THE IMPACT OF SUSTAINABLE PRACTICES ON THE FINANCIAL PERFORMANCE OF COMPANIES: A REVIEW OF THE LITERATURE

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Reception date: 07/14/2023 – Approval date: 09/15/2023
DOI: https://doi.org/10.36995/j.visiondefuturo.2023.28.01.006.en

ABSTRACT

The Sustainable Development Goals (SDGs) constitute a set of 17 global targets defined by the United Nations (UN) to promote sustainable development in its social, environmental, and economic dimensions. Currently, companies face challenges due to the cost of implementing responsible and sustainable practices in the business world. This article examines the relationship between sustainable practices (SP) and financial performance (FP) of companies, within the framework of the SDGs. The research is based on a systematic review of existing literature. The study's findings support the idea that sustainable practices benefit companies financially, providing a competitive advantage for those businesses that implement sustainable strategies. Thus, sustainability is not only an ethical and environmental imperative, but it is also an opportunity to improve profitability and business competitiveness.

KEYWORDS: Sustainable Development Goals; Business sustainability; Financial performance.

INTRODUCTION

Cont et al. (2022) mention that the environmental and social challenges embedded in the SDGs reflect the urgency of addressing two interconnected major issues: climate change and the conservation of natural capital. These challenges result from decades of utilizing a development model that prioritized economic growth without adequately considering the environmental and social repercussions (Solórzano Chamorro et al., 2022).

One of the most evident negative consequences of this approach has been the increase in greenhouse gas (GHG) emissions, significantly contributing to global warming and its associated impacts, such as rising temperatures, glacier melting, extreme weather events, and ocean acidification and warming (Cont et al., 2022).

Following Cont et al.'s (2022) work, another grave issue associated with the dominant development model is the depletion of natural capital. Natural resources like freshwater, forests, fertile soils, and healthy ecosystems have been overexploited to meet the high demands of production and consumption. This depletion has devastating consequences, including soil degradation, water scarcity, desertification, and the loss of natural habitats, among others.

The concept of sustainable development refers to the ability to meet the present needs of society without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). Sustainable development is thus grounded in a balance between economic, social, and environmental aspects, recognizing that these three pillars are interconnected and equally essential for achieving a sustainable future (Gómez Gil, 2018).

Sustainable development not only encompasses responsible environmental management but also focuses on poverty eradication, gender equality promotion, access to education and healthcare, and the creation of decent and sustainable jobs (United Nations, 2015; Huang et al., 2021).

Considering the above, economic development must occur sustainably and equitably, taking into account long-term social and environmental impacts. This can be achieved, among other measures, through the promotion of responsible and sustainable business practices. Thus, companies play a fundamental role in achieving the SDGs and sustainable development in general, as they are significant job creators and contribute substantially to economic growth and the development of local communities. Additionally, they can implement sustainable and responsible practices that contribute to sustainable development, such as adopting more resource-efficient technologies and processes, reducing their carbon footprint, improving waste management, supporting gender equality and human rights in their supply chains, and promoting social and economic inclusion (González Ordóñez, 2022).

Sustainable practices and their impact on the financial performance of companies

Companies are concerned about the cost of implementing Sustainable Practices (SP) and their profitability, with financial performance being one of their primary concerns in the practice of sustainability and compliance with the Sustainable Development Goals (SDGs).

Since the adoption of the SDGs in 2015, there has been a growing interest in their impact on companies' Financial Performance (FP) (Vorontsova, et al., 2022). Many studies have been conducted in recent years to investigate the relationship between the SDGs and financial performance (Betti et al., 2018).

The findings of these studies have been mixed. Some indicate a positive correlation between SP and FP (Khan et al., 2023; Yousefian et al., 2023; Ghardallou, 2022) (among others), while others suggest a negative relationship (Kim et al., 2022; Ensign et al., 2021; Činčalová and Hedija, 2020), and some assert that there is no significant correlation, at least in the short term, between SP and companies' FP, aligning with the "moderator variable hypothesis" (Fernando et al., 2021; Solari and Méndez Sáenz, 2020; Yang and Jang, 2020). Some studies have found that companies with strong commitments and actions toward

achieving the SDGs tend to have better long-term financial performance (Betti et al., 2018). These studies argue that the adoption of sustainable practices and the incorporation of the SDGs can lead to a better reputation, increased operational efficiency, reduced costs, improved innovation, and better risk management, all of which can contribute to improved financial performance (Vorontsova et al., 2022).

In contrast, other studies have shown a negative correlation between SP and financial performance, arguing that pursuing the SDGs may require significant investment and operating costs, which can impact short-term profitability (Tijani et al., 2020). Furthermore, some researchers suggest that companies may engage sustainably merely by claiming to support the SDGs without implementing substantial changes (Whittingham et al., 2023), so caution must be exercised when reviewing this issue.

Overall, it is clear that the relationship between SP and FP in companies is complex and multifaceted. Further research is needed to clarify the nature and direction of this relationship, taking into account contextual factors such as industry type, company size, and geographical location, among others (Datta and Goyal, 2022; Muhmad and Muhamad, 2020).

Thus, the impact of the SDGs on companies' financial performance remains a subject of debate. However, the incorporation of sustainable practices and SDGs can yield long-term benefits for companies in terms of reputation, operational efficiency, innovation, and risk management (Vorontsova et al., 2022) (Betti et al., 2018). Nevertheless, short-term costs and the potential for opportunistic companies should also be considered when evaluating the relationship between the SDGs and financial performance.

This study highlights the various sustainability practices and their interaction with the economic performance of companies from the adoption of the Sustainable Development Goals (SDGs) in 2015 until the year 2023. The focus is on disclosure trends following the adoption of the SDGs, sustainability metrics linked to the SDGs, and implemented financial measures.

