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Does Corporate Social Responsibility Affect the Financial Performance in the FMCG Sector? Evidence from the BSE FMCG Index

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Abstract

The study examines the relationship between Corporate Social Responsibility (CSR) and Corporate Financial Performance (CFP) of companies listed on the Bombay Stock Exchange (BSE). It is based on the BSE Fast-Moving Consumer Goods (FMCG) index. It consists of 30 companies in the FMCG sector, and analysis was undertaken on 25 BSE FMCG companies from 2013-2014 to 2021-22. The companies are selected based on top market capitalisation. To retrieve CSR data from the company's annual report, the Sustainability Reporting Index (SRI) developed by Garg (2017) has been utilised as CSR data remains challenging to access in India. The report also includes social, economic, and environmental disclosure, and it is also the only official and legal document published regularly by the organisation. To analyse the relationship between CSR and CFP, six indicators, namely Return On Equity (ROE), Net Sales (NS) and Net Profit (NP), are taken as an independent variable which determines the firm's profitability. Whereas stock price, Earning Per Share (EPS) and Price to Earnings (P/E) ratio are used to determine market share return. Then Capital Employed (CE), company size and Debt to Equity (D/E) ratio are used as a control variable. The research findings yield mixed results, revealing the positive and negative relationships between CSR and CFP across different models. Notably, the average sustainability reporting score indicates a collective need for companies to enhance their CSR initiatives, particularly in addressing environmental concerns. This study carries significant implications for managers and decision-makers, emphasising the importance of investing in sustainable projects after a thorough cost-benefit analysis. Such investments contribute to building competitive advantages by meeting stakeholder expectations and fostering a robust brand image for the company.

Keywords: BSE FMCG Index, Content Analysis, Corporate Social Responsibility, Sustainable Reporting Index Framework

1. Introduction

The idea of implementing CSR is generated from the perception that organisations have acquired materials and human resources from society and must give something in return to its origin (Sharma, 2018). The role of CSR in economic, social, and environmental development has been crucial in shaping the nation's destiny, as it promotes environmentally and socially responsible behaviour through the involvement of stakeholders and management. CSR thus becomes an important instrument for honouring Sustainable Development Goals (SDGs). These goals will help in achieving equality, peace and prosperity among its people and the planet through partnerships between various nations. Although CSR can be enacted as a business strategy, its significance towards tackling environmental issues has increased over the past few years (Maqbool & Hurrah, 2020). The primary reason for this increase is the growing awareness of the need to protect the environment from harmful corporate actions (Rahi *et al.*, 2023). Environmental degradation and climate change are escalating challenges in developing countries, with long-lasting impacts on everyone (Abid

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et al., 2023; Boubakri *et al.*, 2021; Suganthi, 2019). These negative effects of corporations have contributed to recent global warming, widespread wildfires, and the melting of Arctic ice (Pannett, 2022; Tolliver *et al.*, 2020), the Fast-Moving Consumer Goods (FMCG) plays a role in environmental degradation, as the sector is one of the largest in the Indian economy and the world. FMCG consists of everyday products that are purchased and used by the general public (Kuzmina *et al.*, 2019; Muranko *et al.*, 2021). These products can include food, personal care items, cosmetics, or cleaning products. The FMCG sector is known for its high sales volume, low prices, and shorter lifespan compared to durable goods (Robinson *et al.*, 1985). Due to this reason, it requires significant resources, and the materials used for packaging are often not easily recyclable (Bocken *et al.*, 2011). It produces single-use and disposable products, and inadequate collection and recovery systems lead to these items ending up in landfills, contributing to pollution. Inefficiencies and gaps in the waste collection and recovery systems lead to these packaging materials being sent to incineration and landfills, contributing to air pollution, soil contamination, and land accumulation (Weber *et al.*, 2011). It is estimated that approximately ten million tons of plastic waste are dumped into the oceans each year (Oraman *et al.*, 2011). Hence, these industries must address this issue by identifying the key factors responsible for the pollution (Rajput & Siddiqui, 2022). As stated by D'amato *et al.* (2009), CSR has been considered an important strategy in the current environment for enhancing an organization's reputation and competitiveness in society. Moreover, a study conducted by Abugre and Anlesinya (2019) added that when an organisation increases their CSR spending, it creates a positive influence on the stakeholders, which enhances the growth and reputation of the company.

In India, the Ministry of Corporate Affairs enforces the Companies Act, 2013, and made CSR mandatory for companies that satisfy certain norms. According to this law, any organization that has a net worth of Rs. 500 crores or more, revenue of Rs. 1000 crores or more, or a net profit of Rs. 500 crores or more, are required to spend a minimum of 2% of the average net profit generated during 3 immediate preceding years (Dharmapala & Khanna, 2018).

However, the liaison between CSR and CFP is a questionable issue among practitioners, researchers and academicians. Numerous researches show different results and become inconclusive; the outcome varies as positive, neutral, and negative. A study conducted by Sekhon and Kathuria (2019) uses NP and ROE in one of their models as an independent variable, and their observation indicates a negative relationship between CSR and ROE. The findings also suggest a neutral correlation between NP and CSR. Conversely, the results of Okafor *et al.* (2021), when compared with Sekhon and Kathuria (2019), uncovered a conflicting result, where they observed a positive correlation between CSR and ROE and a negative relation between NP and CSR. Moreover, Bag and Omrane (2020) observed the presence of a positive relation between CSR and CFP, although Kaur and Singh (2020) found no significant relation between CSR and Market Return (MR).

Therefore, the motive of the present study is to comprehend the relationship between CFP and CSR. The study is done based on the BSE FMCG index, where the top 25 market capitalizations as of May 2022 are used for the research. The study then uses suitable statistical software to analyze the data (*via.*, SPSS and EVIEWS).

The study has been carried out to achieve three main objectives:

i. To determine the company that uses Global Reporting Initiative (GRI) measure, among the top 25 FMCG market capitalization companies,
ii. To understand the past and present scenario of CSR activities of the top 25 market capitalization FMCG companies in India and
iii. To examine the relationship between CSR and the financial performance of the Indian FMCG.

2. Overview of Literature and Hypothesis Development

There has been an argument relating to CSR and FP which led to the creation of various theories (Arthur *et al.*, 2017). Accordingly, Marrewijk (2000) discussed the societal approach and, based on this theory,

organizations are responsible for contributing to social activities of which they are part as their license to operate in their community is given through public consent. Thus, the organization must serve the public to their satisfaction. Similarly, the stakeholder theory put forth by Freeman (1984) supported the societal approach, which states that a company, while managing individual interests, must generate maximum value for its stakeholders. Narver (1971) also supports the exhortation by stating that voluntary engagement in social activities will pave the way for organisational development. Hence, Maqbool and Hurrah (2020) also concluded by attesting that CSR is a strategy for building a network of loyal stakeholders. Therefore, according to the above-mentioned works of literature, it has been proposed that CSR and FP have a positive relationship.

