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Executive Changes and ESG Disclosure in S&P 500 Firms: The Moderating Role of Strategic Dynamism

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ABSTRACT

The strategic importance of environmental, social, and governance (ESG) disclosure has sparked academic interest, yet the role of top management team (TMT) dynamics remains underexplored. This study examines how the number of executive changes, as a proxy for TMT instability, affects ESG and environmental (ENV) disclosure in S&P 500 firms from 2017 to 2023. Drawing on upper echelons theory, we argue that frequent turnover disrupts disclosure routines and weakens credibility, especially in voluntary settings like the US. Based on 2178 firm-year observations, we find that executive changes reduce ESG and ENV disclosure. This effect intensifies under high strategic dynamism, where shifting priorities hinder transparency. ENV disclosure is particularly vulnerable due to its complexity and long-term nature. Our study contributes by shifting focus from static governance to dynamic leadership, incorporating strategic dynamism as a contextual factor, and resolving mixed findings by demonstrating TMT instability weakens ESG disclosure in voluntary, market-based systems.

1 | Introduction

The growing importance of environmental, social, and governance (ESG) disclosure in corporate practice has generated substantial academic interest across accounting, sustainability, and corporate governance research (Tsang et al. 2023; Christensen et al. 2021; Stuart et al. 2022). ESG disclosure enables firms to communicate nonfinancial performance to stakeholders, strengthening transparency, legitimacy, and accountability (Christensen et al. 2021; Donaldson and Preston 1995; Freeman 1984). As a result, ESG disclosure has been linked to lower cost of capital, improved financing access, and higher customer and employee satisfaction (Dhaliwal et al. 2011; Goss and Roberts 2011; Servaes and Tamayo 2013). In the US, where ESG reporting remains largely voluntary, disclosure decisions are shaped by firm-level discretion, market-based incentives, and reputational concerns (Christensen et al. 2021; Tsang et al. 2023). As a result, ESG disclosure in the US reflects a particularly discretion-based governance outcome, making it especially sensitive to leadership-driven priorities and internal decision processes.

However, while prior research has documented how static board characteristics, such as board gender diversity (Wasiuzzaman and Subramaniam 2023), corporate social responsibility (CSR) committees (Zhang et al. 2021), board size (Husted and de Sousa-Filho 2019), and chief executive officer (CEO) compensation structures (Luo et al. 2021), influence ESG disclosure, little is known about how dynamic leadership processes shape it. This is surprising, given upper echelons theory's emphasis on how top executives' backgrounds and values influence strategic choices (Hambrick and Mason 1984).

To advance knowledge at the intersection of TMTs and ESG disclosure, this study addresses three interrelated research gaps. First, although recent research has begun to explore facets of dynamic leadership, such as the relationship between executive changes and ESG disclosure, the evidence remains limited and

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inconsistent: Bai et al. (2024) find that executive team restructuring enhances ESG disclosure quality in China, while Deng et al. (2024) show that TMT stability reduces ESG greenwashing. These opposing conclusions reveal a theoretical tension and lack of consensus on how executive changes shape ESG disclosure.

Second, the studies by Bai et al. (2024) and Deng et al. (2024) on executive changes and ESG disclosure have been conducted exclusively in the Chinese institutional context, which is characterized by centralized regulatory oversight, stronger governmental influence over corporate practices, and stakeholder pressures that differ markedly from those in Western economies (Marquis and Qian 2014; Qian et al. 2024). In contrast, the US context is marked by more decentralized governance, market-based incentives, and greater latitude for managerial decision-making (Christensen et al. 2021; Tsang et al. 2023). Such institutional differences suggest that the effects of executive changes on ESG disclosure could manifest differently in the US, where competitive pressures, investor activism, and voluntary disclosure norms dominate.

Third, Bai et al. (2024) and Deng et al. (2024) treated the effect of executive changes as uniform across firms, overlooking the contextual factors, such as the firms' strategic dynamism, defined as the extent to which firms frequently revise their strategic priorities (Crossland et al. 2014). However, within the last years, firms faced unprecedented volatility from global pandemics, supply chain disruptions, geopolitical tensions, and shifting ESG norms (Bloomberg 2025; Financial Times 2024a), forcing them to continually reorient strategies to remain competitive (Financial Times 2024b). Strategic dynamism thus introduces organizational complexity and managerial overload, which may amplify the coordination and communication challenges that arise during executive changes.

The purpose of this study is to examine how executive changes, measured as the number of executive changes per year, affect ESG disclosure, particularly environmental (ENV) disclosure, in firms listed on the Standard & Poor's 500 Index (S&P 500) from 2017 to 2023, and how this relationship is contingent on firms' strategic dynamism. Drawing on upper echelons theory, we hypothesize that frequent TMT changes disrupt ESG disclosure by increasing coordination costs, creating uncertainty, and deprioritizing long-term, stakeholder-oriented initiatives (Freeman 1984; Hambrick and Mason 1984). Consistent with this view, we find a negative and significant relationship between executive changes and ESG disclosure, especially pronounced for ENV disclosure, which requires sustained planning and investment (Wasiuzzaman and Subramaniam 2023). We further theorize and find that this negative effect is stronger in firms facing higher strategic dynamism (Crossland et al. 2014).

This study makes three contributions to the ESG disclosure literature. First, we extend prior research by establishing executive changes as a dynamic and temporally sensitive governance antecedent of ESG disclosure, highlighting the need to move beyond static board characteristics such as board diversity and CSR committees (e.g., Husted and de Sousa-Filho 2019; Wasiuzzaman and Subramaniam 2023; Zhang et al. 2021). In doing so, we answer recent calls to examine how leadership dynamics shape ESG practices (Bai et al. 2024; Wang et al. 2024). Second, we address the limited generalizability of prior findings, derived primarily from the Chinese context (Bai et al. 2024; Deng et al. 2024), by demonstrating how the effects of executive changes on ESG disclosure manifest in US firms, operating in a market-based and decentralized institutional environment distinct from state-driven models (Marquis and Qian 2014; Christensen et al. 2021; Tsang et al. 2023). Third, we contribute to upper echelons theory (Hambrick and Mason 1984) by showing that the negative effect of executive instability on ESG disclosure is stronger in firms facing higher strategic dynamism, identifying an important contingency that aligns with emerging evidence on the role of environmental turbulence in shaping top management team effectiveness (Crossland et al. 2014). Together, these findings underscore the importance of leadership continuity for sustaining stakeholder-oriented disclosure, particularly in dynamic and competitive environments (Reuters 2025).

2 | Theory and Hypotheses

2.1 | Theoretical Background of ESG Disclosure

ESG disclosure has emerged as a key dimension of corporate transparency and nonfinancial reporting. ESG disclosure enables firms to communicate their sustainability-related activities, impacts, and strategies to external stakeholders, thus signaling nonfinancial value creation alongside financial performance (McKinsey 2023; Tsang et al. 2023). In the United States, ESG disclosure remains largely voluntary, granting firms considerable discretion of what, how, and when to report. This discretion elevates the strategic character of disclosure: It is not only an act of transparency, but also a deliberate managerial choice influenced by market expectations and reputational incentives (Christensen 2016; Harvard Law School Forum on Corporate Governance 2022; Liu et al. 2018).

While disclosure decisions respond to external pressures and norms, their consistency and credibility depend critically on internal governance structures and leadership priorities (Al-Dah et al. 2018). At the same time, the extent to which leadership priorities can shape disclosure is likely contingent on the institutional environment: in settings with stable institutions and predictable enforcement, disclosure practices may be more standardized and less sensitive to leadership turnover, whereas in more volatile or weakly enforced environments, leadership change may have stronger and more uneven effects (Marquis et al. 2016). Upper echelons theory (Hambrick and Mason 1984) suggests that organizational outcomes are shaped by the experiences, values, and cognitive orientations of senior executives, as filtered through formal governance arrangements. ESG disclosure, as a complex and cross-functional activity, is particularly sensitive to such top-level influences because it requires sustained commitment, strategic alignment, and coordination across departments.

Empirical research supports this perspective by linking governance characteristics to firms' disclosure practices. For instance, board independence (Al-Dah et al. 2018), gender diversity (Wasiuzzaman and Subramaniam 2023), board size (Al-Dah et al. 2018), and CSR committee presence (Zhang et al. 2021) have

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all been associated with enhanced ESG disclosure. Similarly, Al-Dah et al. (2018) find that smaller boards, higher board independence, and greater female representation are associated with increased ESG disclosure. Furthermore, Rupley et al. (2012) demonstrate that diverse boards and directors with multiple external mandates contribute positively to ESG disclosure, while Bui et al. (2020) and Zhang et al. (2021) show that firms with dedicated CSR committees tend to disclose more comprehensive and voluntary ESG information. Additionally, Al-Shaer and Zaman (2018) emphasize the credibility-enhancing role of audit committees in CSR-related disclosures. The design of CEO compensation also emerges as a relevant governance mechanism, as demonstrated by Luo et al. (2021), who provide evidence that explicitly linking executive remuneration to stakeholder-oriented objectives significantly improves the quality of environmental disclosure.

Taken together, these findings indicate that ESG disclosure is not merely a procedural or compliance-driven activity. Rather, it reflects the priorities and governance capacity of senior leaders, consistent with the upper echelons perspective. This conceptual lens highlights the critical role of leadership dynamics in sustaining transparent and credible ESG disclosure.

