

Stakeholder engagement disclosures in sustainability reports: Evidence from Italian food companies

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Abstract

More businesses are embedding stakeholder engagement (SE) practices in their corporate disclosures. This article explores the extent to which SE practices are featured in the sustainability reports (SRs) of 48 Italian food and beverage businesses, following the latest Global Reporting Initiative (GRI) standards. The researchers analyze the content of their SRs dated 2020 and 2021. They utilize a panel regression technique to examine the relationship between stakeholder engagement disclosures (SED) and corporate financial performance (CFP), and to investigate the mediating role of SR assurance. The results show a positive and significant relationship between SED and CFP. They also confirm that there is a moderating effect from SR assurance on this causal path. However, the findings reveal that SED in SRs of Italian food companies is still moderate. This contribution builds on the logic behind the stakeholder theory. It implies that there is scope for food companies to forge relationships with stakeholders. It indicates that it is in their interest to disclose material information about their SE practices in their SR and to organize third party assurance assessments in order to improve their legitimacy with stakeholders.

KEY WORDS

corporate financial performance, food industry, stakeholder engagement disclosures, sustainability assurance, sustainability reporting

1 | INTRODUCTION

The sustainability agenda has gained significant attention within the global food sector (Rueda et al., 2017), and it is becoming a growing concern among stakeholders (Al Hawaj & Buallay, 2022). The food industry is heavily reliant on natural and technological resources such as water, energy, chemicals, and fossil fuels, and therefore, has a substantial impact on the environment and the society (Buallay, 2020; Camilleri, 2021; Ramos et al., 2020). The actions of food manufacturers and retailers can significantly affect

the health of individuals. Their ability to choose, process, package, transport, and promote sustainable food could have an impact on what people consume and on their overall well-being. As they interact directly with consumers, they are subject to intense scrutiny and requests for transparency. Stakeholders, including governmental institutions, consumers, and the global community, have called upon food companies to adopt more sustainable practices and to pay more attention to food sustainability (Friedrich et al., 2012; Troise et al., 2021). Very often, they are raising awareness about value creation opportunities to persuade them

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to engage in responsible production and consumption behaviors (Attanasio et al., 2021), and to forge relationships with marketplace stakeholders (Camilleri, 2020).

The interactions between firms and their external environment constitute a vital characteristic of a sustainable business model, owing to the unique value stream that stakeholder engagement (SE) can offer. In this context, sustainability disclosures can act as a catalyst to foster trust, enhance procedures and systems, promote the firm's vision and strategy, decrease compliance expenses, and generate competitive advantages (Cardoni et al., 2022). Companies operating in the food sector are principally challenged in their efforts to deliver Sustainability Reports (SRs) that provide useful information to both internal and external stakeholders (D'Adamo, 2022). Research examining the role of sustainability reporting in enhancing firm performance in this sector is limited. Some studies suggest a positive relationship between strong sustainability reporting and return on assets (ROA) (Al Hawaj & Buallay, 2022), increased sales (Sen & Bhattacharya, 2001) or reduced cost of capital (Garzón-Jiménez & Zorio-Grima, 2022).

Given the complexity of the food sector, which is a typical multistakeholder context (Al Hawaj & Buallay, 2022), it is particularly relevant for food companies to ensure that their SRs provide accurate and thorough disclosures of their SE practices. SE is a complex and distinct activity that has emerged in the preparation of SRs (Greenwood, 2007) and it is crucial to reflect on the way it is conducted (Petruzzelli & Badia, 2023). The reporting entities cannot ignore their stakeholders' relationships from their corporate disclosures. If they conceal any material information on this matter from their SR, they risk damaging their reputation and image (Ardiana, 2019; De Micco et al., 2021; Manetti, 2011; Miles & Ringham, 2020).

Academic research on SE is an evolving area of investigation due to the increasing scientific and professional interest in sustainability reporting issues (Camilleri, 2015; Stocker et al., 2020). Prior studies have indicated that many companies fail to provide complete disclosures of SE processes (Moratis & Brandt, 2017), and show an inadequate level of SE procedures (Petruzzelli & Badia, 2023; Venturelli et al., 2018). However, despite the significance of this subject, the number of empirical academic contributions on SE remains limited, making it important to further explore this topic. In such a context, several scholars are calling for further studies that seek to investigate how, why, where, and when firms are engaging with stakeholders. In addition, they are encouraging them to explore whether they are disclosing the details about their stakeholder relationships in their SRs (Gagné et al., 2022; Gao & Zhang, 2006; Hörisch et al., 2015).

The purpose of this article is twofold. The first one is to investigate the extent to which SE is featured in the SRs of 48 Italian unlisted food companies (that were relying on GRI's new standards in the period 2020–2021), with the objective to verify their focus on SE disclosures (SED) process. The authors examine their SR's content, in terms of the report preparers' motivations and methods. They also verify whether they indicated specific stakeholders in their disclosures. This paper raises awareness on the role of SE in the

sustainability reporting of food companies. It clarifies how and to what extent food companies are communicating directly with stakeholders, gathering feedback from them, and how explicitly they are involving them in the SR process. To this aim, the researchers developed an SE index composed of 7 categories and 21 items derived from prior literature on the topic and adapted from the latest Global Reporting Initiative (GRI) standards. The proposed index provides a systematic approach to examining the SE practices and activities disclosed by sample firms. Content analysis (a binary coding system) of GRI SRs was carried out to calculate the overall SED score. The second goal of this contribution is to investigate the relationship between SED and corporate financial performance (CFP). In addition, this research analyzes the moderating effects of SR assurance on SED-CFP causal link. Hence, this contribution addresses the following research questions:

RQ1: What is the state and extent of SED in the SRs of food companies?

RQ2: Is there a relationship between SED in SRs and CFP in the food industry? If there is, how and to what extent, is this relationship mediated by SR assurance?

This research explores the above-mentioned questions and provides insights on the SE processes of Italian Food companies. It builds on the Stakeholder Theory (ST; Freeman, 1984), as it seeks to explain whether SE processes are integrated in their SRs. The authors anticipate that the exploratory content analysis on the sample firms' SRs indicate that the average level of SE is not significantly high in food companies in Italy, however, there is an increasing pattern of SED during the study period. While SE seems common practice, many firms are failing to provide the details on their stakeholder relationships in their SRs. The findings suggest that most of the engagement modes disclosed are unidirectional (level 1—Inform) with minimal emphasis on deep involvement strategies (level 3—Involve). Furthermore, only 32% of the sample seek assurance on the information disclosed.

Results from the panel data analysis provide evidence that there is a significant positive association between SED and CFP. Findings also show that SR assurance by accounting firms accentuates this effect. An extensive literature review suggests that this study, to the best of the authors' knowledge, is the first to use food companies' SRs to investigate the impact of SED on CFP introducing the interactive variable of SR third-party assurance, which adds new knowledge to SE and sustainability reporting literature from a specific industry in an advanced economy. Considering the maturity of Italian sustainability reporting and assurance practices (KPMG, 2022; Larrinaga et al., 2020) the Italian context is particularly relevant in explaining the interest of food companies into properly communicating SE activities in SRs. In these terms, this study contributes to a deeper understanding of the underexplored area of SE in a specific industry, highlighting the strategies used by Italian food companies to manage the SE communication process. Specifically, it provides insights to improve the framing of SED and gives evidence of the value

relevance of SED and SR assurance for companies operating in the food sector. Therefore, this research sheds light on the advancement and enhancement of food company–stakeholder relations, particularly from the perspective of value co-creation. The findings will help managers identify key focus areas where they can improve the SED process aiming at creating shared value and foster mutually beneficial relationships with stakeholders.

The remainder of this study is structured as follows. The next section deals with the paper's conceptual framework and hypotheses development. This is followed by the research design and methodology. Finally, the results, discussion, conclusion including recommendations, limitations, and hints for future research are presented.