DEVELOPMENT

Methodology

The methodology employed involves a qualitative systematic literature review, focused on the methods for identifying, selecting, organizing, and critically analyzing data from the studies included in the research by the research questions (Sánchez Meca, 2010; Linares-Espinós et al., 2018). According to Beltrán (2005), the steps to conduct a qualitative systematic review are as follows: 1) Define the research questions; 2) Specify inclusion or exclusion criteria for the studies; 3) Develop the literature search plan; 4) Record data and assess the quality of selected studies; 5) Interpret and present the results.

Research questions

1. What sustainability measures have companies adopted since the period following the adoption of the SDGs in 2015?
2. Which SDGs are most dominant in the present study?
3. What is the impact of sustainability practices on the financial performance of companies in the periods following the adoption of the SDGs (2015-2023)?

Inclusion and exclusion criteria of studies

A research article was considered eligible for inclusion in this study if: (1) it covers sustainability practices related to the financial performance of companies; (2) it applies green practices to assess sustainability and its financial impact on companies; (3) it is a peer-reviewed research article. Articles unrelated to ecological practices, sustainability, and financial performance were excluded. Only articles written in English and Spanish were accepted, and data were collected for a period of 9 years from 2015 to 2023.

Literature search

The literature review was conducted through keyword searches in two databases (Scopus and Science Direct). The keywords used were: Sustainable business practices, SDGs, sustainable development, business financial performance, and financial performance (along with their equivalents in Spanish). This is an exploratory study, and the selection of articles was limited to open-access articles. Additionally, official websites of institutions with extensive experience in the study of the SDGs (United Nations and Global Change Data Lab) were considered.

Search Output

The first phase of data collection involved retrieving articles from Science Direct and Scopus, resulting in a total of 1059 peer-reviewed articles. A review was conducted, narrowing down the topics to sustainable business practices, sustainability, sustainable finance, and company financial performance. Then, in the second phase, the pre-selected samples from the first phase were filtered by scanning the title, abstract, and specific keywords to select articles with clear relevance to sustainable development and financial performance. A total of 120 articles were selected in the first phase, and then, after a full-text review, 30 articles met the inclusion criteria. Out of these 30 articles, four articles were retrieved from Science Direct, and 26 articles were retrieved from Scopus. Three of the four articles retrieved from Science Direct were also indexed in Scopus, while two of the 26 articles retrieved from Scopus were also indexed in Science Direct. Annex No. 2 provides relevant information about the journals consulted for the preparation of this study.

Data extraction

The information recorded for each selected research article covers the following items: (a) author(s), (b) journal name, (c) publisher, (d) year of publication, (e) title, (f) study location (country), (g) sector/industry, (h) sustainability measures, (i) financial measures, and (j) relationship between sustainable practices and financial performance.

Review findings – Results

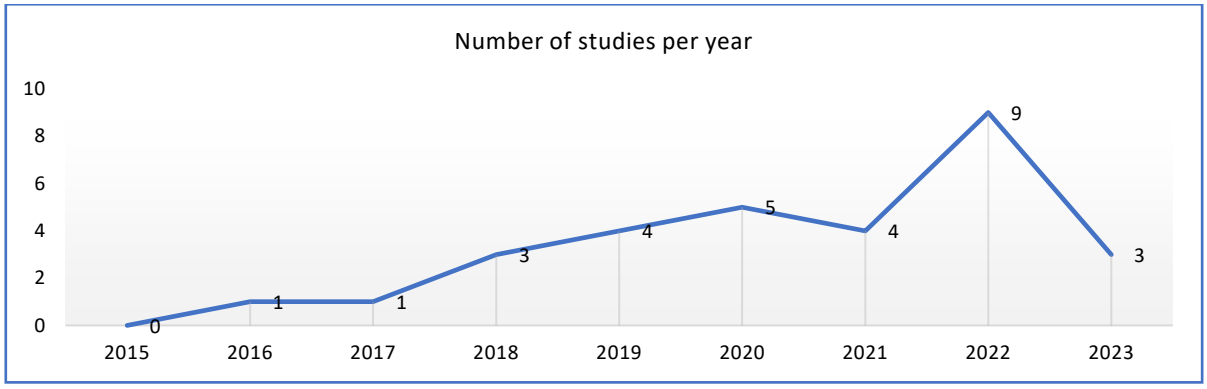
Number of studies per year

Figure 1 depicts the number of articles published per year related to sustainable practices and the financial performance of companies according to the review conducted in this study. As mentioned in the study by Muhmad and Muhamad (2020), after the adoption of the SDGs in 2015, the number of studies on this topic has shown a consistently positive increasing trend year after year, which can be attributed to the impetus provided by the UN and other institutions in this matter.

On the other hand, in 2023, there appears to be a decrease compared to the previous year (2022), which may be because the present study only considered the first four months of 2023 for data collection.

Figure 1

Number of articles published per year



Note. Own elaboration based on Scopus and Science Direct.

Distribution of studies by country

The study on the impact of sustainable practices on financial performance is a widely addressed topic in the global scientific literature. In this regard, an analysis of the number of papers published by country (See Figure 2) has been conducted, indicating the country or countries where the studied companies are located, classifying the results into three categories: developed countries, developing countries, and underdeveloped countries.

A category called "Various" has been identified, encompassing studies that combined multiple countries. This category stood out with the highest number of publications in this review, totaling 6 studies. These publications are of relevance to the purpose of this work since

they aims to obtain general findings and global results. Furthermore, these data reflect the need to address this topic globally, as environmental and social issues are largely interconnected and do not limit themselves to national borders. The search for general findings and global results aligns with the understanding that sustainability is a global challenge that requires unified solutions and approaches.

