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## **Studies on the Effect of Corporate Social Responsibility on Financial Performance: Modest Role of Media Focus (Case FTSE 100: 2012–2020)**

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**Abstract:**

**Purpose:** *In the post-epidemic era, more and more companies are becoming aware of the importance of corporate social responsibility for their own development. However, there is no consensus on the relationship between CSR and financial performance (FP).*

**Design/Methodology/Approach:** *Using media attention as a moderator, we collected data from companies listed on the FTSE 100 between 2012 and 2020 to determine whether CSR was positively or negatively correlated with financial performance. Following a regression analysis, companies with high CSR performance have high levels of FP.*

**Findings:** *The higher the media interest in a company, the better its CSR performance. We classified media attention into two categories, according to the type of emotion positive and negative reports. Positive reviews mitigate the positive impact of CSR on financial performance, and negative reviews amplify this positive effect.*

**Practical Implications:** *These empirical results control for endogeneity and remain robust after using other variable measures.*

**Originality/Value:** *The results of this white paper complement recent work on linkage modelling and provide insight into the mechanisms of interaction of CSR-FP linkages with implications that will benefit the future sustainability of firms.*

**Keywords:** *Corporate Social Responsibility (CSR), performance improvement, moderating listed firms in UK.*

**JEL Classification:** *G30, G32, M14, L25, L82.*

**Paper type:** *Research article.*

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## **1. Introduction**

The fierce competition of today's market has become a challenge for corporate sustainability (Wan Ismail, 2022). In order to achieve sustainable development, companies must take responsibility not only for their profits but also for the environment, and have a corresponding social responsibility (Houssaieny 2022).

Since the early 2000s, CSR has attracted academics and societal attention and is a hot topic among the media, investment firms, regulators and the general public (Wilson, 2020). International organisations such as the Council for the Compact Economy (CEPAA), the United Nations Global Compact (UNGC) and the International Standards Organisation (ISO) are publishing CSR standards (Lohana, 2022). Thus, CSR has officially entered the international horizon. Some developed countries have adopted laws and regulations that encourage the implementation of CSR.

CSR is based on voluntary work that goes beyond the legal and contractual obligations of the company (Aga, 2023). Companies must pursue the interests of their stakeholders and create value while paying more attention to the needs of other stakeholders. In fact, since the advent of COVID-19, active participation in social responsibility activities has become the main task of modern companies.

CSR activities include employee health protection, scientific and technological development, participation in social investment, philanthropy and environmental protection. With economic development and the deepening of the social division of labour, more and more studies conclude that CSR meets the needs of stakeholders, strengthens and improves a company's reputation and financial position, and contributes to the company's sustainability in the market (Lentner, 2020).

The UK is one of the largest developing countries in the world (Zhong, 2019). UK companies are increasingly serving international markets. As the UK has entered an era of quality development, a range of issues such as medical health, food safety and care for the elderly are becoming increasingly important, making CSR performance and disclosure a matter of recognition.

The Guidelines on Social Responsibility for Listed Companies, Guidelines on the Application of Internal Controls in Companies, the UK Companies Act and the Guide to Environmental Disclosure for Featured Companies issued by the Department encourage everyone to increase (Guo, 2019). We encourage companies to actively participate in CSR activities. CSR started late in the UK, but over time more and more companies have taken the initiative to adopt and disclose corporate social responsibility. Especially during the 2020 COVID-19 outbreak, many companies (AstraZeneca, Coca Cola, etc.) rushed to Wuhan to donate money and supplies.

After the social responsibility assessment, everyone becomes a social responsibility assessment body. As public interest in the economy grows, companies are increasingly aware of social responsibility issues. Advances in digital technology have made it easier for ordinary people to access business information via social media. This means that media attention on CSR activities influences corporate decision-making, which in turn affects financial performance.

Corporate social responsibility is receiving a lot of attention, but does its implementation benefit companies? The relationship between CSR and financial performance is the subject of intense debate in the academic community. However, there are three different perspectives.

Firstly, over-investment in CSR activities reduces the chances of maximising the use of resources. Involvement in CSR activities increases costs because it creates conflicts between stakeholders, leading to lower company performance.