2.2 | The Relationship Between Executive Changes Per Year and ESG Disclosure

Upper echelons theory (Hambrick and Mason 1984) posits that organizational outcomes are shaped by the cognitive frames, values, and experiences of senior executives. ESG disclosure, as a complex and cross-functional process, is particularly sensitive to such leadership influences because it requires sustained commitment, strategic alignment, and coordination across organizational units over extended periods (McBrayer 2018). While prior research has extensively examined static governance attributes such as board diversity or CSR committee presence (Wasiuzzaman and Subramaniam 2023; Zhang et al. 2021), TMT dynamics, particularly executive turnover, remain underexplored.

Two recent studies have brought renewed attention to this area by examining the effects of executive changes with contrasting conclusions and different theoretical foundations. Bai et al. (2024), drawing on upper echelons theory (Hambrick and Mason 1984) and agency theory (Jensen and Meckling 1976), argue that TMT restructuring introduces diversity of thought, stimulates innovation, and strengthens internal monitoring. In their study of Chinese publicly listed firms, they find that executive team restructuring is positively associated with ESG disclosure quality. The underlying argument is that newly appointed executives are less entrenched in organizational routines, more open to stakeholder-responsive strategies, and motivated to differentiate themselves through visible sustainability efforts.

Conversely, Deng et al. (2024) adopt principal-agent theory and agency theory to theorize that TMT stability fosters disclosure credibility and reduces ESG greenwashing. Drawing from a longitudinal sample of Chinese firms, they find that stable leadership teams are better equipped to ensure consistency in ESG communication, maintain long-term reporting structures, and uphold reputational trust with external stakeholders. Continuity among executives, they argue, allows for more effective internal control and greater alignment between disclosure practices and organizational values.

These diverging results point to different potential mechanisms linking executive team dynamics to ESG disclosure. However, both studies are conducted in the Chinese context, where institutional logics and stakeholder expectations differ from those in Western economies. In the US, firms operate in a market-based governance system with fewer regulatory prescriptions for ESG disclosure, making leadership commitment even more pivotal for sustaining disclosure practices (Bloomberg 2025; Tsang et al. 2023). This raises the question of whether the positive effects of restructuring or the benefits of stability observed in China also apply to firms operating in other contexts, such as the US. Taken together, these differences suggest that the effects of executive changes on ESG disclosure may not be uniform across institutional contexts. Moreover, consistent with upper echelons theory, leadership changes may in principle have directionally ambiguous effects on ESG disclosure because incoming executives may hold either more supportive or more skeptical views toward ESG initiatives than their predecessors. However, our argument does not assume that newly appointed executives are systematically more anti-ESG than their predecessors. Rather, we focus on the organizational consequences of frequent leadership turnover itself. Specifically, repeated executive changes may destabilize established leadership structures and disrupt the continuity required to sustain complex disclosure processes. Thus, our theoretical framework emphasizes the destabilizing effects of leadership instability rather than the ideological orientation of individual executives.

Building on upper echelons theory, we argue that frequent executive changes undermine ESG disclosure in voluntary reporting environments. First, we expect frequent executive changes to disrupt strategic continuity and organizational memory, both of which are critical for sustaining ESG reporting routines. ESG disclosure requires firms to develop and maintain long-term systems for tracking and communicating nonfinancial performance (Deng et al. 2024). Frequent turnover interrupts these processes, as newly appointed executives bring their own priorities and cognitive frames, which may not align with established ESG initiatives. This misalignment increases the likelihood of deprioritizing ESG activities, like ESG disclosure, in favor of short-term financial objectives. Empirical evidence supports this mechanism: Dao et al. (2014) find that executive changes are associated with weakened internal controls, which can impair both financial and nonfinancial transparency. Similarly, McBrayer (2018) shows that leadership instability undermines firms' ability to maintain coherent reporting practices, while Deng et al. (2024) demonstrate that TMT stability supports the institutionalization of disclosure routines, enabling firms to produce more consistent and credible ESG disclosure.

Second, we expect frequent executive turnover to create cognitive misalignment and coordination challenges within the TMT. Upper echelons theory emphasizes that shared mental models and leadership cohesion are essential for effective decision-making and cross-functional collaboration (Hambrick and Mason 1984). Frequent changes at the top impede the

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development of these shared understandings, weakening the firm's capacity to coordinate ESG disclosure across departments. Empirical studies lend support to this reasoning: Bai et al. (2024) caution that while some restructuring can stimulate innovation, high turnover, particularly involving core executives, disrupts alignment and undermines the organizational routines necessary for consistent disclosure.

Third, we expect this negative effect to be particularly pronounced for the ENV dimension of ESG disclosure. ENV disclosure often involves technically complex, long-term commitments such as emissions reduction targets, investments in renewable energy, and supply chain decarbonization (Doan and Sassen 2020). These initiatives require sustained oversight from senior leaders, cross-departmental coordination, and the accumulation of specialized technical expertise, conditions that are highly vulnerable to frequent leadership changes. In addition, environmental disclosure tends to be more resource-intensive and less immediately tied to financial performance than social or governance disclosure. This makes it particularly susceptible to de-prioritization during periods of leadership instability, as incoming executives may focus on initiatives that deliver faster, more visible returns. In a recent article, McKinsey (2023) highlights that environmental disclosures face heightened scrutiny from investors and regulators in the US, where voluntary reporting regimes amplify the reputational risks of fragmented or inconsistent communication. Together, these considerations suggest that the negative impact of executive turnover will be especially severe for environmental disclosure.

In summary, these arguments suggest that frequent executive changes can have detrimental effects on firms' ability to sustain credible ESG disclosure. Leadership turnover disrupts strategic continuity and weakens the shared cognitive frameworks necessary for maintaining consistent sustainability communication. It also impedes the coordination of cross-functional processes and deprioritizes long-term initiatives in favor of short-term performance objectives. As a result, firms experiencing high levels of executive change are less likely to develop and maintain the organizational routines required for comprehensive and reliable ESG disclosure.

We thus hypothesize:

H1a. *The number of executive changes per year is negatively associated with ESG disclosure.*

H1b. *The number of executive changes per year is negatively associated with ENV disclosure.*

The moderating effect of strategic dynamism on the effect of executive changes per year on ESG disclosure.

Upper echelons theory (Hambrick and Mason 1984) posits that organizational outcomes are shaped not only by the cognitive frames and values of senior executives but also by the interaction between leadership characteristics and environmental contingencies. One such contingency is strategic dynamism, which reflects instability and unpredictability in a firm's competitive and strategic environment (Dess and Beard 1984; Milliken 1987). In highly dynamic contexts, firms face fluctuating performance pressures, shifting stakeholder expectations, and evolving competitive conditions that require continuous strategic adjustment. These conditions increase coordination demands within the top management team and make long-term organizational initiatives more fragile. Strategic dynamism is therefore often manifested in the frequency and magnitude of shifts in a firm's strategic priorities and resource allocation (Crossland et al. 2014). In such environments, firms must continually adapt to environmental volatility, requiring consistent leadership focus and cohesive decision-making to sustain long-term initiatives such as ESG disclosure.

While prior research has examined the effects of executive changes and strategic dynamism separately, their joint influence on organizational outcomes remains underexplored. Wiersema and Bantel (1992) find that TMT instability limits a firm's capacity to process complex information and implement change. This raises the question of whether strategic dynamism amplifies the negative consequences of leadership turnover for ESG disclosure, particularly in voluntary reporting regimes such as the US.

First, we expect frequent executive changes in highly dynamic strategic settings to impose a double burden on the firm's leadership. Newly appointed executives must not only familiarize themselves with firm-specific routines and stakeholder expectations (Ma et al. 2015), but also make rapid, high-stakes decisions in an environment characterized by frequent strategic shifts (Chen 2015). Upper echelons theory suggests that such dual demands overwhelm the cognitive capacity of the TMT, impeding the alignment of leadership priorities and the institutionalization of disclosure routines (Hambrick and Mason 1984). Empirical evidence supports this reasoning: Ling et al. (2008) demonstrate that executive changes undermine innovation-related performance in turbulent strategic contexts.

Second, we expect strategic dynamism to amplify the deprioritization of long-term, voluntary initiatives such as ESG disclosure during periods of leadership instability. In dynamic environments, managerial attention and resources are often redirected toward short-term competitiveness, crisis management, or rapid strategic pivots (Bansal and DesJardine 2014; Slawinski and Bansal 2015). Frequent executive changes under such conditions further fragment leadership focus, making it difficult to sustain noncore practices like ESG disclosure. Upper echelons theory highlights that shared cognitive frames and stability are crucial for maintaining attention to long-term goals (Hambrick and Mason 1984). Empirical studies support this perspective, as Marais et al. (2020) find that under competing institutional and financial pressures, firms often symbolically implement or deprioritize sustainability efforts.

Third, we expect this amplifying effect of strategic dynamism to be particularly pronounced for the ENV dimension of ESG disclosure. ENV disclosure often requires alignment with broader strategic priorities to appear credible and value-relevant to external stakeholders (Ling and Mowen 2013; McKinsey 2023). Ling and Mowen (2013) show that ESG

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disclosure is more impactful when it complements the firm's core strategic initiatives, rather than being perceived as symbolic or disconnected. In highly dynamic environments, frequent shifts in strategy and resource allocation can undermine this alignment, creating uncertainty especially about long-term environmental commitments. Ryou et al. (2022) suggest that in turbulent or competitive contexts, firms often scale back transparent ESG disclosure as they struggle to reconcile short-term strategic pivots with forward-looking sustainability goals. When executive changes coincide with such volatility, the organizational capacity to integrate environmental initiatives into the strategic narrative is further weakened. As a result, ENV disclosure is particularly vulnerable to disruption in these settings.