2 | CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

2.1 | Exploring SE disclosure within the framework of stakeholder theory

SE is theoretically grounded in ST (Freeman et al., 2017), sharing a common purpose with ST in terms of understanding the information requirements and expectations of various stakeholder categories (Freeman et al., 2010). ST allows understanding how a firm's resource allocation decisions are linked to stakeholders' demands that are crucial to the company's success. In line with ST, managers should strive to satisfy the needs of all stakeholders rather than only of investors or shareholders (Melé, 2008) which, in turn, affect the company's performance. Considering the multi-stakeholder perspective, ST also posits that "paying attention to multiple stakeholders secures tangible and intangible resources that may create organizational wealth or value for shareholders" (Hillebrand et al., 2015, p. 413). This paves the way to a new and broader concept of "stakeholder ecosystem" (Gyrd-Jones & Kornum, 2013), in which value is co-created by the interaction of a network of stakeholders (Vargo & Lusch, 2008). In contrast with the conceptualization of co-creation as a dyadic relationship, Vargo and Lusch (2008, p. 5) reveal that value co-creation happens between "economic and social actors within networks integrating and exchanging across and through networks". Thus, the idea of value co-creation takes place when a set of stakeholders collectively generates more value than the sum of the value each actor creates alone (Pera et al., 2016). In this sense, when adopting a stakeholder marketing perspective it is important to understand the reasons to engage within an ecosystem. Consistent with this view, SE is considered in its strategic management form and is used as a mechanism to manage the firm in response to stakeholders' interests (Greenwood, 2007). It includes initiatives or practices that organizations develop to positively engage their stakeholders in their activities and can inspire fundamental changes to core operations that are useful for both society and the environment (Sulkowski et al., 2018). In accordance with this conceptualization, extant literature frequently examines the intersection of SE and

stakeholder co-creation (Shams & Kaufmann, 2016), with the latter being characterized as a collaborative innovation approach (Siaw & Sarpong, 2021).

From a ST perspective, stakeholder culture, the relevance of stakeholder groups, and the SE process are associated with each other, and managers need to shift their attention from corporate reputation to activities that create value for a wide range of stakeholders (Boesso & Kumar, 2016). Thus, SE and value co-creation concepts are matched, as stakeholders and firms are involved in a collaborative and dynamic process based on the creation, exchange and transfer of internal ideas, creativity, and knowledge assets (Tardivo et al., 2017).

In such a context, ST suggests that reporting specific types of information, such as a firm's social or environmental activities, can be used to attract or retain certain stakeholder groups (Deegan & Blomquist, 2006). Accordingly, Kruger et al. (2018) not only consider value co-creation and SE as intricately intertwined concepts but also stress the importance to implement sustainable practices that could provide a participatory and integrative environment. In these terms, non-financial disclosure can be useful for firms to meet stakeholders' needs, leading to several benefits that ultimately can positively impact CFP (Buallay, 2022). Thus, SE involves considering stakeholders' perspectives to evaluate and communicate significant information about company outcomes, including sustainable activities and results. Over the years, two primary reporting mechanisms have emerged to disclose non-financial performance information: SR and integrated reporting (IR). The first one is oriented toward the idea of sustainable development and is leveraged by companies to disclose information on economic, environmental, and/or social sustainability impacts (GRI, 2016). It is often used interchangeably with CSR reporting or Sustainable Development Goals (SDGs) reporting. IR is a more recent reporting tool that companies use to offer a comprehensive and long-term view of the process of value creation, integrating financial and non-financial information into a single report (IIRC, 2021). Several global organizations have developed a range of international reporting frameworks to support companies' sustainability disclosure, varying in their scope. Both GRI and International Integrated Reporting Council (IIRC) are the most recognized worldwide sustainability standards. GRI provides a structured approach for reporting on sustainability issues, thereby enabling companies to enhance their transparency and accountability to stakeholders. Furthermore, the SR, which is based on this framework, presents information concerning firm operations that have a positive or negative effect on the economy, society, and the environment (Cho et al., 2015). In brief, sustainability reporting is increasingly gaining importance among firms as it is an integral component of their sustainability efforts, providing them with a competitive advantage and increasing their likelihood of survival (Stubbs et al., 2013). In this light, ongoing and proactive SE with the involvement of multiple categories of stakeholders is necessary for the processes of sustainability reporting yielding to benefits such as improved corporate reputation and better economic performance (Landrum & Ohsowski, 2018). To this aim, bi-directional communication between the company and its stakeholders is

fundamental (Bellucci et al., 2019), occurring within a framework of trust and interdependence. Regarding the communication ways through which companies try to engage with their stakeholders, Gioia and Chittipeddi (1991) introduced the concepts of "sensemaking" and "sensegiving." The extent to which companies can assimilate and consolidate the "sensemaking" of their stakeholders (i.e., the process through which the involved parties attempt to develop a meaningful framework for understanding the nature of the intended strategic change), affects their ability to strategically enter and manage a collaborative and fruitful relationship (Morsing & Schultz, 2006). Instead, "sensegiving" is seen as an attempt to influence the way another party understands or makes sense. The consideration of the progressive iterations of "sensemaking" and "sensegiving" processes might generate a more robust conceptual framework of what guides sustainable initiatives that companies undertake and thereby produce a better understanding of the largely ignored communicative nature of sustainability issues (Maitlis, 2005). Depending on how organizations strategically engage their stakeholders in sustainability communication, Morsing and Schultz (2006) suggest three types of relations, namely the information strategy (one-way style), response strategy (two-way style), and involvement strategy (multi-way style). The SE strategy, considered at a high level of communication quality, is associated with the identification and inclusion of stakeholders and other characteristics of SRs disclosed by firms (Campra et al., 2020). Prior research highlighted that companies using SR as a means of SE can ultimately enhance their performance (Ebaid, 2022; Henisz et al., 2014; Hongming et al., 2020; Hörisch et al., 2015), for example, by minimizing their production and transaction costs (Finch, 2008; Laplume et al., 2022). The Figure 1 synthesizes the conceptual framework guiding the present study in answering the RQs.

2.2 | Hypotheses development

2.2.1 | Corporate financial performance

SE is based on the principle of inclusiveness (GRI, 2016), which recognizes the right of stakeholders to be heard and obliges organizations to involve them in identifying, understanding, and responding to sustainability issues and concerns, as well as to report, explain, and respond to their decisions, actions, and performance. This way, SE is recognized as a corporate social responsibility (CSR) tool that is useful for reducing information asymmetries between firms and stakeholders (Freeman et al., 2017), as well as a powerful accountability mechanism (AccountAbility, 2015; GRI, 2016). Specifically, it refers to the process by which an organization involves its stakeholders to understand their expectations, interests, concerns, and the resulting information needs. Moreover, SE allows organizations to explain how the company has reacted and responded to those issues (GRI, 2016; Zarzycka et al., 2021). As highlighted in past research (Henisz et al., 2014; Waddock & Graves, 1997), companies that involve all stakeholders in their sustainable actions are more likely to improve their financial results by accessing stakeholders' resources and capabilities and decreasing transaction costs in the stakeholder relationships (Jung & Im, 2023). Previous studies recognize SE as a best practice in corporate sustainability reporting and its potential to improve firm value (e.g., Ardiana, 2021; Bellucci et al., 2019; Iazzi et al., 2020; Kaur & Lodhia, 2014; Manetti, 2011; Pasko et al., 2021; Romero et al., 2019; Vrontis et al., 2022). Therefore, it is important for companies to translate SE practices into disclosure by adopting the GRI's standards for defining SR content (Moratis &