Secondly, a stronger commitment to CSR can improve the financial performance of a company. For this reason, many large companies around the world invest significant resources to be proactive in their social responsibility and disclose their CSR activities to stakeholders and potential investors through various channels. B. Annual Sustainability Report.

Third, there is a non-linear relationship between CSR and FP. Extensive research has been conducted on the relationship between the two, but the results are inconsistent due to the diversity of data and research methods (Tian, 2022).

This paper examines the relationship between CSR and FP in the UK context. In doing so, we continue to explore the boundary conditions of the CSR-FP nexus, drawing on existing research. Firms can be influenced by external factors when conducting socially responsible activities.

Therefore, in this paper we examine how positive and negative relationships have different impacts on the relationship between CSR and FP (Raza, 2022). Specifically, use the Rankin CSR to measure CSR performance. We have independently developed the UK's first rating system for CSR reporting. It is the authoritative CSR rating agency in China, dedicated to providing investors, consumers and the public with scientific and objective information on corporate responsibility. The replacement of the FP indicator in a robustness test maintains the reliability of the results.

This work differs from previous studies in several respects. The first is the research theme. Under the 'national and international traffic' development model, Britain's economic development will pay more attention to environmental protection and humanitarian considerations, and the British people will also pay more attention to

corporate social responsibility. It is therefore very important to consider the UK in the context of CSR and FP research. Second, the role of moderators. Some researchers have studied the effects of media attention on CSR and the effects of CSR on FP, but have paid little attention to the moderators of media attention in the relationship between CSR and FP. This is the original value of this research.

Media attention and the impact of CSR on FP were examined together in the UK context to influence the future development of sustainable businesses. Finally, financial performance indicators. Contrary to the work of some researchers, this paper reflects the financial performance of companies using profit margins before interest and taxes on total assets without revenue management. This not only makes financial performance more realistic and reliable, but also improves the company's operational capabilities, efficiency of asset utilisation and levels of financial control.

The content of this document is organised as follows:

Part 2 is devoted to the literature review and research hypotheses, Part 3 to the research methods and Part 4 to the analysis of the empirical results and robustness tests. Finally, we present some arguments that conclude this paper.

## **2. Literature Review**

Through our literature review, we found that academics have done extensive research on CSR and FP.

### **2.1 CSR-FP**

Sheldon was the first to formally propose CSR. In 1924, he pointed out that in order to maximise profits, a company must also take into account the needs of the groups concerned, both inside and outside the company, and contribute to society (Friedman, 2007).

However, even after almost a century of theoretical and practical development, there is still no clear and precise definition of CSR. From an economic point of view, the greatest responsibility of a company is to continuously seek profits within legal limits. From a sociological point of view, in addition to taking responsibility for shareholders and creating profits, companies must also participate in social security and be mindful of people's lives and ecological construction.

Howard Bowen, known as the "father of corporate social responsibility", pointed out that corporate social responsibility is about setting policies, making decisions and acting according to social norms and values. From this perspective, CSR can be seen not only as an obligation for companies to pursue long-term goals, but also as an important factor in achieving socially sustainable development (Lu, 2018).

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CSR is also important for companies to disclose non-financial information, effectively mitigate information asymmetry, strengthen internal controls and prevent insider trading. Due to the growing importance of CSR for economic and social development, CSR has become an important research topic in management and accounting.

Managers use resources wisely and only activities that contribute to CSR can help companies gain a competitive advantage. In their study, Hu et al. show that corporate behaviour that improves stakeholder value has become the new measure of financial performance. A review of the relevant literature reveals that research on the relationship between CSR and FP has been a hot topic since the 1970s (Grira, 2019).

However, their research results are very different. There are several statements such as positive correlation, negative correlation, irrelevance and non-linearity. Studies using different CSR measures and financial performance variables yield different results. In existing research, most researchers believe that CSR can lead to improved financial performance. Chen and Wang found that in the UK market, compliance with corporate social responsibility can improve financial performance from the beginning of the year and beyond.

Maqbool and Zameer (2021) showed that CSR can improve the profitability and returns of UK banking stocks. Cochran and Wood found that when companies were able to proactively integrate CSR into their normal production and operating processes, their financial performance improved compared to companies that did not implement CSR.

Stakeholder theory outlines the objectives and content of corporate social responsibility, and through corporate social responsibility activities, conflicts of interest between stakeholders and companies can be reduced, thereby improving the company's reputation, if companies can reduce the costs of reducing or achieving them. A differentiated competitive advantage to improve financial performance.