Taken together, these arguments suggest that strategic dynamism magnifies the negative effects of executive changes by creating a highly volatile organizational context that demands rapid adaptation and continuous strategic realignment. Upper echelons theory highlights that in dynamic environments, top executives must process large volumes of complex information, maintain alignment across shifting priorities, and coordinate rapid responses to environmental change (Hambrick and Mason 1984). Frequent leadership turnover in such settings compounds these challenges by disrupting the cognitive capacity and shared vision needed to sustain long-term initiatives like ESG disclosure. As strategic dynamism increases, the organizational bandwidth available for voluntary and cross-functional practices diminishes, leaving little room for consistent sustainability reporting. This amplifying effect is particularly pronounced for environmental disclosure, which relies on forward-looking commitments and technical integration with broader strategic goals. We therefore hypothesize that strategic dynamism amplifies the disruptive effect of executive changes on ESG disclosure by compounding cognitive overload and deprioritization, particularly for environmental disclosure, which depends on stable, long-term strategic alignment.

We thus hypothesize:

H2a. *Strategic dynamism strengthens the negative relationship between executive changes per year and ESG disclosure.*

H2b. *Strategic dynamism strengthens the negative relationship between executive changes per year and ENV disclosure.*

The conceptual research model is presented in Figure 1 and illustrates the hypothesized relationship between the number of executive changes per year and ESG disclosure, moderated by strategic dynamism.

3 | Methodology

3.1 | Data and Sample

We test our hypotheses using a panel dataset of large US firms listed in the S&P 500 index, covering the period from 2017 to 2023. The sample ends in 2023 because financial and ESG disclosure data for 2024 were not yet consistently available across the full sample at the time of data collection. This temporal scope is analytically meaningful because it captures the period prior to the implementation of several recent ESG-related regulatory developments and can therefore be interpreted as a preregulatory baseline for examining leadership-driven variation in ESG disclosure. The initial sample comprises 595 firms that were part of the index at any point during this period and for which ESG disclosure data were available. We focus on this setting due to the economic relevance and global visibility of these firms, as well as the voluntary nature of ESG disclosure in the US context. Because ESG disclosure during our sample period was not governed by a single, comprehensive federal mandate, firms retained substantial discretion over whether and how to disclose nonfinancial information (Tsang et al. 2023). This institutional setting is analytically advantageous for our research design, as it allows us to examine how internal leadership dynamics shape disclosure outcomes in the absence of binding reporting requirements. At the same time, the US setting is characterized by relatively stable capital-market institutions and disclosure infrastructures, allowing us to study leadership-driven variation in ESG disclosure without conflating turnover effects with broad institutional instability (Christensen et al. 2021). Data were obtained from two established sources. ESG and environmental disclosure scores, as well as executive-level and governance-related information, were collected from Bloomberg. Financial data, including the variables required to construct the measure of strategic dynamism and other firm-level controls, were retrieved from Compustat Fundamentals Annual. The construction of the analytical sample followed a structured multistep merging process. The initial sample included 595 firms and 3131 firm-year observations. In the first step, merging Bloomberg and Compustat data led to the exclusion of 1 firm and 28 firm-year observations due to unmatched identifiers. In the second step, we excluded 146 firms and 923 firm-year observations that lacked data on strategic dynamism. Finally, we removed 2 firms and 2 firm-year observations with missing control variables. These exclusions resulted in a final sample of 446 firms and 2178

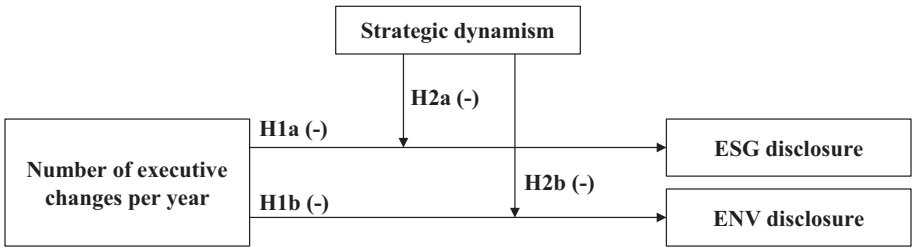


FIGURE 1 | Research model (*Source:* own illustration).

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TABLE 1 | Sample selection.

Sample selection and merging process	Number of firms	Firm-year observations	Note
Initial sample of S&P 500 firms	595	3131	Initial sample of firms which were part of the S&P500 at some point between 2017 and 2023 and with ESG disclosure data from Bloomberg available
Drop outs: Merge with Compustat data	1	28	We used gvkey and financial year as unique identifier
Remaining	594	3103	
Drop outs: No data on strategic dynamism	146	923	We excluded all firm-year observations in which no data on strategic dynamism was available
Remaining	448	2180	
Drop outs: No data on control variables	2	2	We excluded all firm-year observations in any of the control variable data was missing
Final sample of analysis	**446**	**2178**	

firm-year observations. The resulting panel allows us to exploit both cross-sectional and temporal variation in ESG disclosure, as well as variation in executive turnover and firm-level strategic conditions. Table 1 outlines the detailed sample selection and merging procedure.

3.2 | Measures

3.2.1 | Dependent Variables: ESG Disclosure and ENV Disclosure

Our dependent variables (DVs) are the ESG disclosure score and the ENV disclosure score, both obtained from Bloomberg. Because our theoretical arguments focus specifically on firms' disclosure behavior rather than broader ESG performance or ESG risk, Bloomberg's ESG and ENV Disclosure Scores are particularly appropriate for our study. These scores quantify the extent to which firms disclose information related to ESG topics through publicly available sources, including annual reports, sustainability reports, and regulatory filings. Bloomberg's ESG disclosure score ranges from 0.1 to 100, with higher scores reflecting more comprehensive and structured ESG disclosure. The score is based on a predefined set of ESG indicators, including metrics such as greenhouse gas emissions, energy consumption, water usage, employee turnover, board diversity, and anticorruption policies. These indicators are drawn from a proprietary Bloomberg framework and aim to capture both policy presence and reporting transparency. To enhance cross-firm comparability, Bloomberg tailors the score to sector-specific relevance by excluding indicators not material to a given industry (Li et al. 2018). Thus, the ESG disclosure score serves as a normalized measure of transparency, independent of firm size or business model. Although the score is often viewed as a quantitative disclosure metric, recent academic work argues that the underlying scoring methodology, by emphasizing indicator relevance and weighting, captures dimensions of disclosure quality (Stuart et al. 2022). In line with recent research (Al-Dah et al. 2018; Alkhawaja et al. 2023; Christensen et al. 2022; Wasiuzzaman and Subramaniam 2023), we use both the aggregate ESG disclosure score and the ENV disclosure score to differentiate general ESG disclosure from environmental-specific. Both scores are treated as continuous variables in our analyses.

3.2.2 | Independent Variable: Number of Executive Changes During Fiscal Year

We measure executive turnover using Bloomberg's data on executive changes, which tracks additions and departures of senior executives on a firm-year basis. Specifically, we construct a continuous variable capturing the number of executive changes that occur within a given fiscal year. Bloomberg defines executive changes as any appointment or departure of named executive officers (NEOs), including but not limited to the CEO, chief financial officer (CFO), chief operating officer (COO), and other senior leadership roles as disclosed in regulatory filings or company announcements. By focusing on the frequency of executive changes, the variable serves as a proxy for the degree of leadership fluctuation within the TMT, which may influence strategic consistency and resource allocation, including firms' commitment to nonfinancial reporting such as ESG disclosure. The measure is treated as a continuous predictor in all models.

3.2.3 | Moderating Variable: Strategic Dynamism

We measure strategic dynamism following the approach developed by Crossland et al. (2014), who define it as the extent of change in a firm's strategic resource allocations over time. Strategic dynamism reflects the volatility of a firm's strategic behavior and signals the degree to which firms continuously reconfigure their priorities in response to environmental or internal conditions. Empirically, it captures the extent to which firms experience frequent shifts in strategic priorities across domains such as capital investment, financing structure, and operational scope. We operationalize this construct in line with Crossland et al. (2014), the standard deviation of a firm's industry-adjusted return on assets (ROA) over a rolling three-year window. Prior

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research commonly interprets sustained volatility in firm performance as reflecting unstable competitive conditions and ongoing strategic adjustments rather than mere accounting variability (Boyd 1990; Keats and Hitt 1988; Palmer and Wiseman 1999). This approach therefore captures relative fluctuations in firm performance that are associated with strategic change. To account for industry effects, we adjust each firm's ROA by subtracting the annual mean ROA of all firms within the same two-digit Standard Industrial Classification (SIC) industry.

