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**The impact of Corporate Social Performance and CSR committee  
efficiency on firm market value: a comparison between Europe and  
America**

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## Preface

Writing this thesis was the last part of the Double Degree Tilburg-Luiss Master's program in International Management. These last two years have been challenging, motivating and incredibly inspiring, and the same has been developing this master thesis. I have learned a lot and I am glad to present my research to you.

Without the support and help of others, this thesis would not have been possible. Firstly, I would like to thank my supervisors, Francesco Paolone and Miranda Stienstra, who have taught me a lot and made me confident in the implementation of a quantitative thesis.

Moreover, I would like to thank my wonderful family and friends. I have always felt you were close to me even when we were far apart. You have been essential in this journey, giving me the strength to push my limits and overcome my fears.

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## Chapter 1 Introduction

This chapter begins with the problem indication, and the problem statement is derived from it. The research questions are established to answer the problem statement. In addition, a conceptual map will be included to clearly explain the relationships analysed and the hypothesis under investigation will be briefly presented. Lastly, the method used and the study structure will be described.

### 1.1 Problem statement and problem indication

Corporate Social Responsibility (CSR) attention has been increasing in both academic and practitioner environments all over the world (Lee et al., 2012). The European Commission (2011, p. 6) defines CSR as “*the responsibility of enterprises for their impacts on society*” and “*to fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders*”<sup>1</sup>.

In order to assign significance to CSR practices and compare various organizations, these activities must be measurable (Porter & Kramer, 2002). Therefore, CSR performances or Corporate Social Performances (CSP) are often assessed and operationalized by the Environmental Social and Governance factors (ESG factors) (Bassen & Senkl, 2011). In particular, the environmental factors refer to the emission, the resources used and the degree of innovation of the firm. Meanwhile, the social factors can be divided into four main categories: community, workforce, human rights and product responsibility. Lastly, the governance factors are related to the compensation and structure of the management, to the rights of the shareholders and to the quality of the CSR strategy (Refinitiv, 2021a).

Although Duque-Grisales & Aguilera-Caracuel (2021) explain that, according to the conventional neoclassical approach (Derwall et al. 2005; Hassel et al. 2005; Semenova & Hassel, 2008), investing in ESG operations increases a firm's costs, in the recent years scholars have indicated many reasons why companies should participate in CSR activities.

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<sup>1</sup> European Commission (2011). A renewed EU strategy 2011-14 for Corporate Social Responsibility. Brussels: COM. 681.

For example, CSR can be used to bolster the company brand image (Menon & Kahn, 2003), to increase employees' motivation (Zhu et al., 2015) and to mitigate product, operating and technology-related risks (Starks, 2009). Moreover, the research of Sahut & Pasquini-Descomps (2015) states that the ratings a company receives on non-accounting criteria are related to lower residual and reputational risk and, consequently, it is reasonable to believe that CSR may have a positive effect on the company's stock price.

Many scholars have studied the relationship between CSR performance and firm outcomes. Existing research has indicated a positive relation between CSP and stock market performance (such as market cap or Tobin q) (Dowell et al. 2000; Kim, 2013; Alareeni & Hamdan, 2020). In particular, the study of Lee (2020) demonstrates that, even if initially CSR activities have a negative effect on the firm's market value, after a one-period time lag, CSP positively impacts firm market capitalization. Other studies, on the other hand, have found a neutral or negative correlation between CSR and stock market outcomes (Elsayed & Paton 2005; Sahut & Pasquini-Descomps, 2015), likewise between CSR and overall financial performances (for example ROA) (Griffin & Mahon, 1997; McWilliams & Siegel, 2020). Hence, empirical research has indicated contrasting results. Moreover, these studies present several limitations.

In particular, regarding the different CSR dimensions analysed, it is recommended to take into consideration subcategories behind CSR (Cavaco & Crifo, 2014; Sahut & Pasquini-Descomps, 2015; Alareeni & Hamdan, 2020). Hence, this research attempts to examine, also, a specific dimension of CSR, which is the CSR committee. CSR committees are defined as organizational subcommittees of boards of directors that make social and environmental recommendations to the boards of directors and support board members in their CSR-related tasks (Dixon-Fowler et al., 2017).

CSR committees are a relatively new subject that has received little attention in corporate governance studies (Gennari, 2019; Gennari & Salvioni, 2019). However, they may play a proactive role in enhancing organisational performance, advising directors on strategies to improve business results (García-Sánchez et al., 2019). Therefore, relevant evidence may arise from testing the impact of CSR committee's efficiency on firm market capitalization, which is expected to result in a positive relationship.

Moreover, in the actual empirical research on CSP, it is suggested to include other countries to provide a fruitful comparison (Alareeni & Hamdan, 2020). Indeed, the differences across continents and countries regarding CSR appear to be relevant: they concern not only the level of attention to the company's Top Management Team, country of origin (politics, culture and economy) has a strong impact on firm CSR attitude (de Abreu et al., 2012; Ioannou & Serafeim, 2012). Kumar et al. (2019) demonstrate that, despite the global nature of CSR, stakeholder management practices and programs are operationalized differently due to different national frameworks. Therefore, it is reasonable to believe that also shareholders' interest towards CSR performance may differ across countries or continents.

In conclusion, this research will study the differences across America and Europe regarding the relationship between CSP and firm performance. These continents are chosen due to their different financial systems (Ruiz-Mallorquí & Santana-Martin, 2011) and attitude towards CSR (Sison, 2009). In particular, this study will research the effect of CSR performance on firm market value, measured by market capitalization (Lee, 2020). Moreover, as current studies show conflicting results regarding the relationship of CSP and firm performance, further understanding may be possible by also investigating the effect of the CSR committee efficiency on firm market value.

## 1.2 Research questions, hypotheses and conceptual maps

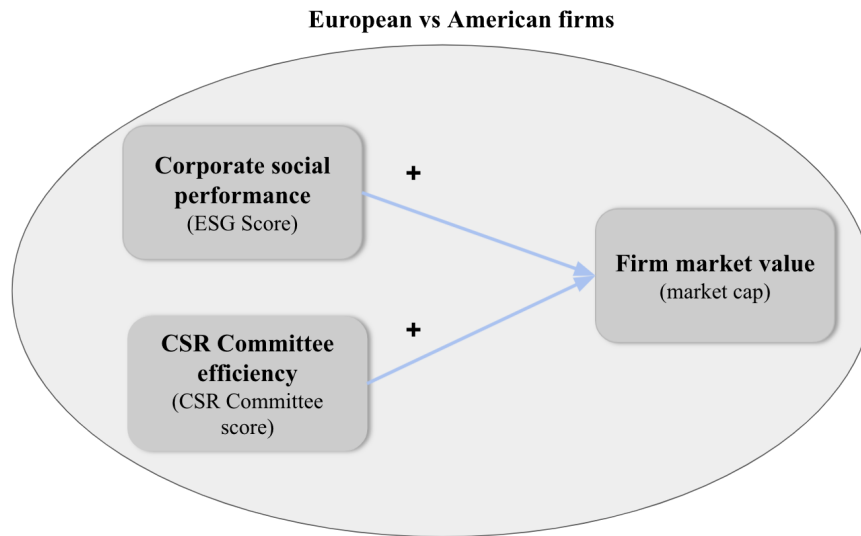
Concluding the introduction, the consequent research questions are: *how does the geographical location affect the impact of corporate social performance and of CSR committee efficiency on firm market value?*

To answer this problem statement, the following sub research questions have been established:

- How does CSP affect the firm value?
- How does the CSR committee have an impact on firms' market value?
- What are the differences between Europe and America regarding CSR attitude and CSR investments?

This leads to the following conceptual map:

Figure 1. Conceptual map



As it is explained in Figure 1, this study will test the impact of corporate social performances (measured by ESG score) and of CSR committee efficiency (measured by CSR committee score) on firm market value (measured by market cap). These relationships will be examined in Europe and in America. Therefore, a cross-continent analysis will be performed.

In particular, the following hypothesis will be tested:

*H1. Corporate social performance will be positively related to firm market value.*

*H2. CSR committee efficiency will be positively related to firm market value.*

*H3. Corporate social performance's impact on firm market value is stronger in the European firms than in the American firms*

*H4. CSR committee efficiency's impact on firm market value is stronger in the European firms than in the American firms*

Moreover, after the main study, in the additional analysis section, two variables' moderating roles will be tested: the moderating role of continent of origin in the relationship between CSR committee presence and market cap (Figure 2) and the moderating effect of CSR committee score in the relationship between ESG score and market cap (Figure 3).



Figure 2. Additional analysis - Continent of origin as moderator

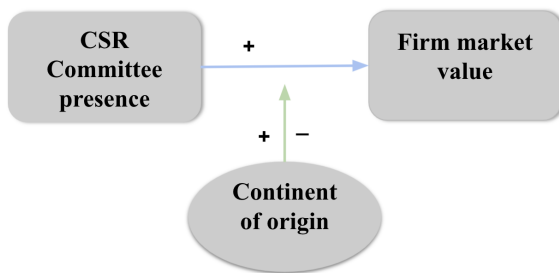
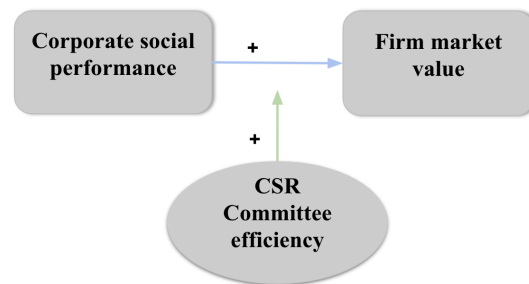


Figure 3. Additional analysis - CSR committee score as moderator



### 1.3 Method and structure

This is a quantitative study, based on the analysis of secondary data. In particular, 391 American and European public companies working in the industrial economic sector from 2018 to 2020 will be studied. To test the hypothesis, two Ordinary Least Square (OLS) regressions will be performed: one for the European and one the American firms. Moreover, additional analysis will be included in order to provide robustness checks and to test different effects between the variables, also different sample sizes will be used.

In chapter 2, a theoretical background will be provided on CSR, CSP and CSR Committee, and the four hypotheses will be formulated, based on the existing studies. Chapter 3 discusses the method adopted to test the hypothesis and the research variables will be described more in depth. Chapter 4 concerns the results of the regression analysis and the additional final analysis. Lastly, chapter 5 discusses the results and the contributions. Moreover, it reports the limitations of the study, providing suggestions for future research.

## Chapter 2 Theoretical background and hypothesis development

In this chapter, the definitions of the main subjects of this study will be clarified. In particular, the definitions of Corporate Social Responsibility, corporate social performance (ESG score) and CSR committee will be given. Moreover, the impact of corporate social performance on firm financial performance, on firm stock market performance and, in particular, on firm market value will be illustrated more thoroughly by the means of existing literature on these relationships. In addition, the reasons why a cross-continent analysis is performed will be presented. As a result of this theoretical background, the four hypotheses will be developed.

