

# Corporate governance model, stakeholder engagement and social issues evidence from European oil and gas industry

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## Abstract

**Purpose** – Lately, sustainability issues are increasingly affecting all sectors, even if oil and gas industry is highly required to improve its social performance because of the societal pressure to environmental protection and social welfare. Sustainability concerns and corporate governance features and practices are more and more connected because sustainability has been perceived as a crucial topic by owners and managers. In this perspective, the empirical analysis aims to explore whether and to what extent, sustainability-oriented corporate governance model is linked with social performance.

**Design/methodology/approach** – By adopting a multi-theoretical framework that includes the legitimacy theory, the stakeholder theory and the resource-based view theory, this analysis used a sample of 42 large European-listed companies belonging to the oil and gas industry. The authors run fixed effects regression models by using a dependent variable, i.e. the social score, available in ASSET4 Thomson Reuters, and some independent variables focused on sustainable corporate governance models, stakeholder engagement, firm profitability, market value and corporate risk level.

**Findings** – Drawing upon the investigation of a moderating effect, findings display that stakeholder engagement is positively associated with corporate social performance and it can be considered an important internal driver able to shape a corporate culture and most likely to address corporate social responsibility issues.

**Research limitations/implications** – This study confirms the need to develop an organizational and holistic approach to corporate governance practices by analyzing internal and external governance mechanisms. From the managerial perspective, managers should opt for a sustainable corporate governance model, as it is positively correlated with corporate social performance.

**Originality/value** – There is an urgent need to investigate sustainability issues and their potential association with firm internal mechanisms, particularly in the oil and gas industry. This paper can extend the current body of knowledge by pointing out a positive relationship between stakeholder engagement and firm social performance.

**Keywords** Europe, Stakeholder engagement, Market value, Corporate governance model, Corporate risk, Financial performances, Social performances, Oil and gas industry, Corporate governance, Social goals

**Paper type** Research paper

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## 1. Introduction

Latterly, several researchers, top managers and advisors recognized corporate social responsibility (CSR) as a crucial role for firm's survival, in accordance with last reports published by the European Commission [1], which enhanced the movement toward sustainability concerns in most of the large-sized companies, in several European countries. The Commission has defined CSR in the following way: "Corporate social responsibility (CSR) refers to companies taking responsibility for their impact on society. The European Commission believes that CSR is important for the sustainability, competitiveness, and innovation of EU enterprises and the EU economy. It brings benefits for risk management,

cost savings, access to capital, customer relationships, and human resource management.” [2].

In the same perspective, in the USA, an independent non-profit organization, i.e. the Sustainability Accounting Standards Board, developed and disseminated sustainability accounting standards for several sectors to support organizations in disclosing material and useful decision-making information to investors [3]. Japan is adopting a stewardship code to enhance the collaboration between companies and fund owners and managers through a constructive engagement and dialogue [4]. They can achieve this goal through a better understanding of companies and their business environment [5]. In addition, the Hong Kong Stock Exchange and the Singapore Exchange are issuing guidelines for sustainability and environmental, social and governance (ESG) reporting, after a public consultation on the basis of “comply or explain” approach [6]. Recently, the United Nations Global Compact and Accenture performed a survey to over 1,000 chief executive officers (CEOs) (UNGC & Accenture, 2013). The results highlighted that 93% of them view sustainability as an “important” or “very important” factor for its success. In this context, the bulk of the large-sized companies (approximately 90%) now publish sustainability reports (KPMG, 2013). Sectors with high environmental and social impact, such as oil and gas and mining, typically show a high CSR reporting rate. Moreover, the need for transparency leads both external stakeholders and management toward a growing confidence in a company’s sustainability information for decision-making process (Global Reporting Initiative, 2013).

Moreover, the debate on the need for consistent CSR regulation (Tamvada, 2020) was radically affected and changed by issuing a new mandatory requirement by the European Commission (European Directive 95/2014/UE) for large undertakings on non-financial disclosure, which is currently under revision (EU, 2020). This directive aims to improve transparency and accountability for large companies, increase the uniformity and standardization of non-financial information in the European Union and expand the number of companies active in non-financial reporting. An estimated number of about 6,000 large companies are obliged to disclose in a separate report or in the annual report (management report) information on environmental issues, social and employee policies, human rights and anti-corruption and diversity policies. Given that this requirement is restricted to a scarce number of companies, an increased number of companies are starting to adopt the sustainability reporting (SR). To do this, they can opt for the drawing up of a separate sustainability and/or a web-based report (Kolk, 2003; Simnett *et al.*, 2009; Cohen *et al.*, 2012; CRPerspectives, 2013; KPMG, 2013), for a twofold objective, namely, for improving their corporate accountability and standing with respect to sustainability (Gomes *et al.*, 2015). In such lens of analysis, integrated report (IR) (IIRC, 2013; Eccles and Krzus, 2010, 2014; Busco *et al.*, 2013), issued by the International Integrated Reporting Council (IIRC,) represents a fitting alternative to aptly connect and “blend” financial and non-financial information. In this regard, IIRC put in evidence that the links among strategic design, corporate governance model and social and environmental goals play a pivotal role in the firm’s value-creation pathway (IIRC, 2013). The quality and quantity of sustainability or CSR disclosure provided by firm to a wide range of stakeholders might engender a significant influence on different factors, within and beyond the company’s boundaries. Additionally, the quality of non-financial reporting can be affected by the credibility of information as both stakeholders and academics often show skepticism and mistrust toward CSR reports (Seele and Lock, 2015). Credibility of CSR communication can be enhanced if companies and stakeholders are involved “in communicative action” (Seele and Lock, 2015, p. 404). Given the need for improving the credibility of CSR report, the influence of content and standardization of CSR reports (Lock and Seele, 2016) as well as the ab(use) of some reporting practices (i.e. the use of a stand-alone report, assurance and reporting guidance) have been demonstrated by prior studies (Michelon *et al.*, 2015).

