INSTITUTO
UNIVERSITÁRIO
DE LISBOA

THE RELATIONSHIP BETWEEN ESG DISCLOSURE AND FINANCIAL PERFORMANCE: EVIDENCE FROM ITALIAN LISTED COMPANIES

Aleksandar Ranković

Master in Managment

Supervisor:

PhD Inna Choban de Sousa Paiva, Assistant Professor, Iscte – University Institute of Lisbon

October 2023

BUSINESS
SCHOOL

Department of Marketing, Strategy and Operations

THE RELATIONSHIP BETWEEN ESG DISCLOSURE AND FINANCIAL PERFORMANCE: EVIDENCE FROM ITALIAN LISTED COMPANIES

Aleksandar Ranković

Master in Managment

Supervisor:

PhD Inna Choban de Sousa Paiva, Assistant Professor, Iscte – University Institute of Lisbon

October 2023

Abstract

The objective of this dissertation is to explore the relationship between Environmental, Social and Governance (ESG) disclosure and corporate financial performance. Using a sample of 93 companies listed on the Italian Stock Exchange, *Borsa Italiana*, between 2018 and 2020, four multiple regression models are developed to assess the impact that each of the three pillars of ESG disclosure has on the dependent variable: Return on Assets (ROA). The results suggest there are differences in how each of the three components influence economic performance: only the total ESG score and the Governance score have a statistically significant and positive effect on financial performance. The findings of our study contribute to the existing literature and provide further evidence about the value relevance of non-financial and ESG disclosure. The paper is also significant as despite the vast literature on the subject, there are relatively few empirical studies which focus on countries outside the Anglo-Saxon context.

Keywords: ESG disclosure; Corporate Social Responsibility; firm performance; Italy

JEL *Classification System*:

G34: Mergers; Acquisitions; Restructuring; Corporate Governance

M14: Corporate Culture; Diversity; Social Responsibility

Resumo

O objetivo desta dissertação é explorar a relação entre a divulgação ESG e o desempenho financeiro das empresas. Utilizando uma amostra de 93 empresas cotadas na Bolsa de Valores Italiana, Borsa Italiana, entre 2018 e 2020, são desenvolvidos quatro modelos de regressão múltipla para avaliar o impacto que cada um dos três pilares da divulgação ESG tem na variável dependente: ROA. Os resultados sugerem que existem diferenças na forma como cada um dos três componentes influencia o desempenho económico: apenas a pontuação ESG total e a pontuação de Governance têm um efeito estatisticamente significativo e positivo no desempenho financeiro. As conclusões deste estudo contribuem para a literatura existente e fornecem mais provas sobre a relevância da divulgação de informações não financeiras e de ESG em termos de valor. O estudo é também significativo, uma vez que, apesar da vasta literatura sobre o assunto, existem relativamente poucos estudos empíricos que se centram em países fora do contexto anglo-saxónico.

Palavras-chave: Divulgação ESG; Responsabilidade Social Corporativa; desempenho da empresa; Itália

JEL *Classification System*:

G34: Fusões, Aquisições, Restruturações, Governo das Sociedades

M14: Cultura Corporativa; Diversidade; Responsabilidade Social

Summary

Table Summary

Graphic Summary

Glossary

CSR – Corporate Social Responsibility

ESG – Environmental, Social and Governance

NFRD – Non-Financial Reporting Directive

CSRD – Corporate Sustainability Reporting Directive

SASB – Sustainability Accounting Standards Board

GRI – Global Reporting Initiative

1. Introduction

In a very short period of time the concept of environmental, social and governance (ESG) disclosure has enjoyed rapid advancement and a considerable rise in significance for companies. Evolving from a niche concept it has nowadays become a crucial instrument for businesses as a mean of both strategic competitiveness as well as stakeholder engagement.

The growth of ESG disclosure is deeply linked with the notions of corporate social responsibility (CSR) and socially responsible investment (SRI). Currently both companies and investors are extremely aware of the importance of accountability and transparency regarding the impact of the firms' activities on society and the environment. This has been accentuated by issues such as climate change, corporate scandals and the recent global financial crisis which have impacted the relationship between corporations and the public. As a consequence, companies have given higher priority to managing their image and reputation among stakeholders through the increasing focus on social and sustainability matters in their decision-making process (Haque, 2017).

In response to the lack of uniformity as well as an increasing demand for ESG information - from stakeholders, investors and regulators - independent organizations began forming and divulging voluntary ESG reporting guidelines with the mission of improving and harmonizing reporting practices across countries and industries (Rouen et al., 2022).

Focusing on the European scenario, the European Union has been a major player in defining and promoting shared guidelines for European companies to conduct their business in a responsible and sustainable way. The latest legislation in the context of ESG reporting is directive 2022/2464/EU also known as the Corporate Sustainability Reporting Directive (CSRD) which came into effect on January 5th, 2023.

The CSRD replaces the term "non-financial statement" (DNF), used in the previous legislation (Non-Financial Reporting Directive - NFRD), with the term "sustainability reporting". The change is not merely terminological and underlines the idea that sustainability information no longer qualifies as "non-financial" but has a clear impact on the company's financial strategy. Sustainability reporting thus becomes an integral part of the annual financial report.

The points of contact between financial and sustainability reporting find their synthesis in the concept of "dual materiality" adopted by CSRD. Materiality analysis identifies how and why certain information is relevant to a company or business sector. In this regard, the CSRD specifies that each company must include information necessary for understanding how sustainability issues affect its business, as well as information necessary for understanding the company's impact on people and the environment. Dual materiality overcomes the dichotomy between financial materiality and materiality of ESG impacts, bringing both perspectives together.

This link, established by the CSRD, between financial and sustainability information allows us to bring forward the question of whether there might be a further and deeper connection between these two aspects. Acknowledging the rapid rise of ESG disclosure and its importance for both companies and stakeholders, for the last two decades scholars have developed studies to investigate and explore the relationship between ESG performance and financial performance.

The present study aims to analyze the impact of the corporate social responsibility disclosure (ESG) on the performance of the firms, having as reference companies listed on the Italian Stock Exchange, Borsa Italiana, between 2018 and 2020. It thus aims to contribute to the existing literature on ESG disclosure (Giannarakis, 2014; Giannarakis, 2014a; Guerrero-Villegas et al., 2018; Lagasio & Cucari, 2018; Michelon & Parbonetti, 2012; Stacchezzinni et al, 2016), as well as for the one based on this analysis in Italian companies (Landi & Sciarelli, 2019; Cordazzo et al, 2020; Pulino et al, 2022), increasing knowledge regarding firms' performance and ESG disclosure.

This study used the multiple regression model, with the dependent variable ESG disclosure score assigned by Refinitiv (Refinitiv, 2020). The independent variable is represented by accounting financial index, return on assets (ROA).

The results show that ESG disclosure has a positive effect on financial performance. In more detail, all three pillars have a positive relationship with ROA, however only the total ESG score and the Governance score present a statistically significant relationship.

This study contributes to the investigation of the relationship between ESG disclosure and financial performance for several reasons. Firstly, the study incorporates a three-year period, more recent than most of the studies cited, encompassing companies in Italy, this being a country about which there is not extensive literature regarding this relationship compared to the Anglo-Saxon context, while also simultaneously investigating the effects of each of the three components of ESG. Secondly, the study uses the ESG Score, widely accepted and internationally recognized by most stakeholders, on issues of investment and company performance in CSR (Batae et al., 2021). This score is attributed by third-party rating, which avoids problems of legitimacy and subjective results.

Finally, the findings of this study are relevant for businesses, investors and regulators as it underlines the fact that listed companies with a better ESG rating do in fact achieve better financial performance. This is relevant as it comes at a time when firms are under increasing pressure both from stakeholders and institutions to commit more resources towards implementing a coherent and holistic strategy to communicate how their economic activity impacts and intertwines with environmental and social issues. In this context, having a reassurance that these efforts also result in better economic returns could potentially create a virtuous cycle, pushing and persuading corporations to strive for even higher levels of quality and transparency in their sustainability reports.

The remainder of this study is organized as follows. The next section introduces related theories and develops theoretical framework and hypothesis, followed by sections on methods and results. The study concludes with a discussion of the implications of the results and directions for future research.

2. Literature Review

2.1 Corporate Social Responsibility and ESG Disclosure

The subject of CSR is one that, in recent years, has enjoyed extensive coverage from both the academic world as well as the public opinion and the media.

The reasons for this newfound interest in the role of companies within society, can be traced back to the challenges brought forth to our linear model of production and consumption by very pressing issues, such as global warming and the finiteness of our planet’s resources.

The current situation is the outcome of a process that started two centuries ago in the midst of the Industrial Revolution. Adam Smith in his 1776 book *An Inquiry into the Nature and Causes of the Wealth of Nations* proposed that through the pursuit of self-interest and gain the individual also fulfills the best interest of society. Personal and societal interest are linked by the power of an *invisible hand*, which is a metaphor for the forces that govern the free market. In this scenario, according to Smith, by pursuing his own interest, the individual frequently promotes that of society more effectively than when he really intends to promote it.

Smith’s theories are the foundation of the *traditional* view of the business which has represented the mainstream economic thought for a substantial portion of contemporary history. One of the most influential members of this school in recent times was surely Milton Friedman. Friedman argued there should be a clear distinction between the role of companies and the role of the government in society. The main duty of directors and managers should be to satisfy the expectations of *shareholders*, through an efficient governance of their firm which solely coincides with financial performance and profit. Social issues are the domain of government and policy makers, as managers have no expertise in this field and their actions would only be detrimental to both the business and the community (Friedman, 1984). Friedman was, as Smith before him, a firm believer in the *autoregulation* of the market which will always lead to the greatest efficiency in the use of resources and the best possible economic and social outcome. Therefore, any interference with this natural balance should be avoided at all costs.

If Smith and Friedman where completely accurate in their analysis of the economic environment, today we would not be familiar with the concept of Corporate Social Responsibility. There are three main issues that have emerged in recent times which render their arguments obsolete, if not naïve:

1. *Sustainability:* the environment has been worn out by decades of abuse and consumption. The earth and its ecosystems have a limited capacity to provide resources and to regenerate

themselves. At the time of Smith this was not an issue, in Friedman's this was starting to be one.

2. *Corporate Governance*: In Adam's Smith time the owners and managers were either the same person or they were part of the same community, allowing a system of checks and balances that guaranteed the alignment between the interests of the enterprise and its stakeholders. Nowadays, most frequently, we see a separation between ownership and management which have different and conflicting objectives: shareholders pursue dividends and managers prioritize their career, resulting in a lack of interest in long term performance.
3. *Globalization*: this phenomenon can be seen also from the perspective of *de-territorialization*, a progressive loss of links and connection between the business and the territory it was founded in, leading to loss of social and political ties with local communities. Moreover, companies can easily escape the legal control of national governments by relocating their headquarters in countries that have a more lenient legislation. It is hard for national governments to hold multinational enterprises accountable for their actions and subject them the control and judgement of the public eye.

In this context, the concept of sustainability becomes an imperative in the establishment of future social and economic practices. From this perspective, sustainable development - defined as a way of meeting the needs of the present without compromising the future generation’s ability to fulfill their own needs (World Commission on Environment and Development, 1987) - becomes the lens through which institutions and companies must evaluate their plans, goals and objectives in the long term.

From a corporate standpoint, *sustainable development* refers to three main areas: economics, ecology, and social justice. Economic sustainability refers to the ability of a company to generate profits in the long run and, subsequently, to the financial sustainability of its operations. Ecologic sustainability concerns the overall impact that a corporation has on the natural environment in which it operates. In order to be defined as environmentally sustainable, a business should go beyond avoiding harmful externalities by proactively contributing to environmental preservation. Lastly, as far as social justice is concerned, a corporation is sustainable if it protects human rights and actively contributes to creating a better, more inclusive society.