### 2.1 Corporate Social Responsibility

Corporate Social Responsibility (CSR) has become an integral part of management's decisions, since stakeholders, such as customers and investors, do not solely focus on economic outputs, but also on company's social and environmental performances (Sarkis et al. 2010). But what is exactly CSR? It's difficult to provide a definitive response due to the large number of existing definitions: CSR is a complex and multidimensional concept (Carroll, 1979) and it is still evolving (Kercher, 2007). Costa & Menichini (2013) explain that research literature presents CSR definitions referring to different aspects of society: the economic, the politic, the social and the ethical ones (Carroll, 1979; Maclagan, 1998; Kotler & Lee, 2008).

In this study, the notion of CSR given by the European Commission (2011, p. 6) will be used, as it integrates the Costa & Menichini (2013) dimensions: CSR is *“the responsibility of enterprises for their impacts on society”* and *“to fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders”*<sup>2</sup>.

However, Duque-Grisales & Aguilera-Caracuel (2021) explain that, according to the conventional neoclassical approach (Derwall et al. 2005; Hassel et al. 2005; Semenova &

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<sup>2</sup> European Commission (2011). A renewed EU strategy 2011-14 for Corporate Social Responsibility. Brussels: COM. 681.

Hassel, 2008), investing in CSR increases firm costs. In particular, environmental operations may require changing obsolete technology, which is costly. So, why should companies incorporate social and environmental matters into their business practices? Firstly, CSR can bolster the company brand image, distinguishing its product from its rivals (Menon & Kahn, 2003) and if it is sold as a strategic feature, it brings more positive revenues (Albuquerque et al., 2012). Secondly, CSR is a useful tool to increase employees' motivation (Zhu et al., 2015). The study of Valentine & Fleischman (2008) demonstrates that perceived CSR mediates the relationship between ethics programs and work satisfaction. Moreover, CSR practices have also been shown to mitigate product, operating and technology-related risks (Starks, 2009). Therefore, CSR can be adopted as a strategic asset.

In summation, CSR is a broad concept with many dimensions, which is integrated by companies into their operations not only for moral obligations, but also for obtaining competitive advantages. However, in order to assign significance to performance and compare various organizations, these CSR practices must be measurable (Porter & Kramer, 2002). This will be clarified in greater detail in the next section.

## 2.2 Corporate Social Performance (CSP) - ESG score

According to the Wood (1991) framework, Corporate Social Performance (CSP) (or CSR performance) is a collection of descriptive categorizations of business behaviour that focuses on the effects and consequences for society, stakeholders, and the firm itself. Chen & Delmas (2011) explain that the full scope of CSP is broad and creating a proxy that accurately reflects it is difficult. Since CSP is qualitative, it is evaluated primarily using “soft” indicators relevant to management activities rather than “harder” indicators. However, Amini & Dal Bianco (2017) recognise four recurrent ways to check for CSPs: 1) annual reports, shareholder letters, and other corporate public disclosures; 2) reputation scores; 3) social audits; and 4) managerial standards and values (Orlitzky et al., 2003).

In recent years, the demand for Environmental, Social, and Governance (ESG) ratings has grown significantly, both research and the capital market support the use of ESG variables to catch CSP (Sassen et al., 2016). It is an aggregate measure that is derived from a variety of CSR practices (Velte, 2017). It is now used by major business consulting companies all over the world as major indexes to classify CSR activities (Alareeni & Hamdan, 2020). Moreover,

firms are increasingly engaging in a wide range of ESG transparency activities in order to offer a transparent image of their corporate responsibility policies and efforts to all stakeholders (Alareeni & Hamdan, 2020). Therefore, in this study ESG score will be used as measurement of the CSP.

Numerous studies have proven the benefits of CSR practices (e.g. Menon & Kahn, 2003; Valentine & Fleischman, 2008; Starks, 2009; Albuquerque et al., 2012; Zhu et al., 2015) and the positive impacts of CSP and, in particular, ESG score disclosure on firm performance (e.g. Tarmuji et al., 2016), whether measured by the stock market or financial outcomes.

### *2.2.1 CSP impact on Corporate Financial Performance*

Regarding corporate financial performance, a series of researches have demonstrated that the higher the ESG, the higher the financial performance (e.g. Waddock & Graves, 1997; Russo & Fouts, 1997). For example, Pasquini-Descomps & Sahut (2013) looked at how news-based ESG scores affect ROA. They found that yearly variance in ESG activities improves a company's reputation and, consequently, its financial performance. Porter & Kramer (2006) demonstrated that if CSR is approached strategically, it can become a competitive advantage for a company. Moreover, another viewpoint on the reasons why ESG should affect corporate financial performance positively is given by the theory of “cost of capital” reduction, which states the costs of establishing a socially acceptable system in a business are offset by a reduction in the company's cost of capital (Sahut & Pasquini-Descomps, 2015). This theory has been demonstrated by the study of El Ghouli et al. in 2011.

In contrast, some studies (e.g. Griffin & Mahon, 1997; McWilliams & Siegel, 2020) present a neutral or negative association between CSR and overall financial results. As previously mentioned, Duque-Grisales & Aguilera-Caracuel (2021) explain that investing in ESG operations, according to the conventional neoclassical approach (Derwall et al. 2005; Hassel et al. 2005; Semenova & Hassel, 2008), increases a firm's costs, which influences firm performance.

### *2.2.2 CSP impact on stock market performance and firm market value*

Concerning the impact of ESG (and overall CSP) on corporate stock market results (eg. Tobin q or market cap), existing research has found a positive correlation between the two (Dowell et al. 2000; Kim, 2013; Deng & Cheng, 2019; Alareeni & Hamdan, 2020). Kong (2012) analysed China's food industry and found that CSP has a positive impact on abnormal returns over the long term. Moreover, according to Flammer (2013)'s study, firms that act responsibly against the climate have a significant increase in stock price, while companies that behave irresponsibly have a significant decrease. The work of Sahut & Pasquini-Descomps (2015) reports that the “information effect” of residual risk is a common theoretical position around the relation of ESG and firm performance. Several scholars (Kurtz, 2005; Sharfman & Fernando, 2008) contend that a company's CSP reveals information about how it manages the risks it faces: high ESG ratings will indicate lower residual risk for such firms. Lower residual risk is linked to lower reputational risk, which could affect the company market price.

In fact, the study of Lee (2020) provides evidence from the Chinese stock market. It shows that, while CSR practices initially have a negative effect on a firm's stock valuation, after a one-period time lag, CSP has a positive impact on firm market cap. Furthermore, Bajic & Yurtoglu (2018) found that CSR impact on company market value and, in particular, the power to predict firm value comes from the social dimension. In addition, the study of Lins et al. (2017), who researched in the largest U.S. companies during the financial crisis period that occurred between 2008 and 2009, found that stock returns were four to seven percentage points higher for companies with high CSR intensity.

On the other hand, several studies (e.g. Elsayed & Paton, 2005; Sahut & Pasquini-Descomps, 2015) have shown a neutral or negative relationship between CSP and market stock performances. According to Orlitzky (2013), ESG news can create noises in the stock market, because of the ambivalent effect of CSR activities on a firm's economic outputs and the knowledge asymmetry in financial markets (led in large part from managerial opportunism). Therefore, investors may hesitate to trust such information.

In conclusion, there is contrasting evidence. However, previously mentioned literature regarding CSR and CSP drives the assumption that CSR costs are at least as high as its

benefits. In addition, Døskeland & Pedersen (2016) found that moral concerns are significant in the investment behaviours and Bollen (2007), Hong & Kacperczyk (2009) and Hong & Kacperczyk (2012) have demonstrated that norms and principles affect investment choices. Therefore, it is reasonable to believe that companies' shareholders are influenced by ESG scores: for moral reasons and for the mentioned financial benefits resulting from high CSP levels. Consequently, this study expects that high ESG scores are related to high firm market values. These considerations lead to the following hypothesis:

*H1. Corporate social performance will be positively related to firm market value.*

## 2.2 CSR committee

CSR committees are boards of directors' organizational subcommittees that offer social and environmental recommendations to the boards of directors and assist board members with CSR-related activities (Dixon-Fowler et al., 2017). Many organizations have formed CSR committees in recent years, as these committees play an important role in prioritizing CSR-related issues, developing strategies and reporting to the board of directors (Eberhardt-Toth et al., 2019). Moreover, CSR committees frequently have the authority to audit all CSR practices and conformity with the corporation's CSR and ethical standards (Jain & Zaman, 2020). Although the adoption of CSR committees stays voluntary (Jaggi et al., 2018) and from the perspective of some scholars are more symbolic than operational (Rodrigue et al., 2013), its adoption for the implementation of a CSR policy is one of the first measures that most international standards and guidelines recommend (Baraibar-Diez & D Odriozola, 2019).

In fact, according to Hussain et al. (2018), it improves overall social and environmental performance. García-Sánchez et al. (2019) report several studies (e.g. Helfaya & Moussa, 2017; Cucari et al., 2018) demonstrating that having a CSR committee increases corporate accountability, especially when it comes to environmental information.

Moreover, as explained by Velte & Stawinoga (2020), sustainability-related board composition may have implications other than CSR, such as lower increased financial performance and reduced cost of capital. In addition, establishing a CSR committee may increase the competitive advantage of the company. In this regard, the study of Baraibar-Diez

& D Odriozola (2019) explains that a multidisciplinary team that supports, tracks, and disseminates the company's socially conscious contribution sends a message to the market and other rivals, indicating an aggressive competitive strategy in terms of stakeholder relationships (Mallin & Michelon, 2011; Burke et al., 2019; Gennari & Salvioni, 2019).

In conclusion, CSR committees are a relatively new subject that has received little attention in corporate governance studies (Gennari, 2019; Gennari & Salvioni, 2019). Moreover, the actual research is divided. Some scholars believe that CSR committees have only a symbolic role to satisfy stakeholders' expectations and strengthen public image (Rodrigue et al., 2013). On the other hand, other scholars affirm that a CSR committee can also adopt an active position in enhancing business results, issuing recommendations to directors on measures to improve company efficiency (García-Sánchez et al., 2019).

Since the main debate is regarding the CSR committee efficiency, which is sometimes considered limited (Burke et al., 2019), this research aims at testing not just the presence of the concerned committee, but its actual performance. Moreover, based on the theory reported, this study is expecting that:

*H2. CSR committee efficiency will be positively related to firm market value.*

### 2.3 Cross-continent analysis

CSR is a worldwide concept and its globalised features may lead to the belief that national factors are secondary, if not insignificant. Recent studies, however, show that it is applied differently in relation to different social, economic, cultural, legal and political settings (Gjølberg, 2009). In particular, these factors impact the regulation context, normative expectations, behaviours and shared know-how that incorporate CSR (Baughn et al., 2007). Consequently, it is reasonable to assume that shareholders' attitudes toward CSP vary across countries and continents.

In this study, it is analysed the difference between America and Europe, as Sison (2009) states that there are significant differences in how CSR has been interpreted, developed, and implemented in these regions. Company culture in America is more hesitant to embrace the

view of the firm as a socially rooted entity due to its legacy of individualism, legalism, and pragmatism, in contrast to Europe, where this notion is welcomed and widespread despite variations.