In addition, organizations might be influenced by several internal and external drivers (Cooper and Owen, 2007; Holder-Webb *et al.*, 2009). The preparation of SR or IR along with the broader adoption of CSR patterns (FEE, 2008; KPMG, 2013; CR Perspectives, 2013; Global CR Reporting Trends and Stakeholder Views, 2013; Eurosif and ACCA, 2013; ACCA, 2015) should be integrated into core firm's organizational goals (Cheng *et al.*, 2014), particularly to legitimize the role of CSR manager (Argento *et al.*, 2018), with the aim to prevent "exercises" of impression management (Hooghiemstra, 2000; Merkl-Davies and Brennan, 2007; Melloni, 2015) or "greenwashing" (Lyon and Maxwell, 2011). Admittedly, it should be deemed a prominent strand of activities intent on managing organizational processes concerning firm's value creation (Eccles and Krzus, 2010) or as a part of integrated internationalization strategies (Bondy and Starkey, 2014). Taking into account the increasing importance of SR as well as the need of common standardized SR standards and the significant disclosure divergences among several sectors, there is therefore an important necessity to share and adopt generally accepted procedures regarding the handling of issues pertinent to the three "pillars" of SR, i.e. ESG. The drawing up of a high-level quality sustainability report is a unique opportunity for companies to be more careful with respect to CSR, to improve strategic decision-making processes and minimize its reputational risk (Bebbington *et al.*, 2008; Morales-Raya *et al.*, 2019), both directly through relationships with their stakeholders and indirectly via interactions with other firms (Wensen *et al.*, 2011). Several factors, such as the growing complexity of businesses and the 2008 global financial crisis (Rossouw, 2012), lead organizations to embed the concept of sustainability in their corporate governance mechanisms (Galbreath, 2010; Michelon and Parbonetti, 2012; Peters and Romi, 2015; Haque and Ntim, 2018) and to pursue sustainability goals (Clarkson *et al.*, 2008). Although sustainability can be linked to sustainable development (Holme and Watts, 2000), if a firm decided to implement it in its corporate identity, we can refer to corporate sustainability by investigating the companies' relationships with society, as well as the firm's responsibility to environment and community (Kong Cheung, 2011). A growing involvement in sustainability activities has been often evaluated as a "root" of competitive edge (Porter and Kramer, 2006) and a crucial part of corporate voluntary practice (Lacy *et al.*, 2010). Given these premises, organizations can obtain some benefits from a strong commitment to ethical behavior and a significant awareness of environmental and social activities (Dutta *et al.*, 2012). Consequently, they lead to the implementation of sustainability in businesses, following a "triple bottom-line approach" to quantify financial performance and success (Dyllick and Hockerts, 2002) or amplifying sustainability concerns at different levels of the organization (Sneirson, 2008). Last economic downturn along with the increasing uncertainty of financial providers (Duff, 2009) have incited industry to promote the adoption of ethical codes and even more induced organizations to rethink their corporate governance model (Wagner *et al.*, 2009), in everywhere throughout the world (International Federation of Accountants, 2012). Additionally, several firms feel the necessity to strengthen the truthfulness of corporate sustainability performance (CSP) (Sawani *et al.*, 2010), in terms of accountability, lack of opacity and adequacy of corporate governance model. In this regard, it should be put in evidence a strong impulse to gauge and control CSP by adopting some indicators on the integration of ESG factors and core business tasks (Artiach *et al.*, 2010; Abrantes Ferreira *et al.*, 2010; Henri and Journeault, 2010). In this perspective, the correlations between some inner and outer drivers, such as the corporate governance model, oriented on CSR, market value and corporate risk level over CSP need to be investigated. Given these considerations, our research aim is to explore, whether and to what extent, corporate governance model, oriented on CSR, is positively associated with CSP. To this end, a sample of large European-listed companies was looked into the oil and gas industry, namely, into an industry widely recognized careful toward environmental issues. "Few industries has received the attention from CSR scholars such as oil & gas" (Berkowitz *et al.*, 2017, p. 754).

In our empirical analysis, we also analyzed whether corporate performance of the prior year, such as the profitability, the market value and the corporate risk level, are correlated with CSP get over next one. As oil and gas sector has a significant impact on climate change and environment reporting, there is an urgent need to investigate sustainability issues and their potential association with firm internal mechanisms. Indeed, some empirical studies have been carried out within this industry by paying greater attention on the quality of greenhouse gas emissions reporting (Guenther *et al.*, 2007; Cormier and Magnan, 2015) on environmental information (Nilsson *et al.*, 2008) and on economic, social and environmental performance indicators of SR (Orazalin and Mahmood, 2018; Hasheminasab *et al.*, 2018). Little is known concerning the relationships between corporate governance structure and firm financial performance over CSP. Prior studies, focused on corporate governance mechanisms, highlighted the linkages between sustainability and some corporate governance characteristics, such as the board composition, size, independence, gender diversity, the presence of environmental committee, the presence of chief sustainability officer (CSO), given that these factors can show crucial drivers of transparency and accountability within organizations (Michelon and Parbonetti, 2012; Peters and Romi, 2015; Bravo and Reguera-Alvarado, 2018; Haque and Ntim, 2018; Elmagrhi *et al.*, 2018). Our study can extend the current body of knowledge in this literature stream by pointing out a positive relationship between CSR-oriented corporate governance practices and CSP. Contrarily, our findings show that prior firm financial performance, market value and corporate risk level are uncorrelated with CSP. Moreover, our results herald an important step in the existing literature by exploring the relationship with stakeholder engagement and CSP. Such relationship is positive and preparatory with respect to some sustainability-oriented corporate governance practices, such as the setup of the CSR committee.

This study is conducive to the current CSR literature along the following lines. First of all, the bulk of the previous analyses on sustainability and CSR reporting in the oil and gas sector were looked just into environmental dimension (Nilsson *et al.*, 2008; Dong and Burritt, 2010; Pled and Iatridis, 2012; Ayoola and Olasanmi, 2013; Alazzani and Wan-Hussin, 2013; Haque and Ntim, 2018), but a prominent need is felt for the examination of the other pillars, namely, the governance and social dimensions by considering the high level of awareness on social issues, such as human rights, work conditions, anti-bribery and anti-corruption measures (Raufflet *et al.*, 2014; Kirat, 2015). To address this gap, we investigated the association between the social dimension, the corporate governance model oriented on CSR and the past financial goals (Rahman *et al.*, 2011; Amran *et al.*, 2014), market value (Chowdhury *et al.*, 2019) and the corporate risk level (Waddock and Graves, 1997). Second, despite of the prominence of the European Commission efforts on CSR, scant cross-country studies were conducted in the European context, especially in the oil and gas industry (Ferns *et al.*, 2019). Most of the previous research is mainly focused on non-European country (Sharma, 2001; Dong and Burritt, 2010; Chowdhury *et al.*, 2019) or on emerging countries (Abdalla and Siti-Nabiha, 2015; Kirat, 2015; Orazalin and Mahmood, 2018; Hasheminasab *et al.*, 2018; Shvarts *et al.*, 2018).

The rest of the paper is structured in the following sections. The main studies on sustainability and CSR reporting, sustainability-oriented corporate governance model and the results regarding the association between sustainability and financial goals, market value and corporate risk level are described in Section 2. The theoretical frameworks and the focus on the development of research hypotheses are identified in Section 3. The research design, the methodological approach and the data collection process are explained in Section 4. Empirical evidence and findings are outlined in Section 5. At last, the discussion and the prompts regarding the future research avenues are broken down in Section 6.