3.2.4 | Control Variables

To account for firm-level heterogeneity in ESG disclosure, we include a set of control variables commonly used in prior sustainability accounting research (Alkhawaja et al. 2023; Bhatia and Marwaha 2022; Husted and de Sousa-Filho 2019; Wasiuzzaman and Subramaniam 2023). Firm size, measured as the natural logarithm of total assets, captures resource availability and public visibility. ROA is included to control for firm profitability, while leverage (long-term debt to total assets) reflects financial risk and constraints. Governance structure is captured through board size, board independence (percentage of independent directors), and board gender diversity (percentage of women on the board), all of which have been shown to influence ESG disclosure (Al-Dah et al. 2018; Bui et al. 2020; Zhang et al. 2021). In addition, the market-to-book ratio serves as a proxy for firm growth opportunities and market valuation, and we include a dummy for the presence of a CSR committee (Wasiuzzaman and Subramaniam 2023; Zhang et al. 2021), reflecting formal sustainability oversight. Finally, we include year dummies to account for time-specific effects such as changes in regulation, reporting standards, or macroeconomic conditions that could affect ESG disclosure. An overview and detailed description of all variables used in the regression analysis is provided in Table 2.

3.3 | Analysis

We estimate our empirical models using the statistical software STATA 17. Given that our DVs, ESG disclosure and ENV disclosure, are approximately normally distributed, and the dataset is structured as a firm-year panel, we employ panel

TABLE 2 | Variable description.

Variable	Definition	Source
(1) ESG disclosure/ENV disclosure	ESG disclosure score and environmental disclosure score, ranging from 0 to 100, with higher values indicating more comprehensive disclosure practices. These scores reflect both the quantity and quality of publicly reported ESG information.	Bloomberg
(2) Executive changes per year	Annual count of changes in executive leadership, including CEO, CFO, and other named executive officers. The variable is winsorized at the 1% level to reduce the influence of extreme values.	Bloomberg
(3) Strategic dynamism	Strategic dynamism captures the magnitude of year-on-year changes in a firm's allocation of resources and strategic priorities. Following prior work (Crossland et al. 2014), it reflects a firm's propensity to shift investments across strategic domains such as R&D, advertising, capital expenditures, and financing. Winsorized at the 1% level.	Compustat
(4) Firm size	Natural logarithm of total assets, used as a proxy for firm size. The variable is winsorized at the 1% level to mitigate skewness.	Compustat
(5) ROA	Return on assets (net income divided by total assets), representing firm profitability. Winsorized at the 1% level.	Compustat
(6) Leverage	Financial leverage measured as the ratio of long-term debt to total assets. The variable is winsorized at the 1% level.	Compustat
(7) Board size	Total number of directors serving on the board of a firm in a given year. Winsorized at the 1% level.	Bloomberg
(8) Board independence	Percentage of independent directors on the board of a firm. Winsorized at the 1% level.	Bloomberg
(9) Market to book	Market-to-book ratio is calculated as market equity (stock price multiplied by common shares outstanding) divided by book equity. Winsorized at the 1% level.	Compustat
(10) Board women share	Percentage of women on the board of directors of a firm. Winsorized at the 1% level.	Bloomberg
(11) CSR committee	Binary variable coded 1 if the firm maintains a dedicated CSR or ESG committee at the board level, and 0 otherwise.	Bloomberg

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data ordinary least squares (OLS) regression with robust standard errors (Bhatia and Marwaha 2022; Deng et al. 2024; Wooldridge 2010). To determine whether a fixed effect (FE) or random effect (RE) specification is more appropriate, we perform a Hausman test (Hausman 1978). The results ($\chi^2 = 77.97$, $p < 0.001$) indicate that the FE model is preferable, as the difference in coefficients is systematic. Consequently, we estimate all models using FE panel regressions, in line with recent ESG disclosure studies that prioritize within-firm variation over time (Alkhawaja et al. 2023; Bhatia and Marwaha 2022; Deng et al. 2024). To test our hypotheses, we estimate hierarchical models. In Step 1, we enter the full set of control variables. In Step 2, we include the independent variable (IV) capturing the number of executive changes per year. In Step 3, we introduce the moderator strategic dynamism. This stepwise procedure allows us to assess the incremental explanatory power of each variable set and is consistent with practices in corporate governance research (Bhatia and Marwaha 2022; Husted and de Sousa-Filho 2019). Descriptive statistics and pairwise correlations are reported in Tables 3 and 4. Correlation coefficients between the main variables of interest (e.g., firm size and ESG disclosure, board size, and ESG disclosure) exceed the |0.3| threshold suggested by Kalnins (2018), but not by more than |0.12|, which suggests only modest concern for multicollinearity. In addition, we assess variance inflation factors (VIFs). The mean VIF is 1.14, well below the conservative threshold of 5 (Kalnins 2018). When using the broader assessment criteria of Hair (2010), the maximum VIF remains low at 1.80 (for firm size), further confirming that multicollinearity is not a concern in our models.

In line with Kalnins (2018), we also examined whether any coefficient sign is inconsistent with its respective bivariate correlation. We find no indication of reversed effects, and thus no evidence of spurious statistical significance due to common factor bias. All IVs are winsorized at the 1% level to mitigate the influence of extreme values and improve the robustness of coefficient estimates. This approach is consistent with recent ESG disclosure research using secondary data (Bhatia and Marwaha 2022; Christensen et al. 2022). Finally, following Husted and de Sousa-Filho (2019), we do not lag the independent, moderator, or control variables. While lagged predictors are commonly used in performance-based models, ESG disclosure is a forward-facing, contemporaneous governance outcome, where managerial decisions (e.g., executive changes or strategic adjustments) are expected to influence disclosure behavior within the same fiscal year. This approach is also consistent with prior disclosure-focused studies (Bai et al. 2024; Deng et al. 2024).

4 | Results

We report the results of our FE panel regressions in Tables 5 and 6. All models include year dummies and firm FEs. Our analyses follow a stepwise structure: Model 1 includes only control variables, Model 2 adds the IV, and Model 3 introduces the interaction term to test the moderation hypotheses. H1a predicts a negative association between the number of executive changes and ESG disclosure. This hypothesis is supported. As shown in Table 5, the coefficient for executive changes is

TABLE 3 | Descriptive statistics and bivariate correlation coefficients (DV: ESG disclosure).

Variable	Mean	SD	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) ESG disclosure	54.00	11.52	25.70	85.81	1.00										
(2) Executive changes per year	1.74	1.80	0.00	7.00	0.06	1.00									
(3) Strategic dynamism	−1.98	2.43	−7.29	4.19	−0.09	0.01	1.00								
(4) Firm size	9.85	1.14	7.59	12.77	0.42	0.07	−0.07	1.00							
(5) ROA	0.15	0.08	−0.04	0.41	−0.01	−0.07	−0.14	−0.29	1.00						
(6) Leverage	0.31	0.19	0.00	1.02	0.06	0.05	0.06	−0.01	0.09	1.00					
(7) Board size	10.77	1.81	6.00	15.00	0.27	0.13	−0.09	0.40	−0.14	0.08	1.00				
(8) Board independence	0.85	0.08	0.55	0.93	0.25	0.05	−0.13	0.09	−0.01	0.10	0.09	1.00			
(9) Market to book	5.46	22.02	−134	97.81	0.03	−0.02	−0.02	−0.02	0.07	−0.11	0.02	−0.02	1.00		
(10) Board women share	27.68	9.26	8.33	54.55	0.26	0.01	−0.03	0.13	0.03	0.05	0.06	0.18	0.02	1.00	
(11) CSR committee	0.64	0.48	0.00	1.00	0.31	0.00	−0.03	0.28	−0.06	0.03	0.18	0.15	0.00	0.23	1.00

Note: $N = 2178$. The table reports the mean, standard deviations (SD), minimums, maximums, and Pearson correlation coefficients. Firm size is log-transformed. All independent variables are winsorized at the 1% level.

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TABLE 4 | Descriptive statistics and bivariate correlation coefficients (DV: ENV disclosure).

Variable	Mean	SD	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) ENV disclosure	39.6	20.51	0.00	89.22	1.00										
(2) Executive changes per year	1.74	1.80	0.00	7.00	0.05	1.00									
(3) Strategic dynamism	−1.98	2.43	−7.29	4.19	−0.09	0.01	1.00								
(4) Firm size	9.85	1.14	7.59	12.77	0.39	0.07	−0.07	1.00							
(5) ROA	0.15	0.08	−0.04	0.41	−0.02	−0.07	−0.14	−0.29	1.00						
(6) Leverage	0.31	0.19	0.00	1.02	0.05	0.05	0.06	−0.01	0.09	1.00					
(7) Board size	10.77	1.81	6.00	15.00	0.27	0.13	−0.09	0.40	−0.14	0.08	1.00				
(8) Board independence	0.85	0.08	0.55	0.93	0.22	0.05	−0.13	0.09	−0.01	0.10	0.09	1.00			
(9) Market to book	5.46	22.02	−134	97.81	0.05	−0.02	−0.02	−0.02	0.07	−0.11	0.02	−0.02	1.00		
(10) Board women share	27.68	9.26	8.33	54.55	0.24	0.01	−0.03	0.13	0.03	0.05	0.06	0.18	0.02	1.00	
(11) CSR committee	0.64	0.48	0.00	1.00	0.31	0.00	−0.03	0.28	−0.06	0.03	0.18	0.15	0.00	0.23	1.00

Note: $N = 2178$. The table reports the mean, standard deviations (SD), minimums, maximums, and Pearson correlation coefficients. Firm size is log-transformed. All independent variables are winsorized at the 1% level.

negative and significant in Model 3 ($\beta = -0.191$, $p = 0.012$). This indicates that more frequent changes in top management are associated with lower levels of ESG disclosure, suggesting that leadership instability may impair firms' ability or willingness to report comprehensively on sustainability-related issues. Similarly, H1b posits a negative relationship between executive changes and environmental disclosure ($\beta = -0.183$, $p = 0.088$).