Furthermore, Cherian *et al.* (2019) did a study based on 50 manufacturing Indian companies in India and found a positive relationship between CSR and CFP. The finding shows that CSR initiatives strengthen a business's credibility, social values, and profitability. Similarly, Saeidi *et al.* (2014) observe that by taking competitive advantage and reputation as a mediating variable, CSR and CFP have a positive significant relationship. Moreover, Soewarno (2018) concludes that a business which participates specifically in environmental activities boosts its image and reputation, and its positive correlation with financial performance leads to the growth of a company. These findings are similar to the findings of Nyeadi *et al.* (2018), in which they observe that giving importance to environmental activities results in better financial performance, whereas administration in social activities results in a negative relationship. However, this does not imply that businesses are not required to participate in social activities, as Cornett (2016) observes under the banking sector that banks which are Socially Responsible (SR) have better financial performance than the banks that are not responsible toward the society. They also concluded that larger banks that are SR have outperformed the SR smaller banks. Moreover, Lee and Shin (2010) added that when corporations aid societal advancement and local people, the efforts influence local purchase intentions among the consumers. Studies done by Selcuk (2019) proved the existence of a positive relationship in developed countries based on Turkish firms, which reveal that CSR and financial performance show a positive and statistically significant relation, as compared to non-CSR companies. Furthermore, Bag and Omrane (2020) also revealed the presence of a positive relationship between the dependent variable FP and MR and the independent variable CSR in developing countries using the top 100 NSE-listed companies. Thus, this observation proved that CSR is a method that businesses can use to gain a competitive advantage.

On the contrary, Freidman (1970) argues, using the shareholder approach, that an organization's sole purpose is to increase the worth of stakeholders and not engage in the development of society by solving societal issues. At the same time, Quazi and O'Brien (2000) stated that the organization doesn't have any responsibility toward social development, as it is a main task of the government. This theory has been proved by various researchers; for instance, Tien *et al.* (2019) researched food and beverage companies in Vietnam, in which the results show a negative relation due to inadequate resources, lack of knowledge, poor comprehension of the CSR concept and new implementation of CSR in emerging countries. A further contribution is made by Rodrigo *et al.* (2016), which stated that weak government enforcement, cultural norms and informal networks for communication of CSR practices result in adverse relations between CSR-CFP in six Latin American countries. Then again, Moore (2001) also proves that CSR activities do not always result in better financial performance as the findings suggest that when social performance improves, financial performance tends to decrease at the same time. Furthermore, Peng *et al.* (2013) did a study on a Taiwan-based company and found that ownership concentration results in negative financial results in both the short and long run and too much cash-flow divergence also worsens the financial performance of the company. Similarly, Nair *et al.* (2018) did research based on India's top sales 414 companies for 9 years. The analysis was done from 2010 to 2018, and hence, the data collected was before and after the mandatory CSR spending, *i.e.*, The Companies Act, 2013. The findings showed that mandatory CSR regulation

has reduced the positive effect on the FP of a company. Their study stated that before the CSR regulation became mandatory, the relationship between CSR-CFP was positive and significant; however, during post mandatory, it became insignificant. Hence, the above-mentioned study revealed that for some companies, mandatory CSR results in less spending because now the company just tries to fulfil the minimum norms. However, Moser *et al.* (2012) added that even though many of the results show a negative correlation between CSP, CSR, and CFP. Ethical managers will still strive to contribute to the CSR and CSP activities at the expense of shareholders. Moreover, some managers feel the need to be ethical and contribute towards society even at the expense of the shareholders. These activities sometimes lead to more financial costs than financial benefits. Therefore, based on a societal approach that is supported by stakeholder theory, shareholder approach, and previous literature, we formulated the following hypothesis and sub-hypothesis to be tested:

H_0: There is a significant relation between CSR and CFP.

H_{01}: There is a significant relation between ROE and CSR.

H_{02}: There is a significant relation between NS and CSR.

H_{03}: There is a significant relation between NP and CSR.

H_{04}: There is a significant relation between SR and CSR.

H_{05}: There is a significant relation between the P/E ratio and CSR.

H_{06}: There is a significant relation between EPS and CSR.

3. The Methodology Uses for the Research

3.1 Technique Used for CSR Score

A review is done to determine the most favourable technique used by researchers from the various methods of determining CSR scores. Previous studies have adopted questionnaire-based surveys, reputation indices, company rating approaches, and content analysis. While most researchers choose one technique for CSR measurement, some researcher uses a combination of different measurement techniques. A previous study conducted by Galant and Cadez (2017) adopted reputation indices, content analysis, questionnaire-based surveys, and one-dimensional measures for CSR measurement, whereas Lee and Shin (2010) adopted only a questionnaire survey to acquire CSR scores. Likewise, Ron Bird *et al.* (2007) adopted a one-dimensional measurement technique which was obtained from KLD Research and Analytics, Inc. This third-party database is also employed by numerous researchers because of feasibility and accessibility, as Xiao *et al.* (2017) use IMSS VI data and Yang *et al.* (2019) retrieved CSR data from the Hexun CSR database, whereas Ali *et al.* (2020) use RKS database to avail CSR score. Likewise, a content analysis technique is adopted for this study as Mishra and Suar (2010) stated about the unavailability and inaccessibility of CSR data in India. Content analysis is the most prevalent form for obtaining the CSR score, which is indicated based on previous studies such as (Guthrie & Parker, 1989; Gary *et al.*, 1995; Gary *et al.*, 2001; Ahamed *et al.*, 2014; Priyanka Garg, 2017; Aggarwal & Singh, 2018; Bag & Omrane, 2020; Okafor *et al.*, 2021). As CSR data is still inaccessible in India to date, the annual report of the company is used for gathering CSR data, as Hamid and Atan (2011) assert that the annual report of a company includes social, economic, and environmental disclosure. Besides, Malik and Kanwal (2018) also reveal that companies disclose their CSR initiatives in their annual reports as a means to satisfy the needs of stakeholders, and it is also the only official and legal document published regularly by the organization. Therefore, a content analysis technique has been adopted to avail CSR data for the study.

3.2 Research Instrument Use for CSR Measurement Technique

To retrieve CSR data from annual reports through content analysis techniques, SRI developed by Garg (2017) has been utilized. The framework is developed from the compilation of different indices, namely

the GRI, Dow Jones Sustainability Index (DJSI), SIGMA (Sustainability Integrated Guidelines for Management), National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business, and others. The total initial disclosure consists of 268 items, after removing the items which convey the same underlying themes (74), sustainability disclosure not reported by Indian companies (43), and reputation of items (91). The final index consists of 60 categories across 3 main themes, such as the score for economic (13), environment (25), and social (22) with a sub-theme consisting of employment (9), society (7), and product responsibility (6) parameters.

3.3 Corporate Social Responsibility Measurement Technique

As described by Harwood *et al.* (2003), content analysis is a technique to structure "open-ended" data for analysis. Carson *et al.* (2001) delineate content analysis as a specific coding scheme; accordingly, Collis and Hussey (2003) ratify its uses in both quantitative and qualitative data. Moreover, Tesch (1990) and Mariampolski (2001) have added that the use of this procedure is most appropriate when the information is in the form of text, word, image, number, etc. Which enables the information to be categorized, recorded, compared, amalgamated, or found differently (Collis & Hussey, 2003). Thus, this study uses the content analysis technique, where manual interpretation of annual reports is done. Moreover, the scoring of the report is done based on the criteria framed by Garg (2017). The following formula has been used to compute each company's final CSR score:

$$CSRscore_f = \frac{\sum_f^n X_{if_{t=1}}}{n_f}$$

where,

$CSRscore_f$ = CSR disclosure scores for the j^{th} company.

n_f = Total number of CSR activities estimated for j^{th} company.