## 2. Literature review

CSP is a growing area of interest for academics, professionals and investors. Moreover, multiple stakeholder groups including investors, media and the community at large are increasingly requiring organizations to report their sustainability performance through ESG factors (Cohen *et al.*, 2011; Huggins *et al.*, 2011; Eccles and Serafeim, 2013). The plethora of studies on SR are mainly focused on broad firm-level characteristics, such as country of domicile, size, the industry membership, dual listing status, measuring and evaluating their potential influence on the quantity and quality of sustainability information disclosed by companies (Salehi *et al.*, 2019). In addition, corporate governance literature sheds light a relevant nexus between governance structures and sustainability concerns. Particularly, the association between managerial entrenchment (i.e. board independence, management duality, management tenure, the board compensation, independence and owner percentage), CSR activities and financial performance has been analyzed (Salehi *et al.*, 2020). As result, some studies proved that corporate governance model is significantly correlated with the management of CSR activities (Wagner *et al.*, 2009; Trong Tuan, 2012) also in emerging countries (Sharma and Khanna, 2014; Nwagbara and Ugwoji, 2015; Narjess Boubakri *et al.*, 2020). Hence, firms increasingly adopt some corporate governance models to handle and oversee sustainability issues (International Federation of Accountants, 2012). Still, other empirical studies noted that firms show a strong need to organize environment-related committees on their corporate boards to integrate sustainability initiatives and risk management, to define and set sustainable goals and to implement policies and practice to enhance sustainability growth within the organizational structure (Carcello *et al.*, 2011; Ceres, 2013).

Several studies looked into the sustainability governance characteristics and their association with sustainability issues, reporting and performance, but they provided mixed or unclear findings. In particular, several studies demonstrated an insignificant or low association between sustainability-oriented committees and sustainability outcomes (O'Dwyer, 2005; Prado and Garcia, 2010; Rodrigue *et al.*, 2013; Amran *et al.*, 2014), whereas other findings show a positive relationship between environmental committees and environmental performance (Ewing, 2008; Michals, 2009; Peters and Romi, 2014). Furthermore, other studies were focused on the relationship between the role of the board within the SR and the assurance of CSR reports (Simnett *et al.*, 2009; Kolk and Perego, 2010; Peters and Romi, 2015; Gomes *et al.*, 2015). Beyond establishing board-level committees, companies are more and more appointing executive officer positions, namely, the CSO (Rivenburgh, 2010; Galbreath, 2010; Deutsch, 2007; Lubin and Esty, 2010). In this perspective, CSO has been evaluated to play a relevant role for the modern corporation by integrating sustainability activities, firm-wide strategy and corporate governance practices within the organization (Miller and Serafeim, 2014; Peters and Romi, 2015).

If we shift the attention from a firm's internal determinants to financial and market-related determinants of CSR reporting, a plethora of studies investigated the link between CSR and financial performance (Waddock and Graves, 1997; McGuire *et al.*, 1988; Verschoor, 1998; McWilliams and Siegel, 2000; Brammer and Millington, 2008; Fiandrino *et al.*, 2019), also in the emerging markets (Salehi *et al.*, 2018a, 2018b). Such link was measured by different accounting or stock market-related variables, which revealed contradictory results ranging from a positive to a negative association because of different reasons, such as several empirical and theoretical limitations of the prior empirical studies (McWilliams and Siegel, 2000).

Drawing upon the earlier reflections and on the increasing company's perception in handling sustainability issues around the world and in the European context, the pivotal aim of the following empirical analysis is pursued through the examination of the ESG disclosure policies adopted and measured on a sample of large European-listed companies working into the oil and gas industry. Several types of non-financial information are included in ESG

data, such as carbon emissions, water consumption, deforestation, waste disposal, supply chain, human rights, community relations, executive compensation, shareholders' rights, etc. These data might reveal very conducive for risk assessment with specific respect to the firm's operational decisions, the implementation of policies compliant with the existing legal framework and the setting of corporate governance model. In the oil and gas industry, many researches opted for environmental reporting and practices (Guenther *et al.*, 2007; Dong and Burritt, 2010; Comyns and Figge, 2015; Shvarts *et al.*, 2018) and emphasized the crucial role played by the environmental dimension ("pillar") within the ESG analysis. Conversely, we decided to investigate the other two dimensions, namely, the governance and social pillars (Prado-Lorenzo *et al.*, 2009). In particular, we intend to explore whether corporate governance model, oriented on CSR, is positively associated with CSP.

### 3. Theoretical framework and hypotheses development

This paper rests on a multi-theoretical framework (Ruf *et al.*, 2001; Bansal, 2005; Surroca *et al.*, 2010; Lourenço *et al.*, 2012; Amran *et al.*, 2014). Indeed, to look into the aforesaid research question, three prominent constructs were "blended": the legitimacy theory, the stakeholder theory and the resource-based view (RBV) theory. Among them, legitimacy theory, with its roots in institutional theory and political economy (Cormier and Magnan, 2015), is richly adopted to enlighten organizations' disclosure about environmental and social issues (Gray *et al.*, 1995). Such theoretical construct may provide a useful support for companies' motivations to develop SR and practices to legitimize their business activities, evaluated by some scholars as a response to both the public pressures (Patten, 1991; 1992; Pellegrino and Lodhia, 2012; Raufflet *et al.*, 2014) and the ongoing as well as the careful media consideration (Brown and Deegan, 1998, Deegan and Rankin, 1999). The measurement and the assessment of CSP and appreciation of its benefits for investors and other stakeholders is because of legitimacy theory, as confirmed by several scholars (Patten, 1991; 1992; Deegan and Rankin, 1996; Hackston and Milne, 1996; Campbell, 2000; Wilmshurst and Frost, 2001; Cho and Patten, 2007; Laine, 2009; Hahn and Kühnen, 2013). In addition, in the oil and gas industry, socio-political theories are used to legitimize CSR disclosure in an effort to increase the credibility of investments and business activities and to improve transparency, respectively, toward stakeholders and investors (Raufflet *et al.*, 2014, Fonseca *et al.*, 2014).

In a similar vein, stakeholder theory can be thought of using a lens of institutional perspectives. The focus is also the social legitimacy, because organizations operate in the social environment, which is represented by stakeholders; hence, they obtain legitimacy through meeting stakeholders' expectations. Companies are able to realize legitimacy, if they conformed to the stakeholders expectations (Bansal and Bogner, 2002). CSP can be evaluated using a lens of stakeholder theory, in terms of companies' ability to meet the expectations of their stakeholders (Ruf *et al.*, 2001). An effective communication channel (Dyllick and Hockerts, 2002), driven by SR and performance, can influence the expectations and perceptions of stakeholders and help legitimize the existence of organizations (Hedberg and Von Malmberg, 2002).

This research used also the RBV, which can complement the stakeholder theory, to demonstrate the existence of intangible resources, such as an organizational culture driven by stakeholder engagement and able to support companies in achieving a competitive advantage (Amran *et al.*, 2014). This theoretical framework leads companies to develop distinctive resources and competences (Barney, 1999; Bowman and Ambrosini, 2003; Pertusa-Ortega *et al.*, 2010) to maintain and defend the competitive advantage. Thus, the firm's attitude to meet societal demands can be evaluated as a strategic investment (Ruf *et al.*, 2001). The engagement in corporate sustainability activities can be motivated by the achievement of a competitive advantage. It is possible to demonstrate that CSP can stem from internal and external benefits that may support the development of new intangible

resources and capabilities, amenable to know-how and corporate culture (Lourenço *et al.*, 2012).

