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# Moderating role of firm characteristics on the relationship between corporate social responsibility and financial performance: evidence from India

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## Abstract

**Purpose** – The effect of corporate social responsibility (CSR) on corporate financial performance (CFP) is shown to depend on both firm-specific and external factors. This study investigates the moderating role of two firm-specific factors – the firm life-cycle stage and ownership structure – on the CSR–CFP relationship in a developing economy setting – India.

**Design/methodology/approach** – The study covers 1,419 listed companies in India during 2015–21. The firm lifecycle is represented using firm age and future growth prospects. Ownership is represented through a dummy variable and promoters' holding percentages. Return on assets (RoA) is used as a measure of CFP, while CSR intensity, i.e. the ratio of CSR expenditure to profit after tax (PAT), is used to represent CSR. Fixed effect panel regression and generalized method of moments (GMM) models are used for data analysis.

**Findings** – CSR expenditure has a significant negative impact on CFP. Firm age and future growth prospects amplify this negative impact, indicating that the firm life-cycle has a significant negative moderating effect on the CSR–CFP relationship. Furthermore, the impact of CSR on CFP is worse for government companies than private ownership. Promoters' holdings have a positive impact on the CSR–CFP relationship.

**Research limitations/implications** – The results question the validity of mandatory CSR expenditure on companies operating in developing countries and call for a differentiated policy approach to CSR expectations based on firm characteristics. This study also enhances the existing literature on CSR–CFP.

**Originality/value** – The growing research on CSR–CFP has limited coverage of firm characteristics as contributing factors. Hence, this paper helps in enhancing the existing literature on CSR–CFP and makes it more relevant to firms with specific characteristics.

**Keywords** Corporate social responsibility, Financial performance, Firm characteristics, Firm life-cycle, Ownership structure, CSR–CFP

**Paper type** Research paper

## 1. Introduction

Corporate social responsibility (CSR) is a channel for firms to exhibit their obligation towards society and the environment. Management theorists recommend an active involvement in CSR activities to gain long-term benefits (Smith, 2007). The benefits – stock performance,



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operating efficiencies, employee productivity, brand value and sales – influence long-term performance (Barnett and Leih, 2016; Yang and Rhee, 2020). With the growing regulatory expectation of sustainable development (Chaneta, 2013), CSR is considered a corporate governance matter that has to be explicitly dealt with (Kanji and Agrawal, 2016). These factors compel companies to "invest" in CSR activities (Balabanis *et al.*, 1998; Bear *et al.*, 2010; Inoue and Lee, 2011). Lately, developing countries are also focusing on CSR activities (Kim and Moon, 2015; Lee *et al.*, 2018; Xiao *et al.*, 2018; Xu and Zeng, 2020). For instance, in India, the Companies Act 2013 mandates profitable companies to spend at least two percent of the profit after tax (PAT) on CSR (MCA, 2013).

Though the literature linking CSR and corporate financial performance (CFP) is diverse and growing (Arendt and Brettel, 2010; Carroll and Shabana, 2010; Cordeiro *et al.*, 2023; Goll and Rasheed, 2004; Kang *et al.*, 2016; Lai *et al.*, 2010; Servaes and Tamayo, 2013; Tarus, 2015), the empirical evidence remains inconclusive (Orlitzky *et al.*, 2011). The inadequate inquiry into the contribution of external factors to the CSR–CFP linkage is often used as an explanation for the mixed evidence (Barnett, 2007; Wang *et al.*, 2015). This is particularly relevant while analyzing companies with varied firm characteristics (Hou *et al.*, 2016; Li *et al.*, 2010).

In this study, we investigate the moderating role of two firm characteristics, namely, firm life-cycle and ownership structure, on the CSR–CFP relationship of listed Indian companies. It has been shown that corporate strategy is a function of both life-cycle stage and ownership structure (Rajverma *et al.*, 2019; Shahzad *et al.*, 2019). Hence, decisions involving CSR expenditure and CFP are both impacted by the firm life-cycle stage and ownership structure. Based on our literature review, though there are studies focusing on the impact of CSR on CFP (Bag and Omrane, 2022; Hasan *et al.*, 2022; Sharma and Aggarwal, 2022), there are no studies on the role of firm characteristics in this relationship. The limited studies are based in advanced countries and China, with hardly any evidence from other developing economies.