X_{if} = 0 if no information is provided for activities.

X_{if} = 1 if the information is provided but neither qualitatively nor quantitatively for activities.

X_{if} = 2 if the information is provided qualitatively only for i^{th} activities.

X_{if} = 3 if the information is provided both qualitatively and quantitatively for i^{th} activities.

X_{if} = 4 if the information is provided both qualitatively and quantitatively, along with how the risk will be managed, but not GRI check for i^{th} activities.

X_{if} = 5 if the information is provided both qualitatively and quantitatively, along with how the risk will be managed, and GRI check for i^{th} activities.

Table 1 depicts a compilation of sustainability reporting scores for 23 FMCG companies. The scoring is done from the combination of CSR scores from 2013-14 to 2021-22, using the SRI framed by Grag (2017). To fulfil the first objective of the study, a GRI check has been done for all the companies included in the research. The study observed that out of 23 top market capitalization companies, only eight companies' annual reports have gone through a GRI check. These companies are, *viz.* Dabur, DCM Shriram, Godrej Consumer Products, HUL, Marico, Tata Consumer Products and United Breweries Limited.

CSR activities after the implementation of the Companies Act 2013 are summed up for 9 years for each parameter and sub-indices. The sub-indice average score is also calculated to have an easier understanding and for comparison among the firms. From Table 1, we can see that ITC is ranked first, as it has reported a maximum parameter of 67.85% on average for 9 years followed by Marico (64.41%), and Godrej Consumer Product (62.93%), Shree Renuka Sugar Ltd. is at the last ranked as it has reported the least number of activities with 17.19% on average, followed by Zydus Wellness Ltd. (22.67%), and Patanjali Food (22.96%). From the above table, the study observes that environmental activities are not given priority, as the maximum amount of average disclosure is done by ITC (60%), whereas the maximum average disclosure for economic is 75%

Table 1. Sustainability Reporting Score from 2013-14 to 2021-22

		Total Score				Average Score			
S. No.	Companies	EC	EN	SC	SRI	EC	EN	SC	SRI
1	Balrampur Chini Mills	350	436	542	1328	2.99	1.94	2.74	2.46
2	Britannia Industries	330	262	504	1096	2.82	1.16	2.55	2.03
3	Colgate-Palmolive	276	494	592	1362	2.36	2.20	2.99	2.52
4	Dabur	323	540	594	1457	2.76	2.40	3.00	2.70
5	DCM Shriram Consolidated Ltd.	277	511	476	1264	2.37	2.27	2.40	2.34
6	Eid-Parry	254	484	516	1254	2.17	2.15	2.61	2.32
7	Emami	324	386	526	1236	2.77	1.72	2.66	2.29
8	Gillette India Ltd.	252	300	484	1036	2.15	1.33	2.44	1.92
9	Godrej Industries	166	274	226	666	1.42	1.22	1.14	1.23
10	Godrej Consumer Product	426	591	682	1699	3.64	2.63	3.44	3.15
11	Gujarat Ambuja Exports Ltd.	246	208	418	872	2.10	0.92	2.11	1.61
12	Hutsun Argo Product	294	368	372	1034	2.51	1.64	1.88	1.91
13	Hindustan Unilever Ltd.	370	500	645	1515	3.16	2.22	3.26	2.81
14	ITC Ltd.	424	672	736	1832	3.62	2.99	3.72	3.39
15	Marico	438	612	689	1739	3.74	2.72	3.48	3.22
16	Nestle	336	498	568	1402	2.87	2.21	2.87	2.60
17	Patanjali Food	190	182	248	620	1.62	0.81	1.25	1.15
18	Procter and Gambler	252	290	572	1114	2.15	1.29	2.89	2.06
19	Radico Khaitan Ltd.	236	352	418	1006	2.02	1.56	2.11	1.86
20	Shree Renuka Sugar Ltd.	122	168	174	464	1.04	0.75	0.88	0.86
21	Tata Consumer Product	297	376	586	1259	2.54	1.67	2.96	2.33
22	United Breweries Limited	353	577	604	1534	3.02	2.56	3.05	2.84
23	Zydus Wellness Ltd.	200	106	306	612	1.71	0.47	1.55	1.13

Source: Author's compilation from Annual Reports

and social is 74.34%. The minimum average disclosure for economics by a company is 21%, social 17.58%, while it is only 9% for environmental parameters. The average SRI score taken for 9 years shows that Indian FMCG companies have to give precedence to improve environmental activities.

3.4 Reliability of Corporate Social Responsibility Measurement Technique

To measure the reliability and internal consistency of the SRI, 23 FMCG firms are selected for the calculation of Cronbach's Alpha. The SRI utilized an annual report to collect CSR data for the company. The data is calculated using the following formula:

$$\alpha = \left(\frac{K}{K-1}\right)\left(\frac{S_y^2 - \sum S_i^2}{S_y^2}\right)$$

where,

α = Cronbach's Alpha

K = Number of items in the study

S_y^2 = Variance of the total observed score.

$\sum S_i^2$ = Sum of the individual variance of item i

The result from Table 2 shows that the alpha coefficient is 0.961 (>0.60). The reliability of the entire sub-index is also calculated; the alpha coefficient for economic is (0.834), environment (0.904), and social (0.915). Hence, the SRI used for the study is reliable and consistent.

3.5 Data

The study comprises secondary data that is utilized to examine the relationship between CSR and CFP. The top 25 companies based on a higher market

Table 2. Reliability statistics

Reporting standards	Cronbach's alpha	No. of items
Economic Reporting (EC)	0.834	13
Environmental Reporting (EN)	0.904	25
Social Reporting (SR)	0.915	22
Sustainability Reporting (SUSR)	0.961	60

Source: Author's Calculation

capitalization of the BSE FMCG Index as of May 2022 are selected for the study, similar to the earlier studies done by Cornett *et al.* (2016), Maqbool and Hurrah (2020), and Kaur and Singh (2020). Since the annual reports of some corporations for specific years are not readily available, 23 FMCG companies are included in the final analysis, which was conducted over nine years from 2013-2014 to 2021-2022. In accordance with the study done by Aggarwal and Singh (2018), the year 2013-2014 has been selected as a base year due to the implementation of the Companies Act, 2013, which made a compulsory regulation for firms to spend on CSR activities.

3.6 Explanatory Variable or Independent Variable

To determine the company's profitability, the study uses three independent variables (IV), which were selected according to previous literature. Based on the previous studies done by Cowen *et al.* (1987), Peng and Yang (2013), Saeidi *et al.* (2014), and Wang and Sarkis (2017), ROE is taken as an Independent Variable (IV). Nirino and Miglietta (2019) have defined ROE as the association between a firm's net income and its equity that helps in determining the profitability of a firm from the available equity. Thus, it can be explained as the ratio of net profit to net worth of a company. Therefore, to measure CSR and CFP, the ROE is used prior to previous literature. NS is also taken as an IV because it helps in determining the annual growth rate in sales revenue. NS is taken in accordance with the research done by (Bag & Omrane, 2020; Daske *et al.*, 2008; Eldomiaty *et al.*, 2016; Aboud & Diab, 2019; Kaur & Singh, 2020). Then NP is also used as it helps in comprehension of the firm's health, by calculating the NP growth of a firm which is vouched by different researchers (Lopez *et al.*, 2007; Cho *et al.*, 2019; Sharma *et al.*, 2020; Kaur & Singh, 2020; Bag & Omrane, 2020).