Moreover, American and European different financial systems can lead to differences in CSR implementation and attention. A substantial difference is related to blockholders, which are investors that own at least a 5% stake in a firm (Chung et al., 2019). They are relevant, as management of companies with institutional blockholders is influenced and pressured by the government to follow social targets relevant to government policies that help to boost CSR. Such businesses are motivated to contribute to CSR and thereby serve the social needs of state owners (Zheng et al., 2014). In this regard, Continental Europe does not only have substantially greater level of blockholder ownership than the United States<sup>3</sup> (Thomsen, 2005), but also the majority of its institutional investors are insiders, unlike in the U.S., and, therefore, with the actual power to control business decisions (Ruiz-Mallorquí & Santana-Martin, 2011). Therefore, additional reasons lead to the assumption that European firms and investors have a higher CSR attention than the Americans.

In conclusion, this research will present a cross-continent analysis, examining the differences between American and European firms in terms of CSR performance impact on firm market value. Based on the mentioned theory, the following hypothesis is formulated:

*H3. Corporate social performance's impact on firm market value is stronger in the European firms than in the American firms.*

Lastly, as reported in the study of Thijssens (2012), research proves that managers' approaches toward environmental and social performance and disclosure differ across countries (Buysse & Verbeke, 2002; Hofstede et al., 2002; Holder-Webb et al., 2008). Therefore, it is reasonable to believe that also the CSR committee's management approach and, consequently, its efficiency may vary across countries and continents. In particular, because of the same cultural (Sison, 2009) and financial differences (Ruiz-Mallorquí & Santana-Martin, 2011) between America and Europe that led to the formulation of *H3*, the following outcome is expected:

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<sup>3</sup> Continental Europe and the United States are the main regions where our sample firms come from.



*H4. CSR committee efficiency's impact on firm market value is stronger in the European firms than in the American firms.*

## Chapter 3 Methodology

This chapter shows the methodology used in this study. Firstly, in the research design section, it is explained why a quantitative analysis method is chosen. Secondly, the data collection method and tools are described. Thirdly, the sampling selection process and the final sample description is shown. Subsequently, the data analysis is dealt with. Lastly, the measures used for the variables under investigation are described.

### 3.1 Research design

This study uses the deductive approach, which is defined by Bryman (2004; cited by Bahri, 2010) as a method of thinking about the relationship between theory and research in which the latter is driven by theories and ideas derived from the former. The steps of the deductive approach are summarized by Creswell et al. (2003; cited by Bahri, 2010) in the following steps:

1. A theory is tested or verified.
2. Hypothesis or research questions are tested from the theory.
3. Variables derived from the theory are defined and operationalized.
4. Instruments are used to measure and observe variables in order to generate scores to test the hypothesis.

In this study, the second step was fundamental to choose which continent, between America and Europe, could have a stronger effect in the concerned relationships. In fact, the empirical research did not provide enough ground to formulate an opinion, which has been defined using the theory. The second step was essential also to formulate *H2*, as the actual empirical studies regarding the CSR committee role were not showing relevant evidence.

The deductive approach is applied in quantitative research (Bahri, 2010), which is used in this study. The research questions under investigation allow the use of quantitative analysis, as they aim at investigating the relationships between several variables, and not explaining the reasons behind those relationships and describe the context around them, which is typical in the qualitative research (Matveev; 2002). The main advantage of quantitative research is that

it is possible to arrive at more objective conclusions, since the measurements used should be reliable, valid, and generalizable (Cassell & Symon, 1994; cited by Matveev, 2002).

### 3.2 Data collection

This study will perform an archival analysis. The nature of the variables involved in this study, which are numerical and available in public sources, allow the use of secondary data. In particular, the data have been collected from the Refinitiv database, which uses a mixture of algorithmic and human methods to ensure the best accuracy as possible (Refinitiv, 2021c). Access to the Refinitiv *Workspace for students* platform has been granted by the Luiss Guido Carli library.

The initial sample collected involves 3,725 companies, which are the American and European public companies in the industrial economic sector from 2018 to 2020. This sector is responsible for consumption of about 37% of the delivered energy (Abdelaziz et al. 2011) and accounts for an even higher share of global emissions (Fais et al., 2016; Napp et al., 2014). The study of Fais et al. (2016) reports that the industrial sector has been considered, by the 5th Assessment Report of the IPCC, as the most polluting end-use sector (Fischedick et al. 2014). Therefore, the industrial sector is chosen: if a positive difference is made in such a polluting sector, it is assumed that the consequent environmental benefits would be higher.

Moreover, the American and European firms have been chosen because of their different financial systems (Ruiz-Mallorquí & Santana-Martin, 2011) and attitude towards CSR (Sison, 2009).

### 3.3 Sampling

From the initial sample, companies' yearly observations having missing values have been canceled. As a result, the final sample involves 391 companies (218 Europeans and 173 Americans). However, the total number of observations is 904 (516 in Europe and 388 in America). It is important to mention that, as the efficiency of the CSR committee is tested (and not just the presence), the observations of the companies without a CSR committee (and therefore having a 0 score) are excluded from the sample.

In this regard, an additional analysis is performed, including also companies with a CSR committee score equal to 0 (771 companies: 338 European and 433 American; 2,012 observations: 831 in Europe and 1,181 in America), to have more precise results the CSR committee will be transformed into a dummy variable (**Model 6** for the European sample and **Model 7** for the American sample in Table 8). Therefore, in these additional models the presence of a CSR committee will be tested, and not the efficiency.

For further information regarding the specific industries and countries of the companies included in the samples, respectively, Appendix 1 and Appendix 2 are added.

### 3.4 Data analysis

A time span of three years will be analysed (2018/2020) with cross-sectional data. Since only a few years have been taken into consideration and, after the sampling selection process, 155/391 companies present less than two years observations, the panel analysis method has not been chosen. As some variables have more observations than the others, they may be overrepresented. Therefore, a partial solution is provided and additional analysis will be performed to test if this is an issue. In particular, two regressions with only one year observation per company are added (**Model 4** for Europe and **Model 5** for America, in Table 8).

Therefore, in the main analysis, two Ordinary Least Square (OLS) regressions analysis will be performed: one for the European firms and one for the American ones. Since the presence of heteroscedasticity problems is detected, robust standard errors are used. Moreover, the regressions's results will lead to additional analysis. For the analyses, STATA software will be used.

### 3.5 Mesures

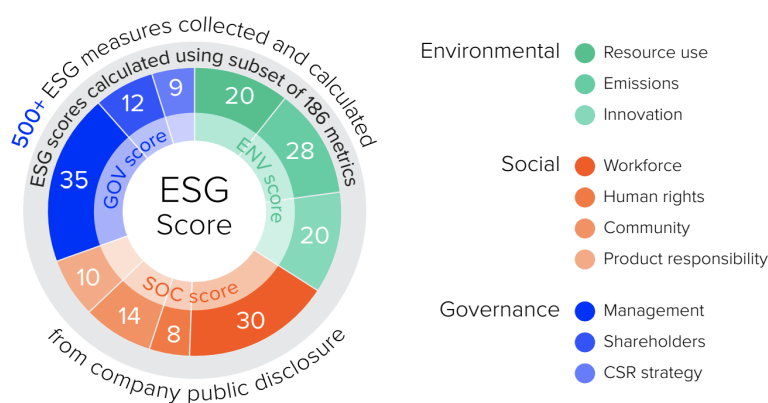
This study has as independent variables the ESG score and the CSR committee score, whereas the dependent variable is the market cap. Moreover, several control variables are selected: net income, common equity, ln revenue.

### 3.5.1 Independent Variables: ESG score and CSR committee score

This study uses the Refinitiv database to collect the independent variables. In particular, the ESG Score, as the measure of CSP, and the CSR committee Score, as the measure of CSR committee efficiency, are collected.

Over 500 ESG measures at the company-level are captured and calculated by Refinitiv. These are divided into 10 categories that reformulate the three pillar scores and the final ESG score, which is based on publicly available data and reflects the company's ESG performance, commitment and effectiveness (Refinitiv, 2021a). From the category scores, the environmental, social, and corporate governance pillar scores are derived. In particular, as shown in Figure 4: the environmental pillar refers to resource use, emissions and the degree of innovation; the social pillar includes workforce, human right, community and product responsibility categories; and the governance pillar is divided into management, shareholders and CSR strategy categories.

Figure 4. ESG score structure (Refinitiv, 2021a)



The ESG pillar score is a weighted average of the environmental and social category weights, which differ by industry. The weights for governance are the same in all industries. The pillar weights are adjusted to percentages ranging from 0 to 100 (Refinitiv, 2021a) and are expressed and further explained in Table 1. The score of 0 is the lowest and 1 is the highest.

Table 1. ESG score range (Refinitiv, 2021a)

Score range	Grade	Description
0.0 <= score <= 0.083333	D -	“D” score indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly.
0.083333 < score <= 0.166666	D	
0.166666 < score <= 0.250000	D +	
0.250000 < score <= 0.333333	C -	“C” score indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly.
0.333333 < score <= 0.416666	C	
0.416666 < score <= 0.500000	C +	
0.500000 < score <= 0.583333	B -	“B” score indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly.
0.583333 < score <= 0.666666	B	
0.666666 < score <= 0.750000	B +	
0.750000 < score <= 0.833333	A -	“A” score indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly
0.833333 < score <= 0.916666	A	
0.916666 < score <= 1	A +	

As explained before, the governance pillar contains three categories: shareholders (shareholders rights and takeover defenses), management (structure and compensation) and CSR strategy. The latter assesses the company’s efforts to communicate that it considers economic, social and environmental dimensions into its daily decision-making (Refinitiv, 2021a). The CSR committee score is a subcategory in the CSR strategy score and it assesses the “*board level or Senior management committee responsible for decision making on CSR strategy*”<sup>4</sup> (Refinitiv, 2021b). Therefore, it is used to measure the CSR committee efficacy<sup>5</sup>, which, in this context, lies in its ability to communicate the ESG performance and provide transparent information (Refinitiv, 2021a). CSR committee score is a continuous variable ranging from 0 to 100.

As far as I know, previous studies identify the CSR committee converting it into a dichotomous dummy variable (Presence of CSR committee: dummy; 1 = “yes”, 0 = “no”), whereas this study uses the CSR committee score, in this way its efficacy will be tested.

<sup>4</sup> Refinitiv. (2021b). [Software]

<sup>5</sup> In the Refinitiv software and website, there is not an extensive description regarding this score. Refinitiv did not provide the additional information requested by email.

However, the CSR committee presence will be tested in the additional analysis section (**Model 6**, **Model 7** and **Model 8** in Table 8), using, indeed, a dummy variable.

### *3.5.2 Dependent Variable: company market capitalization*

The company market capitalization, or market cap, has been used to measure the firm market value, as previously done in Lee (2020) research. Therefore, market capitalization is the dependent variable of this study.

Market cap is collected, as all the other variables, from the Refinitiv database, which defines it as “*the sum of market value for all relevant issue level share types. The issue level market value is calculated by multiplying the requested shares type by latest close price*”<sup>6</sup> (Refinitiv, 2021b). In other words, the market capitalization of a publicly traded company is the combined value of all of its issued share capital at the current market price as defined by the stock market (Majanga, 2018).