However, some experts believe that investing in areas unrelated to business operations is not recommended and is a waste of company resources. Agency theory: CSR activities are a manifestation of management over-investment. Managers lose company profits and undermine company performance in order to improve their own or the company's reputation.

Therefore, companies should pay more attention to how to improve operational efficiency instead of wasting resources on social organisations that have nothing to do with business. Furthermore, some researchers believe that there is no relationship between CSR and FP, or that there is a non-linear relationship between the two (Galeazzo, 2021).

In the UK, the incident has triggered a serious public debate on corporate social responsibility. If a company does not adequately fulfil its social responsibilities, it can at least damage its reputation and, at worst, lead to inefficiency and even bankruptcy. As a result, over the past decade, many companies have paid increasing attention to the important role of corporate social responsibility. This can lead to the development of sustainable businesses. On this basis, we formulated hypothesis H1.

*Hypothesis 1 (H1): A high level of CSR activities is associated with and leads to a higher level of FP.*

## **2.2 Media Attention–CSR**

There are many reasons why companies take on social responsibility (Xiong, 2021). One of the problems that management must solve in the corporate governance process is to reduce stakeholders' distrust of CSR activities. In short, the challenge for management is smooth communication with stakeholders (Ragazou, 2023). Choi pointed out that while some companies disclose their CSR activities, consumers tend to learn about products and brands through third-party platforms and news articles when purchasing products (Chae, 2021).

Therefore, companies should use the media to disseminate information. Never underestimate the power of the media in the information age as a tool for disseminating and amplifying information. In a complex market environment, the media can disseminate information on corporate social responsibility quickly and widely, and businesspeople can make the most of this information to make investment decisions and improve their competitiveness in the marketplace. Timely and credible media attention plays an important role in corporate social responsibility and performance, motivating companies to pay attention to social responsibility to improve their performance.

In addition, media attention plays an external regulatory role for listed companies and is also an important way for the public to obtain information on how companies are performing. As an independent third party, the media will actively report on corporate social responsibility compliance, thereby increasing the visibility and transparency of corporate behaviour.

Positive and negative reports thus encourage listed companies to be more attentive to their CSR practices. The media highlights the impact of their actions on CSR. If the media actively report on corporate social responsibility activities, they can more effectively present a good corporate image and encourage investors to invest. Negative media coverage of social responsibility puts companies under public pressure. At this point, they will invest more in social activities to build up capital.

Dyck (2010) looked at previous research and found that the control of media attention on a company could be as high as 13%. It turns out that media attention can actually influence corporate behaviour. While media attention reduces information asymmetries between consumers, other stakeholders and companies, listed companies are willing to proactively disclose CSR information to protect their honour and interests.

If the media can report objectively and fairly, CSR activities can gain the trust of consumers. Companies that actively engage in social responsibility actively seek media attention and expect positive coverage. As the media actively report on companies' social activities, the public absorbs more information about companies, creating a virtuous circle in which companies are more willing to disclose information (Sharabati, 2022).

In the UK, the incident has triggered a serious public debate on corporate social responsibility. If a company does not adequately fulfil its social responsibilities, it can at least damage its reputation and, at worst, lead to inefficiency and even bankruptcy. As a result, over the past decade, many companies have paid increasing attention to the important role of corporate social responsibility. This can lead to the development of sustainable businesses. On this basis, we formulated hypothesis H1.

*Hypothesis 2 (H2): There is a positive relationship between media attention and CSR activities.*

### **2.3 The Moderating Role of Media Attention**

Much research has been conducted in recent years on CSR and FP, media attention and CSR, but few studies combine the three. With the constant development of information technology, the means of information transmission are diversifying, and the rate of media use is increasing (Abbas, 2019). As a third party, the media report information about companies in a fair way and become an important means of information communication between stakeholders and companies.

Researchers such as Abbas have found that the performance levels of high-emitting companies (the energy industry) responding to media coverage are significantly improved when using low-emitting equipment. However, all these researchers focus on media attention as a mediating variable. In fact, studies on the relationship between CSR and FP do not reach consistent conclusions on the strength and direction of the influence between the two.

