

Sustainable business and financial performance. Evidence from the UK

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Abstract


Purpose: In recent years, there have been growing concerns regarding the sustainable performance of businesses. The difficulties with companies' inefficient performance, public pressure on firms, government legislation, and environmental changes force companies to operate more sustainably. Moreover, by not performing more sustainably, companies put themselves at high risk of damaging their reputation and respectability, which subsequently impacts their financial situation. Applying sustainability strategies and becoming more sustainable means that a firm is responsible for its actions and decision in terms of environmental, economic, and social aspects. Although many scholars agree that there is a relationship between sustainability and financial performance, some propose that sustainability has an insignificant effect on a company's financial situation. So, the issue of sustainability and a firm's economic situation is a topic of significant controversy. Furthermore, some authors emphasize the complexity of verifying the connection between sustainability and the financial situation. For this reason, the aim of this paper is to examine the relationship between sustainability and performance within the UK market. **Methodology/approach:** This work uses linear regression on a sample of 100 companies listed on the FTSE100 to investigate the relationship between reported CSR and profitability. **Findings:** The outcome of the research highlights that for the specific year under investigation, sustainability reporting does not have an impact on performance indicators such as ROE, ROA, or profit margin. **Originality/value:** The article contributes to the discussion on the relationship between sustainable development and the financial results of enterprises.


Keywords: corporate decision, financial performance, profitability, sustainability, Global Reporting Initiative.


Streszczenie

Zrównoważony biznes a wyniki finansowe na przykładzie Wielkiej Brytanii

Cel: W ostatnich latach pojawiają się coraz większe obawy dotyczące zrównoważonych wyników przedsiębiorstw. Trudności związane z nieefektywnymi wynikami przedsiębiorstw, presja społeczna wywierana na przedsiębiorstwa, ustawodawstwo rządowe i zmiany w zakresie ochrony środowiska zmuszają przedsiębiorstwa do działania w sposób bardziej zrównoważony. Ponadto, unikając prowadzenia działalności w sposób bardziej zrównoważony, przedsiębiorstwa narażają się na wysokie ryzyko utraty reputacji, co

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z kolei wpływa na ich sytuację finansową. Stosowanie strategii zrównoważonego rozwoju i dążenie do bardziej zrównoważonego rozwoju oznacza, że przedsiębiorstwo jest odpowiedzialne za swoje działania i decyzje w zakresie aspektów środowiskowych, gospodarczych i społecznych. Chociaż wielu naukowców zgadza się z poglądem, że związek między zrównoważonym rozwojem a wynikami finansowymi jest niepodważalny, niektórzy uważają, że wpływ zrównoważonego rozwoju na sytuację finansową firmy jest nieistotny. Kwestia zrównoważonego rozwoju i sytuacji ekonomicznej firmy jest zatem przedmiotem poważnych kontrowersji. Co więcej, niektórzy autorzy podkreślają złożoność weryfikacji związku między zrównoważonym rozwojem a sytuacją finansową firmy. Celem tego artykułu jest zbadanie związku pomiędzy zrównoważonym rozwojem a wynikami firm na rynku brytyjskim. **Metodyka/podejście:** W badaniu związku między raportem CSR a rentownością firmy wykorzystano regresję liniową na próbie 100 spółek notowanych na FTSE100. **Wyniki:** Wyniki badania wykazały, że w danym roku sprawozdawczość dotycząca zrównoważonego rozwoju nie ma wpływu na wskaźniki dokonanych finansowych, takie jak ROE, ROA czy marża zysku. **Originalność/wartość:** Artykuł wnosi wkład do dyskusji o relacji między zrównoważonym rozwojem a wynikami finansowymi przedsiębiorstw.

Słowa kluczowe: decyzje przedsiębiorstw, wyniki finansowe, rentowność, zrównoważony rozwój, Globalna Inicjatywa Sprawozdawcza.

Introduction

Aspects such as inefficient performance, public pressure on firms, government legislation, and environmental changes increase the pressure on companies to develop and perform in more sustainable ways (Dienes et al., 2016; Dobbs, Staden, 2016). By not performing sustainably, companies put themselves at high risk of harming their reputation. This, in the longer perspective, will impact the company's financial situations. Sustainability represents the simultaneous need for compliance and company strategy (Fombrun, 1996; Michelin et al., 2013). Applying sustainability strategies and becoming more sustainable means that a firm is accountable for its actions in terms of environmental, economic, and social aspects. According to Hahn and Figge (2011), for a firm to be sustainable means that it should perform at its best without compromising the resources of future generations. Furthermore, sustainable business is considered to be more ethical, as well as more profitable, in comparison to non-sustainable businesses.

