

Institutional pressures and ESG disclosure similarity: an analysis of European shareholder letters

Benedetta Valeria Cannizzaro

Department of Foreign Languages, Literatures and Cultures, University of Bergamo, Bergamo, Italy

Anna Piazza

School of Business, Operations and Strategy, University of Greenwich, London, UK

Stefano Ghinoi

Department of Communication and Economics,

University of Modena e Reggio Emilia, Modena, Italy and

Department of Economics and Management, University of Helsinki, Helsinki, Finland, and

Srinidhi Vasudevan

School of Business, Operations and Strategy, University of Greenwich, London, UK

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Abstract

Purpose – The purpose of this study is to reorient scholarly attention from regulatory ESG disclosure to voluntary disclosure practices through shareholder letters, which are directly written by corporate leaders without predetermined reporting templates. Specifically, this study investigates how institutional pressures (i.e. coercive, normative and mimetic pressures) lead European firms to report similar ESG topics in shareholder letters. This work seeks to inform managers and policymakers on how to strategically navigate the institutional pressures in voluntary ESG topic disclosure.

Design/methodology/approach – We build our approach on neo-institutional theory, underlining the role of institutional pressures in shaping voluntary ESG disclosure. We use a cross-sectional research design based on 156 shareholder letters from firms listed on the STOXX Europe 600 Index in the 2022 financial year. Our methodology comprises the use of Discourse Network Analysis (DNA), to map similarities in the disclosure of ESG-related information between firms, and the use of Multiple Regression Quadratic Assignment Procedure (MR-QAP), to test for the extent to which firms are similar along the three institutional pressures: coercive indicated by membership in the European Union, normative measured by cultural cluster from the GLOBE Project classification, and mimetic represented by sector affiliation.

Findings – Our findings reveal that only normative isomorphism, operationalised through cultural cluster membership, is significantly associated with the level of similarity in ESG disclosure. Contrary to theoretical expectations, neither coercive pressure from EU regulatory frameworks nor mimetic pressure from sector affiliation demonstrates statistically significant associations with voluntary ESG disclosure patterns. These findings suggest that when firms have greater narrative freedom in disclosure, cultural values are more strongly associated with ESG communication strategies than regulatory requirements or industry-based imitation.

Originality/value – This research contributes to the existing literature by focussing on an unexamined voluntary disclosure practice on ESG, such as shareholder letters. By employing a relational approach, our work provides new insights into how coercive, normative, and mimetic pressures can facilitate reporting similar ESG activities between European firms.

Keywords Shareholder letters, Neo-institutional theory, Discourse network analysis, ESG disclosure, Institutional pressures

Paper type Research article



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1. Introduction

In recent years, we have witnessed a significant shift in sustainability disclosure, moving from voluntary towards mandatory reporting across multiple jurisdictions. The European Union (EU) has championed this shift, beginning with Directive [2014/95/EU](#) (Non-Financial Reporting Directive – NFRD), which mandated large public-interest entities to disclose information on “environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters.” Building on this, the EU adopted Directive [2022/2464](#) (Corporate Sustainability Reporting Directive – CSRD) in 2022, which expanded the scope of firms covered and the depth of required disclosure. The CSRD introduces more standardised reporting requirements through the European Sustainability Reporting Standards (ESRS) framework that requires reporting across Environmental, Social, and Governance (ESG) dimensions, including information on climate change impacts, working conditions, and governance structures. Bolstering this regulatory framework, the European Securities and Markets Authority (ESMA) introduced regulations in 2020 regarding the taxonomy of fund names based on ESG criteria, standardising ESG disclosures in specific financial products.

However, despite these regulatory accomplishments, a significant gap remains. While there are regulations for specific disclosure requirements governed by the above frameworks, some disclosures remain voluntary, providing considerable autonomy in how sustainability-related information is reported. This is particularly significant because ESG dimensions focus on multiple aspects that firms may prioritise differently based on their strategic objectives and stakeholder pressures. The regulatory landscape surrounding ESG disclosure remains complex and uncertain. The CSRD, which began requiring compliance for the first wave of firms in the 2024 financial year, represents one of the most complex regulatory regimes to date ([Lindahl et al., 2024](#)). The 2024 Draghi Report on EU competitiveness highlighted that “the EU’s sustainability reporting and due diligence framework is a major source of regulatory burden, magnified by a lack of guidance to facilitate the application of complex rules” ([Draghi, 2024](#), p. 318). In response, the European Commission proposed changes to the CSRD scope through its February 2025 “Omnibus” package, removing approximately 80% of firms from initial coverage and introducing measures to reduce compliance burden. These ongoing modifications demonstrate the dynamic and uncertain nature of the regulatory environment, reinforcing the importance of examining voluntary disclosure strategies ([Bertram, 2025](#)).

Within this landscape of increasing regulatory complexity, shareholder letters have emerged as a particularly valuable site for examining voluntary ESG disclosure. Traditionally addressed to shareholders, these letters are now expanding their scope to engage a broader range of stakeholders ([Civera et al., 2025](#)), making them increasingly central to firms’ sustainability communication strategies. Shareholder letters offer distinctive advantages for research: they remain largely voluntary and unstandardised, with narratives shaped directly by corporate leaders without predetermined reporting templates ([Arvidsson, 2023](#); [Arvidsson and Sabelfeld, 2023](#)). Unlike mandatory reports governed by standardised frameworks, shareholder letters provide firms with narrative freedom to choose which ESG topics to emphasise, how prominently to feature them, and how to frame their sustainability commitments. This narrative freedom makes shareholder letters particularly valuable for understanding how firms strategically communicate their ESG priorities when not constrained by regulatory requirements.

However, this freedom does not mean firms draft these letters in isolation from their broader institutional context. Multiple forces shape how firms communicate sustainability commitments, including the national and international regulatory environment, the national culture, and the characteristics of the economic and industrial ecosystem. To understand how these regulatory (coercive), cultural (normative), and industry-based (mimetic) pressures shape voluntary ESG disclosure in shareholder letters, we draw upon neo-institutional theory ([DiMaggio and Powell, 1983](#)), which is particularly well-suited for examining voluntary disclosures because it showcases how firms strategically emphasise certain ESG aspects as a response to external pressures for conformity and legitimacy.

In this study, we examine whether institutional pressures shape the similarity of ESG topics disclosed in European firms' shareholder letters. Specifically, we investigate to what extent firms are similar along the three institutional pressures: coercive (regulatory environment), normative (cultural context) and mimetic (industry sector).

