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Environmental, Social and Corporate Governance and firms' financial performance: A semi-structured literature review, through the lens of sustainable development

Ład środowiskowy, społeczny i korporacyjny oraz wyniki finansowe firm: częściowo ustrukturyzowana kwerenda literatury przedmiotu przez pryzmat zrównoważonego rozwoju

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Abstract. The object of this article is to present a concise study of the state of scientific literature regarding the relationship between the Environmental, Social and Corporate Governance (ESG) factors and the financial performance at a company-based level, taking into account the sustainable paradigm. According to scientific literature, we expect that the more socially responsible companies are interested in the well-being of the stakeholders (customers, employees, members of the supply chain, and the community) as much as in that of their shareholders.

Keywords: Environmental, Social and Corporate Governance, financial performance, sustainable development, socially responsible companies

Abstrakt. Celem artykułu jest przedstawienie studium weryfikacji literatury naukowej dotyczącej relacji pomiędzy czynnikami zarządzania środowiskowego, społecznego i korporacyjnego (ESG) a wynikami finansowymi na poziomie przedsiębiorstwa z uwzględnieniem paradygmatu zrównoważonego rozwoju. Zgodnie z literaturą naukową zakłada się, że przedsiębiorstwa odpowiedzialne społecznie będą zainteresowane zarówno dobrem interesariuszy (klientów, pracowników, członków łańcucha dostaw i społeczności), jak i dobrem akcjonariuszy.

Słowa kluczowe: ład środowiskowy, społeczny i korporacyjny, wynik finansowy, zrównoważony rozwój, przedsiębiorstwa odpowiedzialne społecznie

Introduction

One of the most important topics regarding the economic development of society is represented by the sustainability disclosure promoted at a company level. Recently the public discourse on sustainability has been promoted by several actions of the United Nations, such as the 2030 Agenda and the European Union with Directive No. 2014/95/EU, these developments promote the disclosure of sustainability-related statistics for large companies and groups that are publicly traded.

Today, companies' concerns about financial, economic, and social aspects are summarized in a significant challenge: business sustainability. It cannot be denied that the economic factor has been the priority of any company, even for those that claim to be non-profit. They must also guarantee sufficient profitability to allow them to continue operating. In addition, however, the economic factor must incorporate social and environmental aspects. These three aspects are known as the dimensions of business sustainability (Martens, Carvalho, 2017).

The economic dimension is based on the generation of income through productive activity. This can be measured by the profits generated or by the profitability of an invested capital. Finally, the social dimension refers to the relationships and the positive impact the company has on the society or community in which it is established; it goes beyond corporate social responsibility. It is intended to generate an interaction that favors both parties; society is not only consumers, but they are strategic allies in the company's permanence over time (Abdelkafi, Täuscher, 2016). Therefore, a thriving community is a favorable environment for businesses to exist.

The concept of Environmental, Social, and Corporate Governance is a continuation of the Corporate Social Responsibility ideas that have been prevalent in the business sector in the last decades by introducing measurable and quantifiable progress toward the goals set by the plan. Although the link between the financial performance of the companies and the ESG factors has been an object of study by researchers since the 1970s, with more than 2000 studies published (Friede, Bush, Bassen, 2015), the scientific consensus is that there is a nonnegative relation between ESG and financial performance.

The definition and scope of Environmental, Social, and Corporate Governance

The following dimensions define the Environmental, Social, and Corporate Governance norms: the environmental dimension, which consists of environment protection, prevention of climate change, and sustainability, and the social aspect of the norms regards the following principles: human rights, consumer protection, and animal rights. The Corporate Governance dimension of the ESG criteria includes the management structure, employee relations, and the disclosure of

executive compensations, and equitable pay of the employees. The stated dimensions of the ESG regulations represent the concepts primarily associated with the field of ESG regulations (according to the Corporate Finance Institute).

According to a 2021 report, nearly 90 private equity firms signed a global climate initiative supported by the Principles for Responsible Investment; these signatories managed around 700 billion dollars worth of assets, representing a considerable part of the available global institutional assets (PRI, 2021). These developments lead to the conclusion that there is a significant dedication of the companies to adopt and promote the Environmental, Social and Corporate Governance (ESG) principles when making investment decisions and even to adopt a regulation that can harm their short-term economic prospects in favor of a more stable, and predictable investment option.

For companies, the responsibility and concerns regarding the environmental, social, and corporate governance have been present from the second half of the 19th century, with companies like Macy's, a department store in the USA, and the National Cash Register (Carrol, 2008) offering lunch rooms and access to medical services for employees and the participation of employees in the profit of the company (Visser, 2010).