Sustainable development can also be defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 43). This is considered one of the most widely accepted definitions as it focuses on the needs of both current and future generations. Labuschagne et al. (2005) emphasize that sustainability means that a company adapts its strategies and activities to meet the needs of the enterprise and its stakeholders today, but at the same time, it protects, sustains, and enhances the human and natural resources that will be needed in the future. Goyal et al. (2013) point out that the idea of the "Triple Bottom Line" proposed by Elkington (1998) indicates that for organizations to be sustainable, they need to maintain a balance between environmental, social, and political aspects.

Although most scholars agree that the relationship between sustainability and financial performance exists, some suggest that sustainability has an insignificant, ambiguous, inconclusive, or contradictory effect on a company's financial situation (Aupperle et al., 1985; Griffin, Mahon, 1997; Rowle, Berman, 2000, Li et al., 2017).

The issue of sustainability and a firm's economic situation is the subject of significant controversy. Some authors emphasize the complexity of verifying the connection between sustainability and the financial situation, while other authors argue that the relationship exists only within particular industries.

This work aims to examine the relationship between sustainability and performance using linear regression on a sample of 100 companies listed on the FTSE100. The analysis shows a positive relationship between reported CSR and all measures of profitability for firms, even if they are not statistically significant. The paper contributes to the ongoing studies on performance and sustainability.

The paper consists of four sections. First, the literature on sustainability and firm performance is presented, then the sample and the method are explained. This is followed by the presentation of the results and the conclusions.

1. Literature review and hypothesis development

According to the Global Reporting Initiative (GRI, 2019), a sustainability report is defined as: "a report published by a company or organization about the economic, environmental, and social impacts caused by its everyday activities".

These reports allow firms to provide information and data on the non-financial factors of a firm's activities. It essentially permits companies to create solutions to improve and develop their accountability, transparency, and corporate image. As an early participant in sustainability reporting, the GRI transformed the sustainability reporting factor into a procedure and exercise that are adopted by companies globally.

Regardless of the fact that the effect of sustainability reporting may be positive or negative, a sustainability report indicates the values of a company, its corporate governance, as well as the methods applied to establishing a sustainable global economy. Non-financial reporting may likewise allow markets to react to constant changes. It also provides information to investors and shareholders, consequently keeping them informed, and importantly, showing the transparency of the company's performance. Kolk (2003) indicates that as there is a rapidly growing global trend requesting from companies to expand their reporting scope including additional information related to economic, social, as well as the environmental profile (Kolk, 2003; KPMG, 2015). Interestingly, the consent to disclose Corporate Social Responsibility reporting is obligatory in some countries (e.g., Sweden, Norway, Denmark, France, and Australia). In many others (e.g., the United States), it is an ongoing and developing issue.

By implementing and creating the Sustainability Reporting Standards, the GRI has reduced the misunderstandings regarding the procedure, in particular, the channels used to communicate the flow of information to stakeholders (Jones, 1995). The confusion existed as reports can be different, and that there is no specific accounting principle for social disclosure. According to the GRI report (GRI, 2019), 92 percent of the 250 largest firms in the world provide information about and report on their sustainability performance. Furthermore, about 74 percent of the companies mentioned above utilize the GRI Sustainability Standards, which essentially represents the fact that the GRI Sustainability Standards are broadly recognized and accepted as a method to report sustainability.

Kolk (2003) stresses that when analyzing and examining the existing trends in this field, sustainability reporting is a more prevalent practice in the industrial sectors. It is because some sectors are exposed to higher risks compared to sectors whose daily operations do not create any harm or danger to the environment. Nevertheless, financial sectors also have high risks, as businesses in the financial sector are susceptible to market fluctuations, which can ultimately disrupt capital markets, thus impacting many market segments and the lives of the market consumers.

By viewing environmental performance as a proxy for Corporate Social Performance, Russo and Fouts (1997) examined the relationship between environmental performance and financial performance in 243 firms from the United States. Their study indicated that the advantages gained from environmental performance were substantially greater in firms with higher growth. Similarly, King and Lenox (2001) examined the extent of the impact of sustainable performance on companies' performance in manufacturing companies based in the United States. Their research demonstrated that sustainable performance has a positive impact on companies' performance, and that the relationship between the two enhances and strengthens with industrial growth.

By using a simulation equation modeling for the European paper manufacturing industry, Wagner (2010) explored analogous relationships and further confirmed there is a substantial positive relationship between sustainable performance and financial performance. His results were similar to the study conducted by Hidemichi et al. (2012) on Japanese manufacturers. They conclude that if a company has better and more efficient management of toxic chemicals, it leads to the company's better performance (Hidemichi et al., 2012).

Additional research regarding Japanese automotive and manufacturing companies was carried out by Cortez and Cudia (2011). They examine the effect of Corporate Social Innovation on performance. They demonstrated that these innovations have a substantial positive effect on the financial performance of Japanese automotive companies. Nevertheless, research conducted by Choi (1999) was unsuccessful while trying to attach any significant relationship between sustainable performance disclosure and financial performance.