To determine the correlation between CSR and CFP based on market share, the stock price at the fiscal year ended is taken as an IV, which measures the return for each year, as carried out by previous researchers (Gompers *et al.*, 2003; Kong, 2012; Rhou *et al.*, 2016; Nguyen *et al.*, 2017). Secondly, EP is taken as it is a financial indicator, which can show profits in each share described by Darmadji and Fakhruddin (2012) and also based on the studies done by Peng and Yang (2013), Soewarno (2018) and Kaur and Singh (2020). P/E ratio is utilized by Daszynska-Zygadlo *et al.* (2016) and Kaur and Singh (2020) to measure the company share price as compared to EPS, so the P/E ratio is added in this study as an IV to represent the market share return.

Finally, regarding the control variable, CE is used to determine how the company utilized the capital for the generation of profit. CE is used as per the analysis done by Bag and Omrane (2020). Furthermore, company size is used based on the research conducted by Lopez *et al.* (2007), Artiach *et al.* (2009), Cho *et al.* (2019) and Maqbool and Hurrah (2020). Besides, Russo and Fouts (1997) explained the reason for using company size as a control variable; they said that it is because larger firms have an advantage in possessing and processing social activities. According to Arayssi and Jizi (2018), total assets are a suitable variable for assessing the size of the business. Thus, to measure the company size, total assets are considered, which is by the previous study done by Cho *et al.* (2019) and Bag and Omrane (2020). Furthermore, the ratio of D/E is used as a control variable which measures a firm's attitude toward social activities.

3.7 Research Models

The following research models were used to examine how CSR affected certain CFP indicators:

$$CSR_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 CE_{it} + \beta_3 Size_{it} + \beta_4 De_{it} + \varepsilon_{it}$$

$$CSR_{it} = \beta_0 + \beta_1 NS_{it} + \beta_2 CE_{it} + \beta_3 Size_{it} + \beta_4 De_{it} + \varepsilon_{it}$$

$$CSR_{it} = \beta_0 + \beta_1 NP_{it} + \beta_2 CE_{it} + \beta_3 Size_{it} + \beta_4 De_{it} + \varepsilon_{it}$$

$$CSR_{it} = \beta_0 + \beta_1 SR_{it} + \beta_2 CE_{it} + \beta_3 Size_{it} + \beta_4 De_{it} + \varepsilon_{it}$$

$$CSR_{it} = \beta_0 + \beta_1 PE_{it} + \beta_2 CE_{it} + \beta_3 Size_{it} + \beta_4 De_{it} + \varepsilon_{it}$$

$$CSR_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 CE_{it} + \beta_3 Size_{it} + \beta_4 De_{it} + \varepsilon_{it}$$

where, β_0 is constant term and $\beta_1, \beta_2, \beta_3, \beta_4$, are the independent and control variable. ε_{it} is the error term.

4. Analysis of Data

Table 3 revealed the result of panel regression analysis using the random and fixed effect model. The results have shown that independent variables ROE, net sales, stock return, and EPS, while taking CE, D/E ratio, and company size, as control variables, do not have a relation with the dependent variable CSR. , the probability levels for all the dependent and control variables are >0.05 level of significance. However, when we take net profit and P/E ratio as independent variables, the r-squared value is 0.6642 and 0.6647, respectively, *i.e.*, 66.42% for model 3 and 66.47% for model 5, which is exceptionally high. Thus, we can say that models 3 and 5 have a significant relation with the dependent variable, proved by the value of f-statistics <0.05 level of significance.

The findings of the study have uncovered several interesting points, which were also observed by Sekhon and Kathuria (2019) in their studies towards the impact of CSR on an organization's financial performance. The findings indicate that CFP doesn't have a significant relation with CSR. Vurro and Pereini (2001) also revealed that CSR and financial performance have a negative correlation, according to research done in the United States. Hughes *et al.* (2001) have said that higher CSR declaration in the annual report doesn't signify the firms are good performers in CSR-related activities. They claimed that a corporation must rely on external norms, *i.e.*, Global reporting initiatives guidelines. As it is not mandatory to follow this guideline, there are no certain standards like language, style, or practices that can create simpler reports to be followed. As a result, the degree of disclosure has no impact on the company's CSR performance.

Therefore, the findings of the study indicated that CSR and CFP are either negatively or equally correlated. The findings convey mixed results, as models 3 and 5 share a significant relationship, and the rest of the models don't have a negative impact on the firm's profitability.

The descriptive statistics of the various variables implemented in the research are shown in Table 4. A minimum score of CSR (1) shows that the companies analyzed have reported at least some information based on the SRI parameter. The mean CSR score is 2.89 and has a standard deviation of .914, which demonstrates that the companies under scrutiny have prioritized CSR measures with an average of 57.8% score.

The outcome of multicollinearity using the variance inflation factor is displayed in Table 5. Alan (2010) said that the linear relationship between two or more variables is referred to as multicollinearity. The presence of multicollinearity will create data problems, which create difficulties with the reliability of the estimated parameters. In this analysis, the CSR score has been used as a DV, whereas ROE, Net sales, Net profit, Stock return, P/E ratio, and EPS are taken as

Table 3. Hypothesis tested through panel regression analysis using random and fixed effect models

Models	Independent variable (p-value)	Size (P-value)	Capital employed (P-value)	D/E ratio (P-value)	R-squared	Adjusted R-squared	F-statistic
Model 1 (with ROE) {Random}	0.1495	0.9331	0.511	0.2618	0.024892	0.004035	0.315152
Model 2 (with Net sales) {Random}	0.297	0.9345	0.4163	0.3036	0.020031	-0.00093	0.433173
Model 3 (with Net profit) Fixed}	0.66	0.9344	0.2918	0.401	0.664261	0.606588	0.000000
Model 4 (with Stock return) {Random}	0.9694	0.8977	0.3614	0.3683	0.014556	-0.00652	0.599348
Model 5 (with P/E ratio){Fixed}	0.5148	0.9795	0.2886	0.4242	0.664737	0.607146	0.000000
Model 6 (with EPS){Random}	0.1302	0.9259	0.4539	0.2648	0.025401	0.004554	0.304436
Notes: Panel regression of fixed and random effect models are used. *indicate statistical significant at a 5% level of significant.							