In the scientific literature, there have been several interesting studies that attempted to review de relevant scientific literature from the field of ESG norms and their impact on economic performance (Friede, Bush, Bassen, 2015; Beurden, Gossling, 2008; Busch, Friede, 2018), but their overview can now be considered outdated due to the developments in the scientific literature in the last three years.

The sustainable paradigm at a glance

Although it is clear that the vast majority of the theoretical approaches to sustainability have a systemic focus, one has to mention that some of them go into the difficult task of elaborating methods to value the social and natural capital (Bossel, 1998), which led to the introduction of the terms "anthro-capital" and "social footprint" (Arce, 2014) to obtain an ampler vision on the capacity of measurement of sustainability since the majority of the outcomes that a specific activity creates are not solely social or environmental.

When we refer to either a company or a brand, we must consider a change of setting where the business has to prove its compromises and relate itself to the environment differently. To the extent to which, as mentioned at the beginning of this theoretical chapter, sustainable development implies an intrinsic compromise between the present and the future of its environment, we can also observe that reputation management becomes a first-class function for the company. Hence, the business has to start from the definition of strategic vision – the aim which orients the business strategy – from the values that will represent the foundation of the compromise, from the hierarchy of the stakeholders and from the definition of the

objectives for each of them. Similarly, the more sustainable development is linked to the business strategy, the more closeness and coherence there is between the definition of vision, the brand promise and the position adopted.

Based on the previously described approach, figure 1 depicts a new model for a new context in which the company is responsible for the truth of its messages and its whole conduct. It is no longer about building an image that is more or less attractive with the aid of external advertisements that prompt people to act. Instead, the task, within the framework delineated within the chapter and which is resumed in the figure below, is much more complex and relevant because the brand promise has to be solidly sat on what the company is, does and thinks. Only if the expectations of the interest group are genuinely satisfied, fulfilling the compromises and implementing the new relationship model, will the company obtain the acknowledgment and reputation which allow the continuity of the business in the long term, based on the authentic creation of shared value.

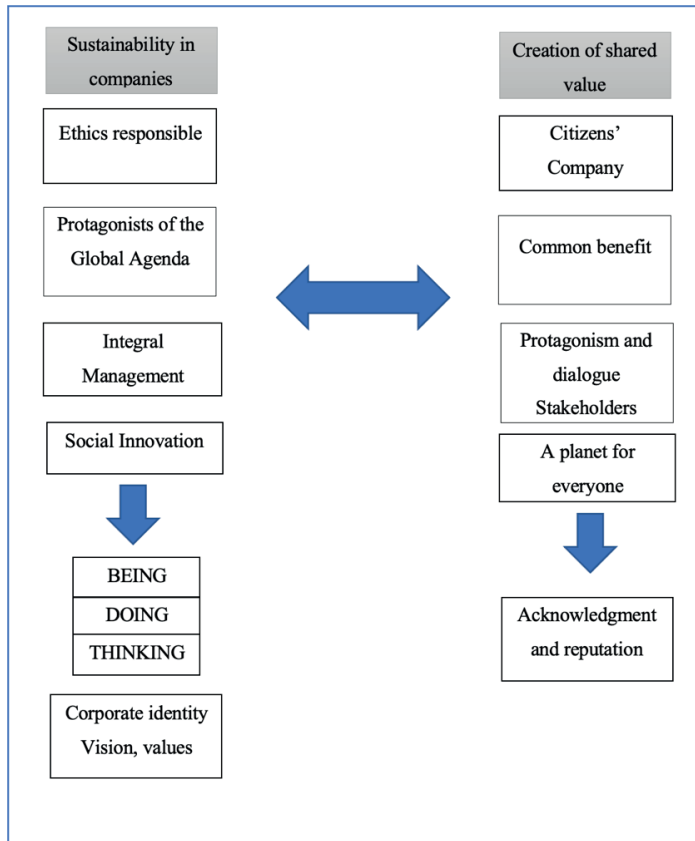


Fig. 1. Conceptual framework: sustainability and shared value
Source: author's research

Review methodology

In order to analyze the relationship between Environmental, Social and Corporate Governance and the corporate financial performance, we extracted information by searching several databases (Scopus Web of Science, semanticscholar.org and researchgate.net). The information was obtained by searching systematically the following keywords: “environmental, social and corporate governance”, “ESG”, “corporate social responsibility”, along with “corporate performance”, “corporate financial performance”, and synonyms. Using this process, we selected 40 studies published between September 1990 (Davidson, Worrell, 1990) and February 2022 (Baran, Kuźniarska, Makieła et al., 2022).