The results in Table 6 support this hypothesis as well. In Model 6, the coefficient for executive changes is negative and significant ($\beta = -0.337$, $p = 0.014$), implying that top management turnover also reduces disclosure specifically in the environmental domain. This effect may be stronger for the environmental subdimension because environmental disclosures typically require technical knowledge, forward-looking planning, and multiyear commitments, all of which depend on stability and institutional knowledge within the leadership team.

H2a suggests that strategic dynamism strengthens the negative relationship between executive changes and ESG disclosure. Model 3 in Table 5 provides support for this hypothesis: the interaction term between executive changes and strategic dynamism is negative and significant ($\beta = -0.052$, $p = 0.031$). The interaction plot in Figure 2 confirms that the negative slope between executive changes and ESG disclosure is steeper under high levels of strategic dynamism. This finding suggests that in more volatile strategic contexts, the disruptive effect of leadership turnover on ESG reporting is amplified. H2b proposes a similar moderation effect for environmental disclosure. The interaction term in Model 6 (Table 6) is negative and marginally significant ($\beta = -0.081$, $p = 0.082$). While the result does not meet the conventional 5% threshold, the direction and form of the interaction (as visualized in Figure 3) are consistent with our theoretical expectation. Firms operating in highly dynamic strategic environments appear particularly sensitive to the destabilizing effects of executive changes when it comes to environmental transparency.

Interestingly, only a limited number of control variables show statistical significance across models. This can be attributed to the use of firm FEs, which remove all time-invariant firm-level heterogeneity. As such, the within-firm variation that remains is often lower in explanatory power for relatively stable control variables such as firm size or board composition. The nonsignificance of most controls, therefore, reflects the analytical focus on within-firm fluctuations rather than between-firm differences.

4.1 | Alternative Explanations and Contextual Heterogeneity

To examine whether broader temporal shifts in the political climate surrounding ESG disclosure affect our results, we include a post-2020 period indicator (year_split = 1 for 2021–2023; 0 for 2017–2020) in our fixed-effects models. This period captures the phase in which ESG became more politically contested in the United States, while the inclusion of year FEs continues to absorb common year-specific shocks. The results show that our main findings remain unchanged after accounting for this temporal split. For overall ESG disclosure, executive turnover remains negatively associated

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TABLE 5 | OLS fixed effects panel data regression results (H1a and H2a).

	Model 1 (only controls)			Model 2 (IV + controls)			Model 3 (IV + MOD + controls)		
DV: ESG disclosure	***β***	**SE**	***p***	***β***	**SE**	***p***	***β***	**SE**	***p***
Executive changes per year				−0.093*	0.056	0.096	−0.191**	0.076	0.012
Executive changes × strategic dynamism							−0.052**	0.024	0.031
Strategic dynamism	−0.055	0.055	0.323	−0.053	0.055	0.335	0.033	0.065	0.605
Firm size	1.977**	0.820	0.016	2.022**	0.818	0.014	2.053**	0.819	0.013
ROA	3.685	3.281	0.262	3.674	3.271	0.262	3.706	3.255	0.255
Leverage	1.211	1.852	0.514	1.281	1.848	0.488	1.123	1.836	0.541
Board size	−0.047	0.108	0.665	−0.031	0.109	0.773	−0.026	0.108	0.806
Board independence	4.154	3.516	0.238	4.055	3.510	0.249	4.057	3.521	0.250
Market to book	0.001	0.005	0.847	0.001	0.005	0.881	0.001	0.005	0.891
Board women share	0.010	0.022	0.652	0.009	0.022	0.689	0.007	0.022	0.738
CSR committee (Y)	1.047**	0.421	0.013	1.033**	0.419	0.014	1.026**	0.419	0.015
Constant	25.737***	8.655	0.003	25.409***	8.654	0.003	25.302***	8.683	0.004
Year dummies	Yes			Yes			Yes		
Fixed effects	Yes			Yes			Yes		
Observations	2178			2178			2178		
R^2	44.0%			44.1%			44.3%		
Number of firms	446			446			446		

Note: Year dummies were included in regression but omitted in reporting to preserve space.
***$p < 0.01$.
**$p < 0.05$.
*$p < 0.1$.

with disclosure quality ($\beta = -0.191$, SE = 0.076, $p = 0.012$), and the interaction between executive turnover and strategic dynamism remains negative and statistically significant ($\beta = -0.052$, SE = 0.024, $p = 0.031$). For ENV disclosure, both the IV executive turnover ($\beta = -0.337$, SE = 0.137, $p = 0.014$), and the interaction term remain negatively significant ($\beta = -0.081$, SE = 0.047, $p = 0.082$). The period indicator itself is positive and significant in both models (ESG disclosure: $\beta = 6.075$, SE = 0.791, $p < 0.001$; ENV disclosure: $\beta = 8.681$, SE = 1.497, $p < 0.001$), indicating that average disclosure levels were higher in the later period. Taken together, these findings suggest that although disclosure levels increased over time, the negative association between executive turnover and disclosure quality is not explained away by broader temporal shifts in the political environment surrounding ESG.

In addition, prior research highlights that ESG aggregates heterogeneous dimensions that differ in their degree of managerial discretion and standardization. Governance disclosure is often more standardized and partially mandated, whereas environmental and social disclosures are more discretionary and forward-looking (Tsang et al. 2023; Christensen et al. 2021). To account for this composite nature, we re-estimate our models using a combined E&S disclosure measure that excludes governance. The results remain consistent with our main findings: Executive turnover is negatively associated with E&S disclosure ($\beta = -0.257$, SE = 0.099, $p = 0.010$), and the interaction with strategic dynamism remains negative and marginally significant ($\beta = -0.063$, SE = 0.032, $p = 0.052$). These findings suggest that leadership instability primarily affects more discretionary disclosure domains, while the inclusion of more standardized governance disclosure attenuates effects in aggregate ESG measures.

Finally, to account for heterogeneity in firms' internal sustainability structures, we include a dummy variable capturing the presence of a chief sustainability officer (CSO) or equivalent senior sustainability executive. Prior research suggests that the presence of a CSO reflects a higher degree of institutionalization of ESG governance and dedicated sustainability infrastructure, which may stabilize disclosure processes and reduce their dependence on individual executives (Thun and Zülch 2023). We incorporate this measure in a reduced-sample specification covering the period 2017–2022. The results remain consistent with our main findings: executive turnover continues to be negatively associated with ESG disclosure ($\beta = -0.203$, SE = 0.078, $p = 0.010$), and the moderating effect of strategic dynamism remains negative ($\beta = -0.050$, SE = 0.026, $p = 0.054$), while the CSO indicator itself is not statistically significant. These findings suggest that our results are not driven by differences in formal ESG governance structures.

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TABLE 6 | OLS fixed effects panel data regression results (H1b and H2b).

	Model 4 (only controls)			Model 5 (IV + controls)			Model 6 (IV + MOD + controls)		
DV: ENV disclosure	***β***	**SE**	***p***	***β***	**SE**	***p***	***β***	**SE**	***p***
Executive changes per year				−0.183*	0.107	0.088	−0.337**	0.137	0.014
Executive changes × strategic dynamism							−0.081*	0.047	0.082
Strategic dynamism	−0.089	0.113	0.431	−0.087	0.113	0.446	0.049	0.128	0.700
Firm size	3.300**	1.494	0.028	3.387**	1.490	0.023	3.435**	1.498	0.022
ROA	5.422	6.223	0.384	5.401	6.213	0.385	5.451	6.210	0.381
Leverage	2.634	3.505	0.453	2.772	3.492	0.428	2.523	3.470	0.468
Board size	−0.205	0.219	0.349	−0.175	0.220	0.427	−0.167	0.219	0.446
Board independence	7.297	5.788	0.208	7.104	5.781	0.22	7.107	5.799	0.221
Market to book	0.005	0.011	0.632	0.005	0.011	0.664	0.005	0.011	0.667
Board women share	0.042	0.042	0.321	0.040	0.042	0.348	0.037	0.042	0.379
CSR committee (Y)	2.520***	0.838	0.003	2.493***	0.834	0.003	2.482***	0.835	0.003
Constant	−7.150	15.827	0.652	−7.794	15.803	0.622	−7.961	15.89	0.617
Year dummies		Yes			Yes			Yes	
Fixed effects		Yes			Yes			Yes	
Observations		2178			2178			2178	
R^2		36.0%			36.2%			36.3%	
Number of firms		446			446			446	

Note: Year dummies were included in regression but omitted in reporting to preserve space.
***$p < 0.01$.
**$p < 0.05$.
*$p < 0.1$.

4.2 | Endogeneity and Causal Identification

To further strengthen the internal validity of our findings and address potential endogeneity concerns, we implement complementary approaches that account for reverse causality and omitted variable bias. Endogeneity is a well-documented concern in upper echelons and ESG disclosure research (Bai et al. 2024; Zhang et al. 2021), as executive turnover may be correlated with unobserved firm characteristics or performance shocks that also influence disclosure behavior. To mitigate this concern, we employ two distinct strategies. First, we apply the Impact Threshold of a Confounding Variable (ITCV) developed by Frank (2000) and extended by Oster (2019). The resulting threshold (ITCV = 0.118) indicates that an omitted confounder would need to explain approximately 11.8% of the residual variance to fully eliminate the observed effect of executive turnover on ESG disclosure. This exceeds commonly applied benchmarks, suggesting that our findings are robust to moderate levels of unobserved confounding.