The more media attention a company receives, the greater the external pressure on the company. Media attention can therefore strongly empower companies and lead them to attach great importance to the social impact of their activities. Stakeholders

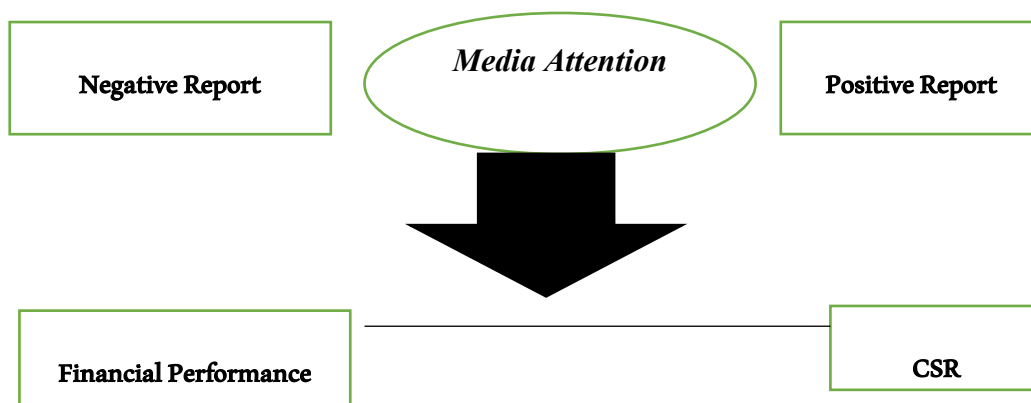
understand and monitor company behaviour through media coverage and 'reward and punish' companies by 'buying or not buying'. The results are directly reflected in the company's performance. Furthermore, as a tool to guide public opinion trends in society, the media exerts a compelling force and external pressure on corporate behaviour, encourages companies to take responsibility for the social impact of various business actions and thus influences corporate performance (Boccia, 2017).

Therefore, from a statistical point of view, it seems more convincing to consider media attention as a moderator. In this context, we have formulated a third hypothesis.

*Hypothesis 3 (H3): The relationship between CSR and FP is moderated by media attention.*

The conceptual framework for the study is presented in Figure 1.

*Figure 1. Proposed research model.*



*Source: Own study.*

### 3. Methodology

#### 3.1 Sample and Data Sources

CSR disclosure in the UK experienced 'explosive' growth in 2012 due to the combined efforts of several forces, including government, financial markets and industry associations. Listed companies account for over 82% of all disclosures and are the main driver of CSR reporting in the UK. Therefore, we selected UK listed companies from 2012 to 2020 as our research sample. The sample consists of 97 valid samples and unbalanced panel data of 873 observations after excluding financial and insurance companies, pharmaceutical companies, services, etc.

The CSR score in this article is based on the evaluation report, and the higher the score, the more effectively the company's CSR activities. Other data such as financial performance, leverage, cash flow, Tobin's q, ownership concentration, ownership structure and education development are obtained from the UK Fellow and Research Accountant market database. GDP is taken from the National Statistical Office of Great Britain. All variables have been winsorised at the 1% level to avoid the influence of extreme values on the conclusions of the study. The relevant data were processed manually in EXCEL and statistically in STATA.

## **3.2 Measures**

### ***3.2.1 Independent Variable***

Corporate social responsibility (CSR) is the most important explanatory variable. Given the reliability and availability of data, we have adopted the FTSE 100 assessment report, which is authoritative and widely recognized in academic and social circles. The structured expert rating allows the FTSE 100 assessment reports to fully reflect CSR performance.

### ***3.2.2 Dependent Variable***

Use financial performance (FP) as the dependent variable. Given the accuracy of accounting information, financial performance is usually expressed directly in terms of interest and pre-tax return on total assets or return on equity, with less consideration for the negative effects of earnings management. Therefore, we draw on the practice of Zhao Lijuan (2018). The deficit (ratio of earnings before interest and taxes to total assets excluding earnings management) is used to represent financial performance.

### ***3.2.3 Moderator Variable***

We consider media attention as a moderating variable, measured by the total number of online press articles. The data processing procedures are as follows:

First, enter the company's abbreviation in the advanced search of the news search engine. Then, before the date of each annual report, it searches for reports with the company's abbreviation in the title. Then filter out public company announcements, analysts' recommendations and reports covering multiple public companies in a single report.