In particular, investments in socially responsible activities may have a positive effect on the motivations and morale of employees as well as on their commitment and on the loyalty to their organization (Brammer *et al.*, 2007). One of the main external benefits of involvement in sustainability activities is the effect on company's reputation (Orlitzky *et al.*, 2003; Branco and Rodrigues, 2006; Orlitzky, 2008; Gallego-Alvarez *et al.*, 2010; Hussainey and Salama, 2010; Jeffrey *et al.*, 2019). Furthermore, corporate reputation represents an important intangible resource, as it produces some benefits, in terms of improvement of relationships with customers, investors, suppliers, bankers and competitors (Roberts and Dowling, 2002).

Sustainability concerns and corporate governance characteristics and practices are increasingly connected, because sustainability has been perceived as a crucial topic by owners and managers. The prior research highlighted that the nexus between sustainability and corporate governance can depend on specific factors. In this regard, many empirical analyses delved into the role of board characteristics with respect to SR and performance. In particular, the foci were on board size, gender diversity, board independence, the presence of a CSR committee and the presence of an internal audit department (Michelon and Parbonetti, 2012; Glass *et al.*, 2016; Haque and Ntim, 2018; Galbreath, 2018; Bravo and Reguera-Alvarado, 2019; Elmagrhi *et al.*, 2018; Abu Qa'dan and Suwaidan, 2019). Companies are able to demonstrate their commitment to CSP to all stakeholders establishing a CSR committee or a specific officer or department with a focus on CSR activities (Amran *et al.*, 2014). Overall, consistently with some scholars (Adnan *et al.*, 2010), this organizational structure might be positively correlated with CSP. Based on the above considerations, we formulated the following hypothesis:

*H1.* There is a positive association between CSR-oriented corporate governance practices and CSP.

There are many studies centered on the link between financial and sustainability performance. Among these, the field regarding the firm's profitability is a growing interest area. Some research demonstrated that firms with a high profitability expected are more oriented towards CSR and they likely drive a high level of CSP (Waddock and Graves, 1997; Artiach *et al.*, 2010; Martínez-Ferrero and Frías-Aceituno, 2015; Yu *et al.*, 2018). In addition, companies with a high level of profit are more exposed to stakeholders and public pressures. Therefore, public visibility implies a more intense stakeholder scrutiny (Branco and Rodrigues, 2006; Lourenço *et al.*, 2012; Yang *et al.*, 2020). In this study, an accounting-based measure, i.e. the return on assets, is used to test the association between firm profitability and CSP (Prado-Lorenzo *et al.*, 2009). Based on the foregoing considerations, we assumed the following hypothesis:

*H2.* There is a positive association between firm's profitability and CSP.

To the best of our knowledge, there is a significant body of research focused on the interplay between firm's environmental and social legitimacy and its appreciation on financial markets (Bansal and Clelland, 2004; Spence, 2009; Doh *et al.*, 2010) and, consequently, on firm value-creation process. Indeed, an extensive research activity came to light on the positive relationship between CSP (in some cases including environmental performance) and financial performance (Moore, 2001; Orlitzky *et al.*, 2003; Salehi *et al.*, 2018a, 2018b). Conversely, little attention has been devoted to the relationship for which social performance indicators could be correlated with markets (Fowler and Hope, 2007) or value-creation process. In this perspective of analysis, we opted for the book value per share, namely, for a key pillar in firm value creation process (Ohlson, 1995; Edvinsson and Malone, 1997; Lev and Zarowin, 1999; Bontis *et al.*, 2000). This is also a measure able to attest the interplay between accounting information and stock prices (Ball and Brown, 1968;

Beaver, 1968). Building on the reflections mentioned earlier, we posited the following hypothesis:

*H3.* There is a positive association between the book value per share and CSP.

According to Waddock and Graves (1997), corporate risk is able to condition the association between social and financial goals. Admittedly, an unbalanced corporate financial structure versus debt can reveal risky and contextually tame the top management team's discretion in the identification of innovative routes for handling other relevant issues in the corporate strategic design, such as the environmental and social challenges. Therefore, a growing weight of debts in the corporate financial structure could be negatively correlated with firm social performance (Barnett and Salomon, 2012). To explore such connection, we identified the gearing ratio, namely, a well-known indicator broadly used for diagnosing firm's financial leverage. Drawing upon the prior considerations, we framed the following hypothesis:

*H4.* There is a negative association between the gearing ratio and CSP.

The theoretical basis of Ullmann (1985) rests on the following three dimensions of the corporate social reporting:

1. the stakeholder power;
2. the strategic posture; and
3. the economic performance.

The first dimension reflects the main theoretical concept of Ullmann's framework by which he argues that firms are prone to satisfy stakeholder demands when stakeholders control resources considered crucial for the firm's survival. This conceptual framework was used by some scholars to investigate the factors that may influence decisions on CSR or SR and performance (Roberts, 1992; Adams, 2002; van der Laan Smith *et al.*, 2005). For instance, Prado-Lorenzo *et al.* (2009) contended that key stakeholders (i.e. government and creditors) along with the strategic posture of a firm could be associated with CSR reporting. Building on the aforesaid considerations and in the light of the relevance of the CSR committee for sustainability corporate governance practices, we posited the following hypothesis:

*H5.* The CSR committee exerts a moderating effect on the relationship between the stakeholder engagement and CSP.

Consistently with the prior literature review, Figure 1 depicts the rationale of the following empirical study.

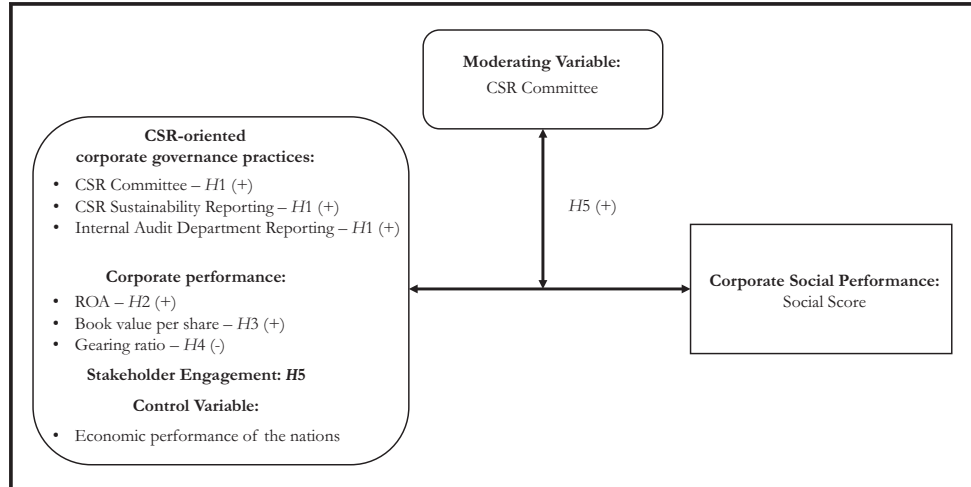
#### 4. Research method and variables description

The social score represents the dependent variable, in the following pattern of research. This choice ensues from the fact that it can be considered a fitting proxy to gauge the firm's attitude to put in place actions and, at the same time, to disclose non-financial information pertinent to the social scope, i.e. employment quality, health and safety, training and development, diversity, human rights, community and product responsibility.