These three macro areas are enshrined within the Triple Bottom Line framework theorized by John Elkington in 1994 (University of Wisconsin, n.d). This model proposes that companies should strive to adopt a broader approach in measuring success, by evaluating their impact on the environment and the community, as well as their financial goals.

This can be explained, for example, by the fact that corporations are becoming increasingly powerful in the globalized world, exploiting plenty of resources, both social and natural. As a logical consequence firms should be morally obligated to invest back, by engaging in a structured and strategic ensemble of CSR practices, with the objective of furthering the well-being of their communities and the environment.

In this expanded role companies are becoming *social institutions* and as such they come in touch with an entirely new set of stakeholders and their demands. As mentioned before, the growing concern about topics such as global warming and the human rights of workers, has given the opportunity to organizations such as NGOs, consumer associations and environmental movements, to denounce the unethical practices of a variety of enterprises, exposing their wrong doings to the media and the public. In this day and age, news travel fast and companies need to protect themselves from the outbreak of scandals, which can have a disastrous effect on brand reputation.

Integrating this comprehensive approach to stakeholder management is the concept of *corporate accountability*, the duty to explain, justify, or report about the firms' business activities. This originates from the idea that corporations are given a license-to-operate by society and for this reason, they should be accountable for what they do. In this setting, creating awareness is as important as conducting activities in a sustainable way and companies need to identify an effective way of communicating their CSR efforts.

Within this frame of reference, *sustainability reporting* or *ESG disclosure* is the main tool through which corporations can be transparent about the impact they have on a variety of environmental and social issues. As a consequence, much like the balance sheet, a sustainability report can be a way for stakeholders and shareholders to form a truthful opinion about the company and make informed economic decisions. The existence of several sustainability reporting frameworks, like for example the GRI or SASB, allows for a fair and critical judgement of CSR performance, with the benefit of comparability across industries and markets. The main contribution of sustainability reporting is that it helps to intensify the relationships that an enterprise has with its stakeholders. In addition, it can be seen as a tool to clarify corporate strategy, from both a financial and CSR perspective; as well as a way to mitigate the informational asymmetry between the top executives on one side and shareholders and stakeholders on the other.

Additionally, by providing a clear view of all their practices, firms engaged in ESG initiatives can benefit from attracting investors and lenders who are particularly keen on companies that appear to have a sustainable future and a low risk profile (Chen & Xie, 2022) as well as building customer loyalty with socially conscious consumers who place increasing value in choosing brands which align with their own beliefs when it comes to social and environmental issues (Accenture, 2021).

2.2 The European and Italian context

Corporate Social Responsibility has a long-standing tradition in the European continent, where the relationship between business and society is certainly shaped by the vast and distinguishable heterogeneity of cultural and political landscapes of the region. In this diverse environment EU institutions have a key role in defining common guidelines and objectives in terms of socially and environmentally sustainable economic development.

Over the years the EU has introduced a combination of voluntary and mandatory regulations in order to encourage and support companies to conduct their business in a responsible way. This effort can be traced back to the publishing of a Green Paper, an official memorandum redacted by the European Commission to stimulate discussion on a given topic, titled "Promoting a European Framework for Corporate Social Responsibility" in 2001. The memorandum focused on general issues, such as the dichotomy between internal CSR issues like HR management and employee wellbeing and external issues such as relations with local communities, business partners, consumers and the environment. The proposed long-term vision was one of a holistic approach towards economic sustainability, focusing on strengthening the partnerships between all stakeholders.

Another important milestone was reached in 2003 when directive 2003/51/EC suggested for the first time that, for the purpose of greater transparency, firms should go beyond reporting strictly financial information and should disclose an accurate analysis of the environmental and social aspects of their business activities.

In 2013, with directive 2013/34/EU the European Counsel confirmed the importance of disclosing nonfinancial information in order to provide a well-rounded and reliable picture of the companies' management and approach towards the environmental and social risks it faced while conducting its business activities.

This gradual process eventually led to a major turning point in 2014, when the European Parliament approved Directive 2014/95, also known as the Non-financial Reporting Directive (NFRD). The NFRD essentially serves as the main rulebook for the disclosure of nonfinancial and diversity information by European companies. More importantly it places an obligation on companies that have more than 500 employees to comply to these standards. Nowadays more than 11.700 firms, including listed companies, banks, insurance companies and public-interest entities fall under the scope of the NFRD. The European Commission still conceded ample autonomy in regard to how firms could structure their reports, in fact they can choose to use international, European or national frameworks depending on their own characteristics and business environment.

Although this was a very important step, the NFRD had some important limitations. First of all, the lack of homogenous reporting frameworks and standards made it hard for stakeholders to compare information between companies and across industries. Moreover, it was difficult to assess the materiality and the relevance of what was included in sustainability reports, as often the figures and facts that it contained were not verified by an independent entity. Finally, the dimensional criteria which established what companies fell under the obligation of redacting a nonfinancial report were not excessively stringent, therefore the pool of companies required to comply was relatively small.

The European Commission decided to address these concerns, in January 2023, by adopting directive 2022/2464/EU also known as Corporate Sustainability Reporting Directive which amends the NFRD. This new directive introduces some relevant changes in comparison with its predecessor. The dimensional threshold is lowered from 500 to 250 employees, additionally all companies listed on regulated markets will be obliged to comply with the directive, regardless of their staff count. This will widen the perimeter of action of the directive to 50.000 firms.

The directive introduces more detailed reporting requirements according to a common set of standards which will be developed by the European Financial Reporting Advisory Group, moreover, there will be dedicated standards to fit the needs of SMEs listed on the stock exchange markets. The information contained in the report will have to be subject to a process of audit and assurance by a third party, much like those required for the financial statements.

The CSRD brings forward the concept of double materiality, meaning that a company should report simultaneously on sustainability matters that are: financially material in influencing the business value or material in terms of how they affect society and the environment. With this in mind, the change in CSRD's perspective leads to greater alignment between these two areas of reporting in multiple respects. In fact, the directive eliminates the possibility-existing in the previous legislation-of publishing sustainability information in a separate report from the management report. Sustainability reporting, therefore, becomes an integral part of the annual financial report. In addition, the processes for producing ESG and financial reporting are aligned and harmonized.

The effort shown by the European institution in enhancing nonfinancial reporting and promoting CSR activities is part of a larger ensemble of initiatives that have social and environmental sustainability at their core. Continuing on this path, the signing of the Paris Agreement during the COP 21 conference in 2015, was a clear signal that the European Union would prioritize topics such as climate change and sustainability in the following years.

The Paris Agreement is a legally binding international treaty on climate change, it was signed by 196 parties and its goal is to put a stop on global warming. To reach these objectives the Agreement proposes a plan for the progressive limitation and reduction in greenhouse gas emissions, through a process which will require significant social and economic transformation. The end goal is to reach a climate neutral world by 2050, while keeping the global temperature increase below 2°C.

To strengthen its commitment, the European Union has recently put in place two major plans: The EU Green Deal and Next Generation EU. The European Green Deal is a set of policies approved in 2020 which have the aim of providing a structured roadmap for reducing greenhouse emission by at least 55% by 2030. It involves initiatives across several sectors and industries such as energy, transportation, agriculture as well as scientific research and financial development. To support European countries in this process and to help them overcome the economic hardships brought on by the Covid-19 pandemic the Commission decided to adopt a € 750 billion investment plan, deemed the "NextGenerationEU".

Within the European context, Italy remains one of the most relevant and competitive economies in the world in terms of raw numbers: with a GDP of 1.651.595 billion euros (ANSA, 2021) Italy ranked 8th largest economy on the globe.

Despite these numbers, a deeper dive into data reveals a different truth, one that paints Italy as a "frail giant". In the last 20 years the Italian economy has experienced a stagnation that has no equal amongst other advanced economies. Comparing the evolution of Italian GDP from 2000 to 2019 (pre Covid) with those of countries such as France, Spain, Great Britain, and Germany it's alarmingly clear how Italy is the only country with zero-growth, meaning that as of today its production capacity actually shrunk over the years. A similar argument can be made for GDP per capita, with Italy recording a negative 1.9% trend from 2000 to 2019, compared to a positive 24.4% increase of the UE 28 (Cerved, 2021).

The report "*Rapporto Italia Sostenibile 2021"* assesses the current state of sustainability practices on a national level with a data driven approach, focusing on identifying the areas of strength as well as those of weakness, in comparison with other European countries.

The landscape that emerges from this overview is a very nuanced and contradictory one. For example, Italy lists among the countries that have been the most successful in reducing the amount of greenhouse gas emissions per capita as a result of a strong focus on renewable energies which shows a dedicated commitment on the environmental sustainability side.

On the other hand, Italy has an extremely high old-age dependency ratio, which puts a strain on the labor market as well on the welfare system which has manifested through a high rate of youth unemployment and a decline in the quality of social security benefits, respectively. These are clear signs of a social structure that is not supported by adequate social policies and practices and as such, is not sustainable long-term.

It is important to assess what will be the role of sustainability in the Italian rebuilding process, in order to better understand the context within which my investigation will take place as well as its relevance among other foundational topics which need to be addressed in the bigger scheme of things.

From a regulatory framework standpoint, the main point of reference in Italy for sustainability reporting is the "Decreto Legislativo 30 dicembre 2016, n.254", an implementation of the Directive 2014/95/EU, approved by the European Parliament on October 22nd, 2014.

The objective of the policy makers was to provide the public with integrated and complementary information with respect to what is reported in the financial statements, with the goal of increasing transparency and awareness about CSR activities and performance in order to provide stakeholders with better tools in order to make informed decisions.

The decree also outlines general guidelines regarding the contents and the issues to be addressed. The information to be provided must be related only to the topics that are relevant given the characteristics of the firm's core activities. Companies, in order to identify the issues which are considered relevant in relation to the business profile, strategy, context and stakeholder expectations are required to carry out a materiality analysis.

The report must also contain all the information necessary to understand the business model in terms of organization, the policies practiced by the company, including due diligence, non-financial results and related key performance indicators; the main risks, generated or suffered, related to the issues arising from the activities of the company, its products, services or business relationships, including supply chains and subcontracting where they are considered relevant for the purpose of the declaration. The attention to the supply chain is an interesting element of the decree as it indirectly widens the scope of the assessment thus incentivizing supplying enterprises, which are often SMEs to adopt higher environmental and social standards.

In addition to passing the law, Italian governments have been increasingly supportive towards companies that want to invest in CSR activities. On the 26th of May 2020 the parliament approved a decree which guaranteed a 10% tax benefit for firms which invest in projects that fall under the concept of "Transizione Ecologica", these may be: design and production of environmentally sustainable products, investments in remanufacturing and recycling projects, implementing a circular economy setup to the value chain or a "product-as-a-service" business model. In 2021 the tax bonus was increased to 15% to boost investments after the slump caused by the Covid-19 pandemic, signaling a strong commitment towards supporting companies in this innovation process.

As I stated in the previous chapter, one of the trending topics at the moment is Socially Responsible Investment (SRI). Even from a statistical point of view, in Italy, the assets invested in sustainable financial products are going through a phase of considerable growth. The amount of assets invested in sustainable funds have increased by 80% between 2015 and 2020 with the trend continuing throughout 2021. It is estimated that almost 30% of total assets invested on the market are placed in funds classified as pertaining to articles 8 or 9 of the SFRD, 40% of these are managed directly by Italian groups. (Forum per la finanza Sostenibile).

In this context, on the 18th of October 2021 Borsa Italiana launched its first blue-chip index, MIBESG, designed to identify the best listed companies in terms of their ESG score. The index responds to the growing demand for sustainable investment tools and information by participants of financial markets. It is a key step in moving towards a more sustainable economy and it also signals a strong commitment by the strongest and most recognizable Italian brands and firms to increase their involvement in CSR practices and nonfinancial disclosure.

From what has been said so far, it is easy to gather why CSR and ESG disclosure are nowadays a critical aspect of every firm's business strategy. In a fast-changing world, corporations are cast in very challenging role in which they have to balance their financial objectives with their ethical and social obligations towards society.