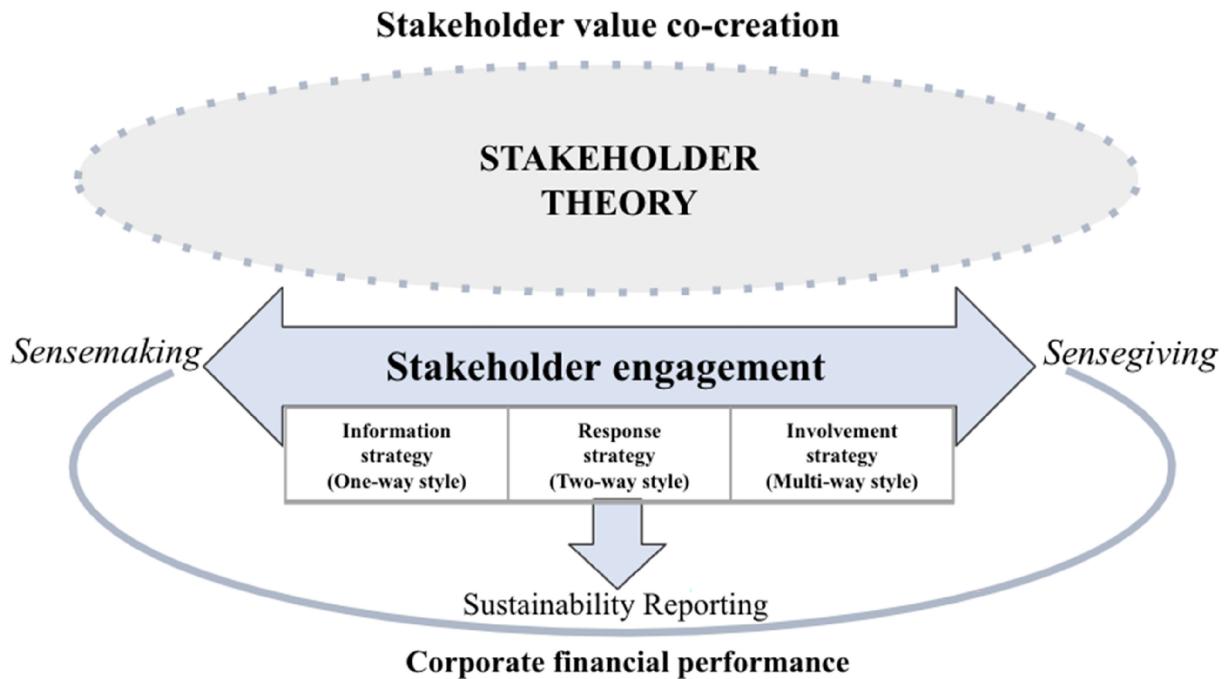


FIGURE 1 Conceptual framework.

Brandt, 2017). SED in companies' SRs should reflect the actual engagement practices, being closely linked to information on topics that matter to stakeholders. In essence, by disclosing SE practices in their SRs companies indicate their commitment to addressing issues that matter to stakeholders and promoting sustainable practices (Ardiana, 2021; Perello-Marin et al., 2022) therefore improving social legitimacy, the credibility of sustainability actions (Luo et al., 2015) and, in turn, building a solid and sustainable reputation (Dal Maso et al., 2017; Iazzi et al., 2020). Hence, using SR as a means of SE can ultimately enhance firms' performance (Ebaid, 2022; Henisz et al., 2014; Hongming et al., 2020; Hörisch et al., 2015; Yoon & Chung, 2018), for example, by minimizing their production and transaction costs (Finch, 2008; Laplume et al., 2022). This positive association is becoming increasingly evident in some industries, and, specifically, in the food industry (Arian et al., 2023). Beyond the ethical imperatives, food companies are recognizing that engaging with stakeholders and transparently disclosing their efforts to meet societal and environmental expectations can translate into improved financial results. As consumer preferences evolve and regulatory pressures intensify (the food industry is subject to stringent regulations related to food safety, labeling, and sustainability), the business case for SE in the food industry is becoming stronger than ever, with benefits that extend to both the top and bottom lines (Sandberg et al., 2023).

Based on the above literature review we expect a positive relationship between SED and CFP. Therefore, the following hypothesis was formulated:

Hypothesis 1. There exists a positive relationship between SED and CFP in the food industry.

2.2.2 | Sustainability assurance: A mediating effect between SED and CFP

The significance of sustainability reporting has been on the rise, and as a result, stakeholders have become increasingly concerned about the lack of uniformity in sustainability reporting standards and the diversity of reporting practices across firms. This has led to a growing demand for greater transparency and accountability in corporate sustainability reporting practices. Indeed, SRs are often criticized for being utilized as symbolic practices for impression management purposes (Cho et al., 2015; Michelon et al., 2015). Consequently, companies are pushed to commission external assurance as systematic and integral elements in the sustainability reporting process (GRI, 2013). The assurance of SRs strengthens user confidence in the accuracy and reliability of the disclosed information, by subjecting it to an independent third-party evaluation that assesses its sufficiency and adequacy against established criteria, and obtains evidence to support its veracity (IAASB, 2013). Therefore, SRs assurance can be viewed as a disciplinary mechanism that increases robustness, accuracy, and trustworthiness of sustainability information (Li et al., 2022), thus enhancing public credibility and confidence

in such disclosures (Du & Wu, 2019) and reducing agency conflicts between managers and shareholders. Consistent with this, an increasing number of firms are seeking independent assurance of their SRs, as a means of enhancing communication with relevant stakeholder groups and maintaining positive relationships with stakeholders (Simoni et al., 2020), which is in line with the principles of ST. In brief, companies aim to gain acceptance and recognition from their stakeholders, therefore, sustainability information that has undergone external assurance result in higher quality disclosures compared to those that have not been externally assured (Larrinaga et al., 2020; Manetti & Toccafondi, 2012; Michelon et al., 2015). On the same page, past research has demonstrated that high-quality SRs have a positive impact on a firm's value (Yoon & Chung, 2018). Other studies found that SRs assurance has a positive influence on firm value (Thompson et al., 2022) or a significant explanatory power on firm value (Akisik & Gal, 2020). Finally, third-party assurance of sustainability reporting has recently become a majority practice for Italian companies (Larrinaga et al., 2020), with a particularly strong emphasis in the food sector (Kaspereit & Lopatta, 2016). This trend reflects a growing recognition of the multifaceted benefits, ranging from regulatory compliance and enhanced credibility to competitive advantage and risk management (Chkanikova & Sroufe, 2021). As sustainability continues to be a driving force in the business world, this practice is expected to remain a cornerstone of responsible corporate conduct for food companies seeking to thrive in a global marketplace.

Based on the above arguments, we propose that:

Hypothesis 2. The association between SED and CFP in the food industry is strengthened by SR Assurance.

3 | RESEARCH DESIGN AND METHODOLOGY

In this section, we outline the measurement of SED and provide an overview of the model design. The conceptual model is presented in Figure 2.

3.1 | Sample

The study analyzed a sample of 48 unlisted firms operating in the Italian food sector who issued stand-alone SRs based on GRI guidelines for the period 2020–2021, to ascertain the state and extent of SED and to assess his relationship with CFP. The selection of companies for the study was carried out through the following steps. First, we downloaded the entire records of Italian food companies active for the fiscal year ending 31 December 2021 from the AIDA Bureau van Dijk database (n. 16.682). In the classification of economic activity developed by the Italian Institute of Statistic (ATECO 2007) these firms are found using the code 70.00.00. We

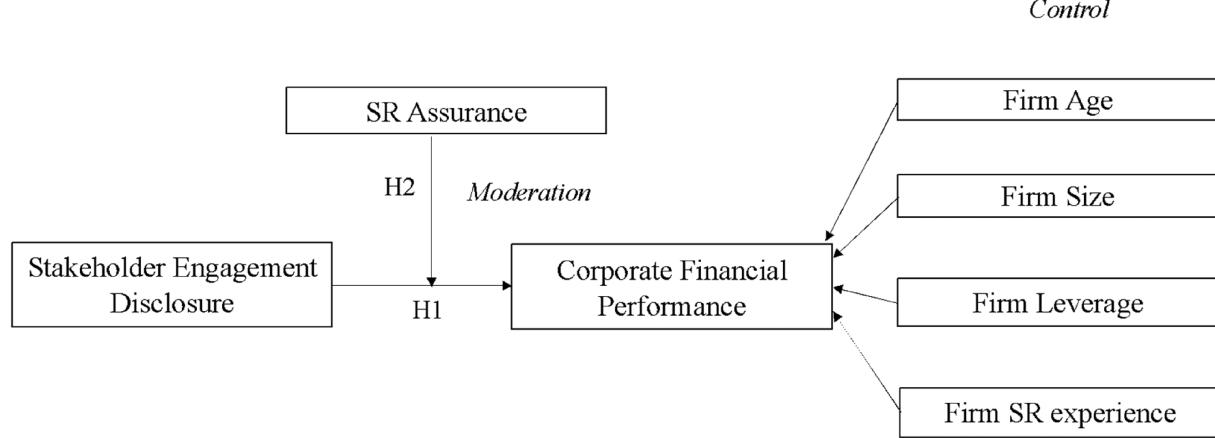


FIGURE 2 Conceptual model and hypotheses.