This study attempts to answer the following research questions – (1) what is the impact of CSR on the CFP in a developing country context? (2) does a firm's life-cycle stage have an impact on the CSR–CFP relationship? and (3) does the firm ownership structure have an impact on the CSR–CFP relationship? The publicly available financial information of 1,419 companies during 2015–21 is used for analysis. The variables representing the firm lifecycle are firm age and future growth prospects. The ownership is represented by promoters' holding and a dummy variable differentiating public and private ownership. Motivated by the existing literature, CFP is represented using return on assets (RoA) and CSR intensity – CSR expenditure as a percentage of PAT –measures of CSR. The answers to these research questions are important considerations for CEOs in developing economies in determining whether to lock funds in CSR investments. This study is crucial for policymakers to determine the relevance of imposing mandatory CSR expenditures on companies. This study also contributes to the literature as the existing studies on factors influencing CSR–CFP are set in developed country contexts with limited literature covering companies in developing countries (Mishra and Suar, 2010; Saeidi *et al.*, 2015; Tarus, 2015).

The article is structured into seven sections: theoretical framework and literature review, methods, results, discussion, implications and conclusion. The next section covers the theoretical framework and literature.

## 2. Theoretical framework and literature review

In this section, we consider the broad theories and literature covering each of the research questions – (1) the CSR–CFP relationship, (2) the role of the life-cycle stage and (3) the role of ownership structure.

(1) CSR–CFP relationship

There are two conflicting schools of thought on the CSR–CFP relationship, proposed by Freidman (Friedman, 1970) and Freeman (1984). The followers of Friedman's school of thought opine that CSR is an unnecessary expenditure by an organization, whose focus should be on value maximization. Hence, Friedman theorized that CSR expenditure negatively impacts CFP. In contrast, Freeman's stakeholder theory (Freeman, 1984) argues that CSR activities allow companies to lower the transaction cost with their key stakeholders – employees, suppliers, financiers, customers and investors – thereby improving CFP. Freeman based his theory on the legitimacy theory (Dowling and Pfeffer, 1975), according to which there is a social contract between the corporation and the society. Hence, corporations that conduct their business in tandem with the expectations and values of society will have a better corporate reputation, which in turn lowers their transaction costs (Arendt and Brettel, 2010).

The results of empirical studies on the CSR–CFP relationship remain inconclusive. The systematic literature review conducted by Margolis and Walsh (2001) covering 80 empirical studies observed that the CSR–CFP relationship reported was a combination of positive (53%), insignificant (24%), mixed (19%) and negative (4%). Similar results have been reported by the systematic studies conducted by other researchers (Chen *et al.*, 2018; Hirsch *et al.*, 2023; Nor *et al.*, 2016; Roman *et al.*, 1999). Though inconclusive, the majority of the evidence indicates that CSR gratifies the implied stakeholder expectation, thereby enhancing the company's reputation, which lowers its transaction costs and improves CFP (Brammer and Pavelin, 2006; Giannarakis *et al.*, 2016; Orlitzky *et al.*, 2003; Reverte *et al.*, 2016). Similar studies conducted in developing economies observed CFP declining with the increased fulfilment of CSR (Zhu and Zhang, 2015). The negative impact is explained in terms of a lack of resources, including capital, and a weak institutional structure. Studies reporting an insignificant CSR-CFP relationship (Han *et al.*, 2016; Nelling and Webb, 2009; Surroca *et al.*, 2010) blamed research design errors (Surroca *et al.*, 2010) in the existing studies. Considering the inconsistency, we proceed with the findings in developing countries and hypothesize that CSR has a significant negative impact on CFP.

*H1*. CSR has a significant negative impact on the CFP of publicly traded companies in India.

(2) Role of firm life-cycle stage

Older firms lag behind younger firms in flexibility, agility and availability of future growth opportunities. Theoretically, the life-cycle theory (Miller and Friesen, 1980) elucidates that the negative performance of older firms is ascribable to the rigidity of change (Barney, 1991). Specific to the CSR–CFP relationship (Han and Kim, 2020) opined that firm age would hamper the relationship between CSR and CFP as the value of CSR is steadily entrenched in the corporate image of the firm over time. Once entrenched, additional signalling from CSR value will not be recognized well by stakeholders, and this process will abate the relationship between the CSR and the CFP. Therefore, due to stakeholders' adaptation, over time, their assessment of the added value from CSR is diluted, thereby negatively affecting the relationship between CSR and CFP.