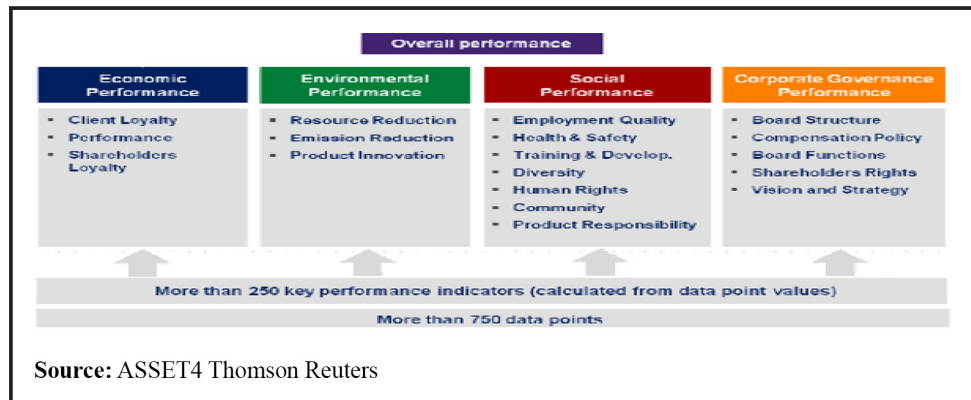
In particular, we gathered it from the database named "ASSET4" and managed by Thomson Reuters. Such database is a distinguished secondary data source, where there are more than 750 specific ESG items called "data points" that, in turn, are aggregated in more than 250 key performance indicators. Then, the latter are categorized in the following performance pillars: economic, environmental, social and corporate governance. For each of them, ASSET4 calculates a specific score. In this regard, in our empirical study, as said earlier, we selected the social performance score (Figure 2).



**Figure 1** Rationale of the empirical study



**Figure 2** Logic map of ASSET4



Very briefly, several documents and reports, such as annual reports, sustainability reports, companies' website, proxy filing, non-governmental organization websites and other important information provided by leading providers are the main data sources used and categorized by ASSET4. ESG information pertain the data given by companies yearly, despite a firm generally publishes its CSR report around two months after the publication of the usual annual report.

The independent variables look into the following domains: the corporate governance model, oriented on CSR, the firm's economic goals, the market value, the corporate risk level and the stakeholder engagement path. In particular, building on our literature review, we identified the following independent variables:

- CSR committee;
- CSR SR;
- internal audit department reporting;
- stakeholder engagement score;

- return on assets;
- book value per share;
- gearing ratio; and
- economic performance of the nations.

In more detail, the first three are dummy variables that take the value of one if the companies included in our sample set up, respectively, a CSR committee, a CSR SR department or an internal audit department; otherwise, such variables are equal to zero.

With the aim to gauge the corporate profitability and market value, we, respectively, selected the following accounting-based variables: return on assets and book value per share. The latter underlines the relationship between accounting information and stock prices and, at the same time, as mentioned before, represents a key pillar in the value-creation process. Moreover, we opted for the gearing ratio, to take into account the level of the risk pertinent to the corporate financial structure. For each of the foregoing measures, we computed a lag of one year, to consider the possible influence that the antecedent performance can exert over the decision-making process of the next year. We collected financial data of the aforesaid independent variables from the database, named “Amadeus” and managed by Bureau van Dijk.

With respect to the stakeholder engagement, ASSET4 computes a score ranging from 0% to 100%. Such score measures the firm’s attitude in explaining “how it engages with its stakeholders” (ASSET4 ESG Guide).

Still, the first four independent variables can be considered internal drivers of firm social performance. Vice versa, in terms of external determinant of firm social performance, the single control variable (*sub* n. 8) included in our sample refers to the economic performance of the countries. We mined such information from the world competitiveness yearbook 2014, prepared by the [International Institute for Management Development \(2014\)](#). Similarly, the World Economic Forum yearbooks are a distinguished secondary data source, *inter alia*, largely well known and adopted in academic research. Building on legitimacy theory ([Dowling and Pfeffer, 1975](#)), the rationale of the yearbook used in our empirical research resides in the tenet that firm’s competitiveness conveys the nation’s attitude to create a fruitful ground for the development of entrepreneurship. [Table 1](#) provides a description of the variables considered in the empirical analysis.

The sample is equal to 42 large European-listed companies working in the oil and gas industry. This amount ensues from the availability of the ESG data in the database named ASSET4. Moreover, for each of them, thanks to the database named Amadeus, we then gathered the accounting-based data. The time lapse ranges from 2010 to 2014. Therefore, the observations are up to 210. Such time lapse is strongly conditioned by the data availability for all the foregoing five years, during the period when the collection was carried out [Table 2](#).

Five fixed effects (FEs) regression models were run. Admittedly, we chose a quantitative methodological approach based on a longitudinal analysis to better handle possible endogeneity problems, which could bias the reliability of our findings. In more detail, in the FE regression models, error terms are not correlated with independent variables. Furthermore, such kind of regression model allows to measure the heterogeneity across firms included in the sample investigated ([Stock and Watson, 2011](#)). The choice for the FE regression models is also supported by the results stemming from the calculation of the Hausman test. To this end, we estimated the following “basic” FE regression model for panel data:

**Table 1** Description of the variables

Variable	Code	Description
<i>Dependent variable</i>		
Social score	soc_score	"The social pillar measures a company's capacity to generate trust and loyalty with its workforce, customers and society, through its use of best management practices. It is a reflection of the company's reputation and the health of its license to operate, which are key factors in determining its ability to generate long-term shareholder value. The score is a number between 0 and 100 showing how the company performs compared to the entire ASSET4 universe based on the «Value» in the related indicator" (source: <a href="#">ASSET4 ESG Content Datastream, 2011</a> )"
<i>Independent variables related to the corporate governance practices</i>		
CSR committee	csr_committee	A dummy variable equal to 1 whether the firm set up the CSR committee and zero otherwise
CSR sustainability reporting A dummy variable equal to 1 whether the firm adopted a CSR sustainability reporting and zero otherwise		csr_sustainability_reporting
Internal audit department reporting A dummy variable equal to 1 whether the firm set up internal audit department reporting and zero otherwise		internal_audit_department_reporting
Stakeholder engagement	stk_engag_score	The score measures the firm's attitude in explaining "(. . .) how it engages with its stakeholders. The score is a number between 0 and 100 showing how the company performs compared to the entire ASSET4 universe based on the «Value» in the related indicator" (source: <a href="#">ASSET4 ESG Content Datastream, 2011</a> )
<i>Independent variables related to the following firm performance: profitability, value creation process and corporate risk level</i>		
Return on assets	roa_lag1	The ratio of net income to total assets with a lag of one year
Book value per share The ratio of total common stockholder's equity to number of common shares with a lag of one year		bookvaluepershare_lag1
Gearing	gearing_lag1	The ratio of total debt to total shareholders' equity with a lag of one year
<i>Moderating variables</i>		
stk_engag_score*csr_committee		Interaction between the stakeholder engagement and the presence of the CSR committee
stk_engag_score* (1-csr_committee)		Interaction between the stakeholder engagement and the absence of the CSR committee
Control variable Economic performance of the nations	nations_ec_perf	It is one of the four "factors" used for the calculation of World Competitiveness. The score stems from the standardization of the statistics related to 83 criteria focused on the following scopes: domestic economy, international trade, international investment, employment and prices. It ranges from 0 to 100

$$\begin{aligned}
soc\_score_{it} = & \beta_0 + \beta_1 csr\_committee_{it} \\
& + \beta_2 csr\_sustainability\_reporting_{it} \\
& + \beta_3 internal\_audit\_department\_reporting_{it} \\
& + \beta_4 nations\_ec\_perf_{it} + \alpha_i + \varepsilon_{it}
\end{aligned} \tag{H1}$$

With the aim to explore both the data stationarity of CSR-oriented corporate governance practices and the association between the social score and the corporate's performance, we ran the following three FE regression models for panel data by

**Table 2** Cross-country distribution of the sample

Nation	No. of obs	(%)
Austria	1	2
Finland	1	2
France	3	7
Germany	2	5
Greece	2	5
Hungary	1	2
Italy	2	5
Norway	2	5
Poland	2	5
Portugal	1	2
Russia	7	17
Spain	1	2
Sweden	1	2
Turkey	3	7
UK	13	31
Total	42	100

replacing from time to time the independent variables pertinent to the accounting-based data selected for measuring, respectively, the profitability, the market value and the corporate risk level:

$$\begin{aligned} soc\_score_{it} = & \beta_0 + \beta_1 roa\_lag1_{it} + \beta_2 csr\_committee_{it} \\ & + \beta_3 csr\_sustainability\_reporting_{it} \\ & + \beta_4 internal\_audit\_department\_reporting_{it} \\ & + \beta_5 nations\_ec\_perf_{it} + \alpha_i + \varepsilon_{it} \end{aligned} \quad (H2)$$

$$\begin{aligned} soc\_score_{it} = & \beta_0 + \beta_1 bookvaluepershare\_lag1_{it} \\ & + \beta_2 csr\_committee_{it} + \beta_3 csr\_sustainability\_reporting_{it} \\ & + \beta_4 internal\_audit\_department\_reporting_{it} \\ & + \beta_5 nations\_ec\_perf_{it} + \alpha_i + \varepsilon_{it} \end{aligned} \quad (H3)$$

$$\begin{aligned} soc\_score_{it} = & \beta_0 + \beta_1 gearing\_lag1_{it} \\ & + \beta_2 csr\_committee_{it} + \beta_3 csr\_sustainability\_reporting_{it} \\ & + \beta_4 internal\_audit\_department\_reporting_{it} \\ & + \beta_5 nations\_ec\_perf_{it} + \alpha_i + \varepsilon_{it} \end{aligned} \quad (H4)$$

With reference to the investigation of the moderating effect, we estimated the following FE regression model for panel data:

$$\begin{aligned} soc\_score_{it} = & \beta_0 + \beta_1 csr\_committee_{it} \\ & + \beta_2 stk\_engag\_score * csr\_committee_{it} \\ & + \beta_3 stk\_engag\_score * (1 - csr\_committee)_{it} \\ & + \beta_4 csr\_sustainability\_reporting_{it} \\ & + \beta_5 internal\_audit\_department\_reporting_{it} \\ & + \beta_6 nations\_ec\_perf_{it} + \alpha_i + \varepsilon_{it} \end{aligned} \quad (H5)$$

To tackle possible multicollinearity problems between the independent variables included in our research design, we computed the variance inflation factor test. Given that the

commonly accepted threshold is equal to 10 (Neter *et al.*, 1989; Greene, 2003), multicollinearity does not reveal a threat because, in the following FE regression models, the values are always less than five. At last, to check for heteroscedasticity, we applied the Breusch–Pagan/Cook–Weisberg test. Such results provide further details regarding the absence of heteroscedasticity and, consequently, prove the trustworthiness of our findings.

## 5. Results

The social score ranges from 7.23 to 96.71. The statistical mean of the stakeholder engagement score is 69.70%. Furthermore, the maximum value of the book value per share with a lag of one year is equal to 73.73. Conversely, the minimum value of the gearing with a lag of one year amounts to 0.05 (Table 3).

Table 4 shows a positive relationship between corporate governance model, oriented on CSR and the *social\_score*. Therefore, our results confirm *H1*.

Model 2 displays that the corporate governance model, focused on CSR, is positively associated with our dependent variable. Moreover, our findings reject *H2*, as the beta coefficient of the independent variable with a lag of one year, named *roa\_lag1*, is not statistically significant (beta coefficient:  $-0.0815$ ;  $p > 0.05$ ) (Table 5).

Table 6 sets out that there is no relationship between the book value per share with a lag of one year (*bookvaluepershare\_lag1*) and the firm social goals (beta coefficient:  $-0.0247$ ;  $p > 0.05$ ). Hence, Model 3 does not confirm *H3*. Contrarily, the corporate governance practices, concentrated upon CSR, are statistically significant.