Our work extends prior research in two ways. First, we advance understanding of how institutional pressures operate differently in voluntary contexts. Recent studies have demonstrated the impact of institutional pressures on ESG disclosure practices (Balogh *et al.*, 2022; Huang *et al.*, 2025; Posadas *et al.*, 2023); however, these studies predominantly examine standardised corporate reports that adhere to established frameworks and in mandatory contexts. By focussing on shareholder letters, we reveal how these three forces manifest when firms have more narrative freedom. This complements existing research by identifying which institutional pressures persist when regulatory mandates are absent. Second, by using a combination of Discourse Network Analysis – DNA (Leifeld, 2009, 2010) and Multiple Regression Quadratic Assignment Procedure – MR-QAP (Dekker *et al.*, 2007; Krackardt, 1987), we examine the association between firms' similarity, on ESG disclosure practices, and institutional pressures. Specifically, the DNA maps ESG discourse network across shareholder letters to identify similarity of patterns, while the MR-QAP evaluates how institutional pressures predict a firm's discourse similarity. This approach allows us to analyse how institutional contexts shape these content choices.

Our research question is therefore the following: *how do institutional pressures define how firms report on ESG topics via shareholder letters?* To address our research question, we concentrate on 156 shareholder letters from firms listed on the STOXX Europe 600 Index in the 2022 financial year. The STOXX Europe 600 represents a diversified sample of firms across 17 European countries and multiple industries, making it particularly suitable for examining how different institutional contexts inform ESG disclosure practices. The year 2022 offers a relevant temporal snapshot because it marked the adoption of the CSRD but preceded its full implementation, providing a context where firms were operating primarily under existing disclosure requirements while anticipating future regulatory changes.

The remainder of the paper is structured as follows. Section 2 reviews previous literature on ESG disclosure, discussing the main approaches adopted in empirical studies. It also illustrates the neo-institutional theory and the role of each institutional pressure that may have an impact on ESG disclosure. Section 3 describes our methodological approach. Section 4 presents the results stemming from our analysis. Section 5 discusses such results and concludes, also suggesting future research directions.

2. Literature review

2.1 The multifaceted nature of ESG

ESG represents firms' commitment to three foundational pillars, namely Environmental, Social and Governance: the Environmental (E) pillar focuses on how firms affect the natural environment, including policies on climate change, carbon emissions, resource use, waste management, and biodiversity preservation; the Social (S) pillar assesses relationships with stakeholders, encompassing community initiatives, human rights, employee welfare, gender diversity, training programmes, and health and safety standards; the Governance (G) pillar concentrates on shareholders' rights, executive remuneration, audits, internal controls, accountability, and transparency (Gillan *et al.*, 2021; Tsang *et al.*, 2023).

Given this multifaceted nature, firms face strategic decisions about which ESG aspects to emphasise in disclosure practices. Existing research has predominantly analysed standardised corporate reports as key ESG information sources (Arvidsson and Dumay, 2022; Lin *et al.*, 2024). However, standardised reports often adhere to predetermined formats and regulatory frameworks that may restrict the articulation of true strategic priorities (Pizzi *et al.*, 2025). The 2020–2024 period represents a regulatory transformation era in sustainable development, with mandatory ESG reporting requirements worldwide (Kim and Yang, 2025). Against these

limitations, growing academic interest has emerged in voluntary corporate communications, such as shareholder or CEO letters (Arvidsson, 2023). Arvidsson and Sabelfeld (2023) found that this communication form reflects various sustainability discourses emerging from regulatory initiatives and socio-political events, revealing how corporate leaders adapt sustainability discourse in response to external pressures. Moreover, shareholder letters represent a space where CEOs employ specific linguistic devices to shape stakeholder perceptions (Toft and Jenssen, 2025) and show their commitment to sustainability issues (Cannizzaro et al., 2026). Consequently, these voluntary letters incorporate the genuine voice and strategic rationale of top management, providing insights into how leaders perceive ESG challenges and their imperative nature within corporate strategy (Zerfass et al., 2016).

However, despite growing scholarly attention on shareholder letters, it is still unclear whether coercive, normative, and mimetic pressures have an impact on firms when they have more narrative freedom.

2.2 Neo-institutional theory as a framework for interpreting institutional factors influencing ESG disclosure

According to North (1990, p. 3), the institutional environment defines “the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction.” As such, the institutional environment plays an important role in explaining the isomorphic pressures within an organisational field (DiMaggio and Powell, 1983).

We know, for instance, that firms operating in the same institutional environment are more likely to progressively become similar because the environment provides access to resources, facilitates the transmission of practices, and helps firms to satisfy formal and informal expectations from institutional stakeholders (Kuzey et al., 2025; Risi et al., 2023; Suchman, 1995). In the context of ESG, this suggests that disclosure is not necessarily a deliberate strategic action but rather emerges from isomorphic pressures. These pressures are divided into three different categories: coercive, normative, and mimetic (DiMaggio and Powell, 1983). Coercive pressures occur through regulatory mandates that push toward environmental compliance (Campbell, 2007); however, weak governance may reduce enforcement effectiveness and enable regulatory evasion (Gerged et al., 2021). Normative pressures occur when firms align with socially accepted norms and values within the institutional environment (Solimene et al., 2025), where the cultural expectation is the key driver. Finally, mimetic pressures occur when firms replicate the environmentally responsible practices of peers (Kuzey et al., 2025), emphasising the role of industry norms in fostering corporate pro-environmental behaviour under a higher level of scrutiny (Chen and Huang, 2024).

The coexistence of these different but interconnected pressures shapes a firm’s strategy on ESG disclosure practices. Overall, research shows that isomorphic pressures have a significant impact on ESG disclosure practices (El Khoury et al., 2023; Kuzey et al., 2025; Ortas et al., 2015). However, results are still mixed, especially when voluntary disclosure is considered one of the key factors showcasing the ESG practices of a firm (Kolk and Perego, 2010; Solimene et al., 2025).

2.1.1 Regulatory environment and coercive pressure on ESG disclosure. Zeng et al. (2012) argue that regulative structures influence organisational behaviour by establishing rules, checking, enforcing and imposing guidelines. This is particularly the case in the European Union, since EU directives and regulations take precedence over national legislation. This pushes EU members to adopt and enforce EU-level standards, including those related to ESG disclosure (Al-Dosari et al., 2023; Dumitru et al., 2017; Posadas and Tarquinio, 2021). Therefore, a key EU objective is to ensure harmonisation in terms of ESG reporting practices across member states. This requires coercive pressures that push firms toward convergence in ESG reporting. Indeed, the EU actively monitors and updates its regulatory frameworks; in this sense, ESMA plays a key role in translating legislation into practical and binding rules. For example, ESMA has recently introduced specific guidelines on the use of ESG and

sustainability-related terms in investment fund names (ESMA, 2024). Moreover, EU regulations go beyond EU borders and affect non-EU firms as well, particularly those that operate within the EU market. Nonetheless, it is the formal membership with the EU institutional environment that defines the coercive institutional pressure faced by EU-based firms (Knill and Lehmkuhl, 2002), making firms more likely to become similar in their ESG disclosure practices.