ESG disclosure is effectively the scale through which companies can aspire to reach this balance, but how does investing (or not, for that matter) in sustainable practices and disclosing them to the stakeholders affect the financial performance of a company?

2.3 Relationship between ESG disclosure and financial performance

Proponents of a positive correlation ground their arguments mainly onto two theories: the *legitimacy theory* and the *stakeholder theory*. Both of these theories fall under the larger concept of Political Economy which Gray (1996) defines as "the social, political and economic framework within which human life takes place" implying that within modern times the economic and politic perspective are inseparable, expressing the new role of businesses in society.

Suchman defines *legitimacy* as a "generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions". Essentially legitimacy theory explains the motives for organizations when engaging in CSR activities and the disclosure of information regarding the latter, as it is a way towards fulfilling their social contract and assuring the recognition of their objectives and their long-term survival (Suchman, 1995). Legitimacy is important for organizations, as the boundaries set by social rules highlight the importance of reflecting on and analyzing the impact of the business on the environment and the community.

Legitimacy theory and *stakeholder theory* are intertwined, as according to the latter a company is responsible for its actions towards a number of stakeholders, therefore having an opportunity to influence the society within which it operates. Freeman (1984) defines a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives". Stakeholders can have a decisive impact on the performance of a company by providing or withdrawing resources, thus it is essential to ensure their continuous support (Mahadeo et al., 2011). According to stakeholder theory, if a corporation manages its relationships with stakeholders properly the firm can improve its financial performance in the long-term (Donaldson & Preston, 1995). This implies that sustainable practices can be motivated by self-interest, as a strategy to increase corporate value and shareholder profit. For example, with stronger sustainability performance a firm may gather more financial resources (Cochran & Wood, 1984) as well as attract more skilled employees (Turban & Greening, 1997). For these reasons, managing stakeholder relations effectively could result in competitive advantage over other firms operating within the same industry (Barnett & Salomon, 2006; Porter & van der Linde, 1995).

More in detail, those who support the idea of a causal relationship between high levels of sustainability performance and higher financial performance, find theoretical support in the social impact hypothesis and the good management theory, both derived from stakeholder theory (Orlitzky et al., 2003).

Social impact hypothesis theory highlights the importance of fulfilling more implicit stakeholder needs. More specifically, failing to properly satisfy less explicit demands of stakeholders might result in market shocks caused for example by product liabilities or lawsuits, which may potentially affect the reputation of the corporation. This may in turn result in negative impact of its financial performance and affect the value of the firm (Cornell & Shapiro, 1987).

Moreover, there is evidence that the costs of sustainability activities are minimal in comparison to the potential benefits that are related with more ethical firm behavior (Salzmann et al., 2005). Hence, if the firm addresses properly various stakeholders' needs, it can be seen as a key step in reaching its economic goals.

The conflict between sustainability and economic purposes exists only in the short term. The cost of CSR practices in terms of implementation expenses and missed business opportunities is outweighed by the long-term benefits of finding the right balance between financial goals and social obligations (Sciarelli, 2007). These benefits can be explained as follows: a firm that fosters a moral culture is believed to be able to curb opportunistic behavior among its management as well as gaining a positive reputation and relationship with its external and internal stakeholders (Jones, 1995). Therefore, resulting in a reduction of agency and transaction costs. Consequently, stakeholder theory implies that profitability and sustainability are not mutually exclusive, but rather that a firm's dedication towards promoting and integrating ethical behavior can prove to be a competitive advantage (Jones, 1995).

Taking social responsibility and complying to moral obligations enhances corporate reputation in a significant way and it contributes to creating a positive image in the eyes of stakeholders, both internal and external. First of all, being sustainable allows corporations to keep their social license to operate. Obtaining public consensus is crucial for corporations as it represents the foundation for their long-term survival. If an organization is not legitimized by the stakeholders or its activities are regarded as harmful towards the environment or society, then it will hardly generate profits, compromising its financial soundness (Kiran & Sharma, 2011).

Moreover, it has been theorized that firms that actually strive towards taking serious action to implement sustainable practices will achieve greater reputational benefits in the long run compared to those who only engage in symbolic and opportunistic initiatives (Clarkson et al., 2011). This phenomenon known as "greenwashing" can have a positive impact on the company's reputation in the short term, but if it is not followed up by a strategic CSR plan the firm will suffer the damage of the legitimacy gap, which is the difference between an organization’s actions and the stakeholders’ perception of the latter. If legitimacy gap is not addressed steadily, it can lead to poor financial performance and therefore may endanger the very existence of the company (Leng Chu et al., 2012).

Additionally, notorious scandals involving multinationals such as Nike, Shell, Enron or British Petroleum have contributed to raise in public awareness and, subsequently, stakeholders have upped their expectations for how corporations behave in terms of their ethical conduct. As a consequence, companies have become more proactive towards strengthening the sustainability of their business’ activities, preventing the reputational damage that comes with such scandals (Culcasi et al., 2010).

In this scenario, companies are encouraged to engage more actively and with a broader range of stakeholders in comparison with the past, comprehending and addressing their demands. This process requires a new understanding of the role of the manager, as a matter of fact the stakeholder theory has been developed as an alternative approach to the agency *theory*. According to the agency theory, managers have the sole responsibility of protecting the interests of the corporate shareholders, hence ensuring that the company’s business generates profits throughout time. On the contrary, the stakeholder theory has a holistic view of the managers’ role. Indeed, managers should primarily act as an intermediary between the company (and its shareholders) and its numerous stakeholders. Therefore, the fundamental objective of corporate management is not merely to ensure the company’s profitability, but it is rather to generate value for society. To a certain extent, the stakeholder theory introduces a practical approach to CSR. The corporate strategy should be defined both by mitigating potential conflicts of interest between stakeholder groups and aiming to increase shared value.

This view intersects and integrates with the concept of *Positive Accounting Theory* (PAT), derived from the broader notion of agency theory, which “is concerned with explaining accounting practice. It is designed to explain and predict which firms will, and which firms will not, use a particular accounting method, but says nothing as to which method a firm should use” (Watts & Zimmerman, 1978) mainly “PAT is concerned with predicting such actions as the choices of accounting policies by firm managers and how managers will respond to proposed new accounting standards” (Scott, 2009).

Moving from the assumption that all individuals are driven in their decisions by self-interest and opportunism towards increasing their personal wealth, PAT analyses the relationship between those individuals and the organization they provide resources to and explains how accounting mediates this relationship.

PAT influences a company to construct itself and coordinate its assets and activities in order to survive and be profitable in their economic environment, which can present with different degrees of challenges and difficulties, for example competition within the industry or external factors such as legal and technological requirements as well as the institutional environment (Scott, 2009).

Watts and Zimmerman (1990) formulate three hypotheses which underline the PAT theory: bonus plan hypothesis, debt covenant hypothesis, and political cost hypothesis. The first one states that if managers are compensated, fully or partly, according to reported income they will use accounting approaches that could increase income and therefore their bonuses. This can imply that, if they perceive it would better profits, managers could decide to voluntarily disclose ESG related information and reports.

The second hypothesis claims that if the debt ratio of the company is higher, the manager will be under greater pressure to use accounting approaches to increase the reported income. (Scott, 2009). If CSR has a positive effect on the company's financial performance, it is convenient for the manager to use voluntary disclosure of CSR information in order to ease the company's debt constraints.

The last hypothesis indicates that managers of large corporations will use accounting techniques that defer reported earnings from current to future periods, in order to evade public and political scrutiny and steer away from government regulations, which usually put more restraints on higher earning firms (Scott, 2009). According to this hypothesis the managers will prefer to not disclose ESG information. Overall, the PAT explains ESG disclosure by self-interest motives of company managers.

The relationship between corporate sustainability performance and financial performance has been analyzed empirically in several previous studies. The Table 2.1 below summarizes the most significant studies which investigated this subject and found a positive relationship, which means that a higher level of ESG disclosure corresponds to a higher financial performance of companies.

Table 2.1 – Summary of studies which found a positive relationship between ESG disclosure and financial performance.

Author	Article Title	Data Sample	Time Frame	Metodology	Findings
Pulino et al. (2022)	Does ESG Disclosure Influence Firm Performance?	Largest Italian listed companies	2011-2020	*Panel Regression Analysis*	Positive relationship between ESG Disclosure and EBIT

Bruna et al. (2022)	Investigating the marginal impact of ESG results on corporate financial performance.	350 European Listed Companies	2014-2019	*Panel regression analysis*	Evidence for a positive and significant impact of ESG performance on financial performance
Chen and Xie (2022)	ESG disclosure and financial performance: Moderating role of ESG investors.	Chinese listed companies	2000-2022	*Regression Analysis*	Positive effect of ESG disclosure on corporate financial performance
Giannopoulos et al. (2022)	The ESG Disclosure and the Financial Performance of Norwegian Listed Firms.	200 firm/year observations	2010-2019	*Panel data regression*	Findings suggest a strong significant relationship between ESG initiatives and financial performance
Chouaibi et al. (2021)	Exploring the Moderating Role of Social and Ethical Practices in the Relationship between Environmental Disclosure and Financial Performance: Evidence from ESG Companies.	523 firms from Western Europe and Canada	2005-2019	*Linear Regression*	Positive and significant relationship between environmental disclosure and financial performance
Ahmad et al. (2021)	Revisiting the impact of ESG on financial performance of FTSE350 UK firms: Static and dynamic panel data analysis.	351 UK firms listed on the FTSE350	2002-2018	*Static and dynamic data panels*	Results confirm that high ESG firms show high financial performance as compared to low ESG firms.
Chouaibi et al. (2022)	ESG and corporate financial performance: the mediating role of green innovation: UK common law versus Germany civil law.	115 UK and 90 Germany companies selected from the ESG index	2005-2019	*Linear Regression*	High ESG perfromance increases firm value.
Lueg and Pasheva (2021)	Corporate sustainability in the Nordic countries – The curvilinear effect on shareholder returns.	118 firms from Northern Europe	2007 - 2014	*Linear Regression*	Positive relationship between Corporate Sustainability and Shareholder Returns
Batae et al. (2021)	The relationship between environmental, social, and financial performance in the banking sector: A European study.	39 European banks.	2010-2019	*Econometric model*	Positive relationship between emission reductions and financial performance.
Wang and Sarkis (2017)	Corporate social responsibility governance, outcomes, and financial Performance.	1980 firm year observations from 500 Green Companies USA	2009-2013	*Linear Regression*	CSR outcomes play an important role in influencing companies' financial performance
Velte (2017)	Does ESG performance have an impact on financial performance? Evidence from Germany.	Companies listed on the German DAX30, TecDAX, MDAX	2010-2014	Regression Model	ESG performance has a positive impact on ROA.
Rodriguez-Fernandez (2016)	Social responsibility and financial performance: The role of good corporate governance.	121 firms listed on the Madrid Stock Exchange	2009	*Regression Model*	Demonstration of positive relationships in both directions.
Reverte et al. (2015)	The influence of corporate social responsibility practices on organizational performance: evidence from Eco-Responsible Spanish firms.	133 Spanish firms.	2014	*Partial Least Square mode.*	Positive and significant direct effects of corporate social responsibility on organizational performance
Charlo et al. (2013)	Sustainable Development and Corporate Financial Performance.	87 Spanish Firms	2008	Discriminant Analysis	Socially responsible corporations obtain higher profits.

In order to translate the corporate sustainability plans and strategies adopted by the companies included in the studies summarized in the table above into a measurable outcome, most scholars utilize ESG scores. As defined previously these scores are calculated by independent rating agencies which consider the performance of companies within each one of the three pillars of corporate sustainability: Environmental, Social and Governance.

There is evidence that ESG disclosure and each of its three pillars positively affect the financial performance of a firm, from both perspectives of capital invested in the company as well as the operating result achieved through business activities, suggesting that stakeholders appreciate and recognize the value of CSR strategy and ESG disclosure promoted by the firm, generating, as direct result a higher level of revenue (Pulino et al., 2022).