**Table 3** Descriptive statistics

Variable	Observations	Mean	Std. dev.	Min	Max
soc_score	165	73.1022	23.4035	7.23	96.71
csr_committee	157	0.7197	0.4506	0	1
csr_sustainability_reporting	164	0.9268	0.2612	0	1
internal_audit_department_reporting	128	0.9375	0.2430	0	1
stk_engag_score	163	69.6953	32.3164	23.47	96.61
roa_lag1	189	5.7780	11.7389	-62.67	54.23
bookvaluepershare_lag1	163	12.8390	17.3798	0.19	73.73
gearing_lag1	186	86.4462	74.2024	0.05	614.05
nations_ec_perf	210	29.2952	15.0192	5	60

**Table 4** Fixed effects (FE) regression model with robust standard errors, Model 1 or basic model

Variable dependent: <i>social_score</i>	Beta coefficients	Robust standard errors
csr_committee	7.0933**	2.1452
csr_sustainability_reporting	13.3013**	4.1180
internal_audit_department_reporting	8.2366**	2.6502
nations_ec_perf	-0.0477	0.1058
Constant	50.4685	4.9967
No of observations	117	
$R^2$ – within	0.306	
F statistic	7.00***	
VIFs – mean	3.25	
Heterosch, <i>p</i> value	0.8207	
Hausman test	24.28***	

Notes:  $\wedge p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table 5** Fixed effects (FE) regression model with robust standard errors, *Model 2*

<i>Variable dependent: social_score</i>	<i>Beta coefficients</i>	<i>Robust standard errors</i>
roa_lag1	-0.0815	0.0876
csr_committee	7.7632*	3.2890
csr_sustainability_reporting	13.3487**	4.2032
internal_audit_department_reporting	8.2837*	3.2819
nations_ec_perf	-0.0641	0.1255
constant	50.6880	5.9076
No of observations	107	
$R^2$ – within	0.311	
F statistic	4.85**	
VIFs – mean	3.81	
Heterosch, <i>p</i> value	0.9121	
Hausman test	23.32***	

Notes:  $\wedge p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table 6** Fixed effects (FE) regression model with robust standard errors, *Model 3*

<i>Variable dependent: social_score</i>	<i>Beta coefficients</i>	<i>Robust standard errors</i>
bookvaluepershare_lag1	-0.0247	0.0474
csr_committee	7.4556*	3.4224
csr_sustainability_reporting	14.3928*	6.2646
internal_audit_department_reporting	9.1329*	4.2874
nations_ec_perf	-0.0227	0.1490
constant	49.0901	7.3522
No of observations	92	
$R^2$ – within	0.332	
F statistic	4.13**	
VIFs – mean	4.08	
Heterosch, <i>p</i> value	0.9761	
Hausman test	22.70***	

Notes:  $\wedge p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Table 7 exhibits that the gearing ratio with a lag of one year (*gearing\_lag1*) is uncorrelated with the *social\_score* (beta coefficient: 0.0017;  $p > 0.10$ ). Thus, our results reject *H4*. *Vice versa*, in line with our research design and similarly to the previous FE regression models for panel data, it is interesting to point out that the corporate governance model, centered on CSR, is positively associated with firm social goals.

**Table 7** Fixed effects (FE) regression model with robust standard errors, *Model 4*

<i>Variable dependent: social_score</i>	<i>Beta coefficients</i>	<i>Robust standard errors</i>
gearing_lag1	0.0017	0.0103
csr_committee	8.1406*	3.4705
csr_sustainability_reporting	13.1526**	4.0414
internal_audit_department_reporting	8.4008*	3.3946
nations_ec_perf	-0.0882	0.1439
constant	50.5451	6.0712
No of observations	105	
$R^2$ – within	0.313	
F statistic	5.08***	
VIFs – mean	4.23	
Heterosch, <i>p</i> value	0.9966	
Hausman test	22.64***	

Notes:  $\wedge p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Furthermore, by investigating a moderating effect, *Model 5* shows that, in terms of relationship with firm social performance, a stakeholder engagement approach is preparatory to the implementation of some corporate governance practices, focused on CSR, such as the CSR committee. Therefore, our empirical evidence does not substantiate *H5*. We assigned the code *stk\_engag\_score\*(1-csr\_committee)* to the independent variable meant to explore the moderating effect of the CSR committee (i.e. the dummy moderating variable) over the relationship between the stakeholder engagement approach and the CSP. In particular, although the CSR committee was not present, it emerges that a stronger adoption of stakeholder engagement implies a higher firm social goals (beta coefficient: 0.1757;  $p < 0.01$ ). Conversely, there is no association with the dependent variable whether the stakeholder engagement approach is part of corporate culture but such kind of committee is already set up (*stk\_engag\_score\*csr\_ccommittee*, beta coefficient: 0.0179;  $p > 0.10$ ) (Table 8).

From a methodological point of view, it should be stressed that the reliability of the foregoing moderating effect is corroborated by the  $p$  value of the Chow test, which is beneath the crucial threshold of 0.05.

Finally, with reference to the control variable, in all foregoing econometric models, the economic performance of the country is always uncorrelated with firm social performance.

## 6. Discussion and conclusion

The main purpose of this paper regard the examination of the relationships between CSR-oriented corporate governance model and CSP. In more detail, the empirical research is centered on a sample of large European-listed companies belonging to the oil and gas industry. The econometric models, run in our quantitative analysis, highlight a positive association between CSR-oriented corporate governance model and CSP, but there is the absence of any relationship, respectively, with the firm profitability, the market value and the corporate risk level get in the prior year. In particular, the gearing ratio, as a proxy of the corporate risk level, is not correlated with CSP. Moreover, we demonstrated that there is no moderating effect by some CSR-oriented corporate governance practices, such as the presence of the CSR committee, over the relationship between stakeholder engagement and CSP.

Our empirical study provides further insights for the existing literature stream focused on sustainability governance practices and, in particular, on their association with CSP. These findings highlight the strong association between corporate governance model and social

**Table 8** Fixed effects (FE) regression model with robust standard errors, *Model 5*

<i>Variable dependent: social_score</i>	<i>Beta coefficients</i>	<i>Robust standard errors</i>
csr_committee	17.9427**	6.0316
stk_engag_score*csr_committee	0.0179	0.0438
stk_engag_score*(1-csr_committee)	0.1757**	0.0579
csr_sustainability_reporting	17.7491**	3.4253
internal_audit_department_reporting	5.5684***	1.3388
nations_ec_perf	0.0072	0.0956
constant	41.6354	5.1835
No of observations	117	
$R^2$ – within	0.373	
F statistic	9.98***	
VIFs – mean	4.77	
Heterosch, $p$ value	0.8989	
Hausman test	23.89***	
Chow test	6.67**	

Notes: ^ $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

issues that render, over and above environmental issues, a key dimension of the oil and gas activities, because of the negative perception regarding the oil and gas companies' commitment to CSR (Berkowitz *et al.*, 2017). This evidence confirms that a company would like to adapt its corporate governance model in improving its social performance in terms of trust, loyalty and reputation perceived by all stakeholders (Bhattacharyya, 2014). Such approach supports the legitimacy theory perspective, as corporate governance structure is strongly associated with sustainability-related issues replying to the society's demands. Admittedly, the positive correlation with some inner determinants on CSP, in addition to the refinement of the corporate governance model, takes root in a corporate culture arguably inspired by the stakeholder engagement. In this regard, it is worthwhile emphasizing that the "substance prevails over form." In other words, the stakeholder engagement – compared with the mere institution of a specific committee (such as, in our empirical analysis, the CSR committee) – represents an important internal driver able to trigger significant change in corporate culture. This finding confirms both the stakeholder theory and RBV theory, as the involvement of stakeholders in internal mechanisms can create intangibles, in terms of knowledge and corporate culture.