However, the relationship between coercive pressure and voluntary ESG disclosure remains complex. In this vein, Solimene *et al.* (2025) found that organisational characteristics explain most of the variation in voluntary ESG disclosure, whereas variations due to regulation at a country level explain less. Moreover, research on the transition from voluntary to mandatory reporting reveals that the enforcement of the law has not led to an increase in the quantity of ESG information disclosed (Álvarez-Etxeberria *et al.*, 2023), nor has it improved the quality of such information (Carungu *et al.*, 2021).

2.1.2 Cultural context and normative pressure on ESG disclosure. According to Caprar and Neville (2012), culture can act in two different manners. First, it exerts a normative effect, facilitating or hindering the development and adoption of institutional pressures for ESG disclosure. Second, it has a conforming effect based on the tendency to adhere strictly to social norms.

Consequently, culture can have an impact on a firm's disclosure practices and shape social behaviour (Martínez-Ferrero and García-Sánchez, 2017). However, how do we define culture and what typologies can be used to differentiate between firms located in different countries with different cultural values and attitudes? As highlighted by Gupta *et al.* (2002), cultural clusters can provide information about societal variations and represent a valuable way to summarise intercultural similarities across firms: countries within the same cultural cluster tend to share common cultural traits, as well as language and social values. Therefore, firms in the same cultural cluster are exposed to similar normative pressures, which lead them to adopt similar behaviours and disclose similar ESG criteria to meet shared cultural expectations (Caprar and Neville, 2012; Miska *et al.*, 2018).

The persistence of normative pressures in the context of voluntary disclosure should also be noted. Unlike coercive pressures, normative pressures can even strengthen their effectiveness because they are embedded in deeply held beliefs about appropriate corporate behaviour (Solimene *et al.*, 2025). Recent research strengthens this persistence across different voluntary disclosure contexts. Nicolò *et al.* (2025) show that the cultural context influences ESG disclosure even in voluntary disclosures where firms have freedom over content and framing. Moreover, regulation imposed on firms does not ensure that desired results will be achieved, especially when these formal rules are not aligned with social norms and shared expectations that shape the institutional context (Nicolò *et al.*, 2024). Indeed, despite ongoing global initiatives to regulate corporate reporting, multiple reporting frameworks exist across the world, underscoring that regulatory convergence alone is insufficient to overcome rooted cultural disclosure practices (Baboukardos *et al.*, 2023).

2.1.3 Industry sector and mimetic pressure on ESG disclosure. Previous research indicates that there is a relationship between mimetic pressure and the adoption of sustainability practices within the industry sector due to sector norms. For instance, in Seow's review of the literature on ESG disclosure determinants (2024), it is outlined that firms operating in the same sector face similar stakeholder expectations and regulatory frameworks, and therefore tend to imitate their competitors to gain legitimacy. When firms adopt similar disclosure practices to their industry peers, they reduce the risk of being viewed as lacking or irresponsible by stakeholders (Ortas *et al.*, 2015; Patten, 1991). Firms secure a so-called "cognitive legitimacy" by conforming to industry expectations: this means that their practices appear normal and appropriate in their sector setting (Suchman, 1995).

Zampone *et al.* (2023) also demonstrate that firms in the same sector tend to face similar stakeholder expectations, which lead them to disclose similar sustainability information. Similarly, mimetic pressure influences the adoption of sustainable behaviours in terms of

environmental and social issues (Famiyeh *et al.*, 2021). Huang *et al.* (2024) further reinforce this idea, stating that ESG disclosure practices are shaped by imitation. Specifically, these authors observed that firms are more likely to follow some sort of average level in the industry, rather than adopting the top firms' best practices. This suggests that under conditions of uncertainty, ESG disclosure practices are driven by a focus on meeting basic compliance requirements rather than striving for leadership in the sector.

However, mimetic pressures may operate differently in voluntary disclosure contexts. Empirical studies reveal mixed results for mimetic effects in such settings. While some studies find that mimetic pressures exist in standardised reports (e.g. Huang *et al.*, 2024), others indicate that mimetic effects are not significant predictors of voluntary disclosure similarity (Iliya Nyahas *et al.*, 2017). These mixed findings suggest that the strength and mechanisms of mimetic pressure depend fundamentally on disclosure structure. Chen *et al.* (2025) show that peer effects on ESG vary depending on whether firms respond to coercive pressure or engage in voluntary behaviours, and that mimetic effects are more prominent in uncertain situations. This suggests that in voluntary disclosure contexts like shareholder letters, where firms have more narrative freedom, sector-based imitation may be less influential than in contexts where structured benchmarking is possible. Consequently, firms may be more selective in emphasising certain ESG aspects.

3. Methodology

3.1 Data collection

We collected data from the European firms listed on the STOXX Europe 600 Index as of December 2022. This index has already been used in previous studies on firms' sustainable practices (Bifulco *et al.*, 2023; Martielli *et al.*, 2024), as it covers 17 European countries and approximately 90% of the free-float market capitalisation of the European stock market. This index includes firms operating under diverse institutional contexts, including different regulatory frameworks (both EU and non-EU), cultural values, and industry sectors, making it particularly suitable for examining how coercive, normative, and mimetic pressures shape ESG disclosure practices. From the initial list of 600 entities, we excluded 106 banks, financial services, and insurance firms due to their specific capital structure and regulatory requirements, in line with previous studies (Dwekat *et al.*, 2022; Martielli *et al.*, 2024).

For the remaining 494 firms, we collected economic and financial information from the Refinitiv database, and we searched for shareholder letters published in the 2022 annual reports or integrated reports. We collected all available shareholder letters signed by CEOs, Chairpersons, or both. To ensure consistency in letter selection across different corporate governance systems, we relied on the classifications discussed by Gelter and Siems (2024), Germanova *et al.* (2015), and Volonté (2015). This approach was necessary because corporate governance structures vary across European countries, affecting who holds primary responsibility for strategic communication with stakeholders. In countries with a one-tier board structure, we prioritised CEO letters, as the CEO typically holds both operational and strategic responsibility. If a CEO letter was unavailable, we sought a Chairperson's letter. In countries with a two-tier board structure, we prioritised Chairperson's letters, as the Chairperson focuses on strategic oversight while the CEO manages operational matters. If a Chairperson's letter was unavailable, we collected the CEO letter. In countries where firms have flexibility in choosing their board structure, we first sought CEO letters and used Chairperson's letters as an alternative if CEO letters were unavailable. Ultimately, we collected 59 letters from CEOs, 47 from Chairs, 48 jointly signed by the CEO and Chairperson, one signed by the CEO, Chief Financial Officer (CFO), and Chief Operating Officer (COO), and one signed by the CEO and CFO. The dual signing does not affect our analysis, as we are not focussing on the roles of the CEO or Chairperson but rather on examining the firm's attitude towards ESG that emerges from the shareholder letter. Our final database comprises 156 letters from firms based in 15 countries. These letters were saved in .txt format for further