To understand the scientific literature and the terms used in the papers, we decided to map the results using the mapping analysis software VOSviewer (van Eck, Waltman, 2010). The decision to use this program is motivated by its perceived popularity among researchers (Pan, Yan, Cui, Hua, 2018; Markscheffel, Schröter, 2021). We used the mapping software to present the field’s evolution in correlation to the date in which the articles were published. The results of the search were the ones present on Clarivate Web of Science and were for papers between 2015 and 2019 to see the evolution of the perception between Environmental, Social and Corporate governance norms and the financial performance of the companies.

The studies presented in this article have been reviewed to be comprehensive and interesting in the relation between Environmental, Social and Corporate Governance and the firms’ financial performance. However, this relation is difficult to quantify due to the subjective nature of the ESG measuring process (Berg, Kolbel, Rigobon, 2019).

An independent bibliographic consultation was carried out to locate the information already published on the sustainable approach, establish the theoretical framework of reference and carry out a historical analysis of the concept “sustainability” or “sustainable development” and its fields of application. The search for documentation was conditioned by the breadth of the term, its wide dissemination and use in recent years, the common associations to the concept of “corporate social responsibility”, and the strong linkage of public organizations and institutions, consultants, associations, and various agents of civil society, worldwide. In any case, the bibliography and webography consulted, primarily international, can be classified based on their content in:

- documentation referring to the history and evolution of the term;
- reports from public organizations and institutions (including universities);
- reports and panels of private consulting firms, with a business focus;
- documentation of civil society agents and associations, with an activist and debate approach;

- specialized publications linked to sustainability, its challenges and the managerial strategy (means of creating and capturing value, considering sustainability as a part of the business model innovation paradigm).

Thereby, our keywords for our bibliographical research were (often combined): sustainability, chronology, entrepreneurial sustainability, sustainable business, local perspectives, glocal, sustainable management, and sustainable competitive advantage. By doing so, we made sure we could acquire a comprehensive understanding of the main idioms from our title and the relations between them. The platforms we have used so far: Web of Science, De Gruyter, Science Direct and Scopus, all accessed through our e-nformation profile. Until now, Elkington's contributions were the ones we are mindful of, as this author is frequently quoted in the great majority of articles consulted.

Observations regarding the role of Environmental, Social and Corporate Governance in corporate financial performance

In the present academic context, the subject of ESG and its effect on financial performance is one of the most debated and researched; despite all these, the field remains very diverse in opinions regarding the effect of ESG on firms' financial performance (Mattingly, 2017; Carroll, Shabana, 2010; Kurucz, Colbert, Wheeler, 2008; Pelozo, Shang, 2011; Crane, McWilliams, Matten et al., 2009).

A focus of the research in the present is the documentation and observation of the accurate correlations between the Environmental, Social and Corporate Governance factors and the company's financial performance. This is a sign of the field's evolution, from the early research that tried to integrate the ESG factors in the company's overall business plan to a quantifiable approach to their effect on the financial indicators.

In the scientific literature, several papers (Wood, 2010; López-Arceiz, Bellostas, Rivera, 2018; Hang, Geyer-Klingenberg, Rathgeber, 2018) consider that more focus should be put on understanding the underlying motivations and causes that lead to the adoption of the ESG framework. Also, there are studies (Gautier, Pache, 2015; Wood, 2010; Hang, Geyer-Klingenberg, Rathgeber, 2018) that consider the importance of the ESG factors could be quantified with the understanding of how the motivating factors are influencing at an individual and general level the economic results of the company, for example in the energy sector a distributor could opt for buying more energy from sustainable sources in order to motivate a change in the environmental awareness and to promote a sustainable way of living.

Another interesting method of better understanding the psychological processes that underline the adoption of the Environmental, Social and Corporate

Governance framework and create the mindset for the process should be framed in an active and thought model. The studied literature promotes the reorientation of the ESG-focused literature towards a general and more holistic approach, with these views offering the possibility of understanding the whole of the activities at the core of the business. This sort of analysis could lead to a better integration of the ESG goals in the business activity by aligning the interests of the companies that make the supply chain and incentivizing from a state-level the adoption of the Environmental, Social and Corporate Governance framework.

An overview of the available research

By searching with the keywords “ESG and financial performance” on Scopus Web of Science, we obtained 446 articles written between 2007 and the present. In figure 2 we presented the frequency of publication by year.