In line with the theoretical understanding, the empirical studies have also reported a moderating role for firm life-cycle stage on the CSR–CFP relationship (Khuong and Anh, 2023; Ye *et al.*, 2021). For instance, the study conducted by Khoug and Anh (Khuong and Anh, 2023) reported that CSR has an impact on the CFP on Vietnamese corporations across all life-cycle stages, and the influence is highest in the growth stage. This result indicates that the

relationship between CSR and CFP is moderated by the firm life-cycle stage. Hence, we suggest the following hypothesis:

*H2.* Firm age has a significant negative moderating impact on the CSR–CFP relationship.

The impact of future growth opportunities on CSR–CFP can be explained using financial slack. Financial slack is defined as the excess resources beyond what is required to sustain the organization (Cyert and March, 1963) or to yield the desired level of outcome (Nohria and Gulati, 1996). Researchers have found that the availability of financial slack positively influenced the CSR–CFP relationship, implying that companies will only benefit from CSR activities if they have excess financial resources (Lin *et al.*, 2020). Companies with high future growth prospects need more money, and hence, any excess expenditure on CSR will not be viewed well by the stakeholders. Their financial slack in such cases has alternative investment options than being spent on CSR activities. This indicates that future growth opportunities could negatively impact the CSR–CFP relationship. This could be particularly true for developing economies with limited resources and institutional weaknesses. Based on the available literature, we built the following hypothesis:

*H3.* Future growth opportunities have a significant negative impact on the CSR–CFP relationship

(3) Role of ownership structure

Corporate governance is significantly affected by the ownership structure, which is reflected in resource allocation, decision-making processes and compliance requirements. This is supported by the principal-agent theory, which states that ownership concentration lowers agency costs, thereby improving CFP (Jensen and Meckling, 1978). The proponents of this theory argued that the disjointing of ownership and operations invariably creates information asymmetry and conflict of interest between the owners and the agents. Larger shareholders can put a stop to this agency problem between owners and managers. Regarding CSR, higher promoter holdings are expected to lead to the active promotion of CSR, fulfilment of targets and improved information disclosure (Kaymak and Bektas, 2017). This enhances the social image of enterprises and is expected to influence CFP. This is further supported by the convergence-of-interest hypothesis (Park and Jang, 2010), which states that as ownership concentration increases, the cost of deviation from maximizing firm value decreases. Considering the literature, the following hypothesis is considered for this study.

*H4.* Promoters' holding has a significant positive moderating impact on the CSR–CFP relationship

Regarding public-private ownership, the governance structures are different for the two organizations. Though the governance structure of public enterprises could be superior to that of private companies, their age could be a deterrent in the CSR–CFP relationship of public sector companies. Hence, we propose the following hypothesis.

*H5.* Government ownership has a significant negative moderating impact on the CSR–-CFP relationship

## 3. Research methodology

### *3.1 Data*

The study utilizes annual financial data of listed Indian companies during the period 2015–21. CSR intensity, defined as the proportion of PAT spent on CSR activities during the year, is used as a measure of CSR engagement. A unitary time lag is applied to CSR intensity as CSR

expenditure is expected to have a lagged impact on financial performance. The analysis includes actual CSR expenditure and not budgeted amounts for CSR activities, as a proportion of the budget is left unspent at the end of the year. Only companies reporting positive CSR intensity (PAT positive) are considered in the dataset. After cleaning, the unbalanced panel dataset had 5,949 observations from 1,419 companies. The financial data were extracted from the Prowess database (Release 4.12), maintained by the Centre for Monitoring Indian Economy (CMIE).

### *3.2 Variables*

In line with the recent literature on the CSR–CFP relationship, return on assets (RoA) is used as a measure of CFP (Lin *et al.*, 2020; Tan *et al.*, 2022). As the actual CSR expenditure would differ based on the size and scale of operations, CSR intensity is used to represent CSR (Han and Kim, 2020). Future growth opportunities are measured using Tobin's Q. The ownership structure is represented using promoters' holding and a category variable representing government (1) or private (0) ownership. Following the available literature on the CSR–CFP relationship, firm size, asset tangibility, cash flow from operations (CFO), liquidity and leverage are used as control variables. The definition of the variables used for analysis is provided in Table 1. To determine the moderating role of firm life-cycle and ownership, interaction variables were created for variables representing firm life-cycle (age, size and future growth prospects) and ownership structure (ownership, promoters' holding). The interaction variables are denoted throughout the study using "Int_" before the variable name.

### *3.3 Modelling*

The theoretical model is empirically tested using an unbalanced panel data regression model. For the panel data regression model, it is necessary to check the stationarity of the variables. Stationarity is checked using various panel unit-root tests. After confirming the stationarity, a correlation matrix is used to check for the multicollinearity of the variables.