In the study of Majanga (2018), it is explained that, for a fixed number of shares in issue, any change in a company's market cap results in a change in its share price and numerous studies prove that such changes are caused, also, by investors' behaviours. In fact, market cap is associated, not only to companies' assets and revenue flow, but also to risk and potential growth (Blumenshine & Wunnava, 2010): investors buy stocks because of the perceived or expected value that they may originate (Ewing & Thompson, 2016).

Therefore, market capitalization is also the result of investors' behaviour, which may be influenced by ESG score (for the many reasons reported in the previous chapter). Hence, this will be tested in this study.

### *3.5.3 Control Variables*

For isolating the impact of the ESG score and CSR committee on stock market performance for other factors, some control variables have been included in the models. In particular, the firm's net income, common equity and revenue, which are derived from Refinitiv.

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<sup>6</sup> Refinitiv. (2021b). [Software]

Net income has been considered, as previous research shows that stock prices are influenced by it in a positive and significant way (Rusdiyanto & Narsa, 2019). However, the study of Rusdiyanto & Narsa (2019) explains that if expressed in the stock price in the financial market, net income is a measure of a risk that has risk significance (Arouri et al., 2012). Consequently, depending on the risk aversion of the investor, the relationship between company income and stock prices could be positive or negative, as higher risk corresponds to higher expected compensation return for the risk they take (Rusdiyanto & Narsa, 2019).

Common equity has been controlled, since it may have an impact on firm market value. In fact, the work of Hopkins (1996), studying the effect of financial statements on the stock price judgments of investors, reports researches (Asquith & Mullins, 1986; Masulis & Korwar, 1986) showing that the market value of a company's outstanding common stock drops by approximately 3% when it announces the issuance of additional common equity securities.

Lastly, firm revenue has been included in the models as a control variable, as it is considered a proxy for firm size. Revenues or total sales have been used in many studies (e.g. Patten et al., 2002; Cho & Patten, 2007; Duque-Grisales & Aguilera-Caracuel, 2019), they are identified as influencing ESG performance and firm value. In particular, in this study it is considered the natural logarithm of revenue (ln revenue).

A summary of the variables in this study is included in Table 2, the explanations are the definitions reported in the Refinitiv (2021b) database, from where the variables are collected.

Table 2. Summary of variables' explanations (Refinitiv, 2021b)<sup>7</sup>

<b>Independent Variables</b>	<b>Explanation</b>
ESG score	“Overall company score based on the self-reported information in the environmental, social and corporate governance pillars.”
CSR committee score	“Board level or Senior management committee responsible for decision making on CSR strategy”
<b>Dependent Variable</b>	<b>Explanation</b>
Market cap	“Sum of market value for all relevant issue level share types. The issue level market value is calculated by multiplying the requested shares type by the latest close price.”

<sup>7</sup> Refinitiv. (2021b). [Software]



Control Variables	Explanation
Net income	“Income/expense after all operating and non-operating income and expense, reserves, income taxes, but before equity in earnings, minority interest, extraordinary items, after-tax adjustments, discontinued operations and preferred dividends”
Common equity	“Total common equity of the company including general partner's holding and deferred shares and any other shareholder's fund.”
Firm size (ln revenue)	“Revenue from the sale of merchandise, manufactured goods and services, and the distribution of regulated energy resources.”

## Chapter 4 Results

The results of the descriptive statistics, Pearson correlation matrix and OLS regression analysis are discussed in this chapter. Moreover, the hypothesis outputs will be reported. As a result, additional analyses are developed, which will help to investigate possible additional limitations and give insights for future research.

### 4.1 Descriptive statistics

In this section the descriptive statistics of the European (Table 3) and the American sample (Table 4) will be presented. In particular, the tables display the descriptive statistics for the variables in our study model, namely: mean, standard deviation, minimum, and maximum values for each variable.

ESG scores are spread out in a similar way between the two continents, as they have close standard deviations (SD). However, in Europe there is a higher ESG score mean (60.9438 in Europe vs. 54.34536 in America). As a result, European firms show better CSP and are, therefore, more willing to incorporate CSR into their business practices.

On the other hand, American firms show a higher CSR committee score average (68.12016 in Europe vs. 83.32474 in America). Therefore, American companies seem to have more efficient CSR committees. Moreover, CSR committee scores are more spread out in America (8.43597 SD) than in Europe (6.69336 SD).

American firms have a higher firm market value, as the American market cap mean is  $1.48e+10$  and the European is  $8.74e+09$ . Moreover, looking at the control variables the two continents display similar means.

Beside these differences, both the sample size and the amount of years observations per firm are relatively similar between America and Europe. The European sample has a total of 516 observations, whereas the American sample has 388 observations.

Table 3. Descriptive statistics - Europe

Variable	N	Mean	Std. Deviation	Minimum	Maximum
ESG Score	516	60.9438	15.90868	10	94
CSR Committee Score	516	68.12016	6.69336	55	92
Market Cap	516	8.74e+09	1.39e+10	2.63e+07	1.15e+11
Net Income	516	2.55e+08	9.98e+08	-8.02e+09	5.18e+09
Common Equity	516	2.27e+09	3.94e+09	-6.70e+09	3.26e+10
Firm size (ln revenue)	516	22.03488	1.294778	18	25
year	516	2019.109	.8003913	2018	2020

Notes: e+ stands for exponent of 10

Table 4. Descriptive statistics - America

Variable	N	Mean	Std. Deviation	Minimum	Maximum
ESG Score	388	54.34536	17.71011	10	93
CSR Committee Score	388	83.32474	8.43597	57	90
Market Cap	388	1.48e+10	2.74e+10	1.96e+07	1.83e+11
Net Income	388	4.77e+08	1.65e+09	-1.24e+10	1.05e+10
Common Equity	388	2.80e+09	5.85e+09	-1.83e+10	7.22e+10
Firm size (ln revenue)	388	21.84021	1.434255	18	25
year	388	2019.137	.8192773	2018	2020

Notes: e+ stands for exponent of 10

#### 4.2 Correlation results - Pearson correlation matrix

Before continuing with the regression analysis, the correlations between the variables are checked and expressed in Table 5 for the European sample and in Table 6 for the American sample.

ESG score, not surprisingly, is positively correlated with the concern companies stock market and financial performance. In particular, it is positively correlated to the dependent variable,

the market cap, both in America (0.3947) and in Europe (0.3581). Moreover, the ESG score is positively correlated to all the control variables and it has the highest correlation with firm size (ln revenue): 0.5047 in the European sample and 0.5688 in the American one.

On the other hand, CSR committee scores do not always show positive correlations. Although in America it is positively, but weakly, correlated with market cap (0.1778) and all the control variables, in Europe it is negatively correlated with market cap (-0.0579), common equity (-0.0096) and firm size (-0.1190).

Lastly, there is a negative correlation between the ESG score and the CSR committee score in the European sample (-0.1001).

The predicting variables are mostly weakly correlated. However, several variables show a correlation higher than 0.5. Therefore, a multicollinearity test is performed to strengthen the analysis.

Table 5. Pearson correlation matrix - Europe

	ESG Score	CSR Committee Score	Market Cap	Net Income	Common Equity	Firm size (ln revenue)
ESG Score	1					
CSR Committee Score	-0.1001	1				
Market Cap	0.3581	-0.0579	1			
Net Income	0.1378	-0.0096	0.4218	1		
Common Equity	0.3147	-0.1190	0.7316	0.5258	1	
Firm size (ln revenue)	0.5047	-0.1528	0.5994	0.2878	0.6148	1

Table 6. Pearson correlation matrix - America

	ESG Score	CSR Committee Score	Market Cap	Net Income	Common Equity	Firm size (ln revenue)
ESG Score	1					
CSR Committee Score	0.0440	1				
Market Cap	0.3947	0.1778	1			
Net Income	0.2137	0.1279	0.4931	1		
Common Equity	0.2515	0.1256	0.4823	0.3677	1	
Firm size (ln revenue)	0.5688	0.3046	0.6225	0.3470	0.4523	1

### 4.3 Regression analysis results

After the pre-analysis, the OLS regression analysis is performed. Since the presence of heteroscedasticity problems is detected, robust standard errors are used. The response variable is a linear function of the following regressors:

$$y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \varepsilon_i \text{ for } i = 1, 2, \dots n.$$

$y$  = market cap (dependent variable)

$\alpha$  = y-intercept (constant term)

$\beta_n$  = slope coefficient for each explanatory variable

$x_1$  = ESG score (independent variable)

$x_2$  = CSR committee score (independent variable)

$x_3$  = net income (control variable)

$x_4$  = common equity (control variable)

$x_5$  = firm size (ln\_revenue) (control variable)

$\varepsilon$  = model error term (residuals)

Table 7 reports the regression results, obtained using STATA software, of the European sample (**Model 1**) and of the American sample (**Model 2**).

Table 7. Regression results with market cap as dependent variable

Variable	Model 1 (Europe)	Model 2 (America)
ESG Score	6.40e+07*** (2.32e+07) [1.03]	8.26e+07 (5.05e+07) [1.52]
CSR Committee Score	1.00e+08 (6.10e+07) [1.03]	-3.12e+07 (7.45e+07) [1.13]
Net Income	.8482221 (1.049606) [1.39]	4.518988 (3.319423) [1.22]
Common Equity	1.617814*** (.2738324) [2.05]	.8477567 (.590983) [1.34]
Firm size (ln revenue)	2.29e+09*** (6.51e+08) [1.96]	8.02e+09*** (2.93e+09) [1.99]
_cons	-5.74e+10*** (1.65e+10)	-1.67e+11*** (6.09e+10)
Observations	516	388
F value	55.18	30.39
R-squared	0.5802	0.5011

Note: \*Correlation is significant p < .10 \*\*Correlation is significant p < .05, \*\*\*Correlation is significant p < .01  
Coefficients are reported. Standard errors are between brackets ( ). VIF coefficient between brackets [ ].

Regarding Europe (**Model 1**), the results show that 58,02 % of the variance in market cap can be accounted for by the six predictors. Looking at the individual contribution of the predictors, the results display that the independent variable ESG score ( $\beta = 6.40e+07$ ) positively predicts the market cap, as it is significant at the 1% level. On the other hand, the other independent variable, CSR committee score, is not significant. Moreover, the remaining control variables are significant and positively predict market cap, except for the net income.

Regarding America (**Model 2**), the results show that 40,11 % of the variance of market cap is explained by the six predictors. When considering each predictor's individual contribution, only the firm size is statistically significant (at the 1% level) and positively predicts market cap. Both the independent variables (ESG score and CSR committee score) are not significant and CSR committee score is even negative.

Moreover, it is interesting to note that firm size has a much stronger effect on market cap in America than in Europe, almost four times stronger.

Any multicollinearity problems are detected, as the highest VIF coefficient is related to common equity in **Model 1** and it is just 2.05.