Second, we estimate a two-stage least squares (2SLS) model using the industry-level average of executive turnover (SIC-2 × year) as an instrument. This instrument captures exogenous variation in turnover driven by industry-level dynamics and peer effects (Bai et al. 2024). The instrumented estimates confirm a negative and statistically significant effect of executive turnover on ESG disclosure ($\beta = -0.499$, SE = 0.213, $p = 0.020$) and a negative moderation effect with strategic dynamism ($\beta = -0.138$, SE = 0.059, $p = 0.019$). These results provide additional support for the robustness of our findings and are consistent with a causal interpretation.

4.3 | Model Specification and Measurement Robustness

To test the generalizability of our results, we re-estimate our core models using two log-transformed variants of the disclosure scores as DVs: (1) the natural logarithm of the ESG Disclosure Score (ln (ESG Disclosure), ESGD) and (2) the natural logarithm of the Environmental Disclosure Score (ln (Environmental Disclosure), ENV). Log-transformation is a common approach to address skewness in disclosure measures (Alkhawaja et al. 2023; Wasiuzzaman and Subramaniam 2023). Across both alternative specifications, we continue to observe a statistically significant negative association between executive turnover and ESG disclosure, as well as a robust negative interaction effect with strategic dynamism. Using the logarithm of the ESG disclosure score

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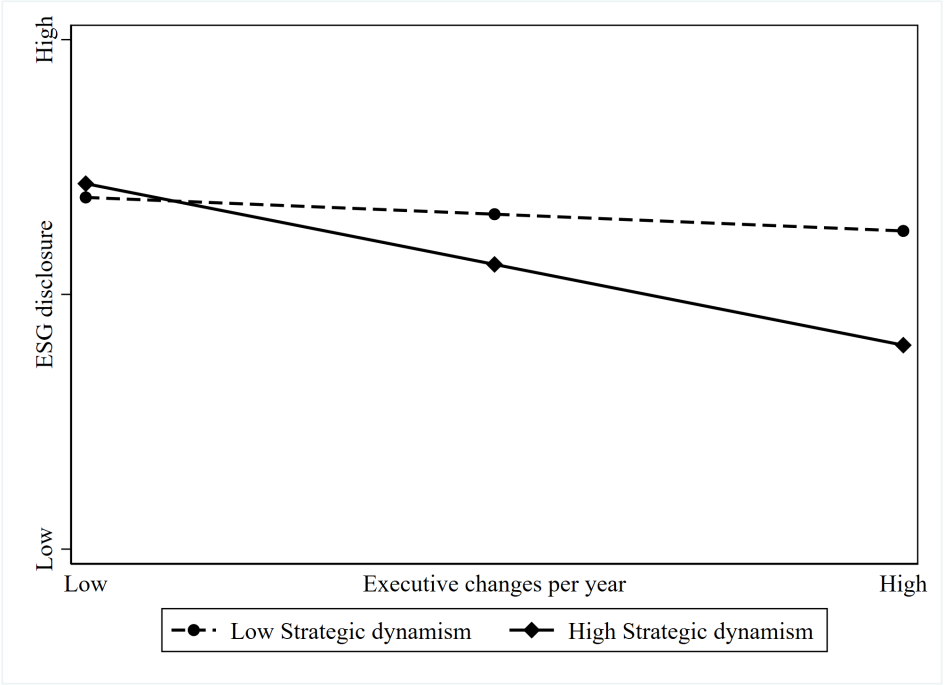


FIGURE 2 | The moderating effect of strategic dynamism on ESG disclosure. *Note:* High and low strategic dynamism as well as the value of ESG disclosure and executive changes per year are displayed at one standard deviation above and below the mean.

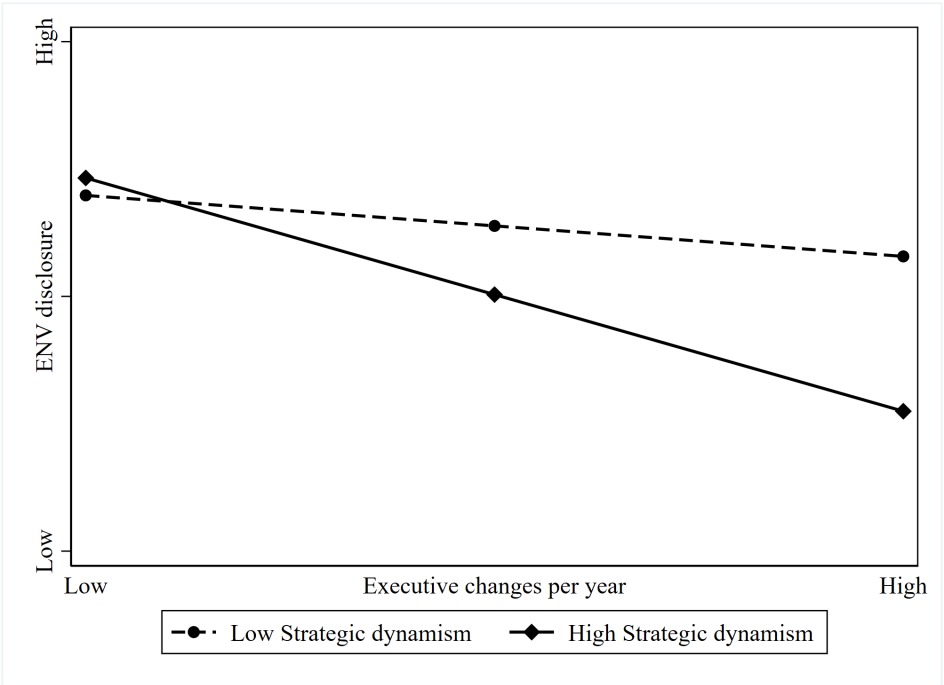


FIGURE 3 | The moderating effect of strategic dynamism on ENV disclosure. *Note:* High and low strategic dynamism as well as the value of ESG disclosure and executive changes per year are displayed at one standard deviation above and below the mean.

(ESGD) as the DV, the results are consistent with our main findings: executive turnover remains negatively and significantly related to ESG disclosure ($\beta = -0.0045$, $p = 0.005$), and the moderating effect of strategic dynamism also retains its negative and significant character ($\beta = -0.0013$, $p = 0.011$). These findings confirm that the theorized relationships are not sensitive to the functional specification of the DV and thus reinforce the robustness of our results.

To examine potential nonlinearities, we include the squared term of executive turnover in the model to test for a U-shaped relationship. The squared term is statistically insignificant ($p = 0.165$), suggesting that the relationship is linear within the observed data range.

Finally, we re-estimate our models using generalized estimating equations (GEEs) with robust standard errors and an

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exchangeable correlation structure. The GEE results are substantively consistent with our FE estimates. Taken together, these analyses consistently support the stability, generalizability, and internal validity of our main findings.

5 | Discussion

5.1 | Implications for Research and Theory

This study contributes to the growing literature at the intersection of TMT dynamics and ESG disclosure by empirically demonstrating how executive changes shape ESG and ENV disclosure in a voluntary reporting context (Bai et al. 2024; Deng et al. 2024). Drawing on upper echelons theory (Hambrick and Mason 1984), we show that frequent executive changes are associated with lower levels of ESG and ENV disclosure. Moreover, we find that this negative effect is amplified under conditions of high strategic dynamism. These findings also shed light on the mechanisms through which leadership transitions influence ESG disclosure behavior. ESG disclosure is not merely a technical reporting exercise but a cross-functional organizational process that requires sustained leadership commitment and coordination across departments (McBrayer 2018). Frequent executive changes can disrupt these processes by interrupting strategic continuity, fragmenting shared cognitive frames within the top management team, and shifting managerial attention toward short-term priorities (Hambrick and Mason 1984; Bansal and DesJardine 2014). Newly appointed executives often reassess existing strategic initiatives while facing pressure to stabilize performance or redefine organizational priorities. In such circumstances, long-term and resource-intensive initiatives such as ESG disclosure may receive less managerial attention, weakening the continuity and depth of sustainability reporting.

Taken together, these findings have several important theoretical implications. First, while much of the existing ESG disclosure literature focuses on static governance characteristics such as board composition, CSR committees, and CEO attributes (Wasiuzzaman and Subramaniam 2023; Zhang et al. 2021), we extend this literature by introducing leadership instability as a dynamic governance mechanism that directly affects disclosure continuity. In doing so, we challenge the implicit assumption that disclosure quality is primarily driven by structural board characteristics and show that temporal leadership processes constitute an equally important explanatory dimension.

Second, we extend upper echelons theory by identifying strategic dynamism as a critical contextual amplifier of leadership instability. Our results demonstrate that in highly dynamic environments, frequent executive changes further constrain firms' ability to institutionalize ESG disclosure processes. Rather than treating executive turnover effects as uniform, our findings qualify existing theory by demonstrating that the consequences of leadership change depend systematically on the strategic volatility of the organizational environment. This contributes to a more contingent view of upper echelons theory and responds to calls for integrating environmental dynamism into leadership research (Crossland et al. 2014).