In the European context, several empirical studies have proposed a positive relationship between ESG disclosure and financial performance even in different settings. Lueg and Pasheva (2021) who investigated a sample of Scandinavian firms listed on stock exchange markets, confirm that ESG disclosure reduces information asymmetry between management and shareholders directly leading to better market returns. This was especially true for companies that chose to report on all three sustainability pillars holistically.

Chouaibi et al. (2021), who analyzed the performance of companies from the United Kingdom, France, Germany and Spain suggest that firms which exhibit high levels of social and ethical practices are able to enhance their financial value through sustainability reporting. They found that the benefits of ESG disclosure is directly and positively linked to the depth and the quality of the nonfinancial reports, signaling that only excellent information which provides a clear view of the governance strategy will materialize the aforementioned benefits. The findings imply that information disclosure can have a key role in legitimizing business activities through the improvement of corporate image as well as an in steering the management decision making process towards more ethical behavior.

Furthermore, there are studies suggesting a more nuanced, nonlinear, relationship between corporate sustainability and financial performance. Barnett and Salomon (2012) proposed that the impact of sustainability practices on economic performance depends on how well firms are able to capitalize on their social responsibility efforts. They base this theory upon the results of an empirical study carried out on a sample of U.S. firms, which showed a positive relationship for companies with low and high sustainability scores and a negative relationship for moderate sustainability performers. They defined this phenomenon as a U-shaped relationship. Thus, CSR might be more profitable for some organizations than for others (Barnett & Salomon, 2012).

Finally, some scholars have also suggested that the relationship could be interpreted as a virtuous cycle (Waddock & Graves, 1997). As they were investigating the relationship between sustainability and financial performance, Waddock & Graves (1997) discovered that significant and positive results were found in both directions of the relationship. Meaning that when sustainability performance was set as the dependent variable of financial performance, there was evidence of a positive relationship, and vice versa. This dynamic is explained by the fact that good financial performance creates possibilities for investments in activities with a long-term strategic impact whereas at the same time, increased sustainability activities improve financial performance. In conclusion, it is possible that if a positive relationship is established the effects may work in both directions.

According to the empirical studies conducted, it is expected that ESG disclosure has a positive effect on financial performance. Following the example of previous studies, we are also going to utilize an ESG score as a measure of CSR performance and therefore, building on the theoretical frameworks and the existing literature we formulate our first and main hypothesis:

H1: there is a positive and statistically significant relationship between the total ESG score of a company and its financial results.

Additionally, we form a second set of hypotheses in order to further investigate the separate effects of each of the three pillars on financial performance.

2.4 Relationship between Environmental and Financial performance

Environmental behavior is typically separated from social behavior because of its unique perspective: it doesn't focus on anthropocentric matters but rather on topics related to sustainability and ecology (Shrivastava, 1995).

Organizations can reach competitive advantage by implementing a variety of environmental related CSR governance mechanisms. For example, an organization could improve its overall performance by adopting governance policies and regulations that range from strategic practices such as including environmental experts on boards or addressing operational issues such as integrating environmental accounting and management systems or promoting green supply chain activities (Sarkis, 2009; Lewis et al., 2014)

Several mechanisms can explain how environmental performance translates into financial performance: firstly, focusing on environmental themes pushes firms to scrutinize how a sustainability perspective might improve their operations and innovation agenda (Maletic et al., 2015). Improvements in visible objects such as products, services, and their marketing led to positive stakeholder reactions such as increased customers satisfaction and loyalty, enhanced production performance, cost reduction and engagement of new potential clients (Chouaibi et al., 2021)

Moreover, when a firm engages in sustainable activities at the same time it increases the amount of information that it discloses. Consequentially, shareholders can learn more about the substance of a company’s practices and thereby build knowledge and trust in the organization (Girón et al., 2021). In this context the recent evolution of contemporary reporting guidelines and principles prioritize shareholders as their recipients, providing further opportunities for transparency and information.

Finally, information disclosure improves accountability toward those stakeholders that have the means to affect a firm’s financial performance. As a firm discloses more information, external stakeholders improve their understanding of the firm’s operations and thereby enhance the legitimacy of the company, this in turn builds external support for a firm and increases its opportunities to perform well: for instance, it enhances an organizations image as a proactive corporate citizen as it signals serious commitment towards sustainability and the wellbeing of the community thereby protecting itself from litigations, boycotts, financial penalties and other harmful outcomes that may arise from a negative event related to the organizations activities and practices (Christensen et al., 2021).

Several empirical studies have shown a positive correlation between environmental practice disclosure and financial performance. Pulino et al. (2022) found that the Environmental Score was positively correlated with EBIT, in the context of Italian firms listed in the stock market. They suggested that the main driver for this result was customer relationship, as EBIT is a sales-driven metric. Customers are more willing to buy products or services when they recognize and observe the presence of sustainable values, as opposed to firms that do not embrace them. A greater attention to the manufacturing process or an increased focus on recycling and not wasting environmental resources can translate into increased sales, as consumers value these factors and will, therefore, pay a premium price, resulting in a higher EBIT.

Analyzing the performance of 39 European banks, Batae et al. (2021) concluded that the environmental pillar of the ESG score was positively related to accounting-based metrics such as ROA and ROE as well as stock market returns. This correlation was mediated in particular by the reduction of emissions and waste. Through initiatives such as recycling, e-waste reduction, environmental restoration, partnerships, expenditures, and environmental philanthropy these financial institutions were able to mitigate environmental risks and generate goodwill and reputation among its stakeholders.

According to the empirical studies conducted, it is expected that the environmental pillar of the ESG score has a positive effect on financial performance. These considerations lead us to state our second hypothesis:

H2: There is a statistically significant and positive relationship between the environmental score or performance of a firm and its financial performance.

2.5 Relationship between Social and Financial performance

Socially responsible behavior focuses more on anthropocentric social issues that range from poor working conditions, employee rights, fair labor practices and social inequities (Wang & Sarkis, 2017).

From an internal point of view, traditional social outcome measures can include initiatives regarding the health and safety of employees, promoting diversity among the workforce as well as turnover percentages. Equally important are external social outcomes, which can include important corporate initiatives such as philanthropic activities and community support activities (Labusagne & Brent, 2008).

Starting from within the organization, stable and fair relationships between management and employees will lead to higher personnel satisfaction and loyalty (Birindelli et al., 2015). Employees play a crucial role in the permeation of CSR practices within the company and in their relations with various stakeholders such as clients or the public. While many employment guidelines are regulated by local laws, there are some elements that can be viewed as beyond mere compliance to law and are thus part of CSR. These aspects refer to diversity, equal opportunities, flexible job design, health and safety, training, and career development (Perrini et al., 2011). Within the company, CSR-oriented values find an explicit structure in codes, rules, and procedures and an implicit manifestation in the ethical climate and organizational profile. Rules, policies, and procedures are mandatory, while implicit manifestations are based on the principles and the code of conduct of those who work for the firm. If employee participation in CSR programs is voluntary, it leads to the development of an ethical climate (Perrini et al., 2011).

Similarly, good management theory proposes that overall company performance will improve when the needs of various stakeholders are addressed (Waddock & Graves, 1997). For instance, a firm that seeks to form positive relations with employees and a construct a good working environment, can achieve it by guaranteeing benefits and promoting diversity for example by including minorities and striving for gender equality. Such initiatives might establish “morale, productivity, and satisfaction” among the personnel and thus improve productivity (Waddock & Graves, 1997).

Matten and Moon (2008) theorized an implicit-explicit framework of CSR. Implicit CSR applies to companies that integrate sustainable practices in corporate norms and values, thus, “walk the talk” in order to pursue greater good for the broader society. Alternatively, explicit CSR refers to companies that only develop symbolic CSR governance policies and regulations that signal to the public that the firm is engaging in CSR activities. However, these explicit symbolic activities rarely generate beneficial outcomes. In agreement with Matten and Moon (2008)’s framework, we define explicit CSR as a corporate governance model that presents CSR initiatives to the public but is not performing them to an acceptable level, as “window-dressing” social activities, which cause a legitimacy gap.

From an empirical perspective, a number of studies have shown that the social pillar score has an influence on financial performance. Pulino et al. (2022) found that the Social Score was positively and significantly correlated with both EBIT and ROA. Wand and Sarkis (2017), who analyzed a sample of the top 500 green firms in the United States from 2009 through 2013, affirm that social outcomes where positively related to both ROA and Tobin’s Q.

According to the empirical studies conducted, it is expected that the social pillar of the ESG score has a positive effect on financial performance. These considerations lead us to state our third hypothesis:

H3: There is a statistically significant and positive relationship between the social score or performance of a firm and its financial performance.

2.6 Relationship between Governance and Financial performance

Corporate Governance can be described as the system through which an organization makes and implements decisions to pursue its goals, the governance of the organization is the crucial factor in enabling the enterprise to take responsibility for the impacts of its decisions and to integrate social responsibility throughout the organization and its relationships. A company aspiring to be socially responsible should have a governance system that can provide it with an overview and put the principles of social responsibility into practice. Often firms tend to focus their efforts and resources on reaping the opportunities steaming from confronting environmental and social issues, forgetting that a strong governance structure is essential for maximizing the potential in the other two areas, thus, good governance practices lead to better environmental and social performance (Haque, 2017).

As discussed above, companies implement CSR governance for various purposes. From the resource-based view, implementing CSR governance mechanisms can help build capabilities and resources to obtain competitive advantage (Torugsa et al., 2013). However, CSR governance implementation also requires firms to consume a generous number of organizational resources that some companies may be unable to afford or unwilling to invest in.

One of the main components of the corporate governance system is the board of directors, which serves as a link between the management, the shareholders and the stakeholders. The board can also play an important role in defining and pursuing effective CSR strategies and in the process leading to their transparency, mainly through ESG disclosure and in maintaining a consistent engagement strategy with the stakeholders. Empirical results have shown that the structure and composition of the BD, improve the quality of disclosure of organizations (Michelon & Parbonetti, 2012).

Kim et al. (2012) summarize theoretical models in the literature and argue that there are two types of firms. The first type of firm is committed to environmentally and socially ethical behavior and invests significant resources to implement an effective CSR governance strategy for the greater social good. As a consequence, these firms are likely to generate beneficial and positive outcomes on CSR-related issues, and therefore are able to achieve enhanced financial results and greater social legitimacy. On the other hand, defined as “greenwashing” firms, are those who engage in opportunistic behavior, trying to improve corporate image while not actively integrating and investing in environmentally and socially responsible governance mechanisms. These “greenwashing” firms will have a legitimacy gap because of their inferior CSR outcomes which will not result in significant financial payoffs in the short and long-term.

Lueg and Pasheva (2021), conducted an empirical study focusing on the dynamics between corporate sustainability and financial performance in the context of Scandinavian companies listed on the respective stock markets. The results suggested that of all the three pillars, only the governance one was positively and significantly correlated with financial performance, measured in terms of total shareholder returns. The positive relation between governance outcomes and financial performance was confirmed also by the studies conducted by Pulino et al. (2022) and Wang and Sarkis (2017).

According to the empirical studies conducted, it is expected that the governance pillar of the ESG score has a positive effect on financial performance. These considerations lead us to state our fourth hypothesis:

H4: There is a statistically significant and positive relationship between the social score or performance of a firm and its financial performance.

3. Methodology

3.1 Database and sample

The objective of this dissertation is to explore the relationship between the ESG, in terms of disclosure and practices, and the financial performance of Italian companies listed on the Borsa Italiana between 2018 and 2020.

Starting from all firms which were active in this time frame, we excluded companies that were subject to mergers or acquisitions as well as those that ceased their operations. The initial sample consisted of 318 observations while the final study is based on a balanced panel data which includes 93 enterprises that had both CSR and financial information available across that three-year period, thus the final sample consists of 279 usable firm-year observations. Our database utilizes the ESG scores attributed by *Refinitiv*, while the financial indicators are obtained by *Thomson Reuters Datastream*.