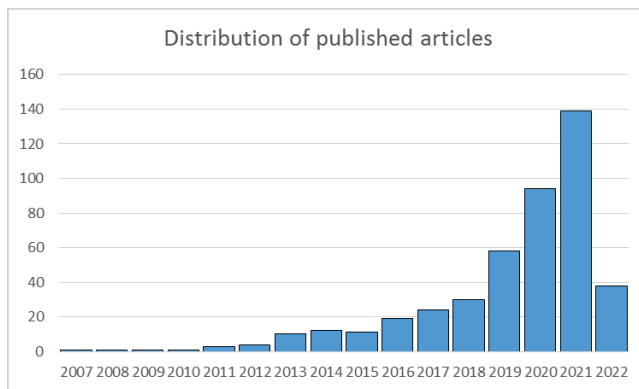


Fig. 2. Distribution of the published articles

Source: author's research

From the analysis, we can observe that the results for the papers we can state that the interest in the field is growing, with 2021 being the year with the most published articles (139) and with 2022 having 38 published articles until the 10th of March, more than the total articles published in 2018 (30).

In order to better understand the relation between the ESG and the financial performance of a company, we decided to present a bibliometric analysis approach, using the results obtained by searching several keywords relating to “corporate social responsibility”, “ESG”, and “financial performance” along with synonyms, in order to obtain a list of papers that had the most citations and were connected to the present methodology.

Results of the studied literature

The studied literature has a range of contradicting results when analyzing the effect of Environmental, Social and Corporate Governance factors on the firms' financial performance. According to the analyzed papers, the relation could be insignificant from a statistical standpoint, positively correlated or negatively correlated. From the perspective developed in the paper by Bénabou and Tirole (2010), we can state that three models can help us understand the adoption of the ESG framework: the win-win model, the delegated model and the insider-initiated model. The win-win model is based on minimizing the long-term risks regarding the adoption of ESG regulation that could affect the position of the company or even the market (for example: coal mining) and also creates a difference between the company that applies ESG regulation and the ones that do not; this works as a commercial advantage (Porter, van Der Linde, 1995) and increases according to Bénabou and Tirole (2010) the financial performance.

The delegated model is similar to the ideas in which the adoption of the ESG criteria can positively impact the stakeholders by signaling the values and the capacity to make decisions of the company (Mitchell, Agle, Wood, 1997).

The insider-initiated model is represented by the case in which the interests of the company decision-makers determine the ESG activity of the company. According to Bénabou and Tirole (2010) and Ferrel et al. (2016), the application of this type of model often leads to a negative or neutral relationship with the financial performance of the concerns regarding corporate governance and agency.

In the following table, we decided to present all the articles from the bibliography to group the studied scientific literature in its central themes by also noting the ones that are the most significant in the view of the researchers.

Table 1. The analyzed relevant scientific literature is presented in a succinct manner

The theme of the article	Article references
Studies that aggregate results of articles in order to offer an overview of the subject	Friede, Busch, Bassen, 2015; Huang, 2019; Lopez-Arceiz, Bellostas, Rivera, 2018; Mattingly, 2017; Beurden, Gossling, 2008
History of the adoption of corporate responsibility	Carroll, 2008; Crane, McWilliams, Matten et al., 2009
Investigating the relation between ESG and firms' financial performance	Busch, Friede, 2018; Davidson, Worrell, 1990; Baran, Kuźniarska, Makiela et al., 2022; Carroll, Shabana, 2010; Hasan, Singh, Kashiramka, 2021; Mansaray, Yuanyuan, Brima, 2017; Okafor, Adeleye, Adusei, 2021; Abdi, Camara-Turull, 2021; Giannarakis, konteos, Zafeiriou, Partalidou, 2016; Li, Gong, Zhang, Koh, 2017; Chen, Feldmann, Tang, 2015; Taliento, Favino, Netti, 2019; Ziolo, Bródka, Spoz, Jankowski, 2022; Grewatsch, Kleindienst, 2017

The theme of the article	Article references
Analysis of the direction of ESG development in the scientific literature	Visser, 2010; Berg, Kölbl, Rigobón, 2019; Carroll, Shabana, 2010; Kurucz, Colbert, Wheeler, 2008; Peloza, Shang, 2011; Crane, McWilliams, Matten et al., 2009; Gautier, Pache, 2015; Bénabou, Tirole, 2010; Porter, Linde, 1995; Mitchell, Agle, Wood, 1997; Ferrell, Liang, Renneboog, 2016; Lu, Taylor, 2016; Margolis, Elfenbein, Walsh, 2007

Source: author's research

An interesting conflict that can be seen in the analysis of the relevant scientific literature is the subjectivity inherent to this field of knowledge. This can be represented by the different values and points of view that can be had on a subject; for example: in consideration of the environmental concerns, some researchers might view the emergency regarding climate as being one of the most critical problems facing society and could argue for the immediate and complete stopping of the use of coal for the production of electricity and in industry. In contrast, other researchers might consider a balanced approach more suitable due to the implications that reducing coal has for developing nations. Also, various overviews on the subject can be shaped by different levels of understanding and the public perception of ESG factors.