aim to cover the period during the COVID-19 pandemic because the heightened level of unpredictability resulting from the pandemic has led to an increased demand for information from stakeholders (Cardoni et al., 2022). Therefore, the COVID-19 pandemic has had a profound effect on accounting, disclosure, and SE (Rinaldi, 2022). Second, we decided to exclude listed companies (n. 5) because of the low number and different regulatory framework, micro-enterprises (n. 13.298) because these firms are most likely not producing SRs due to a scarcity of resources to cover the costs of sustainability disclosure (Gjergji et al., 2020) and young firms (n. 884) because of their unstable economic and financial performance making them more focused on survival or growth, with less interest in sustainability investments (Broccardo et al., 2023; EC, 2002; Withisuphakorn & Jiraporn, 2016). In contrast, companies that exhibit a relatively greater market penetration in terms of turnover, increased investment levels and skilled resources, and a larger workforce tend to garner more interest from stakeholders and are expected to possess more resources to support the expenses associated with disclosing sustainability information (Badulescu et al., 2018; Balasubramanian et al., 2021; El Baz et al., 2016). We followed the European Commission definitions (EU recommendation 2003/361) to identify and exclude micro-enterprises which are defined as companies that employ fewer than 10 people and whose annual turnover or annual balance sheet total does not exceed 2 million euro. Moreover, we identified firms as young if they have been in operation for up to 5 years (Ayyagari et al., 2011; Broccardo et al., 2023; EC, 2002). Third, following prior studies on corporate sustainability reporting (Phelan et al., 2022; Stewart & Niero, 2018), we searched for companies issuing GRI SRs ranging from 2020 to 2021 using the Corporate Register database which is the largest online database of SRs that allows content download in pdf format. We also checked the company's website if a SR was not available on the Corporate Register, ensuring the accuracy of our data collection and analysis (Maji & Kalita, 2022; Stocker et al., 2020). We choose to select only GRI SRs because the guidelines provided by the GRI are the most exhaustive, trusted, and widespread standard for sustainability reporting (Safari & Areeb, 2020; Stocker et al., 2020).

3.2 | SE disclosure index

To gather evidence on how food companies in the sample disclose their SE activities, we performed a content analysis of SRs collected, based on recommended coding rules, which are themselves grounded in prominent literature. Prior studies have employed this method to examine the extent to which sustainability reporting is disclosed (Bellucci et al., 2019) and to systematically quantify and categorize SE practices within the SRs (Campra et al., 2020; Gagné et al., 2022; García-Sánchez & Araújo-Bernardo, 2020; Iazzi et al., 2020; Moratis & Brandt, 2017). In sustainability reporting, content analysis is utilized to collect data by categorizing qualitative and quantitative information into predictable categories to identify patterns in how information is presented and reported on a specific topic (Guthrie & Abeysekera, 2006). Instead of counting the frequency of words (Krippendorff, 2013), the quantitative content analysis in this study involved creating a modified SE checklist (see Annex) based on past studies and GRI Standards (GRI, 2016). Following prior studies (Bellucci et al., 2019; Moratis & Brandt, 2017) the analysis only includes the SE disclosures found in the SRs being studied. Moreover, even though the SE section was given significant attention, the complete report was analyzed. Each item was given a value of 1 if the information is present, and 0 if it is not, with no weighting applied. The objective of this research is to determine the extent of the disclosures, rather than the quality of the information provided (Beattie et al., 2004). Additionally, weighting is only necessary when one item is deemed more significant than another (Marston & Shrivs, 1991), which is not applicable to this study. Drawing upon the major frameworks identified in prior literature and adhering to GRI standards, this index is considered comprehensive.

The SE disclosure index contained 7 categories representing the typical phases of SE and 21 items that considered qualitative factors derived from the GRI's (2016) SE disclosures as well as relevant literature on the subject. We used the GRI stakeholder evaluation and benchmark criterion since it is widely accepted practice-based standards (Pasko et al., 2021), it provides useful insights into SE (Machado et al., 2021) and it can assure a higher quality level in SRs

(GRI, 2016). The evaluation scale associated with each subitem allowed effective representation of their weights in the SE disclosure (SED) index below:

$$\text{SEDIndex} = \frac{\sum \text{item}_i}{i}$$

The following steps were taken to implement the content analysis:

1. Read the SRs in its entirety to ensure that all discussion pages were included in the analysis, although we gave a particular attention to SE sections
2. Identify and disregard any irrelevant information not related to SE
3. Develop the SED index with appropriated items selected from GRI (2016) and prior studies and then use it for the analysis of the SRs collected
4. Conduct the content analysis on SRs collected and the first scoring by each document. Scores were assigned based on the following measurement guidelines: each item received a score of 1 if contained in the SR, 0 otherwise
5. Calculate the scores for each item and add together to obtain a total disclosure score that provided information on the SED figure of food companies in Italy for the reader
6. Compare and analyze the differences and distribution of specific final scores for each company.

3.3 | Description and measurement of variables

In this research paper, the dependent variable under investigation is the CFP, which is measured by a traditional accounting metric. Specifically, return on assets (ROA) is used as a proxy for CFP, obtained by dividing the net income by the total assets. Audited accounting data are expected to be genuine and trustworthy, and is not influenced by market perceptions or speculations, making it less volatile when compared to market-based indicators (Ebaid, 2022). The independent variable in this study is SED measured with an index composed of 7 categories divided in 21 items as per GRI Standards and relevant literature (see Annex). The moderating variable is SR assurance (SRAssur) measured with a binary indicator that determines whether a SR has undergone review by a certified entity. Consistent with other studies (Liao et al., 2018; Oware et al., 2022), this variable takes on the value "0" if the SR has been assured by a third party and "1" otherwise. The data for this variable were collected through analysis of the reports, with the auditors' report indicating whether assurance has been provided or not. To analyze the relationship between SED and CFP it is crucial to consider other factors that could potentially influence this connection. To address this, the research uses the following control variables: firm size (Size), firm age (Age), sustainability reporting experience (SRExper), and leverage (Lev). We control for firm size, defined as the logarithm of total assets, because larger firms may have greater resources available to them, which could influence their ability to effectively disclose

sustainability information (Fasan & Mio, 2017; Romero et al., 2019). Moreover, recent studies indicate that firm size is a driver of higher quality sustainability reporting (Dienes et al., 2016) being one of the primary factors that determine whether a company will issue SRs (Ardiana, 2021). Voluntary sustainability reporting can serve as a means of mitigating information asymmetries and tensions in large companies engaging with a more diverse array of stakeholders or to signal their commitment to promoting sustainability and fostering positive relationships with stakeholders (Al-Shaer, 2020). Additionally, the size of a company plays a role in the SE process, due to the larger number of stakeholders involved and the resulting greater impact on society (Vrontis et al., 2022). In addition, highly indebted firms are likely to have better sustainability practices (Henriques et al., 2022; Orazalin & Mahmood, 2018); therefore, the leverage variable, which is a proxy of the firm's debt or default risk, was calculated by dividing the total debt by the total assets (Ebaid, 2022). For SE disclosure in SRs to be effective, it is also relevant to have a certain level of longevity, which can be assessed over a period (Gagné et al., 2022; Pasko et al., 2021). Therefore, we also control for the number of years of experience in sustainability reporting issued by the companies in the sample. Lastly, evidence suggest that age of a firm can be a significant factor in accounting for variations in sustainability orientation and its influence on CFP (Broccardo et al., 2023). Differences in sustainability orientation between young and older firms have been identified in several studies. Withisuphakorn and Jiraporn (2016) found that older firms are more sustainability-oriented than younger ones because of the higher sustainability investments. However, it has been observed that young firms, even if with fewer resources, must build their reputation and because of their innovation propensity obtain a higher return on economic performance from investments in sustainability, than older ones (Broccardo et al., 2023). Accordingly, firms' age is the number of years that a company has been in operation. Table 1 shows the description and measurement of the variables used in this study.

3.4 | Estimation models

This study employed a panel data regression model to appraise the composite effect of the SED on CFP and to investigate the moderating role of third-party SR assurance. We utilized panel data analysis techniques as they assist in managing heterogeneity marked by unobservable nature and offer data with less collinearity (Hongming et al., 2020). To account for potential unobserved differences among companies and enhance the reliability of the statistical analysis, two types of panel data techniques are used: pooled ordinary least squares (OLS) and fixed-effect (FE) based on the results of a Hausman specification test ($F\text{-test} < 0.05$). To emphasize the significance of SE in the process of sustainability reporting and its potential to improve firm value, as well as to detect the moderating role of SR assurance we created the following regression models:

TABLE 1 Variables description and measurement.