In terms of specific countries, Malaysia leads with the highest number of published works, totaling 4. Following are Spain, China, South Korea, and South Africa, with 2 publications each. Other countries considered in the study, including Indonesia, Belgium, the United States, Mexico, Brazil, Jordan, the Czech Republic, Vietnam, Slovakia, Thailand, Saudi Arabia, and Romania, each have one publication.

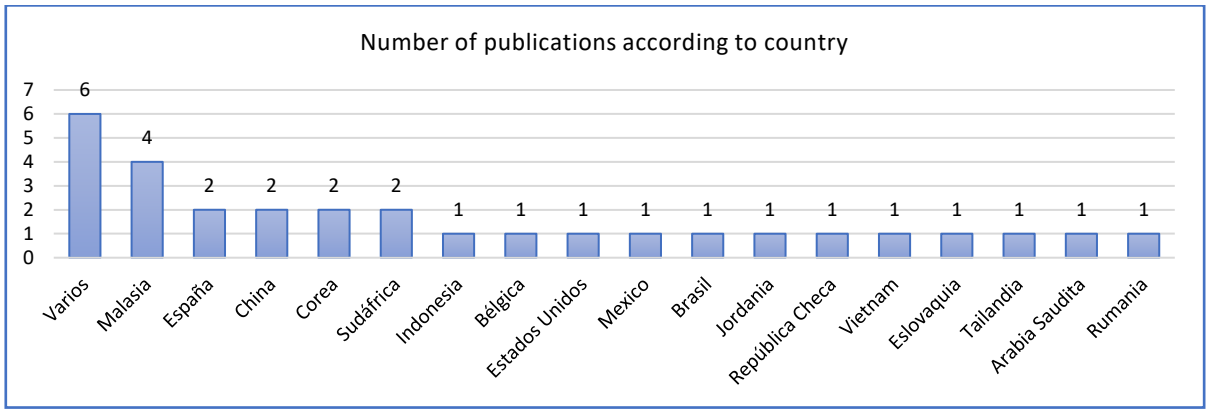
In a comparative analysis, it can be observed that developed countries show a significant level of research in this field, with Malaysia, Spain, and China being the most prominent in this regard. Developed countries often have financial and technological resources to support quality research and may also face greater pressure from investors and regulators to demonstrate sustainable practices. The involvement of these countries suggests a link between economic development and attention to sustainability.

On the other hand, developing countries have also shown a growing interest in this topic, as demonstrated by South Korea and South Africa with a considerable number of published works. This may be due to a combination of factors, including the increasing awareness of environmental and social challenges, as well as the possibility that these nations seek to develop their economies sustainably to avoid the pitfalls of traditional development models.

In contrast, underdeveloped countries have shown limited participation in the scientific literature on sustainable practices and their financial impact, which could be related to these countries often facing more immediate and urgent challenges in terms of economic and social development, leaving fewer resources and capacity for sustainability research. Additionally, academic and scientific systems in these regions may be less developed, making it more challenging to generate and disseminate knowledge in this field.

Figure 2

Number of articles published by country



Note. Own elaboration based on Scopus and Science Direct.

Number of companies that publish sustainable practices

Table 1

Number of companies publishing sustainability reports that meet minimum reporting requirements by country and year

Country	Number of companies (2016)	Number of companies (2021)
Malaysia	41	262
Spain	36	63
China	102	891
South Korea	28	55
South Africa	93	107
Indonesia	18	58
Belgium	15	41
USA	356	1169
Mexico	23	55
Brazil	31	56
Jordan	1	5
R. Czech	1	2
Vietnam	2 (2019)	13
Slovakia	no data	no data
Thailand	32	157
A. Saudi	2	19
Romania	1 (2017)	7
Average countries included in the study	**46**	**174**
Average countries not included in the study	**21**	**50**
World	**2276**	**6522**

Note. Prepared with data from OurWorldInData.org. Global Change Data Lab project.

Table No. 1 reveals notable disparities in the number of companies meeting minimum sustainability reporting requirements across different countries. For example, China and the United States have a large number of companies that publish these reports, whereas countries like the Czech Republic, Jordan, and Romania have very limited representation. This suggests that the adoption of sustainable practices may be influenced by local and regional factors.

There has been substantial growth in the number of companies publishing sustainability reports in countries like Malaysia, China, the United States, and Thailand from 2016 to 2021. This growth could be related to a greater focus on sustainability and increasing awareness of its importance in business decision-making.

Countries with a limited number of companies meeting minimum sustainability reporting requirements may be facing challenges in promoting sustainable practices. Identifying the barriers hindering the adoption of these practices in these regions could be an important research topic.

Differences in the number of companies publishing sustainability reports may reflect the maturity/immaturity of regulations and regulatory frameworks in each country. Further analysis could explore how regulation influences business behavior regarding sustainability.