Finally, the total number of reports relevant to the importance of media attention is counted. For negative reports, a clearly negative language or tone in the title and content of the report will be used as the basis for the negative report, including B. "Scandal", "Loss", "Injury", "Warning", etc. A neutral report, although apparently "neither good nor bad", increases the visibility of a company in society. Therefore, treat neutral reports as positive reports.

### **3.2.4 Control Variables**

Based on relevant research on corporate social responsibility, media attention and financial performance, corporate debt, cash flow, Tobin's Q, real estate concentration, type of real estate, level of education and level of local economic development were selected as control variables.

In the data collection process, the asset-liability ratio is used instead of the liability ratio due to the availability and reliability of the data. Instead of cash flow, net cash flow (operating activity/total assets) is used. The key equity ratio is used to replace the ownership concentration. The number of universities, the level of educational development. Regional GDP is used to replace the level of regional economic development. The type of ownership is represented by Nature. 1 means that the company is state-owned, 0 means that the company is not state-owned. Table 1 summarizes the definitions of the variables, including attributes, descriptions and measures.

**Table 1.** Description of variables used in this study.

<b>Variable</b>	<b>Symbol</b>	<b>Definition</b>
Core Variables		
Financial Performance	<b>Unebit</b>	Total assets EBITDA margin after excluding surplus management
Corporate Social Responsibility	<b>CSR</b>	2012–2020 CSR ratings (based on the rksratings.cn database)
Media Attention	<b>Me</b>	Total media coverage
	<b>Me1</b>	Positive media coverage
	<b>Me2</b>	Negative media coverage
Control variables		
Debt Leverage	<b>Lev</b>	Corporate assets-to-liability ratio
Cash Flow	<b>Cash</b>	Net cash flows from operating activities/total assets
Tobin's Q Ratio	<b>Q</b>	2012–2020 (based on the FTSE 100 database)
Ownership Concentration	<b>Top</b>	Number of shares held by the largest shareholder divided by the total share capital of the company
Nature of Ownership	<b>Nature</b>	A dummy variable that takes value 1 if state-owned, and 0 otherwise
Education Development	<b>Education</b>	Number of top universities in the province where the company is registered
Gross Domestic Product	<b>GDP</b>	2012–2020 GDP (based on the stats.gov.cn database)

**Source:** Own study.

### **3.2.5 Model Building**

We have read extensively on the research on the relationship between CSR and PS and use the Xiong econometric model to aggregate the standard errors for each firm and test the proposed hypothesis.

To test the above-proposed hypothesis H1, the model (1) is constructed as follows.

$$\text{Unebit}_{i,t} = \alpha_0 + \alpha_1 \text{CSR}_{i,t} + \alpha_2 \text{Lev}_{i,t} + \alpha_3 \text{Cash}_{i,t} + \alpha_4 \text{Q}_{i,t} + \alpha_5 \text{Top}_{i,t} + \alpha_6 \text{Nature}_{i,t} + \alpha_7 \text{Education}_{i,t} + \alpha_8 \text{GDP}_{i,t} + \varepsilon_1 \quad (1)$$

To test H2 proposed above, model (2) is constructed as follows.

$$\text{CSR}_{i,t} = \alpha_0 + \alpha_1 \text{Me}_{i,t} + \alpha_2 \text{Lev}_{i,t} + \alpha_3 \text{Cash}_{i,t} + \alpha_4 \text{Q}_{i,t} + \alpha_5 \text{Top}_{i,t} + \alpha_6 \text{Nature}_{i,t} + \alpha_7 \text{Education}_{i,t} + \alpha_8 \text{GDP}_{i,t} + \varepsilon_2 \quad (2)$$

To test H3 proposed above, model (3) is constructed as follows

$$\text{Unebit}_{i,t} = \alpha_0 + \alpha_1 \text{CSR}_{i,t-1} + \alpha_2 \text{Me}_{i,t-1} + \alpha_3 \text{Csri}_{i,t} \times \text{Me}_{i,t-1} + \alpha_4 \text{Lev}_{i,t-1} + \alpha_5 \text{Cashi}_{i,t-1} + \alpha_6 \text{Q}_{i,t-1} + \alpha_7 \text{Top}_{i,t-1} + \alpha_8 \text{Nature}_{i,t-1} + \alpha_9 \text{Education}_{i,t-1} + \alpha_{10} \text{GDP}_{i,t-1} + \varepsilon_3 \quad (3)$$

In equations (1)-(3),  $\alpha$  is the estimated coefficient,  $i$  represents the firm,  $t$  represents time,  $\varepsilon$  is the random error term. To avoid endogeneity, this model is described with a lag of one year. In other words, all variables are values from the previous year corresponding to FP.

