(2): 357–373. <https://doi.org/10.1016/j.jfineco.2007.03.003>
- Deng X, Kang JK, Low BS (2013) Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of Financial Economics* 110(1): 87–109. <https://doi.org/10.1016/j.jfineco.2013.04.014>
- Flammer C, Hong B, Minor D (2019) Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: Effectiveness and implications for firm

- outcomes. *Strategic Management Journal* 40(7): 1097–1122. <https://doi.org/10.1002/smj.3018>
- Friedman M (1970) The Social Responsibility of Business Is to Increase Its Profits. In: Zimmerli WC, Holzinger M, Richter K (Eds) *Corporate Ethics and Corporate Governance*. Springer, Berlin, Heidelberg, 173–178. https://doi.org/10.1007/978-3-540-70818-6_14
 - Graffin SD, Hubbard TD, Christensen DM, Lee EY (2020) The influence of CEO risk tolerance on initial pay packages. *Strategic Management Journal* 41(4): 788–811. <https://doi.org/10.1002/smj.3112>
 - Hong B, Li Z, Minor D (2016) Corporate governance and executive compensation for corporate social responsibility. *Journal of Business Ethics* 136(1): 199–213. <https://doi.org/10.1007/s10551-015-2962-0>
 - Jensen MC, Murphy KJ (1990) Performance pay and top-management incentives. *Journal of Political Economy* 98(2): 225–264. <http://www.jstor.org/stable/2937665>
 - Markoczy L, Kolev KD, Qian C (2023) Trade-off among stakeholders: CEO political orientation and corporate social irresponsibility. *Long Range Planning* 56: 102273. <https://doi.org/10.1016/j.lrp.2022.102273>
 - Murphy KJ (1985) Corporate performance and managerial remuneration: An empirical analysis. *Journal of Accounting and Economics* 7: 11–42. [https://doi.org/10.1016/0165-4101\(85\)90026-6](https://doi.org/10.1016/0165-4101(85)90026-6)
 - Petersen M (2009) Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies* 22(1): 435–480. <https://doi.org/10.1093/rfs/hhn053>
 - Ruiz-Blanco S, Romero S, Fernandez-Feijoo B (2022) Green, blue or black, but washing – What company characteristics determine greenwashing? *Environment, Development and Sustainability* 24(3): 4024–4045. <https://doi.org/10.1007/s10668-021-01602-x>
 - Ryan HE, Wiggins RA (2004) Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring. *Journal of Financial Economics* 73(3): 497–524. <https://doi.org/10.1016/j.jfineco.2003.11.002>
 - SSEI [Sustainable Stock Exchange Initiative] (2024) Sustainable Stock Exchange Initiative. <https://sseinitiative.org/esg-guidance-database>
 - Tsang A, Wang KT, Liu S, Yu L (2021) Integrating corporate social responsibility criteria into executive compensation and firm innovation: International evidence. *Journal of Corporate Finance* 70: 102070. <https://doi.org/10.1016/j.jcorpfin.2021.102070>