By analyzing the relevant scientific literature, we can observe a lack of an agreed theoretical and practical framework that can predict the level of the Environmental, Social and Corporate Governance activities in that a company is involved. This is, in the opinion of some papers (Huang, 2019), the result of a contradiction between the normative idea of a positive and statistically significant relation between ESG performance and the firms' financial performance, and the empirical results which lead to the conclusion of a significant but economically modest relation between the variables (Lu, Taylor, 2016; Endrikat, Guenther, Hoppe, 2014; Wood, 2010). Furthermore, in the scientific literature, some studies conclude that the difficulty of measuring the relation between ESG performance and financial performance due to the different measures that can be used in the analysis (Post, Byron, 2014; Margolis, Elfenbein, Walsh, 2007), the used indicators are concluded to be a determining factor if the analyzed relation is significant or not.

Several studies that we considered to be interesting from the standpoint of analyzing the relation between various Environmental, Social and Corporate Governance measures and the companies' financial performance are depicted in table 1. We decided to present the results of the articles concisely in table 2 by taking into account the article reference, the analyzed period, the computation method, the sample data and the paper's findings.

Table 2. Articles of the scientific literature with considerable data samples and results

Article reference	Analyzed time period	Computation method and sample data	Findings
Hasan, Singh, Kashiramka (2021)	2014-2015; 2018-2019	The computation method pooled ordinary least squares with fixed and random effects. Sample: 287 Indian companies	Corporate social responsibility disclosure is associated with the company's financial performance for companies that activate in consumer goods, services, and heavy engineering. For the energy and the utility companies, the relation is negative.
Mansaray, Yuanyuan, Brima (2017)	2005-2015	The used computation method was multiple linear regression. Sample: 158 listed companies from South Africa, Kenya, Nigeria, Morocco, Egypt and Mauritius	In the short term, the relation between ROA and CSR disclosure is negative for mining, investment and transport. In the long term, the results are positive but are not significant. The paper concludes that, on average, for the analyzed African companies, there is no significant relation between CSR disclosure and financial performance measured with the Return-On-Assets (ROA) indicator.
Okafor, Adeleye, Adusei (2021)	2017-2019	The computation method pooled ordinary least squares with fixed and random effects. Sample: 97 technology companies listed on the S&P 500 Index	The results indicate a significant relationship between investment in CSR activities and revenue growth. Also, spending on CSR is positively correlated with the rate of profit.
Abdi, Camara-Turull (2021)	2009-2019	The used computation method is pooled ordinary least squares with fixed effects. Sample: 38 worldwide airline companies	The Environmental, Social and Corporate Governance disclosure is correlated in a positive and significant way with the value of the company and the financial performance of the company.

Article reference	Analyzed time period	Computation method and sample data	Findings
Giannarakis, Kondeos, Zafeiriou, Partalidou (2016)	2009-2013	The used computation method is pooled ordinary least squares with fixed effects. Sample: 104 companies listed in the S&P 500 index in the sample period.	The companies that are more involved in corporate social responsibility activities tend to increase their financial performance, the results being similar to the theory. Also, the ESG disclosure score positively and significantly influences the Return-On-Assets (ROA) indicator.
Li, Gong, Zhang, Koh (2017)	2004-2013	The used computation methods are: OLS (Ordinary Least Squares), 2SLS (two-stage least squares) and Heckman regression models. Sample: 350 FTSE listed firms	ESG disclosures can increase the company's value due to increased transparency and accountability. Also, these measures increase the level of trust of the shareholders.
Chen, Feldmann, Tang (2015)	2012	The used computation method is a structured content analysis consisting of cluster analysis and calculating correlations between the variables. Sample: 75 companies from the Sustainability Disclosure Database.	The paper concludes that corporate social performance and financial performance mutually interact, creating a virtuous circle.

Source: author's research

We can state that the Environmental, Social and Corporate Governance activity is motivated, according to Aguinis and Glavas (2012), by a range of factors that are not all the time observable, such as internal decision processes, and according to Bénabou and Tirole (2010), there is a high probability that the relation between Environmental, Social and Corporate Governance and firms' financial performance is neutral or slightly positive.

To present a short, yet relevant mapping of the main findings depicted from a sustainable-oriented literature review, we will present a short yet relevant recollection of our primary sources, to enlist and synthesize our main findings (see table 3).