#### *4.3.1 Hypothesis 1*

The first hypothesis states:

*H1. Corporate social performance will be positively related to firm market value.*

The data partially support the hypothesis. In fact, in the regression results of the European sample, the coefficient of the ESG score is positive and statistically significant at the 1% level ( $\beta = 6.40e+07$ ). On the other hand, the data of the American sample suggest no support for the hypothesis, as in the regression results the coefficient of the ESG score is not statistically significant.

Therefore, additional analysis will be performed combining the two American and European samples (**Model 3** in Table 8) and testing for the overall effect of ESG on firm market cap.

#### *4.3.2 Hypothesis 2*

The second hypothesis states:

*H2. CSR committee efficiency will be positively related to firm market value.*

The data do not provide enough evidence to confirm the hypothesis. In fact, the CSR committee score is not statistically significant in the European sample nor in the American one, where it is even negative. Based on these results it cannot be stated that higher CSR committee scores lead to higher firm market value.

Therefore, additional analysis is performed. In **Model 9** (Table 8), it is tested if the CSR committee score is, instead, significant as a moderator in the relationship between ESG score and market cap.

#### *4.3.3 Hypothesis 3*

The third hypothesis states:

*H3. Corporate social performance's impact on firm market value is stronger in the European firms than in the American firms*

In the regression results of the European sample, the coefficient of the ESG score is positive and statistically significant at the 1% level ( $\beta = 6.40e+07$ ), whereas the data of the American sample show that the ESG score is not statistically significant. Therefore, based on these regression results: CSP impacts differently in Europe and in America on the firm market value. In Europe there is a relationship between ESG score and market cap, in America there is not.

However, in the additional analysis section, **Model 7** (Table 8) shows contrasting results, whereas **Model 5** confirms the *H3*.

#### *4.3.4 Hypothesis 4*

The fourth hypothesis states:

*H4. CSR committee efficiency's impact on firm market value is stronger in the European firms than in the American firms*

The data do not provide enough evidence to support the hypothesis. Although in the American sample's regression displays a negative CSR committee score's coefficient ( $\beta = -3.12e+07$ ) and in the European sample regression a positive one ( $\beta = 1.00e+08$ ), in both continents the p-value is not statistically significant. Based on these results it cannot be stated that the impact of CSR committee score on market cap differs between America and Europe, as it is not significant in both samples.



However, **Model 6** and **Model 7** (Table 8), in the additional analysis section, will provide different results measuring only the presence of a CSR committee, and not the efficiency. Moreover, based on the results of the additional analysis, new evidence will be provided regarding the moderating role of continent of origin in the relationship between CSR committee presence and market cap (**Model 8**).

#### 4.4 Additional analysis

Additional analysis will be performed, the results are presented in Table 8. In particular, the two samples (of **Model 1** and **Model 2**) will be combined in order to provide further evidence for *H1* and, therefore, to test if ESG score has an overall positive effect on market cap (**Model 3**).

Moreover, different sample sizes will be analysed, the CSR committee variable will be transformed into a dummy variable and continent of origin and CSR committee score moderation effects will be tested. The next sections further present these additional analyses.

##### 4.4.1 Smaller sample size

In the initial analysis, a time span of three years has been taken into consideration, but, after the sampling selection process, 204/771 companies present less than two years observations. In order to avoid that some companies are overrepresented and to check for potential changes in the results, two additional regression analyses, one for Europe (**Model 4**) and one for America (**Model 5**), with only one year (2020) observation per organization are performed.

##### 4.4.2 Larger sample size, CSR committee dummy and continent of origin as moderator

As the efficiency (and not just the presence) of the CSR committee has been tested in the initial analysis, only companies having a CSR committee have been taken into consideration and the companies scoring 0 in the CSR committee rating have been excluded. However, since no significant results related to the CSR committee score have been found in the regression analysis, interesting outputs may be obtained by including in the two continents' samples also the firms with a 0 CSR committee score. Therefore, two additional OLS

regression analyses, with two larger samples (771 companies: 338 Europeans and 433 Americans; 2,012 observations: 831 in Europe and 1,181 in America), are performed.

The CSR committee, in this case, will be considered as a dummy variable, in order to implement a more accurate analysis and to study the effect of its presence (and not of its efficiency). Presence of a CSR committee in the organisation: dummy; 1 = “yes”, 0 = “no”. **Model 6** shows the results of the European sample and **Model 7** displays the results of the American sample.

Moreover, based on the results of **Model 6** and **Model 7** (reported in the additional analysis results’ section), the continent moderating effect in the relationship between CSR committee presence and market cap will be tested (**Model 8**). In this regard, the American and European samples (of the **Model 6** and **Model 7**) will be combined, and a dummy variable will be created. Continent of origin: dummy; 1 = America, 0 = Europe.

#### *4.4.3 CSR committee score as moderator*

In the initial analysis, not significant results have been found regarding the relationship between CSR committee score and firm market value. However, as the ESG score positively impacts the firm market cap, it may be possible that the CSR committee score positively moderate this relationship. Therefore, the two continents samples of the initial analysis (**Model 1** and **Model 2**) are combined and an additional analysis testing the moderating effect of the CSR committee score is implemented (**Model 9**).

#### *4.5 Additional analysis results*

**Model 3** provides further evidence to support *H1* and, therefore, to validate the relationship between ESG score and market cap, which is significant at the 10% level.

The robustness checks, performed in **Model 4** and **Model 5**, reinforce the **Model 1** and **Model 2**, as the significant variables coincide.

However, the **Model 6** and **Model 7** display new evidence regarding *H3*. Both the European and the American samples show a strongly significant relationship between the ESG score and market cap. Moreover, American firms show a higher coefficient than the European firms:  $1.03e+08$  vs  $7.64e+07$ . This contrasts with the outcomes in **Model 1**, **Model 2**, **Model 4** and **Model 5**, which, instead, show a significant relationship between ESG score and market cap only in Europe. Therefore, in the European companies the impact of CSP on firm market value is stronger than in the American companies. However, this is true when the concerned companies have a CSR committee. Whereas when taking into account also the companies without a CSR committee (as in **Model 6** and **Model 7**) both continents show a positive relationship between ESG score and market cap.

In this regard, descriptive statistics of the American samples in **Model 2**, **Model 5** and **Model 7** are performed (Table 9), in order to better understand if the differing results obtained from the American samples are caused by differences in the ESG score means. Table 9 shows that the companies without the CSR committee (included only in **Model 7**) are also the one with the worst ESG score. In fact, the ESG score means in **Model 7** is 38.58883, whereas in **Model 2** and **Model 5** are, respectively, 52.34536 and 54.21875.

Moreover, **Model 6** and **Model 7** provide evidence, even if just weakly significant, regarding the relationship between the presence of a CSR committee and the firm market value. In fact, in the American sample the relationship between the presence of the CSR committee and the firm market cap is positively significant at the 10% level, whereas in the European sample is, surprisingly, negatively significant at the 10% level.

In this regard, an additional analysis testing the moderating role of continent of origin between the presence of a CSR committee and market cap is performed (**Model 8**). The model shows a strongly significant effect in the interaction term of the CSR committee's dummy and continent of origin. Therefore, the continent of origin seems to be a moderator in the relationship between the presence of a CSR committee and market cap. In particular, the impact that the presence of a CSR committee has on firm market value is stronger in the American firms than in the European firms, where this relationship is even negative (as the individual effect of the CSR committee dummy is negative). This confirms the results of the **Model 6** and **Model 7**.

Lastly, **Model 9** displays a positive and strongly significant effect in the interaction term of CSR committee score and ESG score. Moreover, the individual effect of ESG score is even negative. As a result, the CSR committee efficiency seems to be a moderator in the relationship between market cap and ESG score, which is mostly effective with an efficient CSR committee.

Table 9. ESG score descriptive statistics in Model 2, Model 5 and Model 7

Variable	Model 2 (America)	Model 5 (America)	Model 7 (America)
Observations	388	160	1.181
Mean	52.34536	54.21875	38.58883
Std. Deviation	17.71011	17.5143	19.15533
Minimum	10	10	1
Maximum	93	93	93

Note: In **Model 2** there are three years (2018/2020) observations, in **Model 5** there is only one year observation per organization (2020) and in **Model 7** companies with a 0 CSR committee score are included in the sample.

Table 8. Additional analysis with market cap as dependent variable

Variable	Model 3	Model 4 (Europe)	Model 5 (America)	Model 6 (Europe)	Model 7 (America)	Model 8	Model 9
ESG Score	4.19e+07* (2.51e+07)	8.72e+07** (3.94e+07)	5858625 (1.15e+08)	7.64e+07*** (1.93e+07)	1.03e+08*** (2.76e+07)	9.18e+07*** (1.70e+07)	-9.49e+08*** (2.97e+08)
CSR Committee Score		1.11e+08 (9.60e+07)	-1.65e+08 (2.26e+08)				-4.96e+08*** (1.84e+08)
Net Income	4.158293* (2.171855)	-.0209556 (.8222193)	1.484736 (3.920505)	1.0612 (1.117332)	4.829291* (2.924166)	3.882477* (1.986318)	3.631412** (2.071209)
Common Equity	.9864259*** (.3632711)	2.108546*** (.1896277)	.9047425 (.6108848)	1.795865*** (.2633479)	1.455391*** (.2835707)	1.490813*** (.2116743)	1.030999*** (.3117846)
Firm size (ln revenue)	5.31e+09*** (1.52e+09)	1.93e+09** (8.17e+08)	1.02e+10*** (3.62e+09)	9.64e+08*** (3.52e+08)	2.46e+09** (9.68e+08)	1.93e+09*** (5.96e+08)	5.03e+09*** (1.43e+09)
CSR Committee Dummy				-9.47e+08* (5.55e+08)	1.78e+09* (9.61e+08)	-2.15e+09*** (6.94e+08)	
Continent Dummy (Europe = 0)						1.43e+09*** (3.70e+08)	
CSR Committee Dummy*Continent Dummy (Europe = 0)						4.95e+09*** (1.43e+09)	
ESG Score*CSR Committee Score							1.37e+07*** (4073959)
_cons	-1.12e+11*** (3.16e+10)	-5.18e+10** (2.12e+10)	-1.96e+11*** (6.90e+10)	-2.18e+10*** (7.26e+09)	-5.27e+10*** (2.02e+10)	-4.27e+10*** (1.24e+10)	-7.04e+10*** (1.57e+10)
Observations	904	196	160	831	1.181	2012	904
F value	79.12	20.61	27.51	66.17	94.24	100.04	68.08
R-squared	0.4669	0.6539	0.4561	0.5799	0.5007	0.5050	0.5030

Note: \*Correlation is significant p < .10 \*\*Correlation is significant p < .05, \*\*\*Correlation is significant p < .01

Unstandardized coefficients are reported. Standard errors are between brackets ( )

In **Model 3** and **Model 9** there are three years (2018/2020) observations and the American and European samples are combined, in **Model 4** and **Model 5** there is only one year observation per organization (2020), in **Model 6** and **Model 7** companies with a 0 CSR committee score are included in the samples and in **Model 8** the latter American and European samples are combined.