Table 3.1 shows the distribution of the observations across various industries. The best represented sector is Manufacturing (SIC Code 20-39), within this group the majority of observations fell in the Industrial and Commercial Machinery category (SIC Code 35), followed by the Food (SIC Code 20), Apparel (SIC Code 23) and Transportation Equipment (SIC Code 37) with 12 observations each. The second most represented sector is Finance, Insurance and Real estate (SIC Code 60-67) with the Depository Institutions (Sic Code 60) subgroup leading the way with 30 observations. Among the less represented industries the more relevant ones are the Transportation, Communication and Energy Sector (SIC Code 40-49) and Services (SIC Code 70-89) with 17% and 9% of total observations respectively.

Table 3.1 – Distribution of observations per industry

SIC Code	Description	Nº Observations	%
10 - 14	Mining	3	1%
15-17	Construction	18	6%
20-39	Manufacturing	93	33%
40-49	Transportation, Gas & Electricity	48	17%
50-51	Wholesale	6	2%
52-59	Retail	15	5%
60-69	Finance, Real Estate	72	26%
70-89	Services	24	9%
Total		279	100%

3.2 Dependent Variable Measurement of financial performance

The dependent variable included in the study is an accounting measure of organizational financial performance: Return on Assets (ROA).

ROA is calculated by dividing a company's net income by its average number of assets. It serves as a measure of efficiency, as it represents how effectively a firm utilizes its assets to generate profit. Examining existent literature this metric has been adopted in previous studies as a measure of financial performance, for example by Wang and Sarkis (2017) who analyzed the relationship between CSR and financial performance in the top 500 Green companies in the United States between 2009 and 2013. In the European context, this index has been employed in the empirical studies conducted by Pulino et al. (2022), Giannopoulos et al. (2022) and Chouaibi et al. (2021).

Table 3.2 – Dependent Variables

Variable	Defintion
ROA	Net Income diveded by Total Assets

3.3 Independent Variable: Measurement of ESG disclosure

An ESG score is "an objective measurement or evaluation of a given company, fund, or security's performance with respect to Environmental, Social, and Governance (ESG) issues" (Miller, 2022). ESG scores are essentially analytical frameworks to help quantify the degree to which organizations are operating in a sustainable measure. These scores are computed by rating agencies, which evaluate publicly available information and corporate sustainability reports, finally comparing the results against other companies in the same industry.

The independent variable used is the ESG Score provided by the Refinitiv Database (ESG), which ranges from 0% (bad) to 100% (good). It was used in studies such as that of Batae et al. (2020), which evaluated the relationship between sustainability performance of 39 European banks and their financial performance. It was also implemented by Tóth et al. (2021) in a study investigating the impact of ESG performance on the financial stability of European financial institutions.

The individual scores of the three dimensions: Environmental (ESG_E), Social (ESG_S) and Governance (ESG_G) will also be included in the study. The scores of the three CSR dimensions were also used in the studies by Lueg and Pasheva (2021), which used the

Bloomberg score in a study aimed at understanding the relationship between CSR and financial performance of firms operating in northern European countries as well as in the study by Wang and Sarkis (2017) analyzing United States' companies included in the "Fortune 500 Green Companies".

The utilization of these metrics in various studies investigating the impact of CSR performance on different aspects of corporate governance, signals that these scores are widely accepted as reliable and credible means of measuring a firm's sustainability performance. Environmental, social and governance performance is used as a key valuation marker for stakeholder as it is seen as an indicator with financial materiality, they constitute the cornerstone of decision making for socially conscious investors and investment funds.

ESG scores are designed to measure companies' CSR performance, commitment and effectiveness transparently and objectively through 10 core indicators covering the three pillars of CSR (Annex A):

- *Environmental dimension (E)*: metrics on resource consumption, Co2 emissions, innovation.

- *Social dimension (S)*: employee wellbeing metrics, human rights, community involvement, product responsibility.

- *Governance Dimension (G)*: management metrics, shareholders, CSR strategy.

The calculation of these scores is based on publicly disclosed data from organizations. The source of the data comes from annual reports, CSR reports, corporate websites, non-governmental organization websites, stock exchange filings and other independent sources.

The data is analyzed through the lenses of the most important metrics for the respective industry sector of the company, integrating and accounting for sector's specific characteristics, and the biases derived from company size and transparency. Thus, the scores are considered to be less biased, since they consider several control variables such as company size, company type, number of employees, among others. Dimensions E and S are scored according to performance relative to the industry sector in which the organization operates, and G according to the country of origin, in order to facilitate comparisons between companies with similar backgrounds.

Refinitiv is internationally recognized as one of the most comprehensive databases worldwide, covering more than 70% of the global market. It has more than 450 different metrics to evaluate the three pillars - environmental, social and governance - at company level. It has been operating in this sector since 2002. Within these 450 metrics, there is a subset of 186 metrics, which are the most comparable and which represent the most materiality to the company's industry sector power in the overall process of evaluating and scoring the company. The underlying metrics are based on considerations of comparability, impact, data availability, and industry relevance, which vary across each industry group.

These metrics relate to the three pillars E (environmental), S (social) and G (governance). After data collection a score is given to each dimension. The score for each dimension of the score (E, S, G) is a relative sum of the weights of the 10 categories mentioned above, which varies from sector to sector for the environmental and social dimensions. For the Governance dimension, the weights remain the same across all sectors. The score for each dimension is normalized into percentages ranging from 0% to 100%. The total score will be the sum of the individual scores of the three dimensions E, S and G (Refinitiv, 2020), also represented in percentages (Annex B). The summary of the dependent variables is shown in Table 3.3.

Table 3.3 – Independent variables

Variable	Definition
Score Total (ESG_D)	Overall score based on the disclosed information from the three environmental, social and governance pillars.
Environmental Score (ESG_E)	Weighted average based on the disclosed environmental information and the resulting scores from the three environmental categories.
Social Score (ESG_S)	Weighted average based on the disclosed social information and the resulting scores from the four social categories.
Governance Score (ESG_G)	Weighted average based on the disclosed governance information and the resulting scores from the three governance categories.

3.4 Control Variables

Following the example of previous studies, we include additional control variables to the model.

According to Waddock and Graves (1997), firm size should be considered because of its potential influence on both corporate sustainability and financial performance. Indeed, empirical research has found that there is a relationship between the size of the firm and sustainability performance as well as to some measurements of financial performance (Orlitzky et al., 2003) and to the sustainability rating of the firm (Ahmad et al., 2021).

Larger firms usually have to abide to a higher number of laws and regulations regarding sustainability reporting and they usually interface themselves with a variety of stakeholders which are likely to exert a higher degree of pressure towards the implementation of CSR disclosure policies. Therefore, it is expected that bigger companies will show more commitment in their efforts in sustainability reporting, not discounting that larger organizations will usually have more resources to invest into the disclosure of relevant CSR information. Existent literature confirms that firm size is an important driver when it comes to the organization's reporting agenda and the extent of the information divulged (Ali et al., 2017).

In order to moderate the potential impact of firm size on both financial and CSR performance we control by implementing the natural logarithm of total assets.

The second control variable adopted is *Leverage* represented as the percentage of total debt on the total of common equity. This is done to control the impact of financial risk on the firm's performance, as a high leverage ratio could indicate higher financial risk and poorer financial performance which in turn could lead to the organization increasing the degree of disclosure to try to mitigate the risk or diminishing the amount of information shared to try to conceal its financial position. The level of debt might have implications on managerial behavior. More specifically, it may constrain managers' opportunity seeking behavior as well as controlling managers into making decisions that are in the best long-term interest of the company (Waddock & Graves, 1997; Barnett & Salomon, 2012).

Finally, two dummy variables are included in the models: *Industry* and *Years*. This is done to in order to control possible impacts that operating in different sectors could have on companies included in the study. There is evidence of companies operating in particularly environmentally sensible industries, such as the chemical and the mining and extraction ones, will have higher CSR ratings (Reverte, 2015).

Table 3.4 – Control Variables

Variable	Definition
Firm Size (SIZE)	Natural logarith of total assets
Leverage (LEV)	Percentage of total debt on the total of common equity
Industry (I)	Industry in which the firm operates, represented by SIC code
Years (Y)	Period in which the observation were collected: from 2018 to 2020

4. Results

4.1 Regression Model

To examine the underlying hypothesized relationship between Corporate Social Responsibility and financial performance, a multivariate regression analysis with fixed effects for years and industries is conducted in SPSS, employing ROA as the dependent variable and the ESG as the independent variable. Furthermore, to test the four components of the total ESG score (environmental, social, governance and CSR strategy) a separate model regresses ROA on each pillar separately, allowing further exploration of the relationship between financial performance and different aspects of sustainability performance.

The following regression models are tested:

(I) $ROAit = \beta 0 + \beta 1\ LEVit + \beta 2\ SIZEit + \beta 3\ ESG\_Dit + \beta 4\ Yit + \beta 5Iit + \varepsilon it$

(II) $ROAit = \beta 0 + \beta 1\ LEVit + \beta 2\ SIZEit + \beta 3\ ESG\_Eit + \beta 4\ Yit + \beta 5Iit + \varepsilon it$

(III) $ROAit = \beta 0 + \beta 1\ LEVit + \beta 2\ SIZEit + \beta 3\ ESG\_Sit + \beta 4\ Yit + \beta 5Iit + \varepsilon it$

(IV) $ROAit = \beta 0 + \beta 1\ LEVit + \beta 2\ SIZEit + \beta 3\ ESG\_Git + \beta 4\ Yit + \beta 5Iit + \varepsilon it$

where β0 is the intersection, β the regression coefficients, i the individual company, t the period and Ɛ the error.

Several pre-tests were performed in order to make the appropriate adjustments to the models. As parametric tests require the data variables to have a normal distribution it was necessary to normalize the variables before carrying out the regressions. First, to eliminate the influence of outliers and extreme values a winsorization of the data was performed. More precisely with a set limit of ten percent for both tails, outlier values were moved to the 10^{th} and 90^{th} percentile respectively.

Secondly, the Durbin-Watson test was performed in order to rule out a possible autocorrelation in the error terms in all the models. The results were all close to the value 2.00 indicating the absence of significant autocorrelation.

Finally, a check was done for multicollinearity between the variables, consisting in a strong correlation between them, since its presence would undermine the viability of the model under study. To ensure that it was not present, the VIF (variance inflation factor) coefficient was calculated for each independent variable. The VIF factor presents values lower than 10 for all variables, as well as tolerance values higher than 0.1, which is shown in Annex C. Thus, the absence of multicollinearity problems for the variables analyzed is verified (Kennedy, 1992).

4.2 Descriptive Statistics

Presented in the table below the descriptive statistics for the independent variables (ESG score and its pillars), the dependent variable (ROA) and the control variables.

Table 4.1 – Descriptive Statistics

	N	Mean	Median	Std Deviation	Percentil 25	Percentil 75	Minimum	Maximum
Indipendent Variables								
ESG_D	279	60,99	61,42	16,09	51,01	73,39	28,37	88,79
ESG_E	279	56,17	56,90	23,83	37,40	76,26	10,35	93,14
ESG_S	279	67,71	69,87	17,59	56,79	81,34	27,71	93,15
ESG_G	279	52,88	53,13	28,42	25,78	81,38	2,50	96,09
Dependent Variables								
ROA	279	4,05	3,26	6,49	0,71	6,17	-33,65	46,75
Control Variables								
FIRM_SIZE	279	15,52	15,33	1,97	13,94	16,83	10,84	20,71
LEVERAGE	279	165,41	108,30	185,55	47,93	195,26	0,13	1087,95

The dependent variable ESG_D varies between 28,37% and 88,79%, 75% of observations are equal or above 73,39%. The mean is 60,99%. These values are somewhat discrepant from the studies of Wang and Sarkis (2017) and Lueg and Pasheva (2021) which implemented a similar econometric model, although both relied on the Bloomberg scoring system for ESG variables. In particular, the mean ESG score for Scandinavian based companies (Lueg & Pasheva, 2021) was equal to 34,74%, which would indicate that Italian firms generally fared better than their Nordic counterparts, in regard to total ESG score.