Source: Author's calculations

Table 4. Descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROE	192	0	5	1.19	1.630
Net Profit	192	0	5	1.52	1.535
Net Sales	192	0	5	0.86	0.584
Stock Price	192	0	5	1.30	1.198
EPS	192	0	5	1.43	1.519
P/E Ratio	192	0	5	1.49	1.678
CSR Score	192	1	5	2.89	0.914
Capital Employed	192	0	5	1.05	0.905
Size of the Company	192	0	5	0.95	0.750
D/E Ratio	192	0	5	1.02	1.061

Source: Author's calculations

Table 5. Multicollinearity test using variance inflation factor

Model 1	**Variable**	**ROE**	**Capital employed**	**Size**	**D/E ratio**
	VIF	1.092	1.485	1.435	1.096
Model 2	Variable	Net sales	Capital employed	Size	D/E ratio
	VIF	1.032	1.481	1.399	1.087
Model 3	Variable	Net profit	Capital employed	Size	D/E ratio
	VIF	1.018	1.473	1.405	1.078
Model 4	Variable	Stock return	Capital employed	Size	D/E ratio
	VIF	1.02	1.484	1.392	1.081
Model 5	Variable	P/E ratio	Capital employed	Size	D/E ratio
	VIF	1.022	1.482	1.404	1.091
Model 6	Variable	EPS	Capital employed	Size	D/E ratio
	VIF	1.029	1.474	1.401	1.091

Source: Author's calculations

IV. To measure the control variable capital employed, company size and D/E ratio are used in the research. According to Strike *et al.* (2006), the analysis shows that VIFs are in the acceptable range, *i.e.,* (VIF<10.0). The result shows that the VIFs are in the range of <2. Hence, we can conclude that there is no serious problem regarding multicollinearity for all the models.

The Breusch pagan Godfrey test for heteroscedasticity is displayed in Table 6. There are certain assumptions required to be fulfilled to carry out regression analysis. One of the assumptions states that there shouldn't be any heteroscedasticity in the data. The probability of chi-square in this model must be greater than 0.05. The data are considered heteroscedastic if the value is less than 0.05. The table demonstrates that all models fulfill

Table 6. Breusch-Pagan-Godfrey test for Heteroscedasticity

Model 1 (ROE as an independent variable)	
Obs*R-Squared	1.25894
Prob. Chi-Square	0.8683
Model 2 (Net sales as an independent variable)	
Obs*R-Squared	7.011081
Prob. Chi-Square	0.1353
Model 3 (Net profit as an independent variable)	
Obs*R-Squared	4.554415
Prob. Chi-Square	0.3361
Model 4 (Stock return as an independent variable)	
Obs*R-Squared	2.880956
Prob. Chi-Square	0.5779
Model 5 (P/E ratio as an independent variable)	
Obs*R-Squared	5.791156
Prob. Chi-Square	0.2153
Model 6 (EPS as an independent variable)	
Obs*R-Squared	4.243089
Prob. Chi-Square	0.3741

Source: Author's calculations

Table 7. Panel unit root test using Augmented Dickey-Fuller test

Variable	Test statistic	p-value
CSR Score	-6.017216	0.000
ROE	-6.548093	0.000
Net Sales	-14.71091	0.000
Net profit	-6.66475	0.000
EPS	-10.07664	0.000
Stock return	-11.9925	0.000
PE Ratio	-13.10473	0.000
Capital employed	-14.04549	0.000
D/E ratio	-8.291512	0.000
Size of the company	-11.73249	0.000

Source: Author's calculations

the requirement, so the data is homoscedasticity. So, we can conclude that the data is homoscedasticity data, and the regression assumption is fulfilled, and it can be used for further analysis.

In the panel root test, when the p-value is >0.05, it indicates that the data contains a unit root. As observed in Table 7, we can see that the p-value is 0.000 for all the models. Therefore, we will reject the null hypothesis, which asserts that there is a unit root in the data. Then we will accept the alternate hypothesis, the data is stationary or there is no a unit root problem.

Table 8. Random effect- Husman Test

Model 1 (ROE as an independent variable)	Chi-Square statistic	5.695091
	Probability	0.2231
Model 2 (Net sales as an independent variable)	Chi-Square statistic	4.684849
	Probability	0.3212
Model 3 (Net profit as an independent variable)	Chi-Square statistic	11.096056
	Probability	0.0255
Model 4 (Stock return as an independent variable)	Chi-Square statistic	3.012593
	Probability	0.5557
Model 5 (P/E ratio as an independent variable)	Chi-Square statistic	11.382105
	Probability	0.0226
Model 6 (EPS as an independent variable)	Chi-Square statistic	8.423683
	Probability	0.0772

Source: Author's calculations

As shown in Table 8, the best model for the study has been chosen using a random effect-Husman test. The model states that when the p-value is <0.05 level of significance, the fixed effect model is more suitable. When the p-value >0.05 level of significance, the random effect model is used. From the outcome shown in Table 7, we can conclude that for models 1,2,4,6, random effect models will be used, and for models 3 and 5, the pooled regression analysis will be done through the fixed effect model.

5. Discussion of Result

Studies by Busch and Friede (2018), Holmes (1976), Marti *et al.* (2015), Martínez-Ferrero & Frías Aceituno (2015) and Orlitzky *et al.* (2003) revealed a positive connection between CSR and CFP suggesting that companies implementing CSR strategies can access better resources, attract top talent, market their products and services more effectively, discover new opportunities, enhance their reputation, strengthen community engagement, and ultimately boost their value. Similarly, this paper investigates the relationship between CSR and CFP in leading FMCG firms in India. The models indicate that higher investment in CSR initiatives results in increased profitability, and the P/E ratio rises at a significance level of 0.05. In line with various studies that show a significant positive effect of CSR on profitability (Hillman & Keim, 2001; McWilliams & Siegel, 2000; Orlitzky *et al.*, 2003). The findings for Indian companies suggest that CSR spending does not directly increase profitability. Rather, they indicate that top Indian FMCG firms comply with the Companies Act of 2013. As their profits grow, these firms are required to allocate a larger portion of their earnings to CSR activities, which explains the observed correlation between CSR and CFP.

The full analysis revealed a mixed result in accord with Okafor *et al.* (2021) as the results show CSR spending doesn't have any impact on ROE, NS, stock return and EPS. Accordingly, Sekhon and Kathuria (2019) indicate that CFP doesn't have a significant relation with CSR. Therefore, the findings indicated that CSR and CFP are either negatively or equally correlated in the Indian FMCG sector. As Servaes and Tamayo (2013) found, increased public awareness of CSR can positively influence a company's value. A content analysis of annual reports was conducted to identify social, economic, and environmental disclosures. The analysis, through the SRI score, reveals that for most companies, the disclosure of CSR initiatives in their annual reports does not meet the required standards. Additionally, the content of the reports can be further improved, especially regarding environmental activities. Studies by Okafor *et al.* (2021) show that environmental protection is linked to increased revenue growth. Although the findings suggest that higher investment in social activities does not correlate with better financial performance, the top FMCG companies in India are still fulfilling their social responsibilities.

6. Conclusion

The purpose of the study is to examine the quality of CSR content through their annual report and to comprehend the past and present scenarios of CSR activities, along with how CSR reporting has an impact on financial performance based on 25 top market capitalization FMCG companies. Centred on the first objective, the study was conducted using the SRI score, and the result of the analysis shows that out of 23 top market capitalisation companies, only eight companies' annual reports have gone through a GRI check. This indicates that the quality of CSR reporting needs further improvement in the coming years as GRI reporting promotes transparency and accountability of the company's sustainability in a consistent and promotable way. Moreover, if the reporting in the

annual report is more transparent and straightforward, it will help encourage the importance of sustainability among a wider audience and may result in better financial performance for the organisation in the near future. It can be observed that the companies are growing larger over time as profit also increases and the companies made more substantial investments toward CSR activities in comparison to the previous years. As a result, the present scenario of CSR activities outperforms the past conditions.