## Chapter 5 Discussion

This chapter discusses the findings of this study, making a distinction between the CSP and the CSR committee findings. Furthermore, it explains the academic contributions and the managerial implications resulting from the study's outcomes. Lastly, it describes the limitations of this research methodology and gives suggestions for future research.

### 5.1 Discussion

In this section the findings related to the two main topics, CSP and CSR committee, will be further explained.

#### *5.1.1 Corporate social performance*

In this study, support for the *H1* is found. Therefore, CSP seems to be positively related to firm market value. In fact, in the majority of the models, the market cap has been found to be positively and significantly related to common equity, revenue and ESG score. Consequently, when these variables increase, market cap increases. This means that shareholders, when deciding to invest in a company, appear to be interested not only in the firm's financial results, but also in the environmental, social and government factors.

These results are consistent with the findings of Lins (2017), Bajic & Yurtoglu (2018) and Lee (2020), which show a positive effect of CSR on firm value, and, in general, with the studies showing a positive relationship between CSP and stock market performance (Dowell et al. 2000; Kim, 2013; Deng & Cheng, 2019; Alareeni & Hamdan, 2020). The reason why shareholders reward companies reporting high ESG scores, can be found in the studies of Kurtz (2005) and Sharfman & Fernando (2008), which explain that a company's CSP reveals details on how it handles the risks it faces: high ESG scores mean lower residual risk for those companies. Lower residual risk is related to lower reputational risk, which can have an effect on the stock price.

In this study, *H3* is only partially supported. Although further and more accurate research should be implemented to explain the contrasting results obtained in the models, the first intuition is based on the differing ESG score means presented in the samples.

In particular, when the sample analysed contains firms with a sufficiently high ESG score mean, the positive relationship between ESG score and market cap is significant only in Europe. Therefore, in this scenario, the CSP's impact on firm market value seems to be stronger in the European firms than in the American firms, and *H3* is supported. This result is consistent with the research of Sison (2009), which states that due to its tradition of individualism, legalism and pragmatism, American business culture has a lower CSR attention respect to the European one. Moreover, it is coherent with the study of Zheng et al. (2014), which explains that companies having institutional blockholders are influenced and pressured by the government to follow social targets pertinent to government policies and, therefore, boost CSR. This is relevant, since, unlike in the United States, the majority of institutional investors in Continental Europe<sup>8</sup> are insiders, therefore, with the actual power to control business decisions (Ruiz-Mallorquí & Santana-Martin, 2011).

On the other hand, when taking into account also firms with poor CSPs, showing a low ESG score average, both continents display a positive and significant relationship between ESG score and market cap. In addition, the coefficient in America is, surprisingly, even slightly higher than in Europe. As a result, in this scenario, *H3* cannot be supported. Even if unexpected from the theory considered in the formulation of the hypothesis, this result is coherent with the new trends identified in the *Global sustainable investment review 2018* (Alliance G.S.I., 2018). It reports that environmental, social, and governance factors are becoming increasingly important to Canadian investors when making investment decisions and that in the United States<sup>9</sup> sustainable investment continues to grow at a healthy pace. Whereas, “*in Europe, where sustainable investing has long been broadly practiced and accepted, there are signs that the market is maturing*”<sup>10</sup> (Alliance G. S. I., 2018, p. 13).

In summation, the intuition behind the results is: investors in both Europe and the America tend to penalize corporations with poor CSP, opting to invest in more responsible and

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<sup>8</sup> Continental Europe and the United States are the main regions where our sample firms come from.

<sup>9</sup> In the American sample the majority of the firms are from North America.

<sup>10</sup> Alliance, G. S. I. (2018). *Global sustainable investment review 2018*.

sustainable businesses. However, only European investors are sensitive to changes at high levels of CSP. In other words, American shareholders do not prefer investing in one company over another if both have sufficiently high ESG ratings. A possible explanation may be that sustainable investing has been widely practiced and embraced for a long time in Europe (Alliance G. S. I., 2018) and, as shown in this study, ESG are, on average, higher in Europe than in America. Therefore, changes at a high level of ESG may make a difference in this continent, where the majority of the companies display high CSP.

### *5.1.2 CSR committee efficiency and presence*

In this study, support is not found for *H2* and *H4*. Therefore, there is no evidence that the CSR committee efficiency impacts on firm market value. Both continents' samples show that the relationship between CSR committee score and market cap is not statistically significant.

However, in the additional analysis section, it has been found that CSR committee score has an indirect effect on market cap. In particular, the CSR committee efficiency seems to be a moderator, with a positive effect, in the relationship between CSP and firm market value.

The actual level of CSR committee efficiency may be unknown or irrelevant to the investors and, therefore, not have a direct effect on market cap. However, it helps CSP to generate stock market benefits. The reasons behind this result may reside in its efficiency to improve environmental information (García-Sánchez et al., 2019) and to implement a CSR strategy (Valle et al., 2019), which are considered some of the CSR committee main roles.

In fact, Refinitiv (2021a, p. 22) explains that the CSR strategy refers to “*a company’s practices to communicate that it integrates economic (financial), social and environmental dimensions into its day-to-day decision-making processes*”<sup>11</sup>. Therefore, as the CSR committee score is a subcategory of the CSR strategy score in the Refinitiv database, in this context, the basis of the CSR committee efficiency's moderation role lies in its ability to communicate what is measured in the ESG score. Providing transparent information and giving more visibility to CSP, the CSR committee indirectly affects investors, and,

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<sup>11</sup> Refinitiv. (2021a). Environmental, Social and Governance (ESG) Scores from Refinitiv. [https://www.refinitiv.com/content/dam/marketing/en\\_us/documents/methodology/refinitiv-esg-scores-methodology.pdf](https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/refinitiv-esg-scores-methodology.pdf)



consequently, the firm market cap. This is consistent with the study of Yu et al. (2018), proving that ESG transparency and disclosure lead to higher firm market value.

Moreover, additional results, even if just significant at the 10% level, are obtained regarding the presence (and not the efficiency) of a CSR committee in the organization and its effect on firm market value. In particular, in the additional analysis section, it has been found that in America the relationship between CSR committee presence and the firm market cap is positively significant, whereas in the European sample is, surprisingly, negatively significant.

In this regard, the moderating role of continent of origin has been tested and, indeed, the American firms have a stronger effect in the relationship between the presence of a CSR committee and firm market value. This is consistent with the new trends of America regarding sustainable investment, reported in the previous section. Moreover, the differences between the samples may be caused by the higher efficiency of the American CSR committees found in this study. As the CSR committee score average is higher in America than in Europe, it is possible that American investors appreciate these committees more than Europeans, which may see them as symbolic (Rodrigue et al., 2013) and with limited efficiency (Burke et al., 2019).

Although the negative effect reported in Europe is just weakly significant, this result can be interpreted by referring to the study of Gennari (2019), which explains, by applying the sustainability view, that a CSR committee's role is to balance the potential conflict between shareholders' short-term profit expectations and the long-term generation of value. This may lead to the assumption that European investors are reluctant in investing in organizations with a CSR committee, as they could see it as an obstacle in gaining short-term profit. However, it is important to stress the consideration that just weakly significant results are obtained and, as this study suffers from some bias, future research should be implemented.

To conclude, the intuition behind the results is that CSR committee presence is appreciated by investors in the American market and, although its efficiency is not relevant for European and American shareholders, this study cannot agree with the scholars affirming that the CSR committee has only a symbolic role (Rodrigue et al., 2013). In fact, the results provide evidence that CSR committee efficiency is significantly helping CSP in obtaining stock market benefits.

## 5.2 Academic contributions

This study contributes to the field of literature regarding the relationship between CSR performances and firm stock market and financial results. In fact, empirical research has indicated contrasting results: some studies have found a positive relationship (Dowell et al. 2000; Kim, 2013; Alareeni & Hamdan, 2020) and others a neutral or even negative one (Griffin & Mahon, 1997; Elsayed & Paton, 2005; Sahut & Pasquini-Descomps, 2015; McWilliams & Siegel, 2020). This research provides further evidence that the link between ESG score and firm market value exists.

Moreover, this study presents an initial insight to explain the contrasting results in the literature. Various sample sizes with different CSP means have been analysed and the different effects on including in the analysis companies scoring zero in the CSR committee score have been evaluated. As the models show contrasting outcomes, it may be possible that the previous literatures conflict because of differing ways to handle a zero in the ESG rating system. Future research may further investigate the effects of these zeros.

Furthermore, these studies present several limitations: to have a useful comparison, it is recommended to examine a wider sample and include other countries (Sahut & Pasquini-Descomps, 2015; Alareeni & Hamdan, 2020). As this study is a cross-continent analysis with, in a model, more than 2000 observations, it contributes to filling the mentioned gaps, and general gaps in CSR research. In fact, Beck et al. (2018) explain that CSR studies mostly focus on various industry groups and do not control for potential cross-country effects.

Moreover, there are limitations regarding the various CSR dimensions studied in the literature. It is suggested to take into account subsecretarios behind CSR (Cavaco & Crifo, 2014; Sahut & Pasquini-Descomps, 2015, Alareeni & Hamdan, 2020). Therefore, a second independent variable is included in this study, which is the CSR committee. Although in this study no significant results have been found regarding the direct effect of CSR committee score on firm market cap, it seems that the CSR committee efficiency helps significantly to strengthen the relationship between CSP and firm market value. Furthermore, the presence of

a CSR committee (and not its efficiency) has also a direct positive effect on market cap in the American market.

To conclude, the CSR committee is a recent topic that has received little interest in corporate governance research (Gennari, 2019; Gennari & Salvioni, 2019). Consequently, this research contributes to filling the literature gaps, shedding a new light on the CSR committee position and the impact its existence and efficiency can have on organizational outcomes.

### 5.3 Implications

This study, showing the positive relationship between ESG score and firm market cap, will provide useful implications from a managerial point of view. In particular, it will encourage management to devote time and resources to improve CSP and to see ESG as an investment rather than a cost.

Moreover, this study answers the key management issue: should a CSR committee be appointed in order to gain, from CSR performance, stock market benefits? The shown moderating role of the CSR committee efficiency in the relationship between ESG score and market cap will assist practitioners in the field of management in better understanding and reacting to stakeholders expectations, which do not solely focus on economic outputs, but also on company's social and environmental performances (Sarkis et al. 2010)

### 5.4 Limitation and future research

The main limitation of this study lies in the detection of heteroscedasticity. Robust standard errors have been used to partially solve the issue. However, a more robust check should be appointed in order to detach and solve the reason behind it.

Moreover, cross sectional data have been used, as the three years span sample has missing observations. However, some variables may be overrepresented. In this regard, an additional analysis has been implemented using only one year per company observations (and the results did not change), but a panel data analysis is suggested for future research in order to

take into account also the changes between the years. Furthermore, a panel model is suggested as this study may suffer from bias arising from reverse causality.

Furthermore, some limitations concern the measures used in this study. In particular, to provide more interesting implications, further information regarding the criteria used by Refinitiv to assess the CSR committee score should be gathered. Furthermore, in addition to market cap (which is used to measure firm market value, like in the study of Lee (2020)), future research should consider including other market-based measures as Tobin's  $q$ , which is the ratio of a physical asset's market value to its replacement value (Velte, 2017).