Third, our study contributes to the international ESG disclosure literature by revisiting and extending the conflicting findings of Bai et al. (2024) and Deng et al. (2024), who examined similar questions in the Chinese context. Whereas prior studies yield mixed evidence on whether executive restructuring enhances or undermines ESG disclosure, our results suggest that the direction and magnitude of turnover effects are institutionally contingent. In particular, differences in institutional stability and enforcement predictability may help explain why executive restructuring can coincide with improved disclosure in more compliance-oriented settings, whereas in market-based regimes disclosure routines may depend more heavily on internally sustained leadership continuity. By applying a comparable theoretical framework to US firms and introducing a distinct IV (executive changes per year), we help reconcile prior inconsistencies by showing that in market-based regimes such as the United States, leadership instability appears to disrupt internally institutionalized disclosure routines rather than reinforce compliance-oriented incentives. In doing so, we enhance the generalizability of ESG disclosure theory from state-driven to market-oriented institutional contexts (Alkhawaja et al. 2023; Tsang et al. 2023; Wasiuzzaman and Subramaniam 2023).

Finally, our findings underline the importance of analyzing ESG subdimensions separately. We show that environmental disclosure is particularly vulnerable to leadership instability, likely due to its reliance on long-term planning, technical expertise, and cross-functional coordination (Doan and Sassen 2020). This supports calls for treating ESG components as analytically distinct (Wasiuzzaman and Subramaniam 2023) and opens new avenues for theorizing about governance antecedents of specific sustainability dimensions.

5.2 | Practical Implications

Our results have several implications for corporate decision-makers seeking to enhance their ESG disclosure. First, boards of directors and nominating committees should consider the potential side effects of TMT instability on nonfinancial reporting. While executive changes may be warranted for strategic renewal or performance improvement, their disruptive effects on ESG disclosure, especially in strategically dynamic environments, should be managed proactively.

Second, firms operating in volatile or innovation-driven industries should institutionalize ESG processes more deeply to buffer them against executive changes. For example, investing in internal ESG teams, standardizing disclosure routines, and embedding sustainability metrics into strategic planning may help mitigate the adverse effects of executive changes.

Third, the growing interest of capital markets and stakeholders in sustainability performance underscores the importance of continuity and credibility in disclosure. Communicating clearly about ESG commitments during periods of executive transition, for example, via interim disclosures or transition statements, can help preserve stakeholder trust.

Finally, our findings suggest that environmental disclosure deserves particular attention. Given its reliance on technical

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planning and resource stability, firms should ensure that environmental reporting frameworks are resilient to leadership change, especially in firms subject to high strategic turbulence.

5.3 | Limitations and Future Research

As with any empirical study, our analysis is subject to several limitations that offer opportunities for future research. Our empirical setting focuses on large publicly listed US firms operating in a predominantly voluntary and market-based ESG disclosure regime. Institutional environments differ along important dimensions, including regulatory stringency (mandatory vs. voluntary disclosure) and institutional stability and enforcement predictability. In highly standardized mandatory regimes, formal requirements may constrain managerial discretion and attenuate turnover-related variation in disclosure quality, whereas in less standardized or more volatile institutional contexts leadership changes may translate into stronger or more uneven disclosure effects. Moreover, our sample ends in 2023 and therefore does not capture firms' disclosure behavior under the most recent wave of ESG-related regulatory developments. Future research could examine whether the relationships identified in this study persist or change as ESG reporting becomes increasingly standardized across jurisdictions.

Furthermore, our proxy for leadership instability, the number of executive changes per year, captures the frequency of leadership turnover but does not distinguish between different types or characteristics of executive changes. Future studies could differentiate between forms of turnover, such as CEO versus non-CEO changes, planned versus forced exits, or changes involving key strategic roles, to provide a more nuanced understanding of how leadership transitions influence ESG disclosure. Taken together, these limitations highlight the importance of further research on how institutional contexts, leadership dynamics, and internal governance structures jointly shape corporate sustainability disclosure.

Author Contributions

Christian Schoendeling: conceptualization, writing – original draft, methodology, validation, writing – review and editing, formal analysis, visualization, data curation. **Carolin Krieweth:** writing – original draft, methodology, validation, writing – review and editing, data curation. **Sebastian Kruse:** writing – review and editing, validation. **Malte Brettel:** supervision, writing – review and editing, project administration.

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References

Al-Dah, B., M. Dah, and M. Jizi. 2018. "Is CSR Reporting Always Favorable?" *Management Decision* 56, no. 7: 1506–1525. https://doi.org/10.1108/MD-05-2017-0540.

Alkhawaja, A., F. Hu, S. Johl, and S. Nadarajah. 2023. "Board Gender Diversity, Quotas, and ESG Disclosure: Global Evidence." *International Review of Financial Analysis* 90, no. 3: 102823. https://doi.org/10.1016/j.irfa.2023.102823.

Al-Shaer, H., and M. Zaman. 2018. "Credibility of Sustainability Reports: The Contribution of Audit Committees." *Business Strategy and the Environment* 27, no. 7: 973–986. https://doi.org/10.1002/bse.2046.

Bai, C., D. Liu, and Y. Liu. 2024. "Executive Team Restructuring and Corporate ESG Disclosure Quality." *Finance Research Letters* 66, no. 2: 105654. https://doi.org/10.1016/j.frl.2024.105654.

Bansal, P., and M. R. DesJardine. 2014. "Business Sustainability: It Is About Time." *Strategic Organization* 12, no. 1: 70–78. https://doi.org/10.1177/1476127013520265.

Bhatia, S., and D. Marwaha. 2022. "The Influence of Board Factors and Gender Diversity on the ESG Disclosure Score: A Study on Indian Companies." *Global Business Review* 23, no. 6: 1544–1557. https://doi.org/10.1177/09721509221132067.

Bloomberg. 2025. "US Companies Face Pressure Around Global ESG Disclosure Mandates." https://news.bloomberglaw.com/us-law-week/us-companies-face-pressure-around-global-esg-disclosure-mandates.

Boyd, B. 1990. "Corporate Linkages and Organizational Environment: A Test of the Resource Dependence Model." *Strategic Management Journal* 11, no. 6: 419–430. https://doi.org/10.1002/smj.4250110602.

Bui, B., M. N. Houqe, and M. Zaman. 2020. "Climate Governance Effects on Carbon Disclosure and Performance." *British Accounting Review* 52, no. 2: 100880. https://doi.org/10.1016/j.bar.2019.100880.

Chen, G. 2015. "Initial Compensation of New CEOs Hired in Turnaround Situations." *Strategic Management Journal* 36, no. 12: 1895–1917. https://doi.org/10.1002/smj.2321.

Christensen, D. M. 2016. "Corporate Accountability Reporting and High-Profile Misconduct." *Accounting Review* 91, no. 2: 377–399. https://doi.org/10.2308/accr-51200.

Christensen, D. M., G. Serafeim, and A. Sikochi. 2022. "Why Is Corporate Virtue in the Eye of The Beholder? The Case of ESG Ratings." *Accounting Review* 97, no. 1: 147–175. https://doi.org/10.2308/TAR-2019-0506.

Christensen, H. B., L. Hail, and C. Leuz. 2021. "Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review." *Review of Accounting Studies* 26, no. 3: 1176–1248. https://doi.org/10.1007/s11142-021-09609-5.

Crossland, C., J. Zyung, N. J. Hiller, and D. C. Hambrick. 2014. "CEO Career Variety: Effects on Firm-Level Strategic and Social Novelty." *Academy of Management Journal* 57, no. 3: 652–674. https://doi.org/10.5465/amj.2012.0469.

Dao, M., H.-W. Huang, K. Y. Chen, and T.-C. Huang. 2014. "Can Management Turnover Restore the Financial Statement Credibility of Restating Firms? Further Evidence." *Journal of Business Finance & Accounting* 41, no. 7–8: 893–925. https://doi.org/10.1111/jbfa.12081.

Deng, B., Z. Peng, K. Albitar, and L. Ji. 2024. "Top Management Team Stability and ESG Greenwashing: Evidence From China." *Business Strategy and the Environment* 34, no. 1: 450–467. https://doi.org/10.1002/bse.3998.

Dess, G. G., and D. W. Beard. 1984. "Dimensions of Organizational Task Environments." *Administrative Science Quarterly* 29: 52–73. https://doi.org/10.2307/2393080.

Dhaliwal, D. S., O. Z. Li, A. Tsang, and Y. G. Yang. 2011. "Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting." *Accounting Review* 86, no. 1: 59–100. https://doi.org/10.2308/accr.00000005.

Doan, M. H., and R. Sassen. 2020. "The Relationship Between Environmental Performance and Environmental Disclosure: A Meta-Analysis." *Journal of Industrial Ecology* 24, no. 5: 1140–1157. https://doi.org/10.1111/jiec.13002.

Donaldson, T., and L. E. Preston. 1995. "The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications." *Academy of*

10990836, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/bse.71127 by Universitatsbibliothek RWTH Aachen University, Wiley Online Library on [08/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Management Review 20, no. 1: 65–91. https://doi.org/10.5465/amr.1995.9503271992.

Financial Times. 2024a. "The Way Forward for ESG." https://www.ft.com/content/7e2c08e6-f9a5-4c51-9957-68d3814ba014.

Financial Times. 2024b. "Why Companies Must Avoid the Status Quo Trap." https://www.ft.com/content/6417c24b-e9c8-42c7-bb5b-dcd3217647dc.