Moreover, our result is consistent with previous studies demonstrating the failure of CSR activities in large oil and gas companies because of the low community participation (Idemudia, 2009). Given the controversial nature of the oil and gas industry's business operations, policies intent to take care interests of all stakeholders can enhance public relations, improve employees' motivation and, in the legitimacy theory perspective, legitimate business operations (Chowdhury *et al.*, 2019). Such result is consistent with a recent research conducted by Ferns *et al.* (2019) that emphasized the intrinsic complexity of this sector and the need to adopt a CSR approach not exclusively at a firm or industry level but through the engagement of the players that could be conditioned, in a direct or indirect manner, by oil and gas business. In this, moreover, our findings help to feed interest in the field related to the role played by firm profitability, market value and corporate risk level over CSP. In particular, none of them related to the previous year is associated with CSP. Some literature review provided mixed results regarding the positive, negative and the absence of an association between sustainability and financial performance (Margolis and Walsh, 2003). Our findings differ from the earlier researches, as the latter emphasize that social activities are positively associated with firm market value (Chowdhury *et al.*, 2019) but the significance of the impact on market value of the oil and gas industry has to be evaluated, in the gradual process of decarbonization by 2100. Similarly, in a macroeconomic perspective, the economic performance obtained by each European country included in our sample is uncorrelated with CSP. These results suggest that oil and gas companies are not conditioned by the domestic context, as they are mainly multinational corporations (Raufflet *et al.*, 2014). For the sake of clarity, Table 9 gives an overview of the empirical evidence.

With reference to the managerial implications, this study suggests that some practices of the corporate governance model (such as, the presence of the CSR committee, the CSR SR and the internal audit department reporting) are positively correlated with CSP. This finding adds interesting insights to prior studies concerning the relationship between board

**Table 9** Overview of the empirical evidence

<i>Hypotheses</i>	<i>Expected sign</i>	<i>Findings</i>
H1	(+)	Confirmed
H2	(+)	Rejected
H3	(+)	Rejected
H4	(-)	Rejected
H5	(+)	Rejected



characteristics and corporate reputation (Musteen *et al.*, 2010), as well as the relevance of board composition on organizational performance (de Andrés-Alonso *et al.*, 2010). Nonetheless, it is worth pointing out that the commitment to involve the bulk of stakeholders in the oil and gas industry can represent a crucial point to enhance the firm's awareness toward CSR issues rather than the mere compliance with formal mechanisms related to the corporate governance model, such as the setup of a specific committee. Most of the previous studies are limited to assess the formal characteristics of boards, such as independence (de Andrés-Alonso *et al.*, 2010; Li *et al.*, 2012), size, CEO duality (Ramdani and van Witteloostuijn, 2010), proportion of non-executive directors, board diversity (Ben-Amar *et al.*, 2013). In addition, such studies are mainly focused on financial sectors (O'Sullivan and Diacon, 2003) or on groups of emergent countries (Ramdani and van Witteloostuijn, 2010; Li *et al.*, 2012). Indeed, our findings emphasize the pivotal role played by the stakeholder engagement in shaping a corporate culture prone to address CSR issues. In other words, the stakeholder engagement represents an important internal driver compared with the mere setup of a specific committee (such as, the CSR committee). In this regard, we prompt that the top management team should opt for an organizational behavior into which the stakeholder engagement should have a significant place in corporate culture (Dong and Burritt, 2010; Dong *et al.*, 2014; Abdalla and Siti-Nabiha, 2015; Gallego-Alvarez, 2017; Quan *et al.*, 2018). This evidence demonstrates the link between our findings with the stakeholder theory as well as legitimacy theory as they highlight the importance of meeting the stakeholders' expectations and managing the critical stakeholders' opposite interests (Fernando and Lawrence, 2014; Martínez *et al.*, 2016; Beske *et al.*, 2020). Our finding confirms the need to develop an organizational and holistic approach to corporate governance practices analyzing internal and external governance mechanisms (Filatotchev and Nakajima, 2010) to achieve a competitive advantage which is in line with the RBV theory and its evolution toward the dynamics of resource-based strategies (Chaharbaghi and Lynch, 1999).

The main caveat of this research pertains the sample size, as we exclusively paid attention on the European context. The amount of observations, in a longitudinal perspective, on just that geographical area negatively conditioned the opportunity to use a greater number of control and, more broadly, independent variables. Thus, it could be insightful to enlarge the empirical analysis either to other geographical areas (i.e. North America and Asia) or to other environmental sensitive industries, such as mining and chemistry sectors, to investigate whether these two criteria can reveal important external drivers for CSP. Indeed, in terms of future research avenues, we suggest to examine in depth – whether and to what extent – the firms belonging to the oil and gas industry are prone to adopt stakeholder engagement than the others operating in different sectors. In other words, industry stimulates or even forces to pursue a stakeholder engagement or, vice versa, the latter directly ensues from firms that show a significant propensity toward the adoption of behaviors able to encourage the uptake of sustainability tenets inside the company. In this perspective, on the basis of the research methodological approach suggested by previous studies (Petrovic-Lazarevic, 2008), it is insightful to carry out a survey intent to delve into the possible associations among stakeholder engagement, corporate governance structure and CSP, in the oil and gas industry.

Finally, given the positive relationship between stakeholder engagement and CSP, we prompt to broaden the time lapse (for instance, more than five years), to verify whether this finding persists or, even, intensifies its magnitude in the long run. A wider time lapse moreover might increase the opportunity to also collect environmental data and consequently carry out a comparison between firm social and environmental performances, with the aim to explore the possible connectivity and interdependence.

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*Conflict of Interest Statement:* The authors declare no conflict of interest able to influence the work reported in this paper.

## Notes

1. See the following documents: *Single Market Act communication* issue on April 2011 (IP/11/469), *A renewed strategy 2011–2014 for Corporate Social Responsibility* issued on October 2011 (IP/11/1238), *Action Plan for Company Law and Corporate Governance*, issued on December 2012 (IP/12/1340), European Parliament February 2013 *Corporate Social Responsibility: accountable, transparent and responsible business behavior and sustainable growth and Corporate Social Responsibility: promoting society's interests and a route to sustainable and inclusive recovery*.
2. See, the following source: The European Commission's Strategy on CSR 2011-2014: achievements, shortcomings and future challenges, <http://ec.europa.eu>, June 2015.
3. See, the following website: [www.sasb.org](http://www.sasb.org)
4. See, the following source: Principles for Responsible Institutional Investors “Japan's Stewardship Code”, 26 February 2014.
5. See, the following website: <http://www.fsa.go.jp>
6. See, the following source: (HKE<sub>x</sub>, Appendix 27 Environmental, Social and Governance Reporting Guidance, 2012, <http://www.sseinitiative.org>; SGX, Consultation Paper. Sustainability Reporting: Comply or Explain, 5 January 2016, [www.sgx.com](http://www.sgx.com)).

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