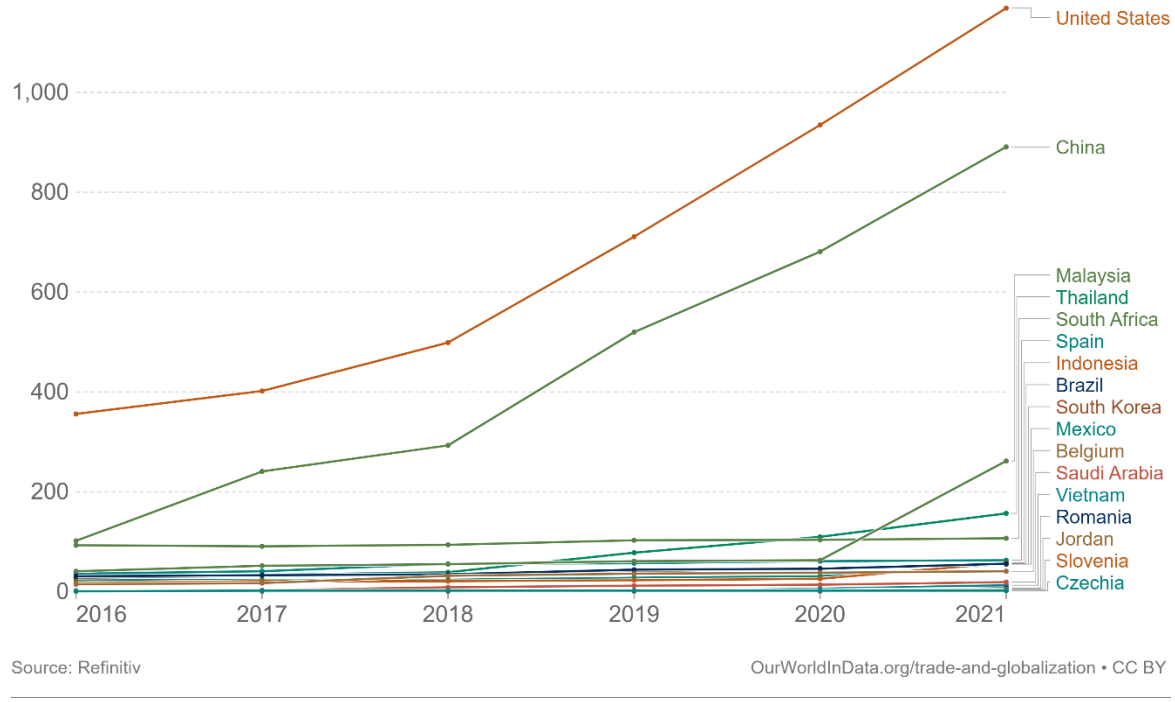
It is observed that companies from the countries included in this study have experienced a significant increase in the publication of sustainability reports (378%) over the five years analyzed, going from 46 companies in 2016 to 174 in 2021. In contrast, companies from countries not included in the study have also experienced growth in sustainability reporting, but more modestly (238%), going from 21 companies in 2016 to 50 in 2021.

The significant increase demonstrated by companies from the countries included in the study suggests a greater commitment to transparency and accountability regarding their sustainable practices. The publication of sustainability reports is a key indicator of a company's willingness to communicate its efforts and achievements in terms of environmental, social, and economic sustainability.

These findings underscore the importance of awareness and public scrutiny in promoting corporate sustainability, as companies operating in countries included in sustainability studies may feel greater pressure to meet minimum disclosure standards and ultimately improve their sustainable practices.

Graphic 1

Number of companies publishing sustainability reports that meet minimum reporting requirements by country (included in the study) and year



Note. Prepared from OurWorldInData.org. Global Change Data Lab project.

Distribution of studies by industry

The multi-industry category stands out as the one that concentrates the majority of publications on the topic of sustainability practices and their impact on the financial performance of companies, totaling 16 publications, as shown in Table 2. This category refers to publications that examined more than one industry, such as companies listed on stock indices. These publications are relevant to the purpose of this study because they aims to obtain general findings and global results.

The preference for the multi-industry category in terms of publication concentration is understandable from a methodological and research perspective. Including multiple industries in a single study allows for a more holistic and comparative view of how sustainable practices influence financial performance. Since companies operate in interconnected contexts and face similar sustainability challenges, analyzing multiple industries can lead to more general findings that apply to different business contexts.

Regarding the specific industries analyzed, it is observed that the manufacturing industry has the highest number of publications, totaling 7. This may be because it is a key sector of the economy that often has a significant impact on the environment due to the use of natural resources and waste generation. Thus, evaluating sustainable practices in the manufacturing industry is especially relevant from an environmental perspective. Additionally, this industry

may be subject to greater pressure from regulators and consumers to improve its environmental and social performance, as manufactured products are often subject to stricter quality and safety regulations, which can influence the adoption of sustainable practices to ensure regulatory compliance and customer trust.

On the other hand, the remaining industries: tourism, mining, plantations, transportation and storage, banking, energy, and fashion, each have one publication. This may indicate that these sectors could be in different stages of awareness and adoption of sustainable practices. Some of these sectors, such as mining and energy, may have historically faced significant environmental challenges, which could have led to greater attention to sustainable practices.

Table 2

Number of articles published by industry

Industry	Number of publications
Multi industry	16
Manufacture	7
Tourism	1
Mining	1
Plantations	1
Transportation and storage	1
Banking	1
Energy	1
Fashion	1

Note. Own elaboration based on Scopus and Science Direct.

Distribution of sustainability measures

Here is a summary of the sustainability measures used in the selected scientific studies and their relationship with the SDGs. Table 3 groups the sustainability measures according to the SDGs they address, providing an overview of the actions taken by companies to promote and measure sustainability in various areas.

The most addressed SDGs according to the sustainability measures found are SDG 12: Responsible Consumption and Production, SDG 8: Decent Work and Economic Growth, and SDG 9: Industry, Innovation, and Infrastructure.

The most commonly used sustainability measures in scientific studies include water and energy savings, proper hazardous material management, product and waste recycling, the use of renewable energy, promotion of gender equality in the company, transparency in disclosing environmental policies, and the adoption of sustainable leadership practices. These measures reflect the need to address various aspects of sustainability, such as environmental protection, human rights, gender equality, and community development.