## 4. Discussion

### 4.1 Statistics Description

Table 2 presents the descriptive statistics of the sample. We can see that CSR has a mean of 47.018 and a standard deviation of 12.706. The large gap between the highest value of 86.143 and the lowest value of 31.732 indicates an uneven CSR performance. Some companies are more proactive, while others need to improve their CSR performance.

Unebit has a large difference between the lowest value of -1.086 and the highest value of 0.497, indicating a gap in the performance of the companies in the sample. With an average leverage level of 52.19%, the overall leverage level is relatively reasonable, but there is a large difference between the minimum value of 8.45% and the maximum value of 91.57%, indicating that the leverage of the companies in our sample is very different.

The standard deviations of Cash and Q are 0.073 and 1.318 respectively. Regarding the major shareholders' ratio, the average value is 40.37, indicating a high degree of concentration in the sample companies. There is a large difference between the highest score of 43 points and the lowest score of 1 point, suggesting that the level of educational development is not balanced across provinces.

There is little difference between the median and average GDP, and the overall distribution is more even.

**Table 2.** *Statistical description of all variables.*

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std-Dev</b>	<b>Min</b>	<b>Max</b>
<b>CSR</b>	873	47.018	12.706	31.732	86.143
<b>Unebit</b>	873	0.04	0.091	- 1.086	0.497
<b>Lev</b>	873	52.19	22.76	8.458	91.573
<b>Cash</b>	873	0.063	0.073	- 0.096	0.019
<b>Q</b>	873	1.513	1.318	0.1736	8.1197
<b>Top</b>	873	40.374	17.002	9.31	84.446
<b>Education</b>	873	11.456	14.094	1	43
<b>GDP</b>	873	4.528	0.722	8.03	11.177

*Source:* Own study.

## 4.2 Regression Results

### 4.2.1 Regression Analysis of CSR and FP

Table 3 shows the results of the regression analysis of the model variables. The results show a significant positive correlation between CSR and deficit at the 10% level, consistent with H1 ( $r=5.346$ ,  $p<0.1$ ). In other words, companies are always closely linked to society and other stakeholders and cannot exist alone in society.

Only by taking social responsibility seriously can we establish a good brand image, attract more investors to cooperate and make a good profit for the company. At the same time, the adjusted  $R^2$  coefficient is 0.081. This shows a good agreement between the explanatory variables (CSR) and the dependent variables.

**Table 3.** *CSR–Unebit relationship using OLS analysis.*

<b>Independent Variable</b>	<b>Unebit (t)</b>
<b>Constant</b>	10.891*** (2.93)
<b>CSR</b>	5.346* (1.95)
<b>Lev</b>	0.071*** (4.98)
<b>Cash</b>	20.479*** (5.77)
<b>Q</b>	0.784*** (-2.89)
<b>Top</b>	0.024*** (1.42)
<b>Nature</b>	4.003*** (5.03)
<b>Education</b>	0.088*** (3.08)
<b>GDP</b>	2.168*** (7.325)
<b>Adj- R<sup>2</sup></b>	0.081

(t)

*Note:* \*  $p < 0.1$ ; \*\*\*  $p < 0.01$ .

*Source:* Own study.

#### 4.2.2 Regression Analysis of Media Attention and CSR

As shown in Table 4, the correlation coefficient between Me and CSR was 0.314, with a significant positive correlation at the 1% level ( $r=0.314$ ,  $p<0.01$ ), which also supported H2 as expected. I am here. The adjusted  $R^2$  coefficient is 0.094, indicating that the model passes the significance test and has a good fitting effect.

This shows that media attention plays an important role in the recognition process of corporate social responsibility. The more the media talks about the company, the more open and transparent the company's information will be, and the more stakeholders will have a better understanding of the state of the company's framework and development prospects.