analysis, as explained in [subsection 3.2](#). As proxies for coercive, normative and mimetic isomorphism, we decided to use data from Refinitiv and other sources and concentrate on the following variables. First, Directive 2014/95/EU and Directive 2022/2464/EU act as coercive forces because they make sustainability disclosure mandatory, which affects how firms approach their reporting ([Posadas et al., 2023](#)). Therefore, as the implementation of EU directives impacts EU firms, we map coercive isomorphism by considering membership in the EU. Second, normative isomorphism is measured using the cultural cluster classification proposed by [House et al. \(2004\)](#), expanded by [Mensah and Chen \(2013\)](#) to include Norway, Luxembourg and Belgium. Specifically, [House et al. \(2004\)](#) proposed a classification of ten distinct cultural clusters by considering the history of 62 countries and analysing their religious, linguistic, and economic similarities. Europe represents a quite diverse continent, as it is divided into five clusters (i.e. Anglo Cluster, Latin Europe, Eastern Europe, Nordic Europe and Germanic Europe). In our analysis, firms are assigned to a specific cultural cluster based on their headquarters. Countries belonging to the same cultural cluster share common characteristics, including language, social values, religious traditions, and institutional norms ([Gupta et al., 2002](#); [Ronen and Shenkar, 1985](#)), which shape the cognitive frameworks, value systems, and professional norms that influence how firms approach sustainability disclosure ([Hofstede, 1980](#); [House et al., 2004](#)). Cultural clusters are particularly appropriate for capturing normative pressures in our European context, as cultural similarities often go beyond national boundaries and create shared behaviour expectations at a supranational level ([Miska et al., 2018](#); [Ronen and Shenkar, 1985](#)). Finally, as a proxy for mimetic isomorphism, we classified firms based on their industry sector, using the Global Industry Classification Standard (GICS) Framework Reclassification 2023. This framework was co-developed in 1999 by Standard and Poor's (S&P) and MSCI/Barra (MSCI) to classify firms worldwide ([Podmetina et al., 2018](#); [Tamimi and Sebastianelli, 2017](#)). The current classification identifies eleven sectors: energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, utilities, and real estate. [Table 1](#) provides an overview of the variables and data sources used in our analysis.

3.2 Method

Our analysis concentrates on the ESG-related statements made by European firms to understand whether they share similar approaches in disclosing ESG information. In this vein, we use Discourse Network Analysis (DNA) to explore firms' similarity from a discourse network perspective. The use of DNA in non-financial disclosure studies has been recently introduced in the specialised literature ([Eberlein and Rinscheid, 2020](#)). DNA has been developed by Philip Leifeld, and it integrates qualitative content analysis and social network analysis ([Leifeld, 2009, 2010](#)): the unit of analysis is considered the statement, which can be defined as "a text portion where an actor reveals his or her [policy] beliefs or preferences in the text" ([Fisher and Leifeld, 2019](#), p. 475) on a specific concept. This method enables researchers to create discourse networks by linking actors and concepts through individual statements. Since DNA requires text data reporting actors' statements, we mapped 18 topic-specific disclosure themes derived from prior research on non-financial disclosure ([Arvidsson and Sabelfeld, 2023](#); [Balogh et al., 2022](#); [Hummel et al., 2024](#); [Seow, 2024](#)), each one related to a

Table 1. Variables and data/method sources

Institutional isomorphism	Variables used	Data and method sources
Coercive isomorphism	EU membership	EU website (European Union, 2024)
Normative isomorphism	Cultural cluster membership	House et al. (2004) , Mensah and Chen (2013)
Mimetic isomorphism	Sector affiliation	GICS Framework Reclassification 2023

specific ESG pillar, as shown in [Table 2](#). Furthermore, these topics align with the requirements of the Directive 2014/95/EU, which mandates firms to disclose information on environmental, social and employee-related issues, as well as respect for human rights and other non-financial information that aims to enhance transparency of firms’ actions and meet stakeholders’ needs. As illustrated in [Figure 1](#), each letter belongs to a firm and can include one or more statements on different ESG-related topics.

The coding process for identifying and classifying ESG topics followed a systematic dual-stage approach using the Discourse Network Analyzer software ([Leifeld, 2009, 2010](#)). First, we identified ESG-related statements within each shareholder letter. To qualify as ESG-related, statements needed to address environmental, social, or governance topics. This identification stage ensured the capture of sustainability-related content in shareholder letters. Second, each identified statement was then classified according to one or more of the 18 ESG topics shown in [Table 2](#). We employed an inductive-deductive approach: while our initial topic categories were derived from established prior literature on sustainability disclosure ([Arvidsson and Sabelfeld, 2023](#); [Balogh et al., 2022](#); [Hummel et al., 2024](#); [Seow, 2024](#)), we remained open to refining these categories based on the voluntary nature of shareholder letters. Through iterative readings of a subset of letters, we verified that the coding scheme captured the ESG dimensions actually discussed. Statements addressing multiple topics were

Table 2. Identified thematic categories for each ESG pillar

ESG pillar	Topics	Sources
Environmental Pillar	• Climate • Use of renewable energy • Biodiversity • Waste management • Water use • Air pollution	Arvidsson and Sabelfeld (2023) , Balogh et al. (2022) , Hummel et al. (2024)
Social Pillar	• Product Innovation • Employee: diversity • Employee: health programmes and safety issues • Employee: training programmes • Education • Philanthropy • Community • Human rights	Arvidsson and Sabelfeld (2023) , Balogh et al. (2022) , Seow (2024)
Governance Pillar	• Business model • Transparency • Management • Shareholder	Arvidsson and Sabelfeld (2023) , Balogh et al. (2022) , Seow (2024)

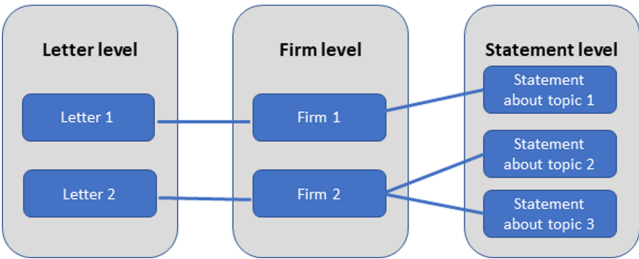


Figure 1. Example of text data structure. Source: Authors’ own elaboration

coded for each relevant topic (i.e. multiple coding was permitted). When a statement's primary focus was ambiguous, we considered the broader paragraph context to determine classification. Generic statements about "sustainability" without a clear strategy were noted but not included in the topic-level similarity analysis, as they did not provide sufficient specificity for meaningful comparison across firms. This coding process involved verifying whether statements were coherent with the main topics identified and enabled us to construct firm-level ESG topics. Following the methodological approach recommended for DNA (Leifeld, 2013), one member of the research team acted as the primary coder, while another member cross-checked the uncertain cases but did not do any coding independently, similar to what has been done in previous studies using the same methodological approach (Ghini and Omori, 2025; Leifeld, 2013). This approach differs from traditional double-coding procedures but is methodologically appropriate for discourse network analysis, where consistent semantic interpretation is crucial. The review process functioned as follows: The second coder examined each coded statement to verify (1) whether it appropriately qualified as an ESG-related statement, and (2) whether the assigned topic classification accurately reflected the statement's content. Any disagreements or uncertainties were flagged for discussion. Additionally, the two coders checked together some statements at different points to ensure consistency and accuracy in the application of coding rules. All disagreements were discussed until a consensual solution was found through re-examination of the original text. While this procedure does not produce traditional intercoder reliability coefficients, it increases "reliability compared with a single-coder strategy" (Leifeld, 2013, p. 177) and ensures interpretative coherence across the dataset. Although this approach is more time-intensive, it mitigates potential issues regarding intercoder reliability, as illustrated by Malkamäki *et al.* (2021). An example of ESG-related statements is provided in Table 3.