Table 3

Sustainability measures used in the studies and their link with the SDGs

Sustainable Development Goal	Sustainability Measure
SDG 1: End Poverty	Social Sustainability Practices
SDG 2: Zero Hunger	The total planted area over a total area
SDG 3: Health and Wellbeing	Pollution reduction
SDG 4: Quality Education	Sustainable training
SDG 5: Gender Equality	Gender composition of the company, Diversity, Gender composition of the board of directors, Women on the board of directors
SDG 6: Clean Water and Sanitation	Reduction of water waste and/or solid waste
SDG 7: Affordable and Clean Energy	Use of renewable energies, Energy efficiency
SDG 8: Decent Work and Economic Growth	Social Sustainability Practices, Labor Sustainability, Environmental Sustainability, Human Rights, Diversity and Labor Rights, Sustainability of relations with employees
SDG 9: Industry, Innovation and Infrastructure	Greenmarket orientation, Number of green patents, Cleaner technologies, Green process innovation, Green product innovation
SDG 11: Sustainable Cities and Communities	Reduction of air emissions, Reduction of pollution
SDG 12: Responsible Production and Consumption	Water savings, Energy savings, Resource commitment, Environmental sustainability commitment, Sustainable growth, Product return, Product design for ease of recycling, Reduction of hazardous/toxic materials usage, Decreased frequency of environmental accidents, Gender equality policy disclosure, Energy efficiency, Establishment of proper procedures for hazardous or contaminated materials at the end of the product lifecycle, Establishment of recycling procedures, Green strategies, Eco-innovation, Sustainable supply chain, Cleaner and low-carbon energy generation, Comprehensive Corporate Sustainability Indicator, Green organizational innovation, Green innovation, Management always considers social and environmental impacts when making significant business decisions, Women on the board, Level of managerial resource commitment to reverse logistics within your company, Level of financial resource commitment to reverse logistics within your company, Level of technological resource commitment to reverse logistics within your company, Environmental Policy and Reporting, Internal environmental policies, Sustainable Leadership Practices (SL), Mitigation practices, Recycling practices, Social Sustainability Practices, Actively promotes socially and environmentally responsible customer/consumer behavior, Sustainable Value Proposition, Environmentally friendly suppliers, Product recycling, Waste recycling, Collects used customer packaging for reuse or recycling, Collects used customer products for recycling, Recognizes and rewards managers/employees who contribute to social and environmental improvements. Is open, honest, and transparent in its internal and external communication of social and environmental impacts, Material recovery or reuse, Waste reduction, Reduced water and/or solid waste waste, reuse or recycles inputs, Uses biodegradable content materials for packaging.
SDG 13: Climate Action	Labor sustainability, Environmental sustainability, Greenmarket orientation, Number of green patents, Cleaner technologies, Green process innovation, Green product innovation
SDG 15: Life in Terrestrial Ecosystems	Crude palm oil extraction rate

SDG 16: Peace, Justice, and Strong Institutions	Corporate Social Responsibility
SDG 17: Partnerships to Achieve the Goals	General Standards Sustainability, Work hard to ensure high social and environmental standards in the supply chain, a Sustainable supply chain

Note. Own elaboration based on Scopus and Science Direct.

SDG attention by industry according to sustainability measures found

In the multi-industry category, sustainability measures focus on gender equality, green innovation, environmental risk minimization, and sustainability in various areas such as employee relations and social practices. These measures reflect the company's commitment to sustainable development and corporate responsibility in multiple aspects.

In manufacturing, measures are oriented towards eco-innovation, energy efficiency, waste reduction, and the implementation of sustainability practices in the supply chain. These actions aim to minimize the environmental impact of manufacturing processes and promote the adoption of more responsible practices throughout the industry.

In mining, emphasis is placed on diversity and labor rights, energy and climate change management, as well as transparency in environmental policy and reporting. These measures aim to address the socio-environmental challenges associated with resource extraction and promote responsible practices in the mining industry.

In plantations, performance and efficiency measurement in agricultural production, especially in the palm oil industry, are highlighted. These measures focus on key aspects such as the yield of fresh fruit and sustainable oil extraction.

In transportation and storage, the importance of gender diversity in leadership and decision-making is emphasized, recognizing the value of inclusion and equity in industry management.

In the banking industry, sustainability measures focus on economic, environmental, and social aspects. These measures seek to promote sustainability in business and financial practices, as well as equitable and responsible development.

In tourism, measures range from the adoption of sustainability practices in waste management and pollution reduction to the use of renewable energy and environmentally friendly suppliers. These actions reflect the importance of minimizing environmental impact and promoting more sustainable tourism.

In the energy industry, proactive corporate environmental responsibility is highlighted, focusing on responsible energy resource management and compliance with environmental standards.

In fashion, sustainability measures center on clear social and environmental objectives, training and education on social and environmental responsibility, as well as transparency in

communication of social and environmental impacts. These measures aim to address environmental and social challenges in the fashion supply chain and promote a more sustainable approach in the industry.