Table 4.2 – Descriptive statistics for the dependent variable ESG_D over the years

ESG_D	N	Mean	Median	Std Deviation	Minimum	Maximum
Year						
3 years	279	60,99	61,42	16,09	28,37	88,79
2018	93	57,26	57,49	16,73	28,37	88,79
2019	93	60,40	60,43	15,51	28,37	88,79
2020	93	65,32	65,07	15,12	28,37	88,79

Graphic 4.1 – Representation of the annual mean of the ESG_D scores

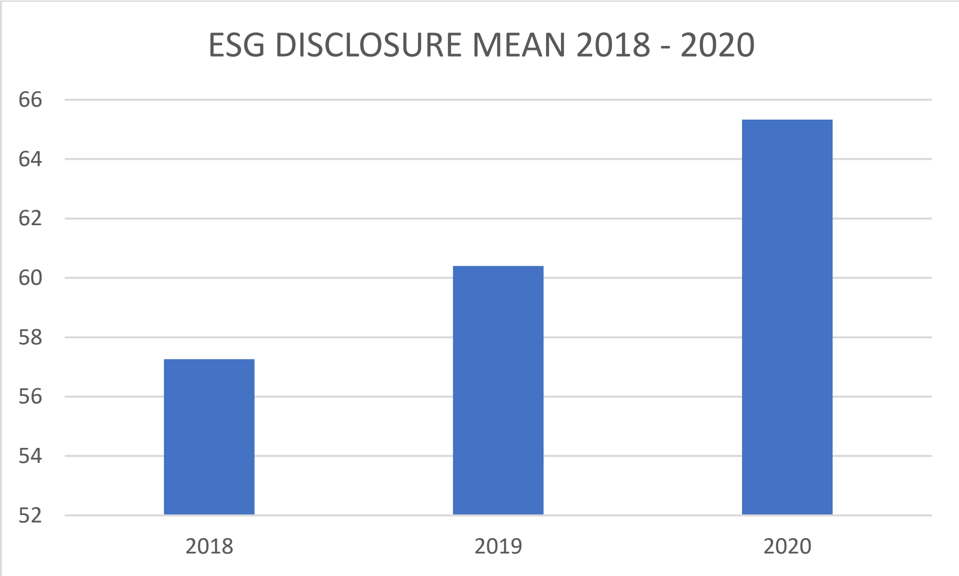


Table 4.2 shows the description of the dependent variable over the years analyzed in the study. The minimum and maximum value verified is in 2018, with 28,37% and 87,99% respectively.

It can be seen that the annual average tends to have similar values over the years ranging from 57,26% in 2018 to 65,32% in 2020. Thus, similar and consistent results are verified throughout the years of the study under analysis, revealing an improved commitment to disclosing CSR information.

The individual environmental, social and governance score variables vary between 10,35% and 93,14% for the environmental score, between 27,71% and 93,15% for the social score and 19,17% and 86,40% for the governance score. The governance score is found to have the highest average among the three pillars, with a value of 67,71%, and the governance score has the lowest average of 54,31%. It is also observed that 75% of the companies have environmental scores of 76,26%, social scores of 81,34% and governance scores of 70,81%, thus identifying a tendency for companies to disclose more information related to their social information, rather than environmental or corporate governance.

In the study by Lueg & Pasheva (2021), there were averages in the environmental score of 27,98%, 34,69 % in social, and 50,08% in governance in Scandinavian companies. The same trend in disclosing more social and environmental information than corporate governance was not observed.

The considered companies have an average size of 15.52, an average leverage of 165.41%, and a return on assets with an average of 4,05%.

4.3 Hypothesis test

Table 4.3 depicts our findings concerning the first hypothesis:

Beta Coefficient p - value	ESG_D
Variable	*ROA*
Y_2019	-0,167
	0,520
Y_2020	-0,673
	0,13
I_1000	0
	0,271
I_2000	1,275
	0,54
I_3000	1,084
	0,227
I_4000	0,978
	0,440
I_5000	1,084
	0,470
I_6000	1,351
	0,414
I_7000	2,371
	0,228
I_8000	3,077
	0,229
LEV	-0,001
	0,247
SIZE	-0,290
	0,003
ESG_D	**0,027**
	0,05

"H1: there is a positive and statistically significant relationship between the total ESG score of a company and its financial results."

We accept H1 since the total ESG score has a significant and positive coefficient in the estimation of ROA (0,027). These results suggest that a one-point increase in ESG score will result in a 2,7% increase of the ROA index. The adjusted R^2 of the regression model is 85,4% indicating that the independent variables collectively explain substantial variation in ROA.

Table 4.4 depicts our findings concerning the second and third hypothesis:

Beta Coefficient p - value	ESG_E	ESG_S
Variable	ROA	ROA
Y_2019	-0,131	-0,129
	0,618	0,622
Y_2020	-0,521	-0,533
	0,54	0,048
I_1000	0	0
	0,447	0,434
I_2000	1,209	1,149
	0,071	0,087
I_3000	0,864	0,805
	0,341	0,371
I_4000	0,615	0,681
	0,631	0,594
I_5000	0,628	0,734
	0,678	0,627
I_6000	0,557	0,614
	0,738	0,710
I_7000	1,915	1,822
	0,339	0,357
I_8000	2,257	2,393
	0,381	0,353
LEV	-0,01	-0,001
	0,212	0,166
SIZE	-0,177	-0,189
	0,071	0,044
ESG_E	**0,006**	
	0,342	
ESG_S		**0,011**
		0,192

"H2: there is a positive and statistically significant relationship between the environmental ESG score of a company and its financial results."

"H3: there is a positive and statistically significant relationship between the social ESG score of a company and its financial results."

As shown in Table 4.4 there is a positive relationship between the environmental and social pillars of the ESG score, however the coefficients are not significant leading us to reject hypotheses H2 and H3.

Yet, the coefficient for the governance pillar score is significant, as shown in table 4.5, allowing us to accept hypothesis H4:

"***H4:*** there is a positive and statistically significant relationship between the governance ESG score of a company and its financial results."

Table 4.5 depicts our findings concerning the fourth hypothesis:

Beta Coefficient p - value	ESG_G
Variable	*ROA*
Y_2019	0,703
	0,009
Y_2020	0,579
	0,030
I_1000	0
	0,252
I_2000	1,602
	0,016
I_3000	1,146
	0,197
I_4000	0,856
	0,493
I_5000	1,177
	0,428
I_6000	1,250
	0,440
I_7000	2,269
	0,242
I_8000	3,023
	0,231
LEV	-0,001
	0,292
SIZE	-0,226
	0,006
ESG_G	**0,022**
	<0,001

Table 4.6 summarizes the validation of the hypotheses:

Hypothesis		Results
H1	There is a positive and statistically significant relationship between the total ESG score of a company and its financial results	Accepted
H2	There is a positive and statistically significant relationship between the environmental ESG score of a company and its financial results	Rejected
H3	There is a positive and statistically significant relationship between the social ESG score of a company and its financial results	Rejected
H4	There is a positive and statistically significant relationship between the governance ESG score of a company and its financial results	Accepted

4.3 Discussion of findings

Regarding H1, this result is in agreement with the findings proposed by Pulino et al. (2022) as well as with the studies conducted by Chouaibi et al. (2021) and Ahmad et al. (2021). This outcome means that ESG disclosure has an immediate impact on financial performance, as organizations increase their investment and commitment in activities and projects linked to CSR they will improve their overall performance. Moreover, to maximize this effect, firms need to increase the quality and the depth of their sustainability reports in order to communicate their strategy and results to the relevant stakeholders, engaging them in the process.

This is in line with the concepts brought forward by *agency theory*, by reducing information asymmetry effective ESG disclosure diminishes agency costs and therefore improves financial results. From an external perspective, especially in industries considered as high-risk, improvement in information asymmetry can be seen as positive outcome by responsible investors (Ahmad et al., 2021).

Additionally, the result corroborates the notions proposed by *legitimacy theory* and *signaling theory* indicating that the integration of sustainable and ethical practices is likely to be a determining factor for financial performance. Chouaibi et al. (2021) suggest that this activates a mechanism in which executives and management are both incentivized and scrutinized to enact moral and ethical conduct as a way to meet their objectives and satisfy shareholder information. In this scenario, as stated by legitimacy theory, information becomes a resource in building relational capital between management and stakeholders.

Finally, this result can be also interpreted through the lens of the *stakeholder theory*. In fact, as a firm is seen as an independent set of relationships among stakeholders, by addressing the interest, through ESG disclosure, of all those who can affect or be affected by the achievement of environmental and social objectives, the firm will be able to also reach its economic goals (Chouaibi et al., 2022).

Regarding the rejection of hypotheses number two and three, Ahmad et al. (2022) also found that the environmental score was positively but not significantly correlated with financial performance. On the other hand, Giannopoulos et al. (2022) conducted a study analyzing the impact of ESG disclosure on the financial performance of Norwegian listed companies and found that both the environmental score and the social score were negatively and significantly correlated with ROA. An explanation was offered in intrinsic characteristics of this accounting-based metric which is bound to be negatively affected in the short term when a company decides to allocate more resources to environmental and social initiatives. This was underlined by the fact that, in the same study, all three ESG score were positively correlated with a different financial performance metric, Tobin's Q.

While Lueg and Pasheva (2021) reached a similar conclusion, in fact, they found that both the environmental and social scores were negatively and significantly correlated with shareholder revenue in the context of Scandinavian listed firms, they proposed a different explanation for this phenomenon. They suggested that there might be such as overreporting, meaning that an excessive amount of disclosure about environmental and social matters, can expose the company to an increased amount of speculation from regulators about their internal sustainable practices as well as to competitors within the same industry who could benefit from the publicly information. In this case the agency costs of sustainability reporting can outweigh the benefits for shareholders.

Concerning H4, our findings are in agreement with several empirical studies conducted recently. A study by Velte (2017), in the context of German companies listed on the DAX30, unveiled that out of all three pillar scores, the governance score was the one with the most significant impact on financial performance. The first proposed explanation is that historically, there has been a longer tradition of corporate governance reporting compared to issues related to the areas covered by the environmental and social scores, which have acquired importance relatively recently. This implies that companies might still be unable to fully capture which type of information pertaining to these two pillars is relevant for stakeholders. The second one is that, despite the firm's efforts towards a holistic approach to ESG matters, corporate governance information remains the utmost valuable for shareholders and investors.

Wang and Sarkis (2017) also found that CSR governance score was positively and significantly correlated with ROA, however only as mediating effect between financial performance and environmental and social performance respectively. In fact, the governance score didn't have a direct influence on either of the financial metric (ROA and Tobin's Q) but is seen as a mean to promote good outcomes on CSR environmental and social issues to generate superior financial performance in corporate accounting book and the capital markets.

As mentioned previously, Lueg and Pasheva (2021) proposed that out of the three pillars only the governance score affected financial performance, this is explained by the fact that good governance practices can be assessed in the short term, leading to an immediate effect on performance. Moreover, a high governance score functions as a checks and balances system, preventing and preceding scandals that might arise from issues in the environmental and social areas. Finally, it is suggested that this dynamic might be contingent to the Scandinavian context, as in those countries the notion of environmental and social sustainability is ingrained into the business model of most firms, while the concept of shareholder-oriented governance is not as widespread as in, for example, the Anglo-Saxon context, and therefore finds value in its uniqueness.

Rodriguez (2016) found that for Spanish listed companies there was a positive relationship between CSR governance score and financial performance, mainly ROA and ROE. The author posited that this was a case of a “virtuous cycle” as the statistical evidence showed socially responsible policies transform into higher profits and higher profits transform into socially responsible policies.