Frank, K. A. 2000. "Impact of a Confounding Variable on a Regression Coefficient." *Sociological Methods & Research* 29, no. 2: 147–194. https://doi.org/10.1177/0049124100029002001.

Freeman, R. E. 1984. "Strategic Management: A Stakeholder Approach." In *Pitman Series in Business and Public Policy*. Cambridge University Press.

Goss, A., and G. S. Roberts. 2011. "The Impact of Corporate Social Responsibility on the Cost of Bank Loans." *Journal of Banking & Finance* 35, no. 7: 1794–1810. https://doi.org/10.1016/j.jbankfin.2010.12.002.

Hair, J. F. 2010. *Multivariate Data Analysis*. 7th ed. Prentice Hall.

Hambrick, D. C., and P. A. Mason. 1984. "Upper Echelons: The Organization as a Reflection of Its Top Managers." *Academy of Management Review* 9, no. 2: 193–206. https://doi.org/10.5465/amr.1984.4277628.

Harvard Law School Forum on Corporate Governance. 2022. "ESG Disclosure Trends in SEC Filings." https://corpgov.law.harvard.edu/2022/07/16/esg-disclosure-trends-in-sec-filings/.

Hausman, J. A. 1978. "Specification Tests in Econometrics." *Econometrica* 46, no. 6: 1251. https://doi.org/10.2307/1913827.

Husted, B. W., and J. M. de Sousa-Filho. 2019. "Board Structure and Environmental, Social, and Governance Disclosure in Latin America." *Journal of Business Research* 102, no. 1: 220–227. https://doi.org/10.1016/j.jbusres.2018.01.017.

Jensen, M. C., and W. H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." MG4105 - S. Machold (Module Leader).

Kalnins, A. 2018. "Multicollinearity: How Common Factors Cause Type 1 Errors in Multivariate Regression." *Strategic Management Journal* 39, no. 8: 2362–2385. https://doi.org/10.1002/smj.2783.

Keats, B. W., and M. A. Hitt. 1988. "A Causal Model of Linkages Among Environmental Dimensions, Macro Organizational Characteristics, and Performance." *Academy of Management Journal* 31, no. 3: 570–598. https://doi.org/10.5465/256460.

Li, Y., M. Gong, X.-Y. Zhang, and L. Koh. 2018. "The Impact of Environmental, Social, and Governance Disclosure on Firm Value: The Role of CEO Power." *British Accounting Review* 50, no. 1: 60–75. https://doi.org/10.1016/j.bar.2017.09.007.

Ling, Q., and M. M. Mowen. 2013. "Competitive Strategy and Voluntary Environmental Disclosure: Evidence From the Chemical Industry." *Accounting and the Public Interest* 13, no. 1: 55–84. https://doi.org/10.2308/apin-10344.

Ling, Y., Z. Simsek, M. H. Lubatkin, and J. F. Veiga. 2008. "Transformational Leadership's Role in Promoting Corporate Entrepreneurship: Examining the CEO-TMT Interface." *Academy of Management Journal* 51, no. 3: 557–576. https://doi.org/10.5465/amj.2008.32626023.

Liu, R., S. Radhakrishnan, and A. Tsang. 2018. "Corporate Social Responsibility Research in Accounting: A Framework and a Review." *SSRN Electronic Journal* 12, no. 2: 149. https://doi.org/10.2139/ssrn.3134872.

Luo, L., H. Wu, and C. Zhang. 2021. "CEO Compensation, Incentive Alignment, and Carbon Transparency." *Journal of International Accounting Research* 20, no. 2: 111–132. https://doi.org/10.2308/JIAR-2020-032.

Ma, S., D. Seidl, and S. Guérard. 2015. "The New CEO and the Post-Succession Process: An Integration of Past Research and Future Directions." *International Journal of Management Reviews* 17, no. 4: 460–482. https://doi.org/10.1111/ijmr.12048.

Marais, M., E. Reynaud, and L. Vilanova. 2020. "CSR Dynamics in the Midst of Competing Injunctions: The Case of Danone." *European Management Review* 17, no. 1: 19–39. https://doi.org/10.1111/emre.12305.

Marquis, C., and C. Qian. 2014. "Corporate Social Responsibility Reporting in China: Symbol or Substance." *Organization Science* 25, no. 1: 127–148. https://doi.org/10.1287/orsc.2013.0837.

Marquis, C., M. W. Toffel, and Y. Zhou. 2016. "Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing." *Organization Science* 27, no. 2: 483–504.

McBrayer, G. A. 2018. "Does Persistence Explain ESG Disclosure Decisions?" *Corporate Social Responsibility and Environmental Management* 25, no. 6: 1074–1086. https://doi.org/10.1002/csr.1521.

McKinsey. 2023. "Investors Want to Hear From Companies About the Value of Sustainability." https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/investors-want-to-hear-from-companies-about-the-value-of-sustainability.

Milliken, F. J. 1987. "Three Types of Perceived Uncertainty About the Environment: State, Effect, and Response Uncertainty." *Academy of Management Review* 12, no. 1: 133–143. https://doi.org/10.5465/amr.1987.4306502.

Oster, E. 2019. "Unobservable Selection and Coefficient Stability: Theory and Evidence." *Journal of Business & Economic Statistics* 37, no. 2: 187–204. https://doi.org/10.1080/07350015.2016.1227711.

Palmer, T. B., and R. M. Wiseman. 1999. "Decoupling Risk Taking From Income Stream Uncertainty: A Holistic Model of Risk." *Strategic Management Journal* 20, no. 11: 1037–1062. https://doi.org/10.1002/(SICI)1097-0266(199911)20:11%3C1037::AID-SMJ67%3E3.0.CO;2-2.

Qian, W., L. Parker, and J. Zhu. 2024. "Corporate Environmental Reporting in the China Context: The Interplay of Stakeholder Salience, Socialist Ideology and State Power." *British Accounting Review* 56, no. 1: 101198. https://doi.org/10.1016/j.bar.2023.101198.

Reuters. 2025. "Why Business Won't Abandon Sustainability as a Long-Term Play." https://www.reuters.com/sustainability/sustainable-finance-reporting/why-business-wont-abandon-sustainability-long-term-play-2025-05-19.

Rupley, K. H., D. Brown, and R. S. Marshall. 2012. "Governance, Media and the Quality of Environmental Disclosure." *Journal of Accounting and Public Policy* 31, no. 6: 610–640. https://doi.org/10.1016/j.jaccpubpol.2012.09.002.

Ryou, J. W., A. Tsang, and K. T. Wang. 2022. "Product Market Competition and Voluntary Corporate Social Responsibility Disclosures." *Contemporary Accounting Research* 39, no. 2: 1215–1259. https://doi.org/10.1111/1911-3846.12748.

Servaes, H., and A. Tamayo. 2013. "The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness." *Management Science* 59, no. 5: 1045–1061. https://doi.org/10.1287/mnsc.1120.1630.

Slawinski, N., and P. Bansal. 2015. "Short on Time: Intertemporal Tensions in Business Sustainability." *Organization Science* 26, no. 2: 531–549. https://doi.org/10.1287/orsc.2014.0960.

Stuart, A. C., S. H. Fuller, N. M. Heron, and T. J. Riley. 2022. "Defining CSR Disclosure Quality: A Review and Synthesis of the Accounting Literature." *Journal of Accounting Literature* 45, no. 1: 1–47. https://doi.org/10.1108/JAL-06-2022-0067.

Thun, T. W., and H. Zülch. 2023. "The Effect of Chief Sustainability Officers on Sustainability Reporting - A Management Perspective."

10990836, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/bse.71127 by Universitatsbibliothek RWTH Aachen University, Wiley Online Library on [08/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Business Strategy and the Environment 32, no. 4: 2093–2110. https://doi.org/10.1002/bse.3238.

Tsang, A., T. Frost, and H. Cao. 2023. "Environmental, Social, and Governance (ESG) Disclosure: A Literature Review." *British Accounting Review* 55, no. 1: 101149. https://doi.org/10.1016/j.bar.2022.101149.

Wang, G., R. A. Devine, G. Molina-Sieiro, and R. M. Holmes. 2024. "Strategic Leaders and Corporate Social Responsibility: A Meta-Analytic Review." *Journal of Management* 50, no. 7: 2675–2714. https://doi.org/10.1177/01492063231164991.

Wasiuzzaman, S., and V. Subramaniam. 2023. "Board Gender Diversity and Environmental, Social and Governance (ESG) Disclosure: Is It Different for Developed and Developing Nations?" *Corporate Social Responsibility and Environmental Management* 30, no. 5: 2145–2165. https://doi.org/10.1002/csr.2475.

Wiersema, M., and K. A. Bantel. 1992. "Top Management Team Demography and Corporate Strategic Change." *Academy of Management Journal* 35, no. 1: 91–121. http://www.jstor.org/stable/256474.

Wooldridge, J. M. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd ed. MIT Press.

Zhang, L., Q. Tang, and R. H. Huang. 2021. "Mind the Gap: Is Water Disclosure a Missing Component of Corporate Social Responsibility?" *British Accounting Review* 53, no. 1: 100940. https://doi.org/10.1016/j.bar.2020.100940.

10990836, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/bse.71127 by Universitatsbibliothek RWTH Aachen University, Wiley Online Library on [08/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License