Moving forward to the final objective, there has been extensive research on the relationship between CSR and financial performance. However, this study revealed a mixed result based on regression analysis using the random effect Husman test and the finding is in accord with the findings of Okafor *et al.* (2021) which revealed that when the company spends directly on CSR activities, it has a negative or no impact on the firm's ROE, NS, Stock returns. Accordingly, based on this finding, it can be concluded that CSR has no impact on financial performance. On the contrary, previous studies done by Maqbool and Zameer (2018), Siueia *et al.* (2019), and Bag and Omrane (2020) revealed that there is a positive impact between CSR and financial performance in which CSR spending has improved NP and P/E ratio. However, the outcomes of the research have application for managers and decision makers. The neo-classical theory states that the enactment of CSR results in a competitive disadvantage among its peers as CSR expenditure results in direct cost from the company's profit. However, as the concerns for sustainability increase among the general public, Sekhon and Kathuria (2019) stated that Indian managers must include CSR activities as business strategies, which has been suggested after identifying the most beneficial investment projects by determining the cost-benefit ratio of the investment. Furthermore, Bag and Omnare (2020) concluded that CSR activities help in gaining a competitive advantage by fulfilling the expectations of the stakeholder as it helps in building a strong brand image, which will in turn result in improved financial results. Although the current study adds to the body of knowledge on CSR and CFP, there are certain drawbacks that need to be addressed. Firstly, the study was done in the Indian context and only specific to Indian companies. Secondly, only the BSE FMCG index as of May 2022 was taken for the study, and no other sector was considered for the study. Thirdly, the financial year 2013-14 was taken as a base year, so the study doesn't contribute to the pre-reform period of the Company's Act, 2013. Fourthly, the study concentrated only on the top 25 FMCG companies based on market capitalization thus, further studies can include all the FMCG companies to generalize the conclusion. Finally, the study uses only annual reports to extract CSR data, while the third-party specific index, the company's CSR activities published on their website, can be considered. By addressing these aspects, future research can overcome the limitations of the current study and provide broader and more robust insights into CSR practices.

7. References

Abugre, J. B., & Anlesinya, A. (2019). Corporate social responsibility and business value of multinational companies: Lessons from a sub-saharan african environment. *Journal of African Business*, *20*(4), 435-454. https://doi.org/10.1080/15228916.2019.1581002

Abid, N., Ahmad, F., Aftab, J., & Razzaq, A. (2023). A blessing or a burden? Assessing the impact of climate change mitigation efforts in Europe using Quantile Regression Models. *Energy Policy*, *178*, Article 113589. https://doi.org/10.1016/j.enpol.2023.113589

Aboud, A., & Diab, A. (2019). The financial and market consequences of environmental, social and governance ratings: The implications of recent political volatility in Egypt. *Sustainability Accounting, Management and Policy Journal*, 10(3), 498-520. https://doi.org/10.1108/SAMPJ-06-2018-0167

Aggarwal, P., & Singh, A. K. (2018). CSR and sustainability reporting practices in India: An in-depth content analysis of top-listed companies. *Social Responsibility Journal*, *15*(8), 1033-1053. https://doi.org/10.1108/SRJ-03-2018-0078

Ahamed, W. S. W., Almsafi, M. K., & Al-Smadi, A. W. (2014). Does corporate social responsibility lead to improve in firm financial performance? Evidence from Malaysia. *International Journal of Economics and Finance*, *6*(3), 1916-9728. http://dx.doi.org/10.5539/ijef.v6n3p126

Ali, R., Sial., M. F., Brugni, T. V., Hwang, J., Khuong, N. V., & Khanh, T. H. T. (2020). Does CSR moderate the

relationship between corporate governance and Chinese firm's financial performance? Evidence from the Shanghai Stock Exchange (SSE) Firms. *Sustainability*, 12(1), Article 149. http://dx.doi.org/10.3390/su12010149

Arthur, C., Wu, J., Yago, M., & Zhang, J. (2017). Investigating performance indicators disclosure in sustainability reports of large mining companies in Ghana. *Corporate Governance: The International Journal of Business in Society*, *17*(4), 643-660. https://doi.org/10.1108/CG-05-2016-0124

Artiach, T., Lee, D., Nelson, D., & Walker. J. (2009). The determinants of corporate sustainability performance. *Accounting and Finance*, *50*(2010), 31-51. https://doi.org/10.1111/j.1467-629X.2009.00315.x.

Arayssi, M., & Jizi, M. I. (2018). Does corporate governance spill over firm performance? A study of valuation of MENA companies. *Social Responsibility Journal*, *15*(5), 597-620. https://doi.org/10.1108/SRJ-06-2018-0157

Bag, S., & Omrane, A. (2020). Corporate social responsibility and its overall effects on financial performance: Empirical evidence from Indian companies. *Journal of African Business*, *23*(1), 264-280. https://doi.org/10.1080/15228916.2020.1826884

Bird, R., Hall, A. D., Momente, F., & Reggiani, F. (2007). What corporate social responsibility activities are valued by the market? *Journal of Business Ethics*, *76*, 189-206. https://doi.org/10.1007/s10551-006-9268-1

Boubakri, N., Ghoul, S. E., Guedhami, O., & Wang, H. (2021). Corporate social responsibility in emerging market economies: Determinants, consequences, and future research directions. *Emerging Markets Review*, *46*, Article 100758. https://doi.org/10.1016/j.ememar.2020.100758

Bocken, N. M. P., Allwood, J. M., Willey, A. R., & King. (2011). Development of an eco-ideation tool to identify stepwise greenhouse gas emissions reduction options for consumer goods. *Journal of Cleaner Production*, *19*(12), 1279-1287. https://doi.org/10.1016/j.jclepro.2011.04.009

Busch, T., & Friede, G. (2018). The robustness of the corporate social and financial performance relation: A second-order meta-analysis. *Corporate Social Responsibility and Environmental Management*, *25*(4), 583-608. https://doi.org/10.1002/csr.1480

Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. (2001). *Qualitative marketing research*. London: Sage.

Cherian, J., Umar, M., Thu, P. A., Trang, T. N., Sial., M. S., & Khuong, N. V. (2019). Does corporate social responsibility affect the financial performance of the manufacturing sector? Evidence from an emerging economy. *Sustainability, 11*(4), Article 1182. https://doi.org/10.3390/su11041182

Cornett, M. M., Erhemjamts, O., & Tehranian, H. (2016). Greed or good deeds: An examination of the relation between corporate social responsibility and the financial performance of U.S. Commercial banks around the financial crisis. *Journal of Banking and Finance*, *70*(C), 137-159. http://10.1016/j.jbankfin.2016.04.024

Collis, J., & Hussey, R. (2003). *Business research*. Palgrave MacMillan.

Cowen, S. S., Ferreri, L. B., & Parker, L. D. (1987). The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis. *Accounting, Organizations and Society*, *12*(2), 111-122. https://doi.org/10.1016/0361-3682(87)90001-8

Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on the relationship between CSR and financial performance. *Sustainability*, *11*, 343. https://doi.org/10.3390/su11020343

D'amato, A., Henderson, S., & Florence, S. (2009). *Corporate social responsibility and sustainable business; A guide to leadership tasks and functions*. Center for Creative Leadership: Greensboro, NC, USA; 2009.