In the Italian context, our results are in agreement with those of Pulino et al. (2022) who also found a positive relationship between the governance pillar and ROA. These results could have significant implication for policy makers as they confirm the need for extensive environmental and social regulations to promote ethical practices across all industries. In this sense the Legislative Decree 254/2016 is a step in the right direction for having firms with high performance on one hand and a more socially and environmentally aware and active community on the other.

5. Conclusion

The aim of this study is to research the impact that ESG disclosure has on the financial performance of Italian listed companies. Additionally, it explores which role each of the three pillars of ESG plays in this relationship. A total of 93 firms listed on the Borsa Italiana index were analyzed between 2018 and 2020 using four multiple regression models. The models employ an ESG score as the independent variable through which an organization's commitment, efficiency and transparency in the three main areas of CSR is measured. The dependent variable, an accounting-based index, ROA has been utilized extensively across the literature and empirical studies as an effective instrument to assess the profitability and financial strength of a company.

The results show that each of the four independent variables have a positive impact on financial performance. However, only the total ESG score and the Governance pillar score had also a statistically *significant* impact on ROA. These results show how the quality and the depth of sustainability reporting can be one of the factors which can help organizations reach their economic goals. These findings suggest that all of the three macro areas of ESG should be studied simultaneously and separately, as it pertains to their relationship to financial performance.

The findings of this study are in line with the theoretical frameworks which provide the basis for understanding the motives and purpose behind CSR disclosure behavior. As has been underlined in previous studies *legitimacy theory* (Wang & Sarkis, 2017), *agency theory* (Pulino et al., 2022) and *stakeholder theory* (Ahmad et al., 2022; Velte, 2017) all present valid arguments to why organizations should engage in sustainability and governance reporting and can be seen as concurrent in explaining the related benefits to the financial performance (Batae et al., 2021).

This study contributes to the literature regarding the relationship between ESG disclosure and financial performance for a few reasons. First of all, it covers a sample ranging three years which is more recent than most of the studies cited previously.

Furthermore, it focuses on the Italian context, which has been subject to far less empirical research on this matter when compared to Anglo-Saxon or Scandinavian countries. In fact, corporate governance scholars divide the world into two different systems: the Anglo-American system orientated towards shareholders and external mechanisms and on the other hand the Continental system orientated towards stakeholders and internal mechanisms (Denis & McConnell, 2003). These two models have been used to try to explain the differences found in corporate governance practices at a global level (Chhillar & Lellapalli, 2015). The distinction between the two is rooted in the differences in culture, law, regulations, the type of relationship between companies and government, the role of financial institutions, and shareholder structures found in different parts of the world.

Companies operating in countries orientated towards external mechanisms, such as the United States and the United Kingdom, tend to have a strong shareholder orientation and a long tradition of common law. The corporate governance of these companies typically has a high commitment to external investors, and a low commitment to other stakeholders. Their managers are rewarded based on market values, and conflicts of interest arise between shareholders and managers (Goergen et al., 2008). On the other hand, Continental countries are characterized by reliance on civil law jurisdictions, funding by banks is very common while shareholder investments are limited and there is overall a lower level of regulation about sustainability practices and disclosure (Cardamone et al., 2012).

Within this framework, there are several reasons which make Italy an interesting country to analyze from the point of view of ESG disclosure. First of all, as other Continental countries, Italy has a low developed stock market, a high degree of concentration of ownership and weak legal enforcement (Cordazzo et al., 2020). Despite this Italy, consistently ranks among European countries with the highest percentage of assured CSR reports (Larrinaga et al., 2018). In this setting, Italian companies have a crucial role in establishing effective ESG disclosure strategies, as the aforementioned Legislative Decree only provides a minimum set of information to be disseminated while it does not enforce any specific nonfinancial reporting model.

Additionally, this study implements the ESG score which is widely accepted and internationally recognized by the majority of stakeholders when it comes to sustainable investment and company performance. This score is assigned by third-party standards and regulations, which avoids problems of legitimacy and subjective results. However, it also encompasses unaudited information on corporate websites, in addition to stand-alone and integrated reports, which may affect the quality of the data. These evaluations are financed by investors and not by the companies themselves, which results in independent evaluations.

The increasing diffusion of these types of scores provides organizations with a clear framework within which they can evaluate their efforts and their long-term sustainability goals and objectives. At the same time, they constitute a valuable instrument for external parties such as auditors or investors to assess the internal mechanism of the company, going beyond what is strictly financial and accounting based.

The results also provide valuable information for companies that are looking to invest resources in order to build a strong CSR strategy and improve the quality of their sustainability reports, giving assurance that those efforts will have an economic return. Similarly, it gives investors additional tools to compare companies within the same industry and make informed decisions. From a holistic perspective, the progressive spreading of the concepts and the metrics presented in the paper can potentially improve and smooth out the relationship between firms, stakeholders and shareholders. Moreover, this comes at a time when there is an increasing external pressure on companies from regulators to step up the standards for their non-financial information. This is especially true in the European context with the introduction of directive 2022/2464/EU as of 2023.

From an institutional point of view, the evidence brought forward with this study substantiates the course promoted by the European Union, which for the past twenty years has striven to enhance the regulations concerning ESG disclosure, releasing comprehensive guidelines and frameworks, with the objective of widening the pool of companies obliged to adhere to disclose ESG reports as well as the final users of this information.

Nevertheless, this study has some limitations, such as the fact that it only focuses on one country. Another limitation lies in the fact that regulations are constantly changing, both at European level and in each country, as is the case of Italy. The Legislative Decree 254/2016 is the main point of reference for ESG disclosure in Italy, it was adopted to implement regulations presented by the NFRD (2014). As mentioned previously this directive has been amended by the CSRD and it’s still unclear how this will impact future Italian legislation on this matter, which will certainly lead to changes in CSR disclosure, and consequently in the type of information disclosed. It's a constantly changing area, which will probably lead to different conclusions and results in the various studies over the years.

In terms of prospects for future research, and following on from the limitations of this study, it could be interesting to carry out the same analysis but with individual samples from the different countries at the same time. This type of research would make it possible to understand the real differences between countries and cultures, and to understand which mechanisms and characteristics have a positive influence on the implementation of ESG disclosure in different realities. It will also be interesting to evaluate how the new regulations implemented in the European context will affect the relationship between sustainability reporting and financial performance.

6. References

Academic Literature & Journal Articles

Ali, W., Frynas, J.G., & Mahmood, Z. (2017). Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273-294. DOI: 10.1002/csr.1410.

Barnett, M.L., & Salomon, R.M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic Management Journal*, 33 (11), 1304-1320. https://doi.org/10.1002/smj.1980

Barnett, M.L., & Salomon, R.M. (2006). Beyond dichotomy: the curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27 (11), 1101-1122. https://doi.org/10.1002/smj.557

Birindelli, G., Ferretti, P. & Intonti, M. (2015). On the drivers of corporate social responsibility in banks: evidence from an ethical rating model. *Journal of Management & Governance*, 19, 303–340 (2015). https://doi.org/10.1007/s10997-013-9262-9.

Cardamone, P., Carnevale, C., & Giunta, F. (2012). The Value Relevance of Social Reporting: Evidence from Listed Italian Companies. *Journal of Applied Accounting Research*, 13, 255-269. https://doi.org/10.1108/09675421211281326.

Chapple, W., Morrison Paul, C.J. & Harris, R. (2005). Manufacturing and corporate environmental responsibility: cost implication of voluntary waste minimization. *Structural Change and Economic Dynamics*, 16 (3), 347-373. https://doi.org/10.1016/j.strueco.2004.04.003.

Charlo, M., Moya, I., & Muñoz, A. (2013). Sustainable Development and Corporate Financial Performance: A Study Based on the FTSE4Good IBEX Index: Sustainable Development and Corporate Financial Performance. *Business Strategy and the Environment*. DOI: 10.1002/bse.1824.

Chen, Z., & Xie, G. (2022). ESG disclosure and financial performance: Moderating role of ESG investors. *International Review of Financial Analysis*, 83(C).

Chhillar, P., & Lellapalli, R.V. (2015). Divergence or convergence: paradoxes in corporate governance? *Corporate Governance*, 15(5), 693-705.

Ching, H.Y., & Gerab, F. (2017). Sustainability reports in Brazil through the lens of signaling, legitimacy and stakeholder theories. *Social Responsibility Journal*, 13(1), 95-110. https://doi.org/10.1108/SRJ-10-2015-0147.

Christensen, H., Hail, L. & Leuz, C. (2021). Mandatory csr and sustainability reporting: economic analysis and literature review. *European Corporate Governance Institute Review of Accounting Studies*, 26, 1176–1248.

Clarkson, P.M., Overell, M.B., & Chapple, L. (2011). Environmental reporting and its relation to corporate environmental performance. *Abacus*, 47 (1), 27-60. https://doi.org/10.1111/j.1467-6281.2011.00330.x.

Cochran, P. L., & Wood, R. A. (1984). Corporate Social Responsibility and Financial Performance. *The Academy of Management Journal*, 27(1), 42–56. https://doi.org/10.2307/255956

Cornell, B., & Shapiro, A. C. (1987). Corporate Stakeholders and Corporate Finance. *Financial Management*, 16(1), 5–14. https://doi.org/10.2307/3665543

Cordazzo, M., Bini, L., & Marzo, G. (2020). Does the EU Directive on non-financial information influence the value relevance of ESG disclosure? Italian evidence. *Business strategy and the Environment*, 29 (8), 3470-3483. https://doi.org/10.1002/bse.2589

Culcasi, F. (2010). How CSR Has Gained Strength Through Corporate Scandals: Case Studies of Social, Environmental and Economic Dimensions. *Escuela de Organización Industrial*.

Denis, D. K., & McConnell, J. J. (2003). International Corporate Governance. *The Journal of Financial and Quantitative Analysis*, 38(1), 1–36.

Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*, 20(1), 65–91. https://doi.org/10.2307/258887

Drucker, P. F. (1954). The practice of management. *New York: Harper & Row*.

Giannarakis, G. (2014). Corporate governance and financial characteristic effects on the extent of corporate social responsibility disclosure. *Social Responsibility Journal*, 10(4), 569-590.

Giannarakis, G. (2014a). Financial, Governance and Environmental determinants of Corporate Social Responsible Disclosure. *Management Decision*, 52(10), 1928-1951. http://dx.doi.org/10.1108/MD-05-2014-0296.

Girón, A., Kazemikhasragh, A., & Cicchiello, A.F. (2021). Sustainability Reporting and Firms' Economic Performance: Evidence from Asia and Africa. *Journal of Knowledge Economy*, 12, 1741–1759. https://doi.org/10.1007/s13132-020-00693-7.

Goergen, M., & Renneboog, L. (2008). Contractual corporate governance. *Journal of Corporate Finance*, 14(3), 166-182.

Guerrero-Villegas, J., Pérez-Calero, L., Hurtado-González, J. M. & Giráldez-Puig., P. (2018). Board Attributes and Corporate Social Responsibility Disclosure: A Meta-Analysis. *Sustainability,* 10. DOI: 10.3390/su10124808

Gray, R., Owen, D., & Adams, C. (1996). Accounting & accountability: changes and challenges in corporate social and environmental reporting. *London: Prentice-Hall*.

Haque, F. (2017). The effects of board characteristics and sustainable compensation policy on carbon performance of UK firms. *The British Accounting Review*, 49(3), 347-364.

Jones, T. M. (1995). Instrumental Stakeholder Theory: A Synthesis of Ethics and Economics. *The Academy of Management Review*, 20(2), 404–437. https://doi.org/10.2307/258852

Kennedy, P. (1992). A guide to econometrics (3rd edition). Basil Blackwell Ltd. *Oxford, UK.*

Kim, Y., Park, M. S., & Wier, B. (2012). Is Earnings Quality Associated with Corporate Social Responsibility? *The Accounting Review*, 87(3), 761–796.