In this work, we created a one-mode network using the congruence approach: two firms are connected if they both express a statement on the same ESG-related topic, and connections are weighted proportionally to the number of shared ESG-related topics. During the coding process, we controlled for the presence of both agreements and disagreements on each topic; however, unsurprisingly, we did not detect any expressed disagreement on any ESG-related topic, because statements about these topics are always expressed in a proactive and supportive perspective.

When creating the network, we normalised tie weights (Leifeld, 2017) to address potential issues arising from core-periphery structures. Furthermore, building upon Ghini and Steiner (2020), we imposed a threshold for selecting strong connections, opting for a threshold of 0.70 to detect strong similarity patterns across firms. Then, we applied the Louvain method for community detection (Blondel *et al.*, 2008) to visualise communities of firms that share similar views on ESG topics. Finally, we run a Multiple Regression Quadratic Assignment Procedure (MR-QAP). This procedure is a network-based regression technique designed to regress a weighted dependent network matrix on a series of independent network matrices, while taking into account the interdependencies across observations, which naturally happens with network data (Dekker *et al.*, 2007). Unlike traditional regression models that treat individual observations as independent units, MR-QAP uses dyads (pairs of actors) as the unit of analysis and models relational outcomes, such as tie presence, strength, or similarity between actors/nodes (Zinilli, 2025). MR-QAP compares the observed values of the dependent variable with the expected values if the independent variables had no effect on the dependent variable. The expected values are obtained through repeated random permutations of the independent variables across network nodes, while maintaining the network structure fixed (Krackhardt, 1987). By iterating this permutation process across multiple replications, the procedure calculates the average difference between the observed and expected values. By minimising the sum of the squared difference between the observed and the expected values, the regression coefficients are estimated (Snijders and Borgatti, 1999).

In our case, the dependent network matrix is made by the presence of (weighted) relationships between firm *i* and firm *j* expressing similar statements via their shareholder

Table 3. Example of ESG-related statements

Firm	EU membership	Cultural cluster membership	Sector affiliation	ESG-related topic	Statement
A2A	Yes	Latin Europe	Utilities	Waste management	On the Circular Economy front, we invested over 1 billion euros in the two-year period 2021–2022, confirming the soundness of our Plan and focusing on closing the waste cycle, recovering materials, energy and heat, and developing bioenergy. In 2022, we inaugurated two plants for the treatment of the organic fraction of municipal solid waste (OFMSW) in Lacchiarella and Cavaglià, for the production of 13 million cubic metres of biomethane per year. The material treatment and recovery plants produced more than 392,000 tonnes of secondary raw material to be put back on the market.
Aroundtown	Yes	Germanic	Real estate	Philanthropy	With our Aroundtown Foundation, we engaged in numerous charities across our portfolio locations, working in close contact with local partners and authorities, such as HORIZONT e.V., Berliner Lebenshilfe, Mutzkidz, wünschdirwas and Joblinge
Sainsbury	No	Anglo	Consumer Staples	Transparency	As signatories of the Task Force on Climate-related Financial Disclosures (TCFD), we are committed to providing consistent information to our stakeholders and our disclosure can be found on page 17
Straumann	No	Germanic	Health care	Employee diversity	Another important priority is to ensure we will have 50% females holding leadership positions within the Group by 2026
Tenaris	Yes	Germanic	Energy	Employee health programmes and safety issues	We paid close attention to the importance of having a safety mindset with awareness and behaviors suitable for the industrial environment of our shop floor. We empower all our employees to be proactive in always taking preventive safety actions. Our lost time injury frequency rate for the year declined by 10% to 0.9 per million man hours worked. We are grateful to our people working in the plant for their contribution to this result

letters: the X_{ij} cell of the matrix represents the similarity level between these two firms. The independent network matrices have been created as it follows: in the case of coercive isomorphism, X_{ij} is equal to one if i and j are both located in a EU country, or if they both are not; in the case of normative isomorphism, X_{ij} is equal to one if i and j belong to the same cultural cluster; in the case of mimetic isomorphism, X_{ij} is equal to one if i and j belong to the same industry sector. In this model, we also controlled for the following firm-level characteristics: ESG performance scores (Saleh *et al.*, 2025), the logarithm of the number of employees (Pizzi *et al.*, 2022), the logarithm of market value expressed in millions of euros (Saleh *et al.*, 2025), and the typology of board structure, which were collected from the Refinitiv database. However, since network models do not work with missing data, our analysis with MR-QAP includes 136 firms instead of 156.

4. Results

Before discussing the results, we present a summary of the firms' main characteristics. Our sample comprises 156 firms from the STOXX Europe 600 Index, with 111 EU-based firms and 45 non-EU firms. The cultural distribution shows Germanic Europe as the largest cluster (77 firms), followed by Latin Europe (31 firms), Nordic Europe (30 firms), Anglo (15 firms), and Eastern Europe (3 firms). Sector representation is diverse, with Industrials (29 firms) and Health Care (27 firms) being the most represented, while Energy and Real Estate each comprise only 4 firms, as shown in Table 4.

Table 5 provides a general overview based on a single occurrence of each ESG-related statement found within the shareholder letters examined.

Solutions for addressing climate change are the most frequently mentioned ESG-related topic, appearing in 63.46% of firms' shareholder letters, followed by information addressed to their shareholders (41.67%) and the use of renewable energy (25.64%). Social aspects are also well represented, with topics like initiatives for community (23.72%), employee diversity (22.44%), employee health programmes and safety issues (14.10%), and employee training (10.26%) reflecting firms' commitments to workforce well-being. Conversely, other environmental-related aspects, such as waste management (16.67%), biodiversity conservation and ecosystem protection initiatives (2.56%), and measures aimed at reducing air pollution (1.28%), are mentioned to a lesser extent.

When looking at the network structure (Figure 2), we identified the existence of multiple communities, which represent different groups of firms characterised by shared (declared) approaches to ESG practices. The network is presented three times, each highlighting a different institutional attribute: EU membership (coercive), cultural cluster membership (normative), and sector affiliation (mimetic).