This will attract more consumers to the company's products and promote cooperation between suppliers and investors. When a company receives a grant, it becomes more proactive in implementing and disclosing corporate social responsibility. Conversely, if the company's risk is low, there will be a lack of communication and understanding between companies.

**Table 4.** Media–CSR relationship using OLS analysis.

Independent Variable	CSR (t)
Constant	28.642*** (6.02)
Me	0.314*** (6.92)
Lev	0.066*** (4.89)
Cash	27.348*** (8.19)
Q	0.639*** (-3.775)
Top	0.101*** (6.98)
Nature	1.769*** (3.44)
Education	0.196*** (6.38)
GDP	1.218*** (4.09)
Adj- $R^2$	0.094

Note: \*\*\*  $p < 0.01$ .

Source: Own study.

#### 4.2.3 The Impact of Media Attention on this Relationship

To confirm that media attention plays a role in regulating the relationship between CSR and FP, we introduced a cross variable  $CSR_{i,t} Me_{i,t}$  based on the above survey and the regression results are presented in Table 5. As mentioned earlier, this is known to be the case when Me as a moderator variable can influence the direction and strength of CSR and Unebit.

In Table 5, the coefficient of the  $CSR*Me$  interaction term is - 0.987, which is significant at the 10% level, indicating that media coverage plays a negative moderating role in the advertising effect of CSR on PS. Furthermore, we divided

media attention into positive and negative reports. In Table 5, the regression coefficients for the interaction terms of CSR\*Me1 and CSR\*Me2 are -1.473 and 16.873 respectively. We find that positive relationships play a negative regulatory role, and negative relationships play a positive regulatory role in this relationship.

#### **4.2.4 Robustness Test**

In this section, robust analyses are performed to ensure the reliability of the results and to eliminate possible estimation biases resulting from measurement errors. To measure the firm's PS, net profit (np) is used as a proxy for PS to analyze the robustness of the model. Net profit, also known as after-tax profit or net profit, is the profit from a company's activities and is a key indicator for measuring the business efficiency of a company.

Table 6 shows the results of the robustness analysis. This is consistent with the results of the regression model in Table 3. H. CSR is positively correlated with financial performance. Therefore, the estimation results of the research model in this paper are robust and the research findings have some generality.

**Table 5.** Moderation result.

Variable		CSR	
Unebit	8.747*** (3.11)	9.187*** (2.798)	4.786 (1.672)
CSR * Me	-0.987* (-2.39)		
CSR * Me1		-1.473** (-2.47)	
CSR * Me2			16.873*** (3.09)
N	540	540	540
F	27.64***	28.46***	28.13***
Adj-R <sup>2</sup>	0.81	0.89	0.93

Note: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: Own study.

**Table 6.** Substitute variables for Unebit.

Independent Variable	Np (t)
Constant	18.476*** (4.378)
CSR	0.077*** (9.989)
Lev	2.003*** (4.75)
Cash	19.713*** (4.76)
Q	-0.311 (-1.32)
Top	-0.009 (-0.086)
Nature	3.219*** (6.82)
Education	0.023 (0.79)
Adj-R <sup>2</sup>	0.183

Note: \*\*\*  $p < 0.01$ .

Source: Own study.

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## 5. Discussions and Implications

We selected the data of listed companies from 2012 to 2020 as the survey sample, collected and organised the data published by the FTSE 100 and conducted data analysis. In addition, we introduce media attention as a moderating variable and examine its influence mechanism.

The relationship between CSR and FP has been studied in many organisations and countries. This survey complements the literature on CSR in developing countries. Companies engage in various business activities such as production, sales and services in society, and are always connected to all parts of society. Conversely, if everyone's wishes cannot be met, the development of the company will be hindered.

Socially responsible companies tend to be more sensitive to the needs of their users and consumers in their products and services. For example, by improving employee benefits and adopting environmentally friendly design, users are more likely to consume products and services more efficiently, giving companies an advantage over their competitors.

At the same time, if a company wants to remain competitive in the long term, it must constantly promote its social responsibility objectives to build a good long-term corporate image and gain goodwill. Goodwill ultimately leads to good FP, which in turn leads to profit growth. Allocating resources to CSR activities is therefore seen as an investment rather than an expense. It is also well-known that a company's commitment to CSR can improve business results.