Table 3. Sustainability-related articles with their main findings

Authors, Year, Title	Methodology Used	Main Findings
Kraaijenbrink (2019), <i>What The 3Ps of The Triple Bottom Line Really Mean</i>	Literature review	<p>Determining factors: (1) the concept of “triple bottom line”, (2) entrepreneurial sustainability, (3) the social (human) dimension, (4) the personal and professional development of the human resource, (5) the objective recognition of the performances registered by the resource human, (6) the imperative of updating professional skills</p> <p>Challenges: (1) the awareness of the overflowing importance attributes to the professional perfection of the human resource, (2) the implementation of the entrepreneurial sustainability in the subconscious of the professional collective</p>
Linder, Williander (2017), <i>Circular business model innovation: Inherent uncertainties</i>	Literature review	<p>Determinants: (1) ecological sustainability, (2) reduction of conventional energy consumption, (3) accelerated degradation of the planetary contour, (4) implementation of innovative technologies that mark the criterion of ecological sustainability, (5) correlation of entrepreneurial benefits with the need to maintain the integrity of the planetary contour</p> <p>Challenges: (1) the implementation of the concepts inscribed in the law of ecological sustainability in the microeconomic contour of the innovative enterprises, (2) the whole assumption of the necessity to preserve the planetary contour and the integrity of the environmental factors</p>
Leleux, van der Kaaij (2019), <i>Winning Sustainability Strategies</i>	Literature review	<p>Determining factors: (1) assuming the sustainable attribute in the corporate concept, (2) correlating the financial objectives with the implementation of ecological principles</p>
World Economic Forum (2016), <i>The New Plastics Economy: Rethinking the future of plastics</i>	Case study	<p>Determinants: (1) “overpopulation” of oceans with unrecycled plastic, (2) endangerment of marine life</p> <p>Challenges: (1) shaping organizational strategies through which intensive plastic consumption can be significantly reduced</p>
Harnoss, Revees (2017), <i>The business of business is no longer just business. Companies must raise their economic and political game</i>	Literature review	<p>Determinants: (1) the financial opportunity outlined by the implementation of innovative technologies that integrate predominantly renewable energies into production processes, (2) the considerable reduction of highly polluting factors, (3) the reduction of unsustainable expenditures under conventional energy</p>

Authors, Year, Title	Methodology Used	Main Findings
Racelis (2014), <i>Sustainable Entrepreneurship in Asia: A Proposed Theoretical Framework Based on Literature Review</i>	Literature review	Determining factors: (1) the integration of economic, environmental and social objectives in the enterprise's activity, (2) the proven responsibility to future generations.
Bell, Stelling (2012), <i>Sustainable Entrepreneurship: The Motivations & Challenges of Sustainable Entrepreneurs in the Renewable Energy Industry</i>	Literature review	Determinants: (1) environmental degradation, (2) the concept of sustainable enterprise, (3) implementation of sustainable directives.
Ikerd (2011), <i>The Three Ecological Principles of Economic Stability</i>	Literature review Case study	Determinants: (1) ecological economy, (2) implementation of resources with renewable potential, (3) eradication of harmful effects propagated by conventional energy consumption, (4) the principle of holism.
Rey (2011), <i>Sustainable Entrepreneurship and its Viability</i>	Literature review	Determinants: (1) sustainability of enterprises, (2) maintaining the integrity of the environment, (3) preserving environmental factors, (4) protecting the environment.
Intergovernmental Panel on Climate Change (2014), <i>Climate change 2014 – Impacts, adaptation and vulnerability: Regional aspects</i>	Literature review	Determinants: (1) the harmful impact attributed to the disruption of the fragile balance of the global climate context, (2) the ecological disasters caused by the intensity of the achievement of financial notoriety
Jackson, Schuler (2005), <i>A Quarter-Century Review of Human Resource Management in the US</i>	Literature review	Determinants: (1) meeting current consumer needs, (2) anticipating future consumer needs, (3) maintaining the fragile balance of environmental integrity
Gerlach (2003), <i>Sustainable Entrepreneurship and Innovation</i>	Literature review	Determinants: (1) innovative behavior, (2) taking on specific environmental issues, (3) gaining competitive advantage. Challenges: (1) gaining competitive advantage through implementing the concept of sustainable enterprise, (2) the inclination of the permanent interest in maintaining the integrity of the planetary contour.