Table 4. Descriptive characteristics of the firms

EU membership		Cultural cluster membership		Sector affiliation	
EU	111	Germanic	77	Industrials	29
non-EU	45	Latin Europe	31	Health care	27
		Nordic	30	Materials	19
		Anglo	15	Consumer discretionary	16
		Eastern	3	Information technology	16
				Utilities	16
				Consumer staples	13
				Communication services	12
				Energy	4
				Real estate	4

Table 5. Descriptive findings of the ESG-related topics

Topics	Number of statements	Percentage value
Climate	99	63.46%
Shareholder	65	41.67%
Use of renewable energy	40	25.64%
Community	37	23.72%
Employee diversity	35	22.44%
Transparency	34	21.79%
Waste Management	26	16.67%
Employee health programmes and safety issues	22	14.10%
Management	22	14.10%
Product innovation	19	12.18%
Employee training	16	10.26%
Philanthropy	16	10.26%
Education	10	6.41%
Business model	9	5.77%
Human rights	6	3.85%
Biodiversity	4	2.56%
Water use	3	1.92%
Air pollution	2	1.28%

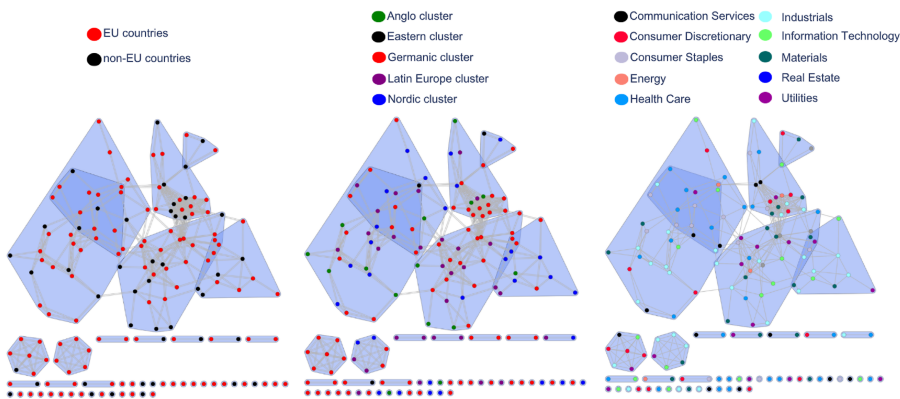


Figure 2. One-mode network according to node attributes. Source: Authors' own elaboration

Overall, although these visualisations may suggest potential similarity patterns between firms, visual examination alone cannot establish whether such observed groupings exhibit statistically significant associations. To quantitatively assess the relationship between institutional pressures and ESG disclosure similarity, we applied the MR-QAP presented in the previous section. Tables 6 and 7 show the descriptive statistics of the variables included in the model and the regression results using 136 firms and controlling for firm-level characteristics.

The analysis reveals that normative isomorphism is the only significant institutional predictor of similarity in ESG disclosure practices: indeed, the cultural cluster membership has a positive and statistically significant coefficient ($\beta = 0.01621, p = 0.0045$). This association holds even after controlling for firm ESG performance scores, firm size, board structure and market value. Although the coefficient size of the cultural cluster membership is relatively low, it implies that even in the absence of any regulatory or industry requirement, firms in the same

Table 6. Descriptive statistics: variables included in the MR-QAP (136 firms)

	Observations	Mean	Standard deviation	Min	Max
Cultural cluster	136	Anglo (13); Eastern Europe (3); Germanic Europe (65); Latin Europe (30); Nordic Europe (25)			
EU membership	136	EU members (96); Non-EU members (40)			
Sector	136	Communication Services (7); Consumer Discretionary(15); Consumer Staples (11); Energy (4); Health Care (22); Industrials (28); Information Technology (13); Materials (17); Real estate (4); Utilities (15)			
Board structure	136	Mixed (2); Two-tier (62); Unitary (72)			
ESG score	136	72.92	12.74	15.81	92.66
Number of employees	136	51,823.88	93,663.86	38	675,805
Market value	136	55,194.08	190,279	2,321.34	2,138,230

Table 7. Multiple regression QAP

	Un-standardised coefficient	Standardised coefficient	p-value	Standard Error
Intercept	−0.00075	0.00000	0.00000	0.00000
Cultural cluster membership	0.01621	0.04708	0.0045	0.00489
EU membership	−0.0028	−0.00862	0.27736	0.00467
Sector affiliation	0.00198	0.00405	0.33633	0.0053
Board structure	−0.00102	−0.00318	0.4078	0.00363
ESG performance score of receiver	0.00037	0.029	0.05797	0.00024
ESG performance score of sender	0.00037	0.02899	0.05347	0.00023
N. of employees (log) of receiver	−0.00078	−0.00857	0.34883	0.00182
N. of employees (log) of sender	−0.00078	−0.00856	0.32484	0.00181
Market value (log) of receiver	−0.00048	−0.0039	0.44178	0.00222
Market value (log) of sender	−0.00049	−0.00391	0.4053	0.0022

	R ²	Adjusted R ²	p-value	Observations	Permutations
Model	0.00364	0.00310	0.00050	18,360	2,000

cultural cluster may prioritise similar ESG issues in their shareholder letter. Such a trend could be driven by normative pressures, derived from cultural values shared by actors (Caprar and Neville, 2012). However, other possibilities should not be ignored. Cultural clusters are also characterised by shared languages and communication conventions, which may independently shape ESG disclosures beyond content choices. Similarly, common rhetorical styles in cultural regions may contribute to such similarities.

In contrast, coercive isomorphism is not statistically significant ($\beta = -0.0028$, $p = 0.27736$). This indicates that EU affiliation is not associated with firms' similarity. Moreover, the negative coefficient, even though statistically not significant, implies a lack of convergence that is associated with shared EU regulatory environments. Although harmonisation of rules may render the format and disclosure requirements for mandatory disclosures consistent, it does not apply to voluntary narrative disclosures, where firms have greater freedom to decide what to emphasise and what to omit.

Similarly, mimetic isomorphism does not show statistical significance ($\beta = 0.00198$, $p = 0.33633$). Firms operating in the same sector do not significantly cover similar ESG issues in their shareholder letters. This suggests that mimetic pressures within specific sectors,

though possibly existing when sustainability reporting complies with GRI or SASB standards, do not enable convergence within voluntary reporting of ESG information, with firms having more freedom of narration in their shareholder letters.