Table 4

Sustainability measures used by the industry

Industry	Sustainability measures
Multi industry	Dissemination of gender equality policies, Green innovation, Minimize environmental risks, Cleaner technologies, Reuse or recycling of inputs, materials and waste, Women on the board of directors, Sustainable Value Proposition, Sustainability of relations with employees, ESG Performance, Sustainable growth, Labor sustainability, Environmental Sustainability, Social Sustainability Practices, Gender composition of the company, Corporate Social Responsibility, Comprehensive Business Sustainability Indicator, Sustainable Leadership Practices (SL), Commitment to environmental sustainability, Savings of water, energy and carbon emissions reduction, Internal environmental policies, Recycling, reuse and waste reduction practices, Environmental performance
Manufacture	Greenmarket orientation, Green innovation, Product design to be easy to recycle, Establishment of recycling procedures, Use of biodegradable content materials for packaging, Reuse of used product materials or components, Product return, Resource commitment , Green strategies, Eco-innovation, Sustainable supply chain, Mitigation practices, Waste reduction, Energy efficiency, Generation of cleaner and low carbon energy, Reuse, recycling, and energy recovery, Number of green patents, Improvement of the environmental situation of a company, Reduction of water waste and/or solid waste, Reduction of air emissions, Reduce the use of dangerous/harmful/toxic materials, Reduce the frequency of environmental accidents, Corporate Social Responsibility, Social Sustainability Practices
Mining	Directory, Diversity and Labor Rights, Energy and Climate Change, Environmental Policy and Reports, Human Rights and Supply Chain, Product, Transparency and Reports, Community Development
Plantations	The total planted area over the total area, Yield of fresh fruit bunches, the Extraction rate of crude palm oil, Price of crude palm oil
Transportation and storage	Board gender composition
Banking	Sustainability of General Standards, Economic Sustainability, Environmental Sustainability, Social Sustainability
Tourism	Serve organic food, Waste Recycling, Waste reduction, Pollution reduction, Water savings, Environmentally friendly suppliers, Use of renewable energy, Energy savings
Energy	Proactive Corporate Environmental Responsibility
Fashion	Social and environmental objectives, Allocation of resources to social and environmental improvements, Measurement and periodic reporting of social and environmental performance, Substitution of polluting materials/products, Training and education on social and environmental responsibility, Consideration of social and environmental impacts in business decisions, Recognition and reward those who contribute to social and environmental improvements, Open and transparent communication of social and environmental impacts, Social and environmental standards in the supply chain, Promotion of social and environmentally friendly customer/consumer behavior

Note. Own elaboration based on Scopus and Science Direct.

Distribution of financial measures

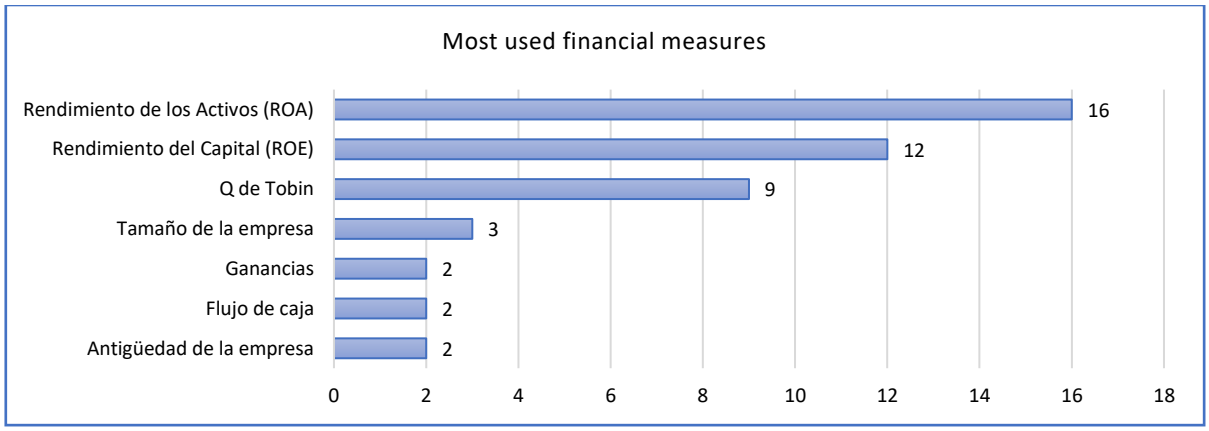
The analysis of the financial performance (DF) of companies is essential to assess their economic health and their ability to generate profitability. Through the review of selected

scientific studies, a set of recurring financial measures that allow measuring and evaluating this performance has been identified, as expressed in Figure 3.

Among the most commonly used financial measures, the following stand out: Return on Assets (ROA), Return on Equity (ROE), Tobin's Q, Company Size, Earnings, Cash Flow, and Company Age. The figure highlights the most commonly used measures (measurement and frequency of use in the selected articles). In addition, more financial measures have been found, such as an increase in resale revenue, Autonomy, Debt ratio, Sales growth, Reduction in disposal costs, Effectiveness in handling cost containment related to returned products, Effectiveness in handling recovery of assets related to returned products, Market share evolution, Earnings evolution, Capital expenditures, Financial slack, Revenues, Liquidity, Gross margin, Net Profit Margin (NPM), Labor productivity, Inventory reduction, Dividend payout ratio, Capital expenditure to sales ratio, Sales yield, Business profitability, Overall company profitability, Return on Investment, Return on Sales, Turnover, Asset turnover, Gross Operating Rate, Profit, Net profit, Value added, Economic Value Added, and Sales.

Figure 3

Financial measures most used in studies



Note. Own elaboration based on Scopus and Science Direct.

Impact of sustainable practices on financial performance

The analysis of financial results about companies' commitment to the Sustainable Development Goals (SDGs) is a significant contribution to understanding how sustainable practices are reflected in financial performance. The reviewed articles in this study were classified into three possible financial outcomes, which are: Positive, Inconclusive/Insignificant, and Negative (See Annex No. 1); providing a comprehensive and nuanced view of the relationship between sustainability and financial performance. The percentage of articles that revealed a positive relationship between sustainability practices and financial performance is 83%, followed by 10% inconclusive/insignificant, and 7% negative (see Figure 4).

The results of this study represent the diverse variables and methodologies used for various sizes of companies and industries. Despite the variety, the literature is dominated by the positive impact of sustainability practices on financial performance.

The prominent proportion of positive results (83%) between sustainability practices and financial performance reinforces the idea that sustainability can not only be considered a social responsibility or an ethical and/or moral obligation but also a strategic opportunity. This finding aligns with the growing understanding that companies adopting sustainability practices can enhance their long-term competitive position by addressing sustainability-related risks, driving innovation, and building trust among socially conscious investors and consumers.