Variables	Description	Measurement	Source
ROA	Return on assets	Ratio of net profit to total asset	AIDA
SED	Stakeholder engagement disclosure index	Unweighted and binary index based on GRI and literature review	SR content analysis
Size	Company size	Log of total assets	AIDA
Lev	Financial leverage	Total debts/Total assets	AIDA
SRAssur	Sustainability assurance	Sustainability reporting assurance	SR content analysis
SRExper	Reporting experience	Sustainability reporting experience	SR content analysis
Age	Company age	No. of years in operation	AIDA

$$CFP_{it} = \beta_0 + \beta_1 SED_{it} + \beta_2 Size_{it} + \beta_3 SRExper_{it} + \beta_4 Lev_{it} + \beta_5 Age_{it} + \beta_6 Year_{it} + \epsilon_{it} \quad (1)$$

$$CFP_{it} = \beta_0 + \beta_1 SED_{it} + \beta_2 Size_{it} + \beta_3 SRExper_{it} + \beta_4 Lev_{it} + \beta_5 Age_{it} + \beta_6 SED * SRAssur_{it} + \beta_7 Year_{it} + \epsilon_{it} \quad (2)$$

The first equation focused on examining the relationship between SED and CEP, which was used to test Hypothesis 1. The second equation focused on examining the moderating role of SR assurance, which was used to test Hypothesis 2.

4 | RESULTS

4.1 | General description of SE disclosure

Table 2 presents the general information regarding the SRs of the companies in the sample gathered according to the coding instrument developed (see Annex). Regarding the conformity choices, we see that 66% of the companies disclosed the option "in accordance-core" with the GRI guidelines while 34% of the reports have been issued respecting the company's choices. In addition, only 6 companies in the sample disclosed to adopt the GRI sector supplement for food processing. We also checked for the presence in the SRs of the materiality matrix. Table 2 shows that 93% of the reports analyzed disclosed a materiality matrix. As per the principle of materiality, material aspects are defined as those that represent the noteworthy economic, environmental, and social consequences of an organization, or those that materially affect stakeholder judgments and choices. This principle is widely recognized and implemented in SR frameworks and guidelines to ensure that organizations disclose information that is relevant and significant to their stakeholders (GRI, 2016). If a company does not mention materiality in the report, it means that it reports on its vision of sustainable development, which does not coincide with the point of view of stakeholders, because there was no proper consultation. In our concept, the more a company discloses materiality in its SRs, the more the company engages stakeholders. In contrast, the effectiveness of this tool is dependent on the quality of the analysis and SE (D'Adamo, 2022; Torelli et al., 2020). Moreover, 32% of our sample comprises reports that have been

TABLE 2 SRs' sample description.

General information	2020		2021		Total	
	n	Freq.	n	Freq.	n	Freq.
GRI food processing sector disclosures supplement						
Presence	-	-	6	12%	6	12%
Absence			42	88%	42	88%
GRI conformity option						
Not disclosed	19	39%	14	29%	33	34%
In accordance/Core	29	61%	34	71%	63	66%
Materiality matrix						
Presence	41	85%	48	100%	89	93%
Absence	7	15	0	-	7	7%
External assurance						
Presence	15	31%	16	33%	31	32%
Absence	33	69%	32	77%	65	68%
Stakeholder engagement section						
Presence	23	48%	26	54%	49	51%
Absence	25	52%	22	46%	47	47%
Stakeholder engagement motivation						
Presence	23	48%	28	58%	51	53%
Absence	25	52%	20	42%	45	47%
Reporting maturity						
2 to 4 years					36	75%
More than 4 years					12	25%
Stakeholder consultation process						
No mention	11	23%	9	19%	20	21%
Generic mention	35	73%	37	77%	72	75%
Substantive mention	2	4%	2	4%	4	4%

certified with external assurance. GRI (2016) suggests that activities involving engagement with stakeholders should be revealed in a designated section of the report. Based on our content analysis, it can be observed that 51% reports in the sample meet this criterion. Dedicating a specific section of the report to SE makes the report more significant and material, the communication of SE more effective (Bellucci et al., 2019) and ensures that SE is adequately

emphasized (Ardiana, 2021). With respect to the motivation behind SE, 62.5% of the companies provided information on the role of SE in their reports. The results showed that 23.5% of the companies reported using SE to help define their strategic objectives, while 29.5% found it beneficial for both meeting strategic objectives and preparing their reports. Of the entire sample, only 2 companies provided information about their SE process in a substantive way. Thus, 75% of the reports provided disclosure on their SE process in a generic manner and, more concerning, 21% not at all. In the absence of specific details regarding the engagement process, reporting firms face a daunting task of convincing readers that they are not exploiting stakeholders' inputs to validate their business. Lastly, we found that almost 75% of the companies have a low reporting maturity having issued 2 to 4 SRs; 12 companies have more than 4 years of reporting experience of which only 3 with more than 10 years of sustainability reporting prepared.

4.2 | Stakeholder groups and engagement techniques

This section initiates the analysis of the SE process by focusing on the disclosures related to practices of SE. **Table 3** displays the groups of stakeholders that are included in the SE process of the

TABLE 3 Groups of stakeholders engaged in the SRs.

Stakeholder groups engaged	n	Freq. (%)
Employees	96	100
Suppliers (e.g., breeders, farmers)	81	84.6
Institutions and public administrations	74	77
Shareholders	74	77
Local communities	74	77
Customers (e.g., retailers)	66	69.2
Business Partner	52	53.8
Consumers	44	46.2
Universities and research centers	44	46.2
Animal rights associations and other NGOs	37	38.5
Financiers	37	38.5
Media, press, social networks, and opinion makers	37	38.5
Category associations	30	30.8
Banks and insurance companies	30	30.8
Competitors	30	30.8
Control and certification bodies (e.g., Arpa, Inail, ASL)	30	30.8
Trade unions	15	15.4
Collectivity	15	15.4
Audit firms	7	7.7
Cooperatives	7	7.7
International associations	7	7.7

companies in the sample. The most cited stakeholders in the sample reports include employees (96), suppliers (81), institutions and public administrations (74), shareholders (74), territories and local communities (74), customers (66), and business partners (52). It could be asserted that the stakeholder groups that are closer or have a dependency on the reporting organization are more likely to be involved in the engagement process. Apart from these stakeholders, there are several others that are relevant and significant to food companies in the sample. These stakeholders are universities and research centers, animal rights associations and other non-governmental organizations (NGOs), media outlets, press agencies, social networks and opinion makers, control and certification bodies, and financial institutions. Overall, the reporting organizations involved an average of ten stakeholder groups while preparing their reports. The mean and mode were also calculated as 10.0, with a standard deviation of 2.9.

Apart from investigating the types and number of stakeholder groups, this study also examined the methods of engagement utilized by reporting firms. According to GRI guidelines, organizations are obligated to provide a depiction of their methods for engaging with stakeholders. Therefore, our research focused on identifying descriptions of the tools used by the sample organizations as well as the stakeholders most engaged in each action (**Table 4**). Since there is no standardized classification for engagement techniques, the categories listed in the table reflect the author's understanding of the primary engagement categories identified in GRI reports (Machado et al., 2021). The engagement techniques most cited were directed toward both internal and external stakeholders and encompassed both passive and active approaches. Consistent with prior studies (Stocker et al., 2020), results in **Table 4** show that the companies in the sample predominantly use engagement strategies focused on informing stakeholders (level 1) and consulting with and supporting them (level 2), with minimal emphasis on deep involvement strategies (level 3). In this regard, the choice of the suitable engagement method hinges on the size, resource availability, and characteristics of the stakeholders to be engaged (Kaur & Lodhia, 2014).

4.3 | The extent of SE disclosure

In this section we first disclose the index for each SE category, followed by a breakdown of the specific items within each category. **Table 5** presents data on the index-based SED, including the minimum, maximum, mean, and standard deviation. According to the findings displayed in **Table 5**, food companies in the sample, on average, disclosed 9 (2020) and 11 (2021) items out of the 21 items that were tested in this study. In 2020, companies disclosed a maximum of 0.60 or 13 out of 21 items, while in 2021, they disclosed a maximum of 0.81 or 17 out of 21 items. In contrast, the minimum number of items disclosed was 0.04 or 1 with a standard deviation of 0.2064 in 2020 and 0.14 or 3 with a standard deviation of 0.1946 in 2021. In line with prior studies (Ardiana, 2021;

TABLE 4 SE level.