Darmadji, T., & Fakhruddin, M. H. (2012). *Indonesia Stock Market*, 3rd ed., Salemba Empat, Jakarta (in Bahasa).

Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, *46*, 1085-1142. https://doi.org/10.1111/j.1475-679X.2008.00306.x

Daszynska-Zygadlo, K., Slonski, T., & Zawadzki, B. (2016). The market value of CSR performance across sectors. *Engineering Economics*, *27*(2), 230-238. https://doi.org/10.5755/j01.ee.27.2.13480

Dharmapala, D., & Khanna, V. (2018). The impact of mandated corporate social responsibility: Evidence from India's Companies Act of 2013. *International Review of Law and Economics*, *56*, 92-104. https://doi.org/10.1016/j.irle.2018.09.001

Eldomiaty, T., Soliman, A., Fikri, A., & Anis, M. (2016). The financial aspects of the corporate responsibility index in Egypt: A quantitative approach to institutional. *International Journal of Social Economics*, *43*(3), 284-307. https://doi.org/10.1108/IJSE-06-2014-0118

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*, Pitman Publishing Company. New York, NY.

Friedman, M. (1970). *The social responsibility of business is to increase its profits*. The New York Times Magazine, Paris.

Galant, A., & Cadez, S. (2017). Corporate social responsibility and financial performance relationship: a review of measurement approaches. *Economic Research-Ekonomska Istraživanja*, *30*(1), 676-693. https://doi.org/10.1080/1331677X.2017.1313122

Garg, P. (2017). *Development of Sustainability Reporting Index (SRI) with special reference to companies in India*. Springer, Indian Institute of Management Calcutta. https://doi.org/10.1007/s40622-017-0162-8

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, *118*(1), 107-156. https://doi.org/10.1162/00335530360535162

Gray, R., Javad, M., Power, M. D., & Sinclair, C. D. (2001). Social and environmental disclosure and corporate characteristics: A research note and extension. *Journal of Business Finance Accounting*, *28*(3-4), 327-356. https://doi.org/10.1111/1468-5957.00376

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, *8*(2), 47-77. https://doi.org/10.1108/09513579510146996

Guthrie, J., & Parker, L. D. (1989). Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research*, *19*(76), 343-352. https://doi.org/10.1080/00014788.1989.9728863

Garg, P. (2017). Development of Sustainability Reporting Index (SRI) with special reference to companies in India. *Decision*, *44*, 29-273. https://doi.org/10.1007/s40622-017-0162-8

Hamid, F. Z. A., & Atan, R. (2011). Corporate social responsibility by the Malaysian telecommunication firms. *International Journal of Business and Social Science*, *2*(5), 198-208.

Harwood, T. G., & Garry, T. (2003). An overview of content analysis. *The Marketing Review*, *3*(4), 479-498. https://doi.org/10.1362/146934703771910080

Hillman, A., & Keim, G. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, *22*, 125-139.

Holmes, S. L. (1976). Executive perceptions of corporate social responsibility. *Business Horizons*, *19*, 34-40.

Hughes, S. B., Anderson, A., & Golden, S. (2001). Corporate environmental disclosures: Are they useful in determining environmental performance? *Journal of Accounting and Public Policy*, *20*(3), 217-240. https://doi.org/10.1016/S0278-4254(01)00031-X

Kaur, N., & Singh, V. (2020). Empirically examining the impact of corporate social responsibility on financial performance: Evidence from Indian steel industry. *Asian Journal of Accounting Research*, *6*(2), 2443-4175. https://doi.org/10.1108/AJAR-07-2020-0061

Kong, D. (2012). Does corporate social responsibility matter in the food industry? Evidence from a nature experiment in China. *Food Policy*, *37*(3), 323-334. https://doi.org/10.1016/j.foodpol.2012.03.003

Kuzmina, K., Prendeville, S., Walker, C., & Charnley, F. (2019). Future scenarios for fast moving consumer goods in a circular economy. *Futures*, *107*, 74-88. https://doi.org/10.1016/j.futures.2018.12.001

Lee, K. H. & Shin, D. (2010). Consumers responses to CSR activities: The linkage between increased awareness and purchase intention. *Public Relations Review*, *36*(2), 193-195. https://doi.org/10.1016/j.pubrev.2009.10.014

Lopez, V. M., Garcia, A., & Rodriguez, L. (2007). Sustainable development and corporate performance: A study based on the Dow Jones sustainability index. *Journal of Business Ethics*, *75*, 285-300. https://doi.org/10.1007/s10551-006-9253-8

Malik, M. S., & Kanwal, L. (2018). Impact of corporate social responsibility disclosure on financial performance: Case study of listed pharmaceutical firms of Pakistan. *Journal of Business Ethics*, *150*(1), 69-78. https://doi.org/10.1007/s10551-016-3134-6

Maqbool, S. & Hurrah, S. A. (2020). Exploring the Bi-directional relationship between corporate social responsibility and financial performance in Indian context. *Social Responsibility Journal*, *17*(8). https://doi.org/10.1108/SRJ-05-2019-0177

Maqbool, S., & Zameer, M. N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian bank. *Future Business Journal*, *4*, 84-93.

Mariampolski, H. (2001). *Qualitative market research*. London: Sage.

Marrewijk, M. V. (2000). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, *44*, 95-105. https://doi.org/10.1023/A:1023331212247

Marti, C. P., Rovira-Val, M. R., & Drescher, L. G. J. (2015). Are firms that contribute to sustainable development better financially? *Corporate Social Responsibility and Environmental Management*, *22*, 305-319.

Martínez-Ferrero, J., & Frías-Aceituno, J. V. (2015). Relationship between sustainable development and financial performance: International empirical research. *Business Strategy and the Environment*, *24*, 20-39.

McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: Correlation or

misspecification? *Strategic Management Journal*, *21*, 603-609.

Mishra, S., & Suar, D. (2010). Does corporate social responsibility influence firm performance of Indian companies?. *Journal of Business Ethics*, *95*(4), 571-601. https://doi.org/10.1007/s10551-010-0441-1

Moser, Donald, V., & Martin, P. R. (2012). A broader perspective on corporate social responsibility research in accounting. *The Accounting Review, 87*, 797-806. https://doi.org/10.2308/accr-10257

Moore, G. (2001). Corporate social and financial performance: An investigation in the U.K. supermarket industry. *Journal of Business Ethics*, *34*, 299-315. https://doi.org/10.1023/A:1012537016969

Muranko, Z., Tassell, C., van der Laan, A. Z., & Aurisicchio, M. (2021). Characterisation and environmental value proposition of reuse models for fast-moving consumer goods: Reusable packaging and products. *Sustainability*, *13*(5), Article 2609, https://doi.org/10.3390/su13052609

Nair, A. K. S., & Bhattacharyya, S. S. (2018). Mandatory corporate social responsibility in India and its effect on corporate financial performance: Perspectives from institutional theory and resource-based view. *Business Strategy and Development*, *2*(2), 1-11. https://doi.org/10.1002/bsd2.46

Narver, J. C. (1971). Rational management responses to external effects. *Academy of Management Journal*, *14*, 99-115. https://doi.org/10.5465/254714