5. Discussion and conclusion

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In today's social environment, ESG disclosure plays a crucial role in advancing how firms communicate responsibility and legitimacy to multiple audiences. This study takes 156 shareholder letters from firms listed on the STOXX Europe 600 Index, representing, in our case, 15 European countries as a sample and investigates the similarity of voluntary ESG reporting practices within the European institutional framework. Our study yields two main findings. First, European firms exhibit distinct patterns in their voluntary ESG disclosure practices. This can be traced back to the use of unstandardised communication channels, such as shareholder letters. Unlike mandatory reporting frameworks, where neo-institutional pressures drive convergence (Witt *et al.*, 2025), shareholder letters are fundamentally voluntary disclosures. The voluntary nature of shareholder letters (Arvidsson, 2023; Civera *et al.*, 2025), where narrative does not follow standardised frameworks, enables firms to exercise greater strategic discretion in their ESG communications. Voluntary channels reflect organisational and strategic choice related to ESG, often resulting in higher quality of communications compared to standardised mandatory reporting (Cardoni and Kiseleva, 2025). As a result, firms leverage the narrative freedom intrinsically in voluntary disclosure – e.g. shareholder letters – to communicate ESG topics that reflect their specific strategic objectives and stakeholder expectations, generating the distinct disclosure patterns observed across European firms.

Second, when firms voluntarily communicate ESG-related initiatives within shareholder letters, their similarities in reporting vary under different institutional pressures. Specifically, under the normative isomorphism (proxied through cultural cluster membership), the results indicate that firms operating under similar cultural contexts – as classified by the GLOBE Project (House *et al.*, 2004) – are likely to develop and disclose similar ESG-related strategies, even in the absence of regulatory mandates or sector norms. This cultural dominance aligns with Caprar and Neville's (2012) framework, which considers culture as both a normative force that enables institution adoption and a conforming force that encourages adherence to social norms. Our work extends this framework by demonstrating that the role of culture as a normative pressure also persists in voluntary disclosures, where regulatory restrictions and competitive pressures are weak. While some topics may be universally salient, as evidenced by the predominant mention of solutions for climate change, other ESG topics may vary and could be more culture-specific. This may indicate that firms operating in a given cultural context are more likely to focus on ESG topics with high salience and legitimacy for their stakeholders, as suggested in previous research on the role of culture in shaping firms' sustainability communication within their CEO letters (Cannizzaro *et al.*, 2026; Conaway and Wardrope, 2010). This finding also aligns with literature that suggests firms operating within the same cultural cluster are exposed to similar institutional pressures and therefore tend to adopt similar ESG strategies (DiMaggio and Powell, 1983). Culture emerges as a critical determinant in the reporting strategy (Helfaya and Whittington, 2019), showing the tendency of firms to align their ESG communication to reflect shared cultural values and institutional norms within their cultural cluster (Risi *et al.*, 2023) and stakeholder expectations. The combination of cultural values and ESG strategy not only impacts the managerial decision-making process (Toumi *et al.*, 2022) but also the voluntary (and its opposite) disclosure of ESG information (Baldini *et al.*, 2018). Therefore, rather than simply replicating the peer group ESG disclosures as seen in other cultural contexts, managers should identify the ESG topics with high legitimacy and salience within their cluster to develop culturally appropriate communication strategies for their sustainability disclosure.

Within the coercive isomorphism framework, we observe that European Union membership does not determine similarity in voluntary ESG disclosure in shareholder letters. This is in line with recent empirical evidence showing that coercive pressures diminish in importance once disclosure is no longer mandatory (Solimene *et al.*, 2025).

Although coercive pressure constitutes an important pressure within the neo-institutional framework, its influence decreases when institutional norms are misaligned with the regulatory environment (Nicolò *et al.*, 2024). We propose that this result can be attributed to the uncertainty created by the regulatory environment itself, specifically in the unique institutional context of Europe. The ongoing transition between voluntary and mandatory reporting has created regulatory inconsistencies across European members (Bertram, 2025; Camilleri, 2015), particularly in 2022 (the timeframe under investigation), when the CSRD was adopted alongside other major regulatory changes in European sustainability reporting. According to Helfaya *et al.* (2023), the one-size-fits-all reporting of corporate narrative does not consider the distinct institutional contexts and cultural values between European members. In such a context, firms may have lacked clear points of reference for their voluntary disclosures, reducing their motivation and incentive to communicate ESG information (Arvidsson, 2010), which could have slowed rather than encouraged convergence. This is in line with findings that enforcement of mandatory disclosure frameworks does not necessarily lead to a higher volume of ESG information disclosed (Álvarez-Etxeberria *et al.*, 2023), nor to improvements in its quality (Carungu *et al.*, 2021). In contrast to corporate reports, which have standardised forms, shareholder letters are more influenced by global trends and stakeholder demands than by local regulation on a regional level, indicating that the nature of voluntary disclosure settings differs from mandatory ones where coercive pressure is intended to function (Witt *et al.*, 2025). Furthermore, shareholder letters, like other flexible communications, allow firms to cope with institutional pressures and minimise constraints related to standardised reporting practices (Nicolò *et al.*, 2025). Consequently, managers can better manage institutional pressure in voluntary reporting of ESG-related topics through shareholder letters, which in turn stabilise the legitimacy concerns with strategic position and differentiation.

Within the mimetic isomorphism framework, our study again reveals that sector affiliations do not shape similarity in voluntary ESG disclosure across European firms.

This result contradicts the idea that sector norms shape corporate behaviour during uncertain times and corroborates recent evidence that has found mixed results on the role of mimetic pressures in voluntary settings (Chen *et al.*, 2025; Iliya Nyahas *et al.*, 2017). Shareholder letters offer an opportunity to draw attention to a selective set of sustainability-related initiatives (Arvidsson, 2023). This allows for greater narrative flexibility, making it harder to identify sector-specific patterns and enables firms to develop unique strategies rather than mimicking others in the same sector. Moreover, ESG topics are becoming increasingly cross-sectoral. Firms are likely to find common ground on issues such as climate change, equality, and governance practices, regardless of their sector affiliation, since these topics are now recognised as widely accepted priorities that go beyond sectoral considerations. This implies that universal ESG priorities may have precedence over sector-specific benchmarking in voluntary disclosures (Huang *et al.*, 2024). In addition to these considerations, the current shift in shareholder letters towards a broader range of stakeholders (Civera *et al.*, 2025) may reduce the relevance of industry-related benchmarking, as firms increasingly do. As a result, firms rely on board diversity to manage the different expectations of stakeholder groups who prioritise different ESG dimensions (Uyar *et al.*, 2024). This, in turn, enables managers to develop differentiated ESG communication strategies that address specific values of multiple stakeholders rather than confirming sector-wide norms.

Our study extends the neo-institutional theory (Di Maggio and Powell, 1983) and expands our understanding of how institutional pressures define ESG disclosure practices within the European context (Helfaya *et al.*, 2023). While previous studies have emphasised that institutional pressures can impact firms' behaviour in disclosing ESG-related information on

their mandatory corporate reports (Kuzey *et al.*, 2025; Posadas and Tarquinio, 2021), our study underscores that their impact may not be the same when considering shareholder letters – a voluntary form of disclosure that engages with multiple stakeholders (Arvidsson, 2023; Arvidsson and Sabelfeld, 2023; Civera *et al.*, 2025) – where firms selectively highlight key ESG strategies to meet stakeholder expectations. Our findings underscore that normative pressure, rather than coercive and mimetic, represents the only pressure that defines similarity in voluntary ESG disclosure. Supporting the role of culture, and therefore, the normative institutional pressure, Nicolò *et al.* (2025) found that institutional forces embedded in national culture influence how headquarters disclose ESG content in social media (e.g. Twitter).