Level of SE	No. of actions	% of actions	Most cited actions	Most cited stakeholders in the action
1) Information strategy (One-way style)	234	52.23%	Press conferences and publication, Company App, Mail, Message boards, Newsletter, Annual and periodical reports, Social Media	Employees, Competitor, Trade unions, Local communities, Animal rights associations and other NGOs, Shareholders, Consumers, Suppliers
2) Response strategy (Two-way style)	187	41.17%	Contact one-to-one, Events, Focus group, Workshop, Survey, Company Visits, Conferences, Seminars, Firm hotline	Clients, Control and certification bodies, Employees, Local communities, Category associations, Consumers, Suppliers, Institutions and public administrations, Media, Press, Social networks, and opinion makers
3) Involvement strategy (Multi-way style)	27	6%	Partnership, Active involvement in institutional and supranational organizations on sustainability (eg. Italian Network of Global Compact), Product development, Participation in company committees	Business Partners, Society, Consumers, Animal rights associations and other NGOs, Category associations, Suppliers, Institutions and public administrations

TABLE 5 Extent of the SE disclosure.

	2020	2021
SED index	0.42	0.52
Min	0.04	0.14
Max	0.60	0.81
Mean	0.4221	0.4941
SD	0.2064	0.1946

TABLE 6 SE categories disclosure.

Stakeholder engagement categories	Proportion of SRs
A) List of stakeholder groups engaged by the firm	97.91%
B) Basis of stakeholder identification and classification	45.83%
C) Approach to Stakeholder Engagement	83.33%
D) Key topics and concerns raised through Stakeholder Engagement	29.16%
E) Stakeholders' opinions	n.a.
F) Evidence of Stakeholder Engagement	8.33%
G) Opportunity for feedback	10.42%

Gagné et al., 2022; Pasko et al., 2021) we found that the extent of SED is low/moderate (40% in 2020 and 50% in 2021, on average), however, there is an increasing pattern of SED during the study period.

Table 6 illustrates the SE indicators disclosed by food companies in the sample with the following results: 97.91% of the companies disclosed information about the stakeholder identification process; 45.83% of the companies provided information on the basis of stakeholder identification and classification process adopted; 83.33% of the companies disclosed information on SE by using media and approaches, such as, questionnaires, focus groups, email; furthermore, only 29.16%, 8.33%, and 10.42% of the companies provided information, respectively, about issues and concerns raised by stakeholders engaged, the opportunities for feedback to stakeholders, and some kind of evidence of the SE; lastly, not one of the companies in the sample disclosed information on stakeholders opinions. In general, it is evident that "Stakeholder identification" and "Approach to SE" were the dominant categories in the dimension of SE in SRs.

Table 7 displays the frequency for each SE item in each category adopted in this study. Results illustrate that only 22.29% of the companies in the sample had a statement related to stakeholder definition, however, almost all companies mentioned the stakeholder types and disclosed a stakeholder list. None of the companies report information about the stakeholder's prioritization and only 20.83% mention the motivations to engage with the stakeholders. Furthermore, while almost half of the companies disclosed the key attributes of stakeholder groups, only few of them provided information of the relationship between the stakeholders identified and grouped and the firm and none of them

TABLE 7 SE items disclosure.

Stakeholder engagement items (21)	Frequency
A) Provide a list of stakeholder groups engaged by the organization	
1 statement related to stakeholder definition	22.29%
2 any mention about stakeholder types	95.73%
3 stakeholder list	97.91%
4 stakeholder's prioritization	0
5 motivations to engage with the stakeholders	20.83%
B) Basis of stakeholder identification and classification	
1 any mention about key attributes of stakeholder groups	45.83%
2 any mention about stakeholder relationship with the firm	26.32%
3 any mention about the methods of stakeholder identification	0
C) Approach to stakeholder engagement	
1 any mention about types of media and approaches used	83.33%
2 any mention about the degree of stakeholder involvement	0
3 any mention about the role of stakeholder engagement	0
4 any mention about the adoption of stakeholder engagement guidelines	6.25%
5 any mention about the stakeholder consultation process	77.55%
D) Key topics and concerns raised through stakeholder engagement	
1 any mention to the key topics/concerns arising from stakeholders	29.16%
2 any stakeholder comments/concerns/questions quoted	4.16%
3 any stakeholder comments/concerns/questions addressed	4.16%
4 stakeholder issues are reported in the stakeholder engagement section	8.33%
E) Stakeholders' opinions	
1 any mention to stakeholder opinions on previous reports	0
F) Evidence of stakeholder engagement	
1 any evidence of stakeholder engagement	8.33%
G) Opportunity for feedback	
1 any mention to channels for questions or other types of feedback regarding the report and its content	10.42%
2 any explanation on use of feedback	4.17%

reported about the methods of stakeholder identification adopted (e.g., proximity, urgency—Hujainah et al., 2018). Regarding the approach to SE, most of the companies disclosed information about the types of media and approaches used and about the stakeholder consultation process; however, none mention the degree or the style of SE and only 3 mention to adopt AA1000 as SE guidelines. The level of information disclosed about the topics and concerns

raised through SE is low. Despite 14 companies mentioning the key topics/concerns arising from stakeholders, only 2 quoted or addressed comments/concerns/questions given by stakeholders and only 4 companies reported those issues in the SE section. However, results show that companies in the sample identifying key concerns and issues of their stakeholders and gathering the feedback on their SRs mainly adopt a consultative approach (Brown & Hicks, 2013). Lastly, it is interesting to note that: none of the companies in the sample reported stakeholder opinions on previous reports; only 4 provided evidence of SE and 5 provided information on channels for questions or other types of feedback regarding the report and its contents.

4.4 | Empirical results

4.4.1 | Descriptive statistics

The descriptive statistics of the study variables are presented in Table 8, which displays the means, standard deviations, as well as the minimum and maximum values of these variables. Results show that the mean for the proxy of financial performance (ROA) is 0.427 with a standard deviation of 0.633. In addition, the mean of the overall index of SED is 0.275 with a standard deviation of 1.221 which signal the low level of SE disclosure of Italian food companies in the period analyzed. Regarding the control variables company size, leverage, sustainability reporting maturity, and SR assurance the means of these variables are 4.183, 1.385, 3.75, and 0.33, respectively, with standard deviations of 2.1311, 2.352, 2.6537, and 0.3763, respectively.

4.4.2 | Correlation analysis

Table 9 presents the results of the Pearson correlation among the research variables. We observed a positive significant correlation between the main variables of interest in our study, the overall index of SED and CFP, as well as SED and SRAssur. This is evident as there is a correlation coefficient of 0.51 at 0.001 significance between SED and CFP and a correlation coefficient of 0.62 at 0.001 significance between SEDInd and SRAssur. The control variables Lev and Size are negatively and significantly correlated with CFP and negatively but not significantly correlated with SED. Moreover, SR experience and SR assurance are positive and significantly correlated with SED. There is very little association between Size and Lev or Size and SRAssur.

Pearson correlation matrix is used to detect any potential issue of multicollinearity among the variables (Weisberg, 2005). Despite there is no consensus among authors regarding the threshold for multicollinearity most studies define multicollinearity as a concern if the Pearson correlation coefficients exceed 0.8 or 0.9 (Farrar & Robert, 1967; Gujarati & Porter, 2003; Hair et al., 2010; Studenmund & Cassidy, 2001). The correlation analysis provides no indication of multicollinearity among the variables with the highest correlation value of 0.62 between SED and SRAssur. To confirm the absence

of multicollinearity, we also examined the variance inflation factors (VIF). If the VIF value exceeds 10, it is generally considered that multicollinearity is a concern (Gujarati & Porter, 2003; Myers, 1990; Neter et al., 1989; Thompson et al., 2017). In model 1 all the variables analyzed in this study have VIF values well below the threshold of 10, ranging from 1.05 to 2.99. In model 2 we found high VIF values for the variables SRAss and SED*SRAssur. The high correlation between the component variables of an interaction resulting in increased VIF values is commonly observed in models containing

TABLE 8 Descriptive statistics.