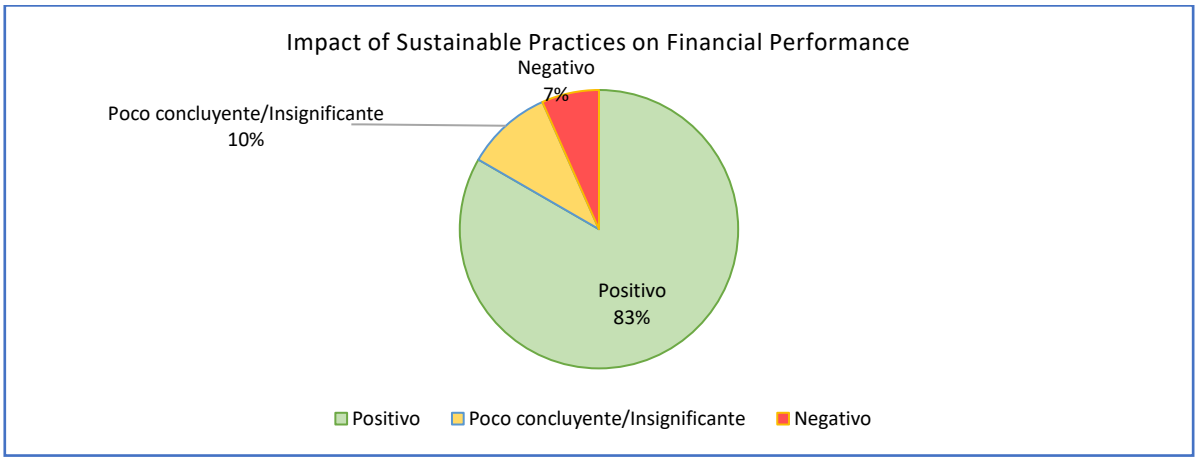
The percentage of inconclusive/insignificant results (10%) underscores the inherent complexity in studying the relationship between sustainability and financial performance. Various contextual factors, such as the industry in which the company operates, geography, governance structure, and market maturity, can influence the magnitude and timing of financial impacts. These inconclusive results may indicate that, in some cases, short-term financial benefits may not be evident but could materialize in the long term, or that certain factors counteract the positive effects of sustainability practices.

The proportion of negative results (7%) highlights the importance of carefully addressing sustainability practices to avoid unexpected adverse effects. These results could suggest that, in some cases, companies may face operational challenges or additional costs when implementing sustainability practices, which could temporarily impact their financial performance. However, these cases could also represent opportunities to improve sustainability strategies and find ways to mitigate negative impacts.

The overall dominance of positive results in the literature reflects progress in understanding the synergies between sustainability and financial performance. Companies that adopt sustainable practices often experience competitive advantages such as reduced operating costs, improved reputation, and the attraction of investors committed to social responsibility.

Figure 4

Impact of sustainable practices on financial performance



Note. Own elaboration based on Scopus and Science Direct.

CONCLUSIONS

The findings indicate that the interest in investigating the impact of sustainable practices on financial performance varies depending on the economic development category of each country and maintains a positive trend, meaning that year after year, there are increasingly more studies. Developed and developing countries show higher research activity in this area, while underdeveloped countries have more limited participation. These findings underscore the importance of promoting research into sustainable practices across all country categories to gain a global understanding and promote sustainable financial strategies worldwide.

The findings reveal that the multi-industry category encompasses the highest number of publications in the field of sustainable practices and their financial impact. Through a comparative analysis of the mentioned industries, possible links with the Sustainable Development Goals (SDGs) are identified, suggesting the importance of addressing sustainability comprehensively and across various industrial sectors to advance global sustainable development.

By addressing the challenges posed by the SDGs, companies can contribute to mitigating climate change, conserving natural resources, promoting social justice, and building a more responsible business environment. Additionally, sustainable practices not only benefit companies in terms of reputation and efficiency but also drive global sustainable development.

This work also highlights the sustainability measures used in different industries and their relationship with the SDGs. The most addressed SDGs include responsible production and consumption, decent work and economic growth, and industry, innovation, and infrastructure. The most used sustainability measures address aspects such as resource savings, proper management of hazardous materials, recycling, promotion of gender equality, and the adoption

of sustainable leadership practices. These measures are fundamental within the framework of global sustainability as they contribute to addressing socio-environmental challenges and promoting global sustainable development.

Each industry has adopted specific sustainability measures to address the particular challenges and opportunities they face about sustainable development. These measures reflect the industries' commitment to social and environmental responsibility and demonstrate their recognition of the importance of integrating sustainable practices into their operations.

The most used financial measures in scientific studies are Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. These measures are crucial for assessing the financial performance of companies and provide a comprehensive perspective on their economic health and their ability to create value. Adequate analysis of these measures provides valuable information for strategic decision-making and effective financial planning.

One of the main findings, according to the studies analyzed in this work, is the existence of evidence of a positive relationship between sustainability practices and financial performance in companies. The literature analysis reveals that 83% of the reviewed articles support this positive relationship, highlighting the importance of adopting sustainable practices in business management.

Despite the diversity of variables and methodologies used in the studies, as well as the consideration of different company sizes and industries, the conclusion that sustainable practices have a favorable impact on financial performance prevails. This suggests that companies that implement sustainable policies and strategies can reap long-term economic benefits.

These findings support the idea that sustainability is not only an ethical and environmental imperative but also an opportunity to enhance profitability and business competitiveness. By adopting sustainable practices, companies can mitigate risks, improve operational efficiency, strengthen corporate reputation, and attract conscious investors and consumers.

Thus, this study underscores the importance of sustainability as a key factor in the financial performance of companies. The results support the notion that sustainable practices can generate economic benefits and suggest that integrating environmental, social, and governance considerations into business management can lead to a competitive advantage and greater long-term sustainability.