Similarly, a study by Sahay (2004) on sustainability reporting practices in India concluded that sustainable reporting was "inadequate and unsystematic". The study revealed that only a small number of Indian companies conducted sustainability reporting practices. Moreover, these practices mostly existed to gain publicity, rather than to actually demonstrate sustainable facts and figures.

Referring to the review of the literature regarding environmental performance reporting and financial performance, researchers and scholars have mixed results and opinions. However, according to KPMG (2015), theoretically, there is a positive relationship between Corporate Social Performance and financial performance. Corporate Social Reporting facilitates positive and healthy relationships with stakeholders; it is also a productive and efficient method of using resources, and it improves corporate transparency. It also draws investments which, in return, develop a company's financial performance.

The presented discussion led us to propose the following hypothesis:

The sustainability score has a positive impact on firm performance.

2. Sample selection, model, and variables

This study uses companies listed on the FTSE100. The data were collected from the Bloomberg database as well as publicly available information on the companies' investor relations webpages. We collected data for 2017 to verify that there was a possible linear relationship between performance and sustainability for that specific year. Our original sample comprised 100 companies, but due to a lack of relevant observations, it was reduced to 92 for the ROE (return on equity) model, 91 for the Profit margin model, and 90 for the ROA (return on assets) model.

Data for the companies' sustainability performance was retrieved using the Environmental, social and governance score (ESG). The ESG dataset was obtained from CSR and sustainability-related information, which was formed using the analysts' data from the ASSET4 (Thomson Reuters), CDP (Carbon Disclosure Project), ISS – IW Financial, MSCI (ESG Intangible Value Assessment, ESG Impact Monitor, Governance Metrics, and Carbon Tracker), Trucost, and Vigeo EIRIS databases.

Variables

As the aim of this work is to identify whether a company's sustainable performance has an impact on its financial performance, the dependent variable is the company's financial performance, while the independent variable is the sustainability performance ratio.

A company's financial performance consists of Profit margin ratio, ROA, and ROE. The profit margin ratio is the result of profit divided by revenues; ROA, is the net profit divided by the total assets; ROE is the amount of net profit returned as a percentage of shareholder equity, and it is measured by net profit divided by shareholder equity.

As previously mentioned, the independent variable is the company's sustainability performance score, which is an ESG performance indicator. Data for the companies' sustainability performance and was retrieved using the ESG score.

Model

The analysis adopts a linear regression model. The first objective is to establish if there is a relationship between a company's sustainability and its financial performance, and what the direction of that relationship is. It is important to identify whether there is a statistically significant relationship between the two. For the second objective, it is necessary to forecast any new observations, meaning whether it is possible to use the information about the relationship to forecast unobserved values.

The linear regression model used in this research to determine the relationships between sustainability performance and performance is given below:

$$\text{Performance}_{it} = \beta_0 + \beta_1 \text{SustainabilityPerformance}_{it} + \varepsilon$$

Sustainability Performance is a weighted average of Key Performance Indicators (KPIs). For the KPIs, we adopted the following four indicators: Energy Productivity (based on revenues/Total energy use); Carbon Productivity (based on Revenue/KgCO₂e, using Scope 1 and Scope 2 emissions); Water Productivity (based on Revenue/Total Water (m³); Waste Productivity (based on Revenue/Total Waste Generated (metric tons)).

3. Findings

The main purpose of this research is to explore the effect of a company’s sustainability performance on its financial performance based on 100 companies from the FTSE100. In particular, the correlation between the weighted averages of the sustainability key performance indicators and financial key performance indicators is analyzed through a linear regression model. The weighted average of the key performance indicators for sustainability performance consists of energy productivity, carbon productivity, water productivity, and waste productivity. The indication of a company’s financial performance is obtained through return on equity, profit margin, and return on assets. Figures 1–3 show the results for the sample group.

This database makes it possible to access various types of sustainability reports. During the research, we used the database from ESG, and the companies were obtained from the FTSE100 list. They were then further divided by the percentage score they had for sustainability reporting. For every company, information was acquired regarding its profit margin, return on assets, and return on equity. All the financial information was collected from publicly available data and annual reports. As some data was either missing or was not applicable in the case of a certain company, the total observations fluctuated for each variable. The average profitability indicators are ROE at 20.22%, ROA at 6.65%, and profit margin at 17.69%.

Figure 1. The relationship between ROE and sustainability

SUMMARY OUTPUT

Regression Statistics			
Multiple R	0.01054947		
R Square	0.0001119		
Adjusted R S	−0.0109986		
Standard Err.	7.35773634		
Observations	92		

	Coefficients	t Stat	P-value
Intercept	6.24150593	1.48764301	0.14034043
71	0.0049753	0.10008665	0.92049815

Source: authors’ own calculation.