Authors, Year, Title	Methodology Used	Main Findings
<p>Gutterman (2018) <i>Entrepreneurship, Business Expert Press taken from Sustainable Business: A Handbook for Starting a Business</i></p>	<p>Literature review</p>	<p>Determinants: (1) sustainability attributed to the professional team, (2) proven responsibility for the environment, (3) community contribution, (4) positive influence on people, (5) integration of sustainability into the organizational environment, (6) risk minimization, (7) organizational transparency, (8) implementation of innovative technologies.</p> <p>Challenges: (1) awareness of the impact of the organization's activity on the integrity of environmental factors, (2) limitation of the harmful effects propagated on the environment, (3) shaping the organizational premises through which the risks associated with entrepreneurial benefits can be reduced</p>
<p>Kim (2018), <i>Sustainable Management and Future of Human Resource Management</i></p>	<p>Literature review</p>	<p>Determining factors: (1) the efficient management of the professional team, (2) the International Standard 26000, (3) the completion of the professional portfolio related to human resources, (4) the promotion of the security and safety of entrepreneurial services, (5) the promotion of professional ethics, (6) the organizational outline inclined towards professional development, (7) the promotion of the competent human resource, (8) the observance of the human resource rights, (9) the assurance of the balance between the personal life and the entrepreneurial performance.</p> <p>Challenges: (1) the objectivity of the recognition of qualitative entrepreneurial services, (2) the objectivity of the promotion of the competent human resource</p>

Authors, Year, Title	Methodology Used	Main Findings
Eurostat (2020), <i>Sustainable development in the European Union. Overview of progress towards the SDGs in an EU context</i>	Literature review Case study	<p>Determinants: (1) eradication of fatal accidents denoted by entrepreneurial benefits, (2) ensuring the safety and security necessary for the average performance of tasks outlined through the job description, (3) eliminating the risk of social exclusion and material deprivation, (4) ensuring the financial benefits that can support the existence of human resources</p> <p>Challenges: (1) complete eradication of potentially high risks from the entrepreneurial benefit, (2) identification of risks that may jeopardize the physical and mental integrity enshrined in the law of the professional community, (3) eradication of the risk of social exclusion and material deprivation for vulnerable employees, (4) outlining the opportunities for financial support for people with temporary incapacity for work</p>
Mazur (2014), <i>Sustainable Human Resource Management in theory and practice</i>	Literature review Case study	<p>Determinants: (1) career development, (2) outlining equal opportunities for human resources, (3) providing adaptable working conditions for people with special needs, (4) protection against abusive behavior, (5) promoting diversity and the multicultural dimension.</p> <p>Challenges: (1) the objectivity of shaping the opportunities of the human resource, (2) the integration in the entrepreneurial performance of the people with special needs.</p>
Gutterman (2019), <i>Technology Management and Transactions</i>	Literature review	<p>Determinants: (1) the implementation of sustainable technologies, (2) the implementation of energy resources with renewable potential, (3) the invaluable contribution to the conservation of environmental factors, (4) the considerable reduction of production costs, (5) high energy efficiency, (6) low maintenance, (7) the use of biodegradable materials, (8) the exponential improvement in quality and performance, (9) the design of predominantly sustainable products, (10) the adoption of directives under the triple bottom line concept, financial resources in research and development.</p> <p>Challenges: (1) prioritizing the involvement in the investment process of technologies with sustainable potential, (2) ensuring the security and safety of the professional team related to the production department.</p>

Authors, Year, Title	Methodology Used	Main Findings
Schaltegger, Wagner (2011), <i>Sustainable Entrepreneurship and Sustainable Innovation: Categories and Interactions</i>	Literature review	Determinants: (1) identification and prevention of the negative impact attached to technological processes, (2) conservation of the planetary contour, (3) eradication of highly polluting factors, (4) limitation of fossil fuel use, (5) promotion of energy efficiency, (6) promotion of climate global, (7) integration of green energy in the contour of the organization, (8) sustainable use of the river network, (9) recycling of industrial water, (10) reuse of raw materials in the production process, (11) reuse of materials used in technological processes

Source: author's research

Briefly, we can mention that the invaluable contribution to defining the concept promoted by the “triple bottom line” outlined by Kraaijenbrink (2019) and propagated in the digital universe Forbes highlights the importance of the three initial pillars that underpinned the sustainability framework concept, to which is added, following the Paris Declaration UNESCO (2011), a fourth pillar (i.e. the cultural environment). Consequently, the four conceptual frameworks can become quantifiers in the analysis and approach to sustainable enterprises.

Moreover, Linder and Williander (2017) outline the premises of ecological sustainability underpinned at the microeconomic level, signalling through specialized studies the need to reduce conventional energy consumption. The accelerated degradation of the planetary contour attributes to all the businesses the colossal responsibility to integrate the economic performance of innovative technologies of sustainable character, opting in favor of the considerable reduction of the exhaustible resources.