Future lines of research

In the future, the intention is to expand the present analysis by adding information from primary sources for multi-industry companies in Argentina, contributing to this topic at the national level and generating relevant contributions in this field.

Future lines of research can address specific aspects of sustainable practices in different categories of countries and specific industries, for example. This could provide a more precise understanding of the factors influencing the adoption of sustainable practices in different economic and geographical contexts. It could also allow for the identification of the most effective sustainable practices in each sector and an understanding of how they relate to the corresponding Sustainable Development Goals (SDGs). On the other hand, longitudinal research could be conducted to track the financial performance of companies over time, before and after the implementation of sustainable practices. This would enable a more solid understanding of the causal relationship between sustainable practices and long-term financial results. Additionally, exploring barriers and facilitators for greater adoption of sustainable practices could be considered. Understanding the factors that drive or hinder their adoption is important to promote greater implementation of sustainable practices in companies. Finally, the present study only covers open-access articles from two databases, so expanding the search to include the entire literature and more databases could be beneficial.

These studies would contribute to expanding knowledge about the relationship between sustainability and financial performance, as well as promoting sustainable financial strategies on a global scale.

REFERENCES

Please refer to the articles in Spanish Bibliography.

BIBLIOGRAPHICAL ABSTRACT

Please refer to articles Spanish Biographical abstract.

ANNEX 1. List of studies analyzed and results found

Year	Author/s	Impact of the SP in the FP
2016	Suparak Suriyankietkaew, Gayle Avery	Positive
2017	Maria J. Charlo, Ismael Moya, Ana M. Muñoz	Inconclusive/ Insignificant
2018	Chrisovalantis Malesios, Antonis Skouloudis, Prasanta Kumar Dey, Fouad Ben Abdelaziz, Apostolos Kantartzis, Konstantinos Evangelinos	Inconclusive/ Insignificant
2018	Lucia Maciková, Marián Smorada, Peter Dorĉák, Benjamin Beug, Peter Markovič	Positive
2018	Ying Jiang, Xiaolong Xue, Weirui Xue	Positive
2019	Amin Jan, Maran Marimuthu, Rohail Hassan, Mehreen	Positive
2019	André Hellmeister, Harold Richins	Positive
2019	Thi Diep Uyen Doan, Van Hung Bui, Thi Thu Hien Phan. Xuan Hung Nguyen, Thi Kim Lien Tran	Positive
2019	Reginald Masocha	Positive
2020	Bambang Tjahjadi, Noorlailie Soewarno, Hariyati Hariyati, Lina Nasihatun Nafidah, Nanik Kustiningsih, Viviani Nadyaningrum	Positive
2020	Yeong Sheng Tey, Mark Brindal, Suryani Darham, Shaufique Fahmi Ahmad Sidique, Marcel Djama	Positive
2020	Simona Ĉinĉalová, Veronika Hedija	Negative
2020	Su Jin Yang, Seyoon Jang	Inconclusive/ Insignificant
2020	Ionica Oncioiu, Anca-Gabriela Petrescu, Florentina-Raluca Bîlcan, Marius Petrescu, Delia-Mioara Popescu, Elena Anghel	Positive
2021	Qiang Xu, Lian Xu, Zaiyang Xie, Mufan Jin	Positive
2021	Muhammad Zahid, José Moleiro Martins, Haseeb Ur Rahman, Mário Nuno Mata, Syed Asim Shah, Pedro Neves Mata	Positive
2021	Luay Jum'a, Dominik Zimon, Muhammad Ikram	Positive
2021	Xue Ning, Dobin Yim, Jiban Khuntia	Positive
2022	Rubén Michael Rodríguez González, Gonzalo Maldonado Guzman, Antonia Madrid Guijarro	Positive
2022	Sandra Escamilla Solano, Jessica Paule Vianez, Alicia Blanco González	Positive
2022	Jonathan Bauweraerts, Unai Arzubiaga, Vanessa Diaz Moriana	Positive
2022	Imran M. Ilyas, Oleksiy Osiyevskyy	Positive
2022	Jootae Kim, Sungjin Son, Ick Jin	Negative
2022	Bojana Vuković, Teodora Tica, Dejan Jakšić	Positive
2022	Ana Paula Perlin, Clandia Maffini Gomes, Felipe Cavalheiro Zaluski, Francies Diego Motke, Jordana Marques Kneipp	Positive
2022	Obey Dzomonda	Positive
2022	Wafa Ghardallou	Positive
2023	Yudi Fernando, Muhammad Shabir Shaharudin, Ahmed Zainul Abideen	Inconclusive/ Insignificant
2023	Mohammad Yousefian, Marc Bascompta, Lluís Sanmiquel, Carla Vintró	Positive
2023	Parvez Alam Khan, Satirenjit Kaur Johl, Anil Kumar, Sunil Luthra	Positive

Note. Own elaboration based on Scopus and Science Direct.

ANNEX 2. Information from the Scientific Journals consulted

Journal	Quartile	SJR 2022
Business Strategy and the Environment	Q1	2.87
Corporate Social Responsibility and Environmental Management	Q1	2.13
Environmental Science and Pollution Research	Q1	0.94
European Journal of Management and Business Economics	Q1	0.91
European Management Journal	Q1	1.63
Heliyon	Q1	0.61
Journal of Cleaner Production	Q1	1.98
Journal of Open Innovation: Technology, Market, and Complexity	Q1	0.74
Research in International Business and Finance	Q1	1.27
Sustainability	Q1	0.66
The Extractive Industries and Society	Q1	0.92
Revista de Gestão Social e Ambiental	Q4	0.11
Management Science Letters	No Assignment	-

Note. Own elaboration based on Scimago Journal and Country Rank (SJR) on 08/24/2023.