This contrasts with researchers who find strong coercive and mimetic effects on ESG disclosure, suggesting that voluntary ESG communication is less about imitating peers and more about aligning with legitimate cultural values. This empirically supports the call to “bring value back” in Risi *et al.* (2023), indicating that shared cultural norms provide the reference points through which firms communicate ESG expectations and develop a voluntary disclosure narrative. Finally, this could be an example of how ESG disclosure can be seen as a strategic and interpretive activity rather than a merely reporting exercise (Asif and Searcy, 2026), where firms exercise discretion in voluntarily reporting ESG topics via shareholder letters.

5.1 Theoretical implications

Our research extends neo-institutional theory. While DiMaggio and Powell (1983) conceptualised coercive, normative, and mimetic forces as collectively driving convergence, our findings reveal that their relative strengths vary depending on the nature of disclosure. In voluntary narrative disclosures where regulatory mandates and sector norms are absent, normative pressures become the predominant force through which organisational behaviour is shaped, whereas coercive and mimetic pressures weaken. This extends theoretical developments in research suggesting that cultural values are fundamental in shaping organisational behaviour when firms face minimal external conditions (Nicolò *et al.*, 2025; Posadas *et al.*, 2023). This cultural prevalence raises important theoretical questions regarding the nature of voluntary ESG disclosure. Does cultural alignment in ESG disclosure represent an authentic commitment to sustainability issues embedded in specific societies? Or does it risk creating culturally-aligned disclosure that may not reflect the real performance differences among firms? This distinction between cultural alignment and strategic cultural conformity represents a critical theoretical tension that has become salient in recent research (Cannizzaro and Quarchioni, 2026). While our findings cannot definitively resolve this tension, they provide important insights. The persistence of cultural patterns in voluntary disclosure where firms face no regulatory mandate to converge suggests that normative pressures are deeply embedded in cognitive frameworks about what constitutes “appropriate” ESG communication. Unlike coercive pressures that depend on enforcement mechanisms, or mimetic pressures that rely on observable benchmarks and structured reporting formats, normative pressures operate through assumptions about appropriate corporate behaviour (Solimene *et al.*, 2025). Cultural values shape what corporate leaders perceive as legitimate topics to discuss, how they frame sustainability challenges, and which ESG dimensions warrant emphasis — processes that persist regardless of regulatory requirements or industry standards. This finding suggests that in voluntary disclosure contexts, where firms have maximum narrative freedom, deeply-held cultural norms become the primary structuring force. If cultural alignment reflects authentic values, it suggests that voluntary disclosures can reveal differences in how societies prioritise ESG issues. However, in case it represents symbolic behaviour, culturally-aligned disclosure may have a legitimacy function while obscuring real performance differences among firms. Future research should examine whether culturally-driven ESG disclosures are associated with real sustainability performance or whether they primarily serve legitimisation purposes in institutional contexts.

5.2 Practical implications

Beyond its theoretical contribution, this study provides practical implications for managers and policymakers seeking to navigate ESG disclosure practices. The adoption of a managerial approach where culture plays a central role in how firms pursue legitimacy can be achieved through deliberate disclosure strategies (Vitolla *et al.*, 2019). By adopting such an approach, managers can operate effectively across borders, considering cultural variations while maintaining coherence in ESG reporting. This can help to avoid redundancy, encourage flexibility and diversification and may ultimately enhance performance (Huang *et al.*, 2025). In the same way, policymakers can use this finding to design policies that foster cross-cultural dialogue in ESG communication. Furthermore, policymakers can promote the inclusion of cultural diversity within ESG reporting frameworks, thereby supporting global sustainable development objectives (Nicolò *et al.*, 2025).

This study also suggests that firms operating under the same regulatory framework do not show similar voluntary ESG disclosure patterns. Managers might consider adopting a “selective approach” for corporate communication: while it is important to follow government regulations, overreliance on compliance alone may not secure legitimacy from stakeholders (Chen *et al.*, 2025). For policymakers looking to introduce ESG mechanisms across different national contexts, our findings suggest that one regulatory framework is not enough to accomplish target goals. ESG policies should therefore be complemented by practical tools and guidance, such as narrative reporting standards and context-sensitive toolkits, because they promote consistency and comparability in narrative ESG communication across diverse institutional settings.

Finally, this study shows that firms do not mimic industry peers in their voluntary ESG disclosure practices. This finding suggests that managers should not assume industry benchmarking will drive disclosure convergence in voluntary contexts. Instead, managers interested in enhancing credibility may benefit from seeking external verification of voluntary reports (Martínez-Ferrero and García-Sánchez, 2017), particularly when communicating beyond cultural boundaries where normative expectations differ. For policymakers, this absence of mimetic pressure in voluntary disclosure has important implications. Policymakers should recognise that voluntary disclosure practices may exhibit substantial heterogeneity within sectors, driven more by cultural contexts than industry norms. Regulatory frameworks seeking to improve voluntary ESG communication should therefore focus on transparency and credibility mechanisms rather than assuming sector-based convergence. As Zhao *et al.* (2025, p. 16) caution, peer-driven ESG behaviours in mandatory contexts “pose risks” as “firms may mimic ESG behaviors symbolically—without genuine sustainability commitments—thus increasing the likelihood of greenwashing and stakeholder misperception.” In voluntary contexts, where our findings show mimetic pressures are absent, policymakers must ensure disclosure frameworks prevent symbolic compliance while allowing for legitimate cultural and strategic diversity.

5.3 Limitations and directions for future research

This study is subject to certain limitations. One of the main limitations is related to its cross-sectional research design, which prevents us from assessing the presence of causal effects and making inferential conclusions. While we have mapped similarity in the disclosure of ESG-related activities and assessed the extent to which two firms are similar when considering the three institutional pressures, we acknowledge that longitudinal research designs support analyses that would help to empirically test whether these pressures have an impact on firm similarity. For this reason, further research could use a longitudinal research design to investigate the influence of the three institutional pressures on ESG practices. Another limitation is related to our setting, which concentrates on Europe. While this is a relevant setting, more research is needed to understand whether there is a tendency toward similarity in ESG reporting among firms operating in other contexts.

CRedit author statement

Benedetta Valeria Cannizzaro: Conceptualisation, Methodology, Data curation, Formal Analysis, Investigation, Writing-Original draft. Anna Piazza: Conceptualisation, Writing-Review and editing, Supervision, Project administration. Stefano Ghinai: Methodology, Software, Formal Analysis, Validation, Writing-Review and editing, Supervision. Srinidhi Vasudevan: Conceptualisation, Writing-Review and editing, Supervision.

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Corresponding author

Benedetta Valeria Cannizzaro can be contacted at: benedettavaleria.cannizzaro@unibg.it