Additionally, to strengthen the intuitions behind the cross-continent differences, further analysis is required, in particular regarding the CSR committee presence's results, as only weakly significant results have been found. Moreover, interesting results may be obtained controlling for cross countries effects (Beck et al., 2018). Lastly, as explained in the academic contribution section, future research may investigate the effects of the different ways of handling the zeros in the ESG rating system, in order to investigate if it may be one of the causes behind the conflicting results in the CSP literature.

## Conclusion

This research displays interesting results related to the effects of corporate social performance and CSR committee on firm market value. In particular, a cross-continent analysis has been performed, looking into the differences between the European and American listed firms in the industrial sector.

Regarding the CSP dimension, this study shows that it has a positive impact on firm market value. Therefore, *H1* can be supported. On the other hand, *H3* is only partially supported. In particular, in the European companies the positive effect of CSP on firm market value is stronger than in the American companies, where this relationship is not even significant. However, this is true when the concerned companies have a CSR committee. Whereas, when taking into account also the companies without a CSR committee, which have also lower a CSP mean, the concerned relationship is stronger in America than in Europe.

This study interpreted these findings as the following: investors in both Europe and America penalize companies with low CSP, preferring to invest in companies that are more responsible and sustainable. Only European investors, on the other hand, are sensitive to changes at high levels of CSP.

Regarding the CSR committee dimension, this research cannot demonstrate that its efficiency has a direct effect on firm market value. Therefore, *H2* and *H4* are not supported. However, when the CSR committee variable is transformed into a dummy variable and, therefore, the effect of its presence (and not its efficiency) is analysed, weakly significant evidence has been found in the American firms. As a result, the CSR committee presence seems to positively impact market cap in America.

Moreover, it has been shown that the CSR committee efficiency plays a strongly significant moderating role in the relationship between CSP and firm market value. This could be considered one of the most interesting findings in this study, as it opens a new view on the CSR committee position.

Overall, this study found only slight differences between America and Europe. In addition, the American attention on CSR results to be higher than what expected, in some contexts, even greater than the European.

## Appendix

### Appendix 1. Industries:

Industries	Europe	America
Aerospace & Defense	61	98
Airlines	29	60
Airport Operators & Services	29	12
Business Support Services	107	167
Business Support Supplies	4	24
Commercial Printing Services	7	13
Construction & Engineering	141	101
Courier, Postal, Air Freight & Land-based Logistics	32	26
Diversified Industrial Goods Wholesale	4	3
Electrical Components & Equipment	68	85
Employment Services	24	45
Environmental Services & Equipment	22	44
Ground Freight & Logistics	8	87
Heavy Electrical Equipment	17	4
Heavy Machinery & Vehicles	46	92
Highways & Rail Tracks	7	20
Industrial Machinery & Equipment	148	217
Marine Freight & Logistics	32	21
Marine Port Services	4	10
Passenger Transportation, Ground & Sea	21	10
Professional Information Services	19	40
Shipbuilding	2	/

Note: it exhibits the numbers of the largest sample (**Model 8**)

## Appendix 2. Countries:

Countries (Europe)	Numbers	Countries (America)	Numbers
Austria	21	Argentina	12
Belgium	13	Bermuda	13
Cyprus	2	Brazil	36
Denmark	28	Canada	78
Finland	29	Chile	15
France	93	Colombia	6
Germany	81	Mexico	21
Greece	17	Panama	6
Republic of Ireland	21	Peru	8
Isle of Man	1	Puerto Rico	3
Italy	26	United States of America	982
Luxembourg	10		
Monaco	6		
Netherlands	28		
Norway	12		
Poland	7		
Portugal	3		
Spain	40		
Sweden	76		
Switzerland	88		
United Kingdom	221		

Note: it exhibits the numbers of the largest sample (**Model 8**)



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## Summary

### **Hypotheses development**

Attention to corporate social responsibility (CSR) has been growing in academic and practitioner environments all around the world (Lee et al., 2012). It has become a critical component of management decisions, as stakeholders such as customers and investors are interested not only in the financial results, but also in the company's social and environmental performance (Sarkis et al. 2010).

In order to assign significance to CSR practices and compare diverse firms, these activities must be measurable (Porter & Kramer, 2002). Therefore, CSR performances or corporate social performances are frequently assessed and operationalized by the Environmental Social and Governance factors (ESG factors) (Bassen & Senkl, 2011). The need for ESG ratings has increased significantly in recent years, and both research and the capital market favour the use of ESG indicators to capture corporate social performance (Sassen et al., 2016). It is now utilized as a primary index to classify CSR activities by major corporate consulting firms all over the world (Alareeni & Hamdan, 2020). Moreover, organizations are increasingly engaging in a wide range of ESG transparency activities in order to provide a transparent image of their corporate responsibility policies and efforts to all stakeholders (Alareeni & Hamdan, 2020).

In fact, corporate social performance can be used to bolster the company brand image (Menon & Kahn, 2003), to increase employees' motivation (Zhu et al., 2015) and to mitigate product, operating and technology-related risks (Starks, 2009). Moreover, according to Sahut & Pasquini-Descomps (2015), a company's ratings on non-accounting criteria are linked to lower residual and reputational risk, therefore it is possible to suppose that CSR may have a positive effect on the company's stock price.

Many scholars have studied the relationship between CSR performance and firm outcomes. However, there are conflicting outcomes. In fact, some studies have indicated a positive relation between corporate social performance and stock market performance (such as market cap or Tobin q) (Dowell et al. 2000; Kim, 2013; Alareeni & Hamdan, 2020). In particular, the

study of Lee (2020) provides evidence from the Chinese stock market. It shows that, while CSR practices initially have a negative effect on a firm's stock valuation, after a one-period time lag, corporate social performance has a positive impact on firm market cap. Other studies, on the other hand, have found a neutral or negative correlation between CSR and stock market outcomes (Elsayed & Paton 2005; Sahut & Pasquini-Descomps, 2015), likewise between CSR and overall financial performances (for example ROA) (Griffin & Mahon, 1997; McWilliams & Siegel, 2020).

In addition to the contrasting results, the literature contains limitations. In fact, it is suggested to include other countries to provide a fruitful comparison (Alareeni & Hamdan, 2020). Furthermore, it is recommended to take into consideration subcategories behind CSR (Cavaco & Crifo, 2014; Sahut & Pasquini-Descomps, 2015; Alareeni & Hamdan, 2020).

Hence, this research will study the differences across America and Europe regarding the relationship between corporate social performance and firm market value. Moreover, as current studies show conflicting results regarding the relationship of corporate social performance and firm performance, further understanding may be possible by also investigating the effect of the CSR committee efficiency, which is a specific dimension of CSR, on firm market value.

CSR committees are a newer topic that has received minimal attention in corporate governance research (Gennari, 2019; Gennari & Salvioni, 2019). Moreover, the actual research is divided. Some scholars believe that CSR committees have only a symbolic role to satisfy stakeholders' expectations and strengthen public image (Rodrigue et al., 2013). Other scholars, on the other hand, believe that a CSR committee can play a proactive role and improve business performance by making recommendations to directors on how to increase corporate efficiency (García-Sánchez et al., 2019).

Moreover, it is analysed the difference between America and Europe, as Sison (2009) states that there are significant differences in how CSR has been interpreted, developed, and implemented in these regions. Due to its tradition of individualism, legalism, and pragmatism, American company culture is more hesitant to adopt the perspective of the enterprise as a socially anchored organization, but in Europe, this notion is welcomed and widespread despite variations.

Furthermore, disparities in financial systems between America and Europe might lead to variations in CSR implementation and attention. Blockholders, investors who control at least a 5% interest in a company, represent a significant distinction (Chung et al., 2019). They are relevant, as management of firms with institutional blockholders is influenced and pressured by the government to follow social targets relevant to government policies that help to improve CSR. Such businesses are motivated to contribute to CSR and thereby serve the social needs of state owners (Zheng et al., 2014). In this regard, Continental Europe does not only have significantly higher level of blockholder ownership than the United States<sup>12</sup> (Thomsen, 2005), but also the majority of its institutional investors are insiders, unlike in the U.S., and, therefore, with the actual power to control business decisions (Ruiz-Mallorquí & Santana-Martin, 2011). As a result, these factors led to the assumption that European enterprises and investors pay more attention to CSR than Americans.

In conclusion, based on the existing literature, the following hypothesis are developed:

*H1. Corporate social performance will be positively related to firm market value.*

*H2. CSR committee efficiency will be positively related to firm market value.*

*H3. Corporate social performance's impact on firm market value is stronger in the European firms than in the American firms*

*H4. CSR committee efficiency's impact on firm market value is stronger in the European firms than in the American firms*

## **Method**

This is a quantitative study, based on the analysis of secondary data. In particular, 391 American and European public companies working in the industrial economic sector from 2018 to 2020 will be studied. To test the hypothesis, two Ordinary Least Square (OLS) regressions will be performed: one for the European and one the American firms. STATA software will be used.

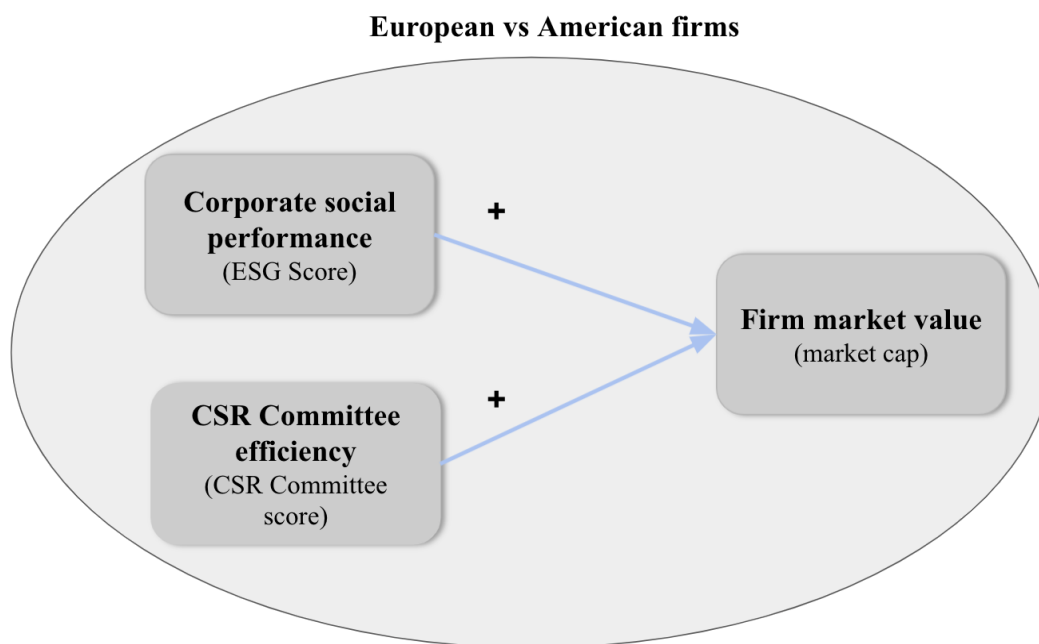
Since this study analyses the effect of corporate social performance and CSR committee efficiency on firm market value, ESG scores are used to measure corporate social

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<sup>12</sup> Continental Europe and the United States are the main regions where our sample firms come from.

performance, CSR committee scores are used to measure CSR committee efficiency and firm market cap is used to measure firm market value. This is shown in the following conceptual map (Figure 1).