Figure 2. The relationship between profit margin and sustainability

SUMMARY OUTPUT

<i>Regression Statistics</i>			
Multiple R	0.03659425		
R Square	0.00133194		
Adjusted R S	−0.0098818		
Standard Err.	36.7943495		
Observations	91		

	<i>Coefficients</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	24.795266	1.18249442	0.24015907
71	−0.0858793	−0.3454608	0.76056314

Source: authors' own calculation.

Figure 3. The relationship between ROA and sustainability

SUMMARY OUTPUT

<i>Regression Statistics</i>			
Multiple R	0.03625509		
R Square	0.00131443		
Adjusted R S	−0.0100343		
Standard Err.	20.1249786		
Observations	90		

	<i>Coefficients</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	16.2507744	1.41135033	0.16166721
71	0.04653515	0.34032663	0.73442162

Source: authors' own calculation.

A relationship was found between CSR reporting and all measures of profitability. Figures 1–3 show all three regressions and the significance levels associated with them. Figure 1 shows that the relationship between sustainability reporting and ROE is inconsistent. The coefficient on Corporate Social Responsibility reporting is 0.046, but it is not significant. A preliminary conclusion is that sustainability reporting does not have a substantial direct impact on ROE. Figure 2 shows that sustainability reporting does not have an impact on profit margin. The coefficient on Corporate Social Responsibility

is -0.085 , but the p -value is not significant. Finally, Figure 3 shows that sustainability reporting does not have an impact on ROA. The coefficient on Corporate Social Responsibility is 0.046 , but the p -value is not significant.

These preliminary results indicated no statistical significance, and it means that sustainability reporting did not impact firms' financial performance. Sustainability reporting did not have an impact on factors such as ROE, ROA, or profit margin for the companies used in this research. However, even if this study shows that sustainability reporting did not affect ROA, such results may have some shortcomings. We need to remember that ROA is an indicator that shows a company's profitability relative to its total assets. ROA must be compared between companies from the same industry because companies in different industries are not asset-sensitive. This means that they may require expensive items, such as plant and equipment, to produce income, whereas other companies may require more than that. ROA will be lower in companies that are not asset-sensitive compared to those that are.

Therefore, since this research examines companies from different industries, it may pose a limitation. In addition, due to the limited time frame, this study evaluated only one reporting period, so it would be beneficial to conduct analysis over a longer period. The study could be further explored by including company size, liquidity, and capital structure in the model, and looking at their impact. A cross country study could also be an interesting expansion of the project.

Conclusion

The impact of corporate sustainable performance on a company's financial performance has received increased attention in recent years due to its controversy. Several inconsistent findings state that sustainability performance reporting has a significant effect on a firm's financial performance. However, others demonstrate that it does not (Li et al., 2017). The majority of both the contemporary and older literature on the interaction between sustainability and financial performance verifies that there is a positive relationship between the two, and that sustainable performance has a substantial impact on financial performance. Thus, firms that are more sustainable show better financial results, as well as a better perspective for the future. Nevertheless, the majority of conclusions are limited to the perspective of one particular country.

This work adopted a linear regression to test the relationships between the variables, i.e., a firm's performance and sustainability indicators. The outcome of the research has highlighted that for the specific year under investigation, sustainability reporting did not have an impact on performance indicators such as ROE, ROA, or profit margin (there is a positive relationship, but it is statistically non-significant). The authors also performed robustness checks using different profitability ratios, but the picture does not change. This is a preliminary study that is looking for a linear relationship between sustainability and performance in a specific year and a specific listed market.

One of the limitations of this work was that we disregarded key variables that have demonstrated to be a crucial determinant of profitability, like Research and Development (R&D) investments and expenditures. Furthermore, this study did not take into consideration control variables such as the size of capital or its structure. McWilliams and Siegel (2000) proposed that such inconsistencies between Corporate Social Responsibility and profitability are the result of a misspecification in the model by disregarding R&D investments.

Further controls could be made in future research, such as adjustments for the differences between industries. In addition, the difference between the profitability of an individual company and the median of the industry must be accounted for, since it is less impacted by the influence of outliers. Through comparing a company's performance to others in the same industry, it is possible to get a deeper understanding and insights into a company's performance in relation to companies within their own industries.

Since several industries have greater profitability figures in comparison to others, understanding how the relationship between Corporate Social Responsibility and profitability will change between the industries could prove to be insightful. An additional proposal is to acquire information and data over more years to assess and examine the long-term impacts of sustainability reporting on financial performance. Using long-term financial data could demonstrate whether sustainability reporting is a rewarding investment in relation to the long-term gains or if it is just a short-term fix for companies to strengthen their profitability.

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