Socially responsible firms tend to have higher levels of performance (H1). As in our study, Thuy and Khuong *et al.* (2021) suggest that socially responsible firms can build trust with stakeholders, reduce costs and increase revenues. Magdalena and Malgorzata suggest that corporate social responsibility is one of the main factors that determine a company's reputation and have a positive impact on its financial performance.

According to Carvalho and Madaleno (2022), social responsibility is the most basic business practice. Not only does it benefit society and make the environment sustainable, but it can also significantly improve the asset turnover and financial independence of companies.

The media, as an important alternative mechanism to the legal system, plays an important role in CSR disclosure. Firstly, they have an oversight role. The "magnifying glass" function of the media can externally monitor the normal functioning of companies, effectively protect companies from financial fraud, regulate management behaviour and promote lawful operations. Secondly, there is the information transfer function.

Media does not own or share any business, but is an independent third party, which gives Media's disclosures its own independence and legitimacy. This can effectively mitigate the problem of information asymmetry. When the media talks more about a company, stakeholders know more. To protect its reputation and image, the company commits itself to employee welfare, environmental protection, philanthropy and other aspects.

On the contrary, the less public a company is, the less public it is known. Investors adopt a more cautious attitude to avoid making bad decisions, and companies resist stakeholders, which makes conservative companies reluctant to assume their social responsibility. Thus, there is a significant positive correlation between media attention and CSR (H2).

As Shen said, in the new digital age, with the use of the Internet and social media, corporate social activities are becoming more and more open. By ensuring wide media coverage of companies, society can properly evaluate and judge the social activities of companies. The more media attention a company receives, the more obvious the effectiveness of a company's advertising in fulfilling its social responsibility.

Socially responsible companies tend to have higher levels of performance (H1). As in our study, Thuy and Khuong et al. (2022) suggest that companies that take their social responsibility seriously can build trust with their stakeholders, reduce costs or increase revenues. Magdalena and Malgorzata (2021) suggest that corporate social responsibility is one of the main factors that determine a company's reputation and have a positive impact on its financial performance. According to Carvalho and Madaleno (2022), social responsibility is the most basic business practice. Not only does it benefit society and make the environment sustainable, but it can also significantly improve the asset turnover and financial independence of companies.

### **5.1 Media as a Critical Alternative Mechanism to the System**

The empirical analysis concludes that media attention plays a moderating role between CSR and financial performance (H3). To understand how media attention is moderated, we divide media attention into positive and negative ratios. In Table 5, the coefficient of the CSR interaction term Me1 is -1.473, indicating that a positive ratio moderates the positive effect of CSR on financial performance.

It is not difficult to see that companies with good social responsibility and strong financial performance have scientific and effective management systems, and their systems and policies are almost perfect. Companies voluntarily participate in social services, which translate into better financial performance. For start-ups and growing companies, the key is to ensure their survival. The performance of this type of CSR has been poor in the past.

Therefore, if companies aggressively market their funds, improve their public relations, clarify corporate responsibilities and build a corporate image, SMEs will suffer from a lack of funds, which will affect their performance. Table 5 shows that the CSR\*Me2 interaction coefficient is 16.873. This means that negative reports can play a positive role in promoting the relationship between CSR and financial performance.

As mentioned above, the media can monitor companies in the performance of their duties (Shirasu, 2022). If there are problems with the company's operations, finances, personnel, etc., the media will question or criticise it. At this stage, in order to stabilise public opinion, we will adjust and optimisations within the company and move forward regularly.

This study has the following important implications:

First, this paper adds to the existing literature on the relationship between CSR and FP. In the face of social tragedy, it is very important for companies to assume their social responsibilities to ensure sustainable development. A British sportswear company donated large sums of money even as it struggled to survive during the state floods. The public thus gains respect for the association and engages in "wild consumption".

Second, this is the first study to examine the relationship between CSR and FP using media attention as a moderating variable. The theory and practice of corporate social responsibility in the FTSE 100 is still in its infancy and much work remains to be done. The media not only motivate companies to engage in social activities but also play a key role in the process of stakeholder understanding of companies.

Therefore, under the attention of the media, managers and governments are encouraged to develop more targeted policies and proposals to encourage companies to actively exercise their social responsibility and promote their active development in the UK market.

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