Kiran, R., & Sharma, A. (2011). Corporate Social Responsibility: A Corporate Strategy for New Business Opportunities. *Journal of International Business Ethics*, 4 (1), 10-17.

Labuschagne, C., & Brent, A.C. (2008). An industry perspective of the completeness and relevance of a social assessment framework for project and technology management in the manufacturing sector. *Journal of Cleaner Production*. 16 (3), 253-262.

Landi, G. & Sciarelli, M. (2018). Towards a more ethical market: the impact of ESG rating on corporate financial performance. *Social Responsibility Journal*, 15 (1), 11-27. https://doi.org/10.1108/SRJ-11-2017-0254.

Lagasio, V. & Cucari, N. (2018). Corporate governance and environmental social governance disclosure: A meta-analytical review. *Corporate Social Responsability and Environmental Management*, 26(4), 701-711.

Larrinaga, C., Rossi, A., Luque-Vilchez, M. (2020). Institutionalization of the Contents of Sustainability Assurance Services: A Comparison Between Italy and United States. *Journal of Business Ethics*. 163, 67–83. https://doi.org/10.1007/s10551-018-4014-z.

Leng Chu, C., Chatterjee, B., & Brown, A. (2012). The current status of greenhouse gas reporting by Chinese companies: a test of legitimacy theory. *Managerial Auditing Journal*, 28 (2), 114-139. https://doi.org/10.1108/02686901311284531.

Lewis, B.W., Walls, J.L., & Dowell, G.W. (2014). Difference in degrees: CEO characteristics and firm environmental disclosure. *Strategic Management Journal*, 35 (5), 712 - 722.

Longo, M., Mura, M., & Bonoli, A. (2005). Corporate social responsibility and corporate performance: the case of Italian SMEs. *Corporate Governance*, 5, 28-42. http://dx.doi.org/10.1108/14720700510616578

Mahadeo, J.D., Oogarah-Hanuman, V. & Soobaroyen, T. (2011). A Longitudinal Study of Corporate Social Disclosures in a Developing Economy. *Journal of Business Ethics*, 104, 545–558. https://doi.org/10.1007/s10551-011-0929-3

Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility. *The Academy of Management Review*, 33(2), 404–424.

Michelon, G. & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance*, 16, 477-509.

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate Social and Financial Performance: A Meta-analysis. *Organization Studies,* 24(3), 403-441.

https://doi.org/10.1177/0170840603024003910.

Pascucci, F. (2012). Responsabilità sociale e questione etica nell’impresa: alcune riflessioni. *Sinergie Italian Journal of Management*, 86, 133-150.

Pfeffer, J. (2005). Producing sustainable advantage through the effective management of people. *Academy of Management Executive*, 19 (4). http://dx.doi.org/10.5465/AME.1995.9503133495

Porter, M.E., & Kramer, M.R. (2006). Strategy and society: the link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78-92.

Porter, M. E., & van der Linde, C. (1995). Toward a New Conception of the Environment-Competitiveness Relationship. *The Journal of Economic Perspectives*, 9(4), 97–118.

Pulino, S., Ciaburri, M., Magnanelli, S. & Nasta L. (2022). Does ESG disclosure influence firm performance? *Sustainability*, 14 (13), 1-18. https://doi.org/10.3390/su14137595

Reverte, C., Gomez-Malero, E., & Cegarra-Navarro, J.B. (2015). The influence of corporate social responsibility practices on organizational performance: evidence from Eco-Responsible Spanish firms. *Journal of Cleaner Production*, 112(4), 2870-2884.

Rodriguez-Ferandez, M. (2016). Social responsibility and financial performance: The role of good corporate governance. Business Research Quarterly, 19(2), 137-151.

Rouen, E., Sachdeva, K., & Yoon, A. (2022). The evolution of ESG reports and the role of voluntary standards. *Harvard Business School*.

Salzmann, O., Inoescu-Somers, A. & Steger, U. (2005). The Business Case for Corporate Sustainability: Literature Review and Research Options. *European Management Review*, 23(1), 27-36. http://dx.doi.org/10.1016/j.emj.2004.12.007

Sarkis, J. (2009). The Theory and Practice of Sustainable Supply Chains. *Supply Chain Forum*, 15(1), 2-5. http://dx.doi.org/10.1080/16258312.2014.11517329.

Sciarelli, S. (2007). Etica e responsabilità sociale nell'impresa. Milano: Giuffrè Editore

Scott, W. (2009). Financial Accounting Theory (5th Edition). *Pearson Education*.

Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87, 355-374.

Stacchezzini, R., Melloni, G., & Lai, A. (2016). Sustainability management and reporting: the role of integrated reporting for communicating corporate sustainability management. *Journal of Cleaner Production*, 136, 102-110.

Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review*, 20(3), 571–610. https://doi.org/10.2307/258788

Wang, Z., Hsieh, T.S., & Sarkis, J. (2017). CSR performance and the readability of CSR reports: Too good to be true? *Corporate Social Responsibility and Environment Management*, 25(1), 66-79. DOI: 10.1002/csr.1440

Taj, S.A. (2016). Application of signaling theory in management research: Addressing major gaps in theory. *European Management Journal*, 34(4), 338-348. https://doi.org/10.1016/j.emj.2016.02.001.

Torugsa, N. A., O'Donohue, W., & Hecker, R. (2013). Proactive CSR: An Empirical Analysis of the Role of its Economic, Social and Environmental Dimensions on the Association between Capabilities and Performance. *Journal of Business Ethics*, 115(2), 383–402.

Tóth, B., Lippai-Makra, E., Szládek, D., & Kiss, G.D. (2021). The Contribution of ESG Information to the Financial Stability of European Banks. *Public Finance Quarterly*, 66(3), 429-450.

Turban, D. B., & Greening, D. W. (1997). Corporate Social Performance and Organizational Attractiveness to Prospective Employees. *The Academy of Management Journal*, 40(3), 658–672. https://doi.org/10.2307/257057

Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*, 8(2), 169-178.

Waddock, S. A., & Graves, S. B. (1997). The Corporate Social Performance-Financial Performance Link. *Strategic Management Journal*, 18(4), 303–319.

Reports

Cerved. (2021). Rapporto Italia Sostenibile 2021.

Accenture. (2021). Reimagined consumers will abandon brands that don’t support their new values—and pay more to those that do so.

Websites

ANSA. (2021, March). Istat: -8,9% Pil Italia nel 2020. Pressione fiscale al 43,1%. https://www.ansa.it/sito/notizie/economia/2021/03/01/istat-89-pil-italia-nel-2020.-pressione-fiscale-al-431_f02d3afc-ac26-4f15-8e01-b925e7c1826b.html

Borsa Italiana. (n.d). Non-financial disclosure obligations. Retrieved November 10, 2021, from https://www.borsaitaliana.it/finanza-sostenibile/materiali/nfrd.en.htm

Borsa Italiana. (2020, December). Borsa Italiana: Review dei Mercati 2020. https://www.borsaitaliana.it/borsaitaliana/ufficio-stampa/comunicati-stampa/2020/reviewdeimercati.htm

Ecovadis. (n.d). What is Sustainability Reporting. Retrieved November 1, 2021, from https://ecovadis.com//glossary/sustainability-reporting/

European Commission. (n.d). Corporate sustainability reporting. Retrieved November 7, 2021, from https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

Miller N. (2022). ESG Score. Corporate Finance Institute. Retrieved November 13, 2022, from https://corporatefinanceinstitute.com/resources/esg/esg-score/

Refinitiv (2020). Environmental, Social and Governance (ESG) Scores from Refinitiv. https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/esg-scores-methodology.pdf

University of Wisconsin. (n.d). The Triple Bottom Line. Retrieved October 31, 2021, from https://sustain.wisconsin.edu/sustainability/triple-bottom-line/

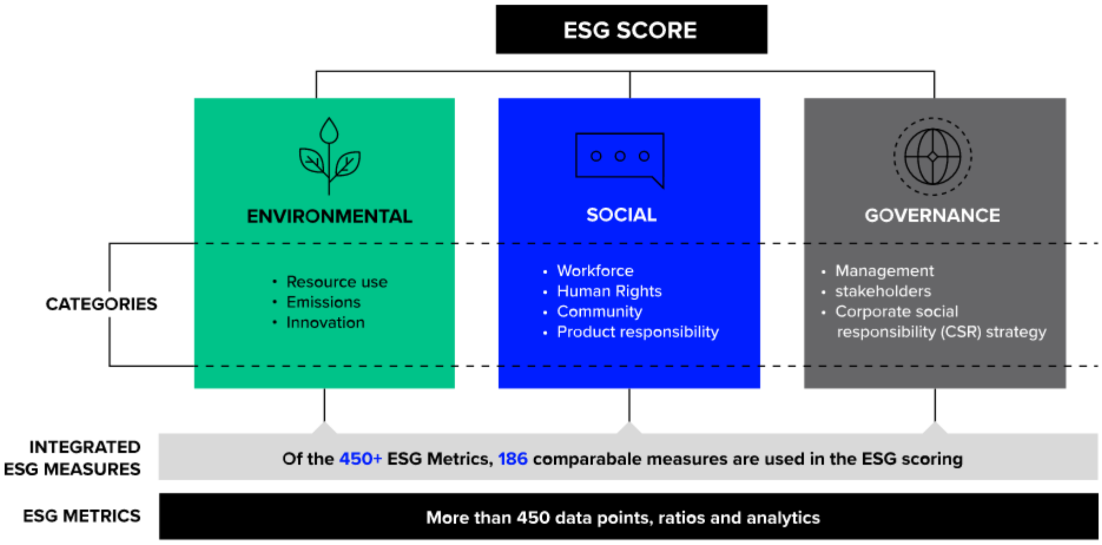
7. Annexes

Annex A – ESG score categories and definitions

Score	Definition
ESG resource utilisation *score*	It reflects a company's ability to reduce the use of materials, energy or water and to find more eco-efficient solutions in order to improve the management of its supply chain.
ESG emission reduction *score*	Measures a company's commitment and effectiveness in reducing environmental emissions from its production and operational processes.
ESG innovation *score*	It reflects a company's ability to reduce environmental costs by creating new market opportunities through new environmental and technological processes or ecological products.
ESG employee *score*	It measures a company's effectiveness in terms of providing job satisfaction, a safe and healthy workplace that maintains diversity and equal opportunities and opportunities for employee development.
ESG human rights *score*	It measures a company's effectiveness in terms of providing job satisfaction, a safe and healthy workplace that maintains diversity and equal opportunities and opportunities for employee development.
ESG community *score*	Measures a company's commitment to being a good citizen, protecting public health and respecting business ethics.
ESG product liability *score*	Reflects a company's ability to produce quality goods and services, integrating customer health and safety with data integrity and protection.
ESG management *score*	Measures a company's commitment and effectiveness in complying with the best practices of corporate governance principles.
ESG shareholder *score*	Measures the effectiveness of a company in relation to equal treatment of shareholders.
ESG CSR strategy *score*	Reflects a company's practices in communicating its commitment to the economic, social and environmental dimensions in its day-to-day decision-making processes.

Adapted from Refinitiv (2020)

Annex B – Refinitiv ESG score calculation



Adaptado de Refinitiv (2020)

Annex C – Collinearity model

	Tolerance	VIF
Dependent Variable		
(Constant)		
Indipendent Variables		
ESG_D	0.63	1.92
ESG_E	0.88	1.25
ESG_S	0.94	1.07
ESG_G	0.91	1.13
Control Variables		
SIZE	0.52	1.82
LEVERAGE	0.79	1.26
Y_2018	0.57	1.83
Y_2019	0.56	1.86
Y_2020	0.62	1.88
I_1000	0.73	1.40
I_2000	0.78	1.46
I_3000	0.73	1.36
I_4000	0.65	1.35
I_5000	0.67	1.49
I_7000	0.73	1.44
I_8000	0.87	1.24

a. Dependent Variable: ROA