Figure 1. Conceptual map



Therefore, this study has as independent variables the ESG score and the CSR committee score, whereas the dependent variable is the market cap. Moreover, several control variables are selected: net income, common equity, ln revenue. All the variables are collected from the Refinitiv database.

➤ ESG score

Refinitiv captures and calculates over 500 ESG metrics at the company level. The three pillar scores are reformulated into ten categories, and the final ESG score, which is based on publicly accessible data and indicates the company's ESG performance, commitment, and effectiveness, is calculated (Refinitiv, 2021a). From the category scores, the environmental, social, and corporate governance pillar scores are derived. In particular, the environmental pillar refers to resource use, emissions and the degree of innovation; the social pillar includes workforce, human right, community and product responsibility categories; and the

governance pillar is divided into management, shareholders and CSR strategy categories. The pillar weights are adjusted to percentages ranging from 0 to 100 (Refinitiv, 2021a).

➤ CSR committee score

The governance pillar in the ESG score includes three categories: shareholders (shareholders rights and takeover defenses), management (structure and compensation) and CSR strategy. The latter evaluates the company’s attempts to communicate that it considers economic, social and environmental dimensions into its daily decision-making (Refinitiv, 2021a). The CSR committee score is a subcategory in the CSR strategy score and it assesses the “*board level or Senior management committee responsible for decision making on CSR strategy*”<sup>13</sup> (Refinitiv, 2021b). As a result, it is used to measure the CSR committee efficacy, which, in this context, lies in its ability to communicate the ESG performance and provide transparent information (Refinitiv, 2021a). CSR committee score is a continuous variable ranging from 0 to 100.

➤ Market cap

The company market capitalization, or market cap, has been used to measure the firm market value, as in the study of Lee (2020). The market capitalization of a publicly traded company is the combined value of all of its issued share capital at the current market price as defined by the stock market (Majanga, 2018).

The following table (Table 2) further presents the variables, which are all continuous.

Table 2. Summary of variables’ explanations (Refinitiv, 2021b)<sup>14</sup>

Independent Variables	Explanation
ESG score	“Overall company score based on the self-reported information in the environmental, social and corporate governance pillars.”
CSR Committee score	“Does the company have a CSR committee or team? - board level or Senior management committee responsible for decision making on CSR strategy”

<sup>13</sup> Refinitiv. (2021b). [Software]

<sup>14</sup> Refinitiv. (2021b). [Software]

Dependent Variable	Explanation
Market Cap	“Sum of market value for all relevant issue level share types. The issue level market value is calculated by multiplying the requested shares type by the latest close price.”

Control Variables	Explanation
Net income	“Income/expense after all operating and non-operating income and expense, reserves, income taxes, but before equity in earnings, minority interest, extraordinary items, after-tax adjustments, discontinued operations and preferred dividends”
Common equity	“Total common equity of the company including general partner's holding and deferred shares and any other shareholder's fund.”
Firm size (ln revenue)	“Revenue from the sale of merchandise, manufactured goods and services, and the distribution of regulated energy resources.”

### Additional analysis

Additional analyses are developed, as a result of the outcomes of the initial study, to provide robustness checks, to help to investigate possible additional limitations and to present further insights for future research. Different effects between the variables will be analysed and different sample sizes will be used.

In particular, in the initial analysis, a time span of three years was considered, but, after the sampling selection process, 204/771 companies displayed less than two years observations. In order to avoid that some companies are overrepresented and to check for potential changes in the outcomes, two additional regression analyses, one for Europe and one for America, with only one year (2020) observation per organization are performed.

Moreover, because the efficiency (rather than merely the presence) of the CSR committee was assessed in the initial analysis, only companies with a CSR committee were considered, and the companies scoring 0 in the CSR committee rating were omitted. However, interesting outputs may be obtained by including in the two continents' samples also the firms with a 0 CSR committee score. Therefore, two additional OLS regression analyses, with two larger samples (771 companies: 338 Europeans and 433 Americans) are performed.

The CSR committee, in this case, will be considered as a dummy variable, in order to implement a more accurate analysis and to study the effect of its presence (and not of its efficiency).

Moreover, two variables' moderating roles will be tested: the moderating role of continent of origin in the relationship between CSR committee presence and market cap (Figure 2) and the moderating effect of CSR committee score in the relationship between ESG score and market cap (Figure 3).

Figure 2. Additional analysis - Continent of origin as moderator

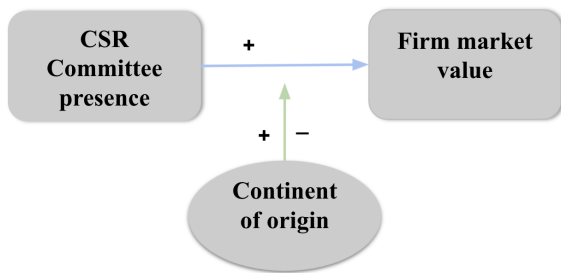
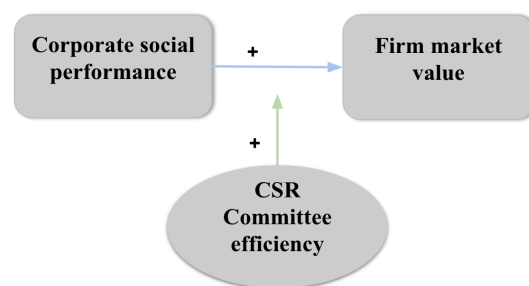


Figure 4. Additional analysis - CSR committee score as moderator



## Findings

### ➤ *Corporate social performance*

In this study, support for the *H1* is found. As a result, corporate social performance appears to be linked to firm market value. This indicates that when determining whether or not to invest in a company, shareholders appear to be concerned not only with the financial success of the company, but also with environmental, social, and government factors.

These results are consistent with the findings of Lins (2017), Bajic & Yurtoglu (2018) and Lee (2020), which show a positive impact of CSR on firm value, and, overall, with the studies showing a positive relationship between corporate social performance and stock market performance (Dowell et al. 2000; Kim, 2013; Deng & Cheng, 2019; Alareeni & Hamdan, 2020).

In this study, *H3* is only partially supported. In particular, the positive link between ESG score and market cap is significant only in Europe when the sample contains firms with a sufficiently high ESG score mean. As a result, the influence of corporate social performance on firm market value appears to be stronger in European firms than in American firms and, in this scenario, *H3* is supported.

On the other hand, when taking into account also firms with poor corporate social performances, showing a low ESG score average, both continents show a positive and significant relationship between ESG score and market cap. In addition, the coefficient in America is, surprisingly, even slightly higher than in Europe. Therefore, in this scenario, *H3* cannot be supported.

The results suggest that investors in both Europe and America penalize companies with poor corporate social performance, preferring to invest in companies that are more responsible and sustainable. However, only European investors are sensitive to changes at high levels of corporate social performance. In other words, American shareholders do not prefer investing in one company over another if both have sufficiently high ESG ratings. One probable explanation may be that sustainable investing has been extensively practiced and embraced for a long time in Europe (Alliance G. S. I., 2018) and, as shown in this study, ESG are, on average, higher in Europe than in America. Therefore, in this continent, where the majority of corporations have strong corporate social performance, changes at a high level of ESG may make a difference.

➤ *CSR committee efficiency and presence*

In this study, support is not found for *H2* and *H4*. Therefore, there is no evidence that the CSR committee efficiency impacts on firm market value.

However, in the additional analysis section, it has been found that the CSR committee score has an indirect impact on market cap. The efficiency of the CSR committee, in particular, appears to be a moderator in the relationship between corporate social performance and firm market value, with a positive effect.



The real level of CSR committee efficiency may be unknown or irrelevant to the investors and, hence, not have a direct impact on market cap. However, it helps corporate social performance in generating stock market gains. The reasons behind this result may reside in its efficiency to improve environmental information (García-Sánchez et al., 2019) and to implement a CSR strategy (Valle et al., 2019), which are considered some of the CSR committee main roles.

Moreover, further results, even if just significant at the 10% level, are obtained regarding the presence (rather than efficiency) of a CSR committee in the organization and its effect on firm market value. In particular, in the additional analysis section, it has been found that in America the relationship between CSR committee presence and the firm market cap is positively significant, whereas in the European sample is, surprisingly, negatively significant.

Although the negative effect reported in Europe is just weakly significant, this finding can be explained by referring to the study of Gennari (2019), which explains, by applying the sustainability view, that a CSR committee's role is to balance the potential conflict between shareholders' short-term profit expectations and the long-term generation of value. This may lead to the assumption that European investors are hesitant to invest in companies that have a CSR committee because they perceive it as a barrier to short-term profit.

To conclude, the results suggest that the presence of a CSR committee is valued by investors in the American market, and that, while its efficiency is unimportant to European and American shareholders, this study cannot agree with scholars who claim that the CSR committee serves only a symbolic role (Rodrigue et al., 2013). In fact, the results provide evidence that CSR committee efficiency is significantly helping corporate social performance in obtaining stock market benefits.

## **Contributions**

This study contributes to the field of literature regarding the relationship between CSR performances and firm stock market and financial results, helping in filling the gaps related to the cross-continent effect and the CSR dimensions analysed.

Moreover, as the existing literature presents contrasting results, this research adds further evidence that the link between ESG score and firm market value exists. This will provide, furthermore, useful implications from a managerial point of view. In particular, it will incentivize management to dedicate time and resources in improving company social performance and to see ESG as an investment rather than a cost.

This research sheds new light on the CSR committee position and the effect its existence and efficiency can have on organizational results. It answers the key management question: should a CSR committee be appointed in order to gain, from CSR performance, stock market benefits? The indicated moderating role of the CSR committee efficiency in the relationship between ESG score and market cap will support management practitioners in better understanding and reacting to stakeholder expectations, which are not solely focused on economic outputs, but also on a company's social and environmental performance (Sarkis et al. 2010).

### **Limitation and future research**

The discovery of heteroscedasticity is this study's principal limitation. To partially overcome the problem, robust standard errors were applied. However, a more robust check should be appointed in order to detach and solve the reason behind it.

Moreover, because the three-year sample had missing observations, cross-sectional data was employed. Some variables, however, may be overrepresented. In this regard, an additional analysis was conducted using only one year of observations per firm (and the results remained the same), but a panel study is recommended for future study to account for changes over time.

Furthermore, in addition to market cap (which is used to measure firm market value, like in the study of Lee (2020)), future research should consider including other market-based measures as Tobin's  $q$ , which is the ratio of a physical asset's market value to its replacement value (Velte, 2017).

Additionally, further research is needed to enhance the intuitions behind the cross-continent disparities, particularly regarding the results of the CSR committee presence, as only weakly significant results have been observed. Lastly, interesting results may be obtained controlling for cross countries effects (Beck et al., 2018).