Variables	Mean	SD	Minimum	Maximum
CFP	0.06	0.0414	-0.05	0.19
SED	0.4411	0.2026	0.04	0.81
Size	0.4458	0.5799	4.28	6.6
Lev	0.6002	0.6	2.51	0
SRAssur	3.75	2.6537	2	12
SRExper	81.25	66.1569	5	243
Age	0.3125	0.4684	0	1

interaction terms (Disatnik & Sivan, 2016; Francoeur, 2013) indicating that multicollinearity is not a major concern in our regression model 2.

4.4.3 | Regression result

We use R software to perform regression analysis on the model. The model fit was deemed acceptable based on the significant chi-square values ($p < .05$) and R^2 values ranging from 49% and 62% in the two specifications. Table 10 presents the results related to the association between SED and CFP and the effect of SRAssur as a moderating variable. Results show that the explanatory power (R^2) of the FE model is greater than the explanatory power (R^2) of the pooled OLS model. We found a positive and significant relationship between the index of SED and the financial performance proxy in both models. The outcome of this analysis leads to the acceptance of the research hypothesis Hypothesis 1, which posits a significant positive correlation between SED and the CFP of food companies in Italy. In other words, improving SED can positively impact the value of the sample firms confirming the value relevance of SE in sustainability

Variables	CFP	SED	Size	Lev	Exper	Assur	Age
CFP	1						
SED	0.51***	1					
Size	-0.27**	-0.20	1				
Lev	-0.31**	-0.16	-0.22*	1			
SRExper	0.19	0.29**	0.19	-0.06	1		
SRAssur	0.39***	0.62***	0.07*	-0.34***	0.27**	1	
Age	-0.06	-0.13	0.14	0.04	0.01	-0.13	1

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

TABLE 10 Regression results.

Variables	Regression model 1				Regression model 2			
	Pooled OLS		FE		Pooled OLS		FE	
	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.
SED	14.235	0.000***	16.133	0.000***	11.513	0.000***	13.544	0.000***
Size	-2.180	0.005**	-2.880	0.004**	-2.264	0.003**	-2.476	0.004**
Lev	-1.581	0.007**	-1.989	0.006**	-1.543	0.008**	-1.543	0.009**
SRExper	-0.010	0.932	-0.165	0.892	-0.006	0.959	-0.006	0.985
SRAssur	0.139	0.375	0.219	0.413	0.098	0.047*	0.098	0.044*
Age	0.001	0.805	0.003	0.879	0.001	0.770	0.001	0.840
SED × SRAssur					9.634	0.050*	11.624	0.050*
F statistics	14.77		15.66		11.68		13.44	
R^2	0.499		0.614		0.518		0.616	
Adj. R^2	0.465		0.589		0.473		0.587	
No. obs.	96		96		96		96	

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

TABLE 9 Correlation matrix.

reporting. In Model 2, we found a significant positive relationship between SRAssur and CFP indicating that third-party assurance of SRs has a positive influence on food companies' value in the sample. Moreover, the results of the interaction SED*SRAssur shows a significant and positive effect on CFP indicating the importance of sustainability assurance and the complementary relationship between SED and assurance of the SR, which supports the Hypothesis 2.

Regarding the control variables, it is noted that the Size and Lev has a negative and significant relationship with CFP, SRExper shows a negative but insignificant relationship with CFP and firm's age shows a positive but insignificant relationship with the dependent variable across the two models.

5 | DISCUSSION AND FINDINGS

The objective of this research is to ascertain how companies practice SE in their sustainability reporting and if such voluntary disclosure can positively affect a CFP. Accordingly, two RQs have been addressed. As for the "RQ1: What's the state and extent of SED in the SRs of food companies?", a content analysis on a sample of GRI SRs issued by 48 Italian unlisted food companies has been performed and an SE disclosure index composed of 21 items derived from prior studies in the field combined with GRI guidelines has been developed. Specifically, consistent with prior studies (Ardiana, 2021; Manetti, 2011; Manetti & Toccafondi, 2012; Torelli et al., 2020), the findings of this study reveal that there exists a moderate level of SED in the analyzed SRs. This reflects a scarce awareness from food companies on how to translate SE practice into sustainability disclosure through the issuance of SRs. Nonetheless, it would be premature to assert that stakeholders are not being engaged by the companies in the sample, since as shown by Kaur and Lodhia (2014), the inclusion of stakeholder input in the preparation of SRs is a plausible scenario. Additionally, in line with Gagné et al. (2022) and Pasko et al. (2021) we found that the extent of the SED increased gradually over the study period. In the context of ST, as also indicated by Ardiana (2019), the study's results indicate that most food companies acknowledge their significant stakeholders, both internal (such as employees) and external (including universities and research centers, animal rights associations and other NGOs, control, and certification bodies). Furthermore, although stakeholder identification and prioritization have been recognized as critical initial steps in the SE process, the findings show that none of the food companies disclosed the precise methods used for stakeholder identification. Thus, an effective SE communication should include the demonstration of how stakeholders are really involved, how they are able to react to their responses and what results are obtained when stakeholders are involved in the decision-making process (Ardiana, 2021; Vrontis et al., 2022). With regards to SE level, the study's findings indicate that external stakeholders, particularly society, animal rights and other NGOs, institutions, and local communities, demand a more structured approach, requiring interaction at the second and third levels (response and involvement strategies, respectively), which enterprises

are responding to only with respect to the second level of engagement. Therefore, consistent with prior studies (Pasko et al., 2021; Stocker et al., 2020; Vrontis et al., 2022) we found that SR of Italian food companies is almost never intended to involve stakeholders but mostly to inform them adopting one-way or two-way SE styles. However, engaging in two-way communication still enables companies to listen, share, and consult with their stakeholders on crucial issues, as well as promotes education, training, and information dissemination to internal and external stakeholders involved (Brown & Hicks, 2013). In brief, our results are in line with prior studies who found that average level of SE is not significantly high in companies, with an overall scarce disclosure concerning SE modes, stakeholders' key expectations and issues to be addressed and answered (Gagné et al., 2022; Petruzzelli & Badia, 2023).

With reference to the "RQ2 Is there a relationship between SED in SRs and CFP in the food industry? If there is, how and to what extent, is this relationship mediated by SR assurance?", we employed a panel data regression model to appraise the composite effect of the SED on CFP and to investigate the moderating role of third-party SR assurance. The outcomes of the estimation procedure strengthen the study's theoretical assertions, which have already been established in previous research. The regression results show that SED is a significant determinant of CFP. Therefore, firms with higher SED are more likely to enhance their performance than firms with lower SED. Moreover, when the moderating role of SR assurance was examined, it was found that third-party SR assurance positively moderated the relationship of SED on CFP. These results suggest that companies should increase corporate value by improving SED. In addition, providing assurance of SRs is an effective way to promote CFP.

6 | THEORETICAL AND PRACTICAL IMPLICATIONS

In this paper, we present not only theoretical insights but also practical implications and solutions to the real-world issues that prompted the present research. Theoretically, our findings contribute to advance knowledge in the field of ST within the domain of SE in SRs. Accordingly, while several studies have attempted to document the impact of sustainability disclosure on the performance of the food companies (e.g., Al Hawaj & Buallay, 2022; Garzón-Jiménez & Zorio-Grima, 2022; Sen & Bhattacharya, 2001) this study is a first attempt to delve into the state and level of SED practices in SRs, its impact on the firm performance and the possible mediating effect of SR assurance. Therefore, this study extends the limited literature on SE practices in companies' sustainability reporting, by providing evidence of SE disclosure in SRs of Italian food firms. Furthermore, the results suggest that firms could improve their financial performance by disclosing more information on SE practices in SRs.