Following this conceptual line, the perception propagated by Leleux and Jan van der Kaaij (2019) emphasizes the imperative of assuming the sustainable attribute in the corporate concept, correlating the incidence of financial objectives with the implementation of ecological principles. The alarming statistics outlined by the World Economic Forum (2016) predict a substantial ecological disaster: by 2050, the oceans will contain more plastic than marine life. This is why it is imperative that the principal actors in the entrepreneurship scene show a permanent and sustained commitment to the ecological principles assumed through implementing the sustainable attribute in entrepreneurial services.

Keeping the focal point on the financial aspect, Harnoss and Reeves (2017) correlate the financial opportunity outlined by implementing innovative technologies that integrate renewable energies into the production circuit, underlining the significant decrease of highly polluting factors and unsustainable expenditures under conventional energy consumption.

Furthermore, Racelis (2014) attributes sustainable development, linked with the ESG framework, as the definition according to which the economic, ecological and social objectives are found in the current activity of enterprises, giving considerable interest to moral responsibility towards future generations. Bell and Stelling (2012) attach considerable interest to raising awareness and reducing the environmental footprint of businesses, highlighting the implementation of sustainable directives. The sustainable vision promoted by the aforementioned authors highlights:

- diminishing the ecological footprint;
- conservation of ecosystems;
- implementation of renewable resources.

On the flip side, the vision Ikerd (2011) promoted emphasizes the implementation of the concept of ecological economy, stressing the integration of resources with renewable potential in the activity of small and medium enterprises, eradicating the harmful effects propagated by conventional energy on the environment. The author introduces the concept of holism in the definition of sustainable businesses, involving the presence of close and permanent relationships between the components of sustainability.

The concept of business sustainability, in line with Rey's (2011) vision, points out the imperative nature of social and environmental responsibility proven by small and medium-sized enterprises, alongside the corporate level, in promoting the conservation and protection of the environment. Therefore, economic activity needs to be inclined towards implementing ecological principles, limiting the negative interaction between the business environment and environmental factors.

It is essential to mention that Schuler and Jackson (2005) integrate the definition of the Brundtland Commission into the literature, supporting the ideology that the success of an organization involves meeting the current needs highlighted by consumers, anticipating and taking a step ahead of future customer needs, maintaining the fragile balance of environmental integrity. Thus, the company integrates the components of the respective economic environment, which define the broad concepts of sustainability.

To sum up, the strategy for approaching sustainable management implements the vision according to which the organizational efforts need orientation towards personal and professional human resource development. Sustainability attributed to social responsibilities, within the ESG framework, addresses the reward of professional performance, stimulating the innovative vision of the business team (Schaltegger, Wagner, 2011).

Conclusions

The theoretical expectations regarding the relationship between the Environmental, Social and Corporate Governance factors on the firms' financial performance indicate a neutral to slightly positive. The articles tend to suggest that the relationship

is defined by this characteristic: understanding the motivations behind the ESG activity and the process of developing a business plan that incorporates the ESG activity. The central research gap that we can identify is the lack of an understanding of the decision process, its relation to the stakeholders, and if they are interested in how companies apply ESG activity. Moreover, we can state that an important question that can be derived from analyzing the research gap is how individual stakeholders and their opinions inform and shape the ESG activity of the company.

We can state that another fundamental challenge of this research field is the identification of the way to measure ESG activity and quantify its influence on the firms' financial performance. This should be done by developing new theoretical frameworks that could test the relation between the two variables in a more significant way. Also, a possible solution can be the departure from the traditional approaches to calculation, as stated in several articles (Huang, 2019; Grewastch, Kleindienst, 2017).

As we are all very well aware, the world finds itself at a real crossroads and, according to Elkington (2012), who advances the "new planet paradigm", businesses, along with institutions, science, activists, religions etc., have the mission of placing humanity on a sustainable track, in its interest and that of future generations. This can be achieved by radically changing its business D.N.A., the strategy, the business model and the supply chain, consonantly with the new priorities and with a new management model, which also involves behavior changes, incentives and new yield indications, while preserving the identity of the business.

On the whole, now more than ever, it is crucial to find the means necessary to link sustainability to the companies' business strategy, to align their behavior with the values proclaimed, and to establish and maintain relationships of trust and collaboration with stakeholders.

In conclusion, we can state that the relation between the Environmental, Social and Corporate Governance factors and the firms' financial performance, pictured from the lens of sustainable development, is documented in a comprehensive and almost exhaustive way by the scientific literature. Moreover, the interest in this field of study is, in our opinion growing due to the inherent importance of a more responsible approach when doing business.

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