Nirino, N., & Miglietta, N. (2019). The impact of corporate social responsibility on firms' financial performance, evidence from the food and beverage industry. *British Food Journal*, *122*(1), 1-13. https://doi.org/10.1108/BFJ-07-2019-0503

Nguyen, P. A., Kecskés, A., & Mansi, S. (2017). Does corporate social responsibility create shareholder value? The importance of long-term investors. *Journal of Banking and Finance*, *112*, Article 105217. https://doi.org/10.1016/j.jbankfin.2017.09.013

Nyeadi, J. D., Ibrahim, M., & Sare, Y. A. (2018). Corporate social responsibility and financial performance nexus: Empirical evidence from South African listed firms. *Journal of Global Responsibility*, *9*(3), 301-328. https://doi.org/10.1108/JGR-01-2018-0004

Oraman, Y., Azabagaoglu, M. O., & Inan, I. H. (2011). The firms' survival and competition through global expansion: A case study from food industry in FMCG sector. *Procedia - Social and Behavioral Sciences*, *24*, 188-197. https://doi.org/10.1016/j.sbspro.2011.09.021

Okafor, A., Adeleye, B. N., & Adusei, M. (2021). Corporate social responsibility and financial performance: Evidence from U.S tech firms. *Journal of Cleaner Production*, *292*, Article 126078. https://doi.org/10.1016/j.jclepro.2021.126078

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, *24*, 403-441.

Pannett, R. (2022). *Antarctica's 'sleeping giant' risks melting, threatens spike in sea levels*. The Washington Post. https://www.washingtonpost.com/climate-environment/2022/08/10/east-antarctic-ice-sheet-melting-climate-change/

Peng, C., & Yang, M. (2013). The effect of corporate social performance on financial performance: The moderating effect of ownership concentration. *Journal of Business Ethics*, *123*(1), 171-182. https://doi.org/10.1007/s10551-013-1809-9

Quazi, A. M., & O'Brien, D. (2000). An empirical test of a cross-national model of corporate social responsibility. *Journal of Business Ethics*, *25*, 33-51. https://doi.org/10.1023/A:1006305111122

Rahi, A. F., Johansson J., Blomkvist, M., & Hartwig, F. (2023). Corporate sustainability and financial performance: A hybrid literature rereview. *Corporate Social Responsibility Environmental Management*, *31*(2), 801-815. https://doi.org/10.1002/csr.2600

Rajput, S., & Siddiqui, N. A. (2022). Environmental aspect impact assessment of FMCG industry: India. *Journal of Industrial Pollution Control*. https://doi.org/10.4172/0970-2083.003

Rhou, Y., Singal, M., & Koh, Y. (2016). CSR and financial performance: The role of CSR awareness in the restaurant industry. *International Journal of Hospitality Management*, *57*, 30-39. https://doi.org/10.1016/j.ijhm.2016.05.007

Robinson, W. T., & Fornell, C. (1985). Sources of market pioneer advantages in consumer goods industries. *Journal of Marketing Research*, *22*(3), 305-317. https://doi.org/10.1177/002224378502200306

Rodrigo, P., Duran, I. J., & Arenas, D. (2016). Does it really pay to be good, everywhere? A first step to understand the corporate social and financial performance link in Latin American controversial industries. *Business Ethics: A European Review*, *25*(3), 286-309. https://doi.org/10.1111/beer.12119

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, *40*(3), 534-559. https://doi.org/10.5465/257052

Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P. & Saaeidi, S. A. (2014). How does corporate social responsibility

contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, *60*(2), 341-350. http://dx.doi.org/10.1016/j.jbusres.2014.06.024

Strike, V. M., Gao, J., & Bansal, P. (2006). Being good while being bad: Social responsibility and the international diversification of US firms. *Journal of International Business Studies*, *37*(6), 850-862. https://doi.org/10.1057/palgrave.jibs.8400226

Sekhon, A. K., & Kathuria, L. M. (2019). Analyzing the impact of corporate social responsibility on corporate financial performance: Evidence from top Indian firms. *Corporate Governance*, *20*(1), 143-157. https://doi.org/10.1108/CG-04-2019-0135

Selcuk, E. A. (2019). Corporate social responsibility and financial performance: The moderating role of ownership concentration in Turkey. *Sustainability*, *11*(13), 3643. https://doi.org/10.3390/su11133643

Suganthi, L. (2019). Examining the relationship between corporate social responsibility, performance, employees' pro-environmental behavior at work with green practices as mediator. *Journal of Cleaner Production*, *232*(20), 739-750. https://doi.org/10.1016/j.jclepro.2019.05.295

Servaes, H., & Tamayo, A. (2013). The impact of corporate social responsibility on firm value: The role of customer awareness. *Management Science*, *59*(5), 1045-1061.

Sharma, E. (2018). A review of corporate social responsibility in develop and developing nation. *Corporate Social Responsibility and Environmental Management*, *15*(6), 322-337. https://doi.org/10.1002/csr.173

Sharma, K., Sayyed, A., & Nigam, P. (2020). Relationship between Corporate Social responsibility and financial performance: A study on Indian Banking sector. *International Journal for Research in Applied Science and Engineering Technology*.

Siueia, T. T., Wang, J., & Deladem, T. G. (2019). Corporate social responsibility and financial performance: A comparative study in the Sub-Saharan Africa banking sector. *Journal of Cleaner Production*, *226*, 658-668. https://doi.org/10.1016/j.jclepro.2019.04.027

Soewarno, N. (2018). The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as mediating variable. *Asian Journal of Accounting Research*, *3*(1), 2443-4175. https://doi.org/10.1108/AJAR-06-2018-0008

Tien, N. H., Anh, D. B. H., & Ngoc, N. M. (2019). Corporate financial performance due to sustainable development in Vietnam. *Corporate Social Responsibility and Environmental Management*, *27*(2), 694-705. https://doi.org/10.1002/csr.1836

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. The Falmer Press, New York.

Tolliver, C., Keeley, A. R., & Managi, S. (2020). Drivers of green bond market growth: The importance of nationally determined contributions to the Paris agreement and implications for sustainability. *Journal of Cleaner Production*, *244*, Article 118643. https://doi.org/10.1016/j.jclepro. 2019.118643

Vurro, C., & Perrini, F. (2011). Making the most of corporate social responsibility reporting: Disclosure structure and its impact on performance. *Corporate Governance: The International Journal of Business in Society*, *11*(4), 459-474. https://doi.org/10.1108/14720701111159280

Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*, *162*, 1607-1616. https://doi.org/10.1016/j.jclepro.2017.06.142

Weber, R., Watson, A., Forter, M., & Oliaei, F. Review article: Persistent organic pollutants and landfills - A review of past experiences and future challenges. *Waste Management and Research*, *29*(1), 107-121. https://doi.org/10.1177/0734242X10390730

Xiao, C., Wang, Q., Vaart, T. V. D., & Donk, D. P. V. (2017). When does corporate sustainability performance pay off? The impact of country-level sustainability performance. *Ecological Economics*, *146*(2018), 325-333. https://doi.org/10.1016/j.ecolecon.2017.11.025.

Yang, M., Bento, P., & Akbar, A. (2019). Does CSR influence firm performance indicators? Evidence from Chinese pharmaceutical enterprises. *Sustainability*, *11*(20), Article 5656. https://doi.org/10.3390/su11205656