Beyond theoretical advancements, our study offers valuable insights for practitioners in the food industry. First, this study recommends that managers should pursue robust engagement of stakeholders by incorporating engagement mechanisms in their

routine operations, such as those related to food processing, in a way that creates a trusting and collaborative environment in which stakeholders feel engaged and motivated to contribute to the wealth creation efforts of firms. In such a context, food firms should foster an environment in which both companies' teams and external stakeholders can comfortably cross-pollinate, get on the same wavelength, and achieve congruence in all supply chain phases. It was demonstrated that companies with improved sustainability practices are more likely to engage with their stakeholders, thus resulting in an enhancement of financial results (Henisz et al., 2014). Thus, SE should be a major concern of food companies core operations. Accordingly, food companies should recognize their fundamental role and shape their behavior toward strategic choices that could contribute to their positive financial performance in a sustainable manner over time. In such a context, the contribution of this work is also associated with the development of processes, strategies, and best practices of SE within an important context for the development of society, that is, the food industry. Analyzing and forecasting the best types of relationships, in terms of SE, induce us to consider the role of business engagement with society, which is to coordinate the interests of and co-create more value with stakeholders for the whole society.

7 | CONCLUSION, LIMITATIONS, AND HINTS FOR FUTURE RESEARCH

This research examined the state and level of SED in SRs of companies in the food industry in Italy, as well as the relationship between SED and CFP and the moderating role of SR assurance.

We first examined the stand-alone SRs of a sample of 48 unlisted food companies for the period 2020–2021. The study finds that the average level of SED is still moderate, however, there is an increasing pattern of SED during the study period. This finding aligns with previous studies which have asserted that companies disclose only a limited amount of the pertinent information and do not clarify their approaches for identifying stakeholders and topics/aspects (Bellucci et al., 2019; Beske et al., 2020; Moratis & Brandt, 2017). Then, we tested two primary hypotheses: firstly, the value relevance of SE in sustainability reporting, and secondly, the incremental value relevance of SR assurance. Using both the regression models, the study finds that the influence of SED on CFP is positive and significant. This suggests that food companies could improve their financial performance by disclosing more information on SE practices. Stated differently, by effectively engaging stakeholders and disclosing more information about the SE in the SRs, companies enhance transparency on risks and opportunities that stakeholders face (del Mar Alonso-Almeida et al., 2014), leading to a possible gradual improvement in profitability. This result further suggests that reporting on SE practices will make firms more attractive to customers, investors, and partners in the food industry. Therefore, the results confirm that SE represents one of the most direct means of understanding the relevance and significance of disclosures on sustainability (Bellucci

et al., 2019). Thus, the study suggests that Italian food companies should improve their SE to trigger their performance positively. Furthermore, in line with the second hypothesis (Hypothesis 2), our findings confirm a positive and significant moderating effect of SR assurance on the relationship between SED and CFP. This indicates the presence of a complementary effect of SED and assurance on CFP, implying that the value of sustainability reporting is contingent on assurance. In line with ST, the transparency and credibility offered by the disclosure of SE practices, especially when these practices are validated by an impartial third-party, not only fortify firms' relationships with their stakeholders but also yield improvements in their financial performance. This synergy between sustainability reporting and financial success underscores the significance of responsible business practices and their impact on long-term sustainability and profitability. However, the context-specific findings suggest that the value relevance of SED and SR assurance cannot be generalized across all markets and industries.

This study has identified certain limitations that may be addressed in future research. A limitation of this paper is that content analysis captures only quantity rather than the quality of SED. The presumption that SE disclosures accurately represent real-world practices may not be consistently true (Ardiana, 2021). Therefore, future studies could overcome this issue by assessing the value of SED through interviews with sustainability accountants in food companies to obtain valuable insights related to SE practices that may not be captured through quantitative methods such as content analysis, or just to collect data. Moreover, to obtain a holistic understanding of the relationship between SED and CFP, future research should consider including large or listed companies operating in the food sector. By expanding the scope of investigation to encompass a broader range of companies, researchers can obtain a more complete picture of how SED practices impact performance outcomes. Another limitation of this study is that it solely focuses on Italian food companies, and further investigations could test the correlation in firms from other countries or industries using the proposed disclosure index. The index developed in this study can also be adapted for use in other research areas by referencing relevant past research, as well as it can be applied and expanded in other contexts, including other sectors or alternative methods of disclosing sustainability information, such as company's websites. Additionally, since the content analysis technique to capture the amount of SE on SRs was performed by a single coder it is possible that subjective judgments were made. While this paper ensured that the coding decision for the pilot sample was confirmed by another experienced researcher, it is advisable for future research to incorporate inter-rater coding during actual data collection to mitigate subjectivity judgments when determining the quantity of disclosure items. Lastly, while it is essential for companies to disclose their SE practices, simply translating these practices into disclosures and including a SE section in the SR may not be sufficient. In this regard future research could investigate if and how SED is being integrated with sustainability disclosures dimensions (environmental, social, economic indexes) to assess whether SE disclosure in SRs of food companies is effective.

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PEER REVIEW

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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ANNEX A

Content analysis coding instrument.

General information	
Categories	Items and scores
Sector supplement	1 if the report mention GRI "Food Processing Sector Disclosures" supplement, 0 otherwise
Conformity option	1 Not disclosed 2 In accordance—Core
Materiality matrix	1 if the report had a materiality matrix; 0 otherwise
External assurance (G4-33)	1 if the report had hired external assurance; 0 otherwise
Stakeholder engagement section	1 if the report had a section dedicated to stakeholder engagement; 0 otherwise
Stakeholder engagement motivation	1 if any mention about the role of stakeholder engagement in the report has been done, 0 otherwise
Reporting maturity	1 if the n. of years of experience of the company in issuing sustainability reports is 2 to 4, 0 if it is more than 4 years
Stakeholder consultation process	1 No mention 2 Generic mention 3 Substantive mention

Stakeholder engagement disclosure index		
Categories	Items and scores	Main references
A) Provide a list of stakeholder groups engaged by the firm	1 if a statement related to stakeholder definition has been included, 0 otherwise 1 if any mention about stakeholder types has been done, 0 otherwise 1 if a stakeholder list definition has been included, 0 otherwise 1 if a stakeholder's prioritization has been done, 0 otherwise 1 if the motivation to engage with the stakeholders been identified, 0 otherwise	GRI (2016) (G4-24 standard or GRI 102-40), Moratis and Brandt (2017)
B) Basis of stakeholder identification and classification	1 if any mention about key attributes of stakeholder groups has been done, 0 otherwise 1 if any mention about stakeholder relationship with the firm has been done, 0 otherwise 1 if any mention about the methods of stakeholder identification has been done, 0 otherwise	GRI (2016) (G4-25 or GRI 102-42), Hujaiah et al. (2018)

C) Approach to stakeholder engagement	1 if any mention about types of media and approaches used for engagement, such as: formal channels, focus groups and workshops, interviews, surveys, dedicated events, group meeting, social media, etc. has been included, 0 otherwise 1 if any mention about the degree of stakeholder engagement has been made, 0 otherwise 1 if any mention about the role of stakeholder engagement in the report has been done, 0 otherwise 1 if any mention about the adoption of stakeholder engagement guidelines (e.g., AA1000) are used to guide the engagement process, 0 otherwise 1 if any mention about the stakeholder consultation process (i.e., generic or substantive) in the report has been done, 0 otherwise	GRI (2016) (G4-26 standard or GRI 102-43), Cooper and Owen (2007), Manetti (2011), Moratis and Brandt (2017), Morsing and Schultz (2006), Garriga and Melé (2004), Venturelli et al. (2018)
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Stakeholder engagement disclosure index

Categories	Items and scores	Main references
D) Key topics and concerns raised through stakeholder engagement	1 if any mention to the key topics/concerns arising from stakeholders has been included, 0 otherwise 1 if stakeholder comments/concerns/questions have been quoted, 0 otherwise 1 if the company shows how it has responded to the identified stakeholder comments/concerns/questions, 0 otherwise 1 if stakeholder issues are reported in the stakeholder engagement section, 0 if they are reported only in the materiality matrix	GRI (2016) (G4-27 or GRI 102-43 and 102-44), Brown and Hicks (2013), Moratis and Brandt (2017)
E) Stakeholders' opinions	1 if stakeholder opinions on previous reports are reported, 0 otherwise	Manetti (2011)
F) Evidence of stakeholder engagement	1 if any evidence of stakeholder engagement (e.g., photographs/pictures) had been provided, 0 otherwise	Kaur and Lodhia (2014)
G) Opportunity for feedback	1 if any mention to channels for questions or other types of feedback regarding the report and its content has been provided, 0 otherwise 1 if the explanation on use of feedback has been included, 0 otherwise	GRI (2016) (G4-31)