A fixed-effect (FE) model is chosen as it controls firm-specific unobserved effects that remain constant across time. These effects could be linked to corporate strategy (McWilliams *et al.*, 2006), management styles and value systems (Hemingway and Maclagan, 2004) of

| Variables | Significance | Units | Definition |
|---|---|---|---|
| RoA | Dependent | Ratio | PAT/Total assets |
| Independent variables | | | |
| CSR intensity | | Ratio | Ratio of CSR expenditure to PAT |
| Age | Firm life-cycle stage | Number | Number of years since the inception of the firm |
| Future growth | | Ratio | Tobin's Q is used as the measure of growth. It is calculated as the ratio of the market value of assets to their book value |
| Ownership | Ownership structure | Category | Two categories were created based on whether the ownership lies with the government or private parties |
| Promoters' holding | | % | % Shareholding of promoters in a given year |
| Firm size | Control variables | INR | Natural log of reported assets in a given year |
| Liquidity | | Ratio | Current ratio: current assets/current liabilities |
| Cash flow from operations (CFO) | | INR | Cash from operations during a given year |
| Leverage ratio | | Ratio | Ratio of long-term debt to total assets |
| Tangibility | | Ratio | Ratio of gross block (book value of plant and machinery) to total assets |

**Source(s):** Authors' analysis

**Table 1.** Variables used for analysis

organizations. If these effects are left uncontrolled, they could produce unrealistic estimates. The two methods of controlling for unobserved effects are the fixed effect (FE) and random effect (RE) approaches. This study utilizes the FE approach, which incorporates a within-group transformation that cancels the effect of any time-invariant, unobserved effect. The Hausman test is used to check the appropriateness of the FE approach over the alternative RE panel data model (Hausman, 1978). The Woolridge test for serial correlation is used to confirm the appropriateness of the within-group transformation rather than the first difference transformation for estimating the FE panel data model.

The independent (CSR intensity) and interaction variables were delayed by one time period as we expect a lagged impact of CSR expenditure on financial performance. The control variables are shown to have an impact on the current year's financial performance. The model used for testing the hypotheses can be represented as follows:

$$\mathrm{CFP}_{it} = \text{constant} + \alpha_1 \mathrm{CSR}_{it-1+} \beta \,\text{Control Variables}_{it} + \gamma \,\text{Interaction variables}_{it-1} + \text{Firm} - \text{level}\,\mathrm{FE}_i + \varepsilon_{it} \quad (1)$$

As the study utilizes seven-year data (2015–2021) across 1,419 companies, there is a possibility of endogeneity. This occurs as the time period is substantially smaller than the number of cross-sections. The FE estimation in the presence of endogeneity could lead to inconsistent parameter estimates. As a robustness check, we estimated Eq. (1) using the generalized method of moments (GMM), a standard approach followed to minimize the endogeneity effect. We used the lagged independent variables as instruments, following an approach similar to the Arellano-Bond estimation (Arellano and Bond, 1991). Two tests were performed to examine the validity of the estimators using GMM. The first test checked whether the residuals had a significant first-order autocorrelation and an insignificant second-order autocorrelation. Then, the overidentification of instruments was checked using the Hansen and Sargan test.

## 4. Results

The descriptive statistics of the variables used for analysis, after removing the outliers, are provided in Table 2. After removing outliers, a total of 4,980 observations were used for

| Variable | Significance | Mean | Std. dev | Min | Max | No. of obs |
|---|---|---|---|---|---|---|
| RoA | Dependent | 6.02 | 4.08 | 0.009 | 21.20 | 4,980 |
| CSR intensity | Independent | 3.61 | 10.91 | 0.004 | 257.14 | 4,980 |
| Age | Firm life-cycle | 37.60 | 20.78 | 1 | 127 | 4,980 |
| Future growth | | 2.75 | 7.00 | 0 | 430.25 | 4,980 |
| Promoters' holding | Ownership | 55.91 | 17.94 | 0 | 99.03 | 4,980 |
| Size (log) | Control | 9.30 | 1.67 | 4.702 | 16.09 | 4,980 |
| Liquidity | | 1.64 | 1.53 | 0.030 | 40.61 | 4,980 |
| CFO (log) | | 6.73 | 1.87 | −1.204 | 13.56 | 4,980 |
| Leverage ratio | | 9.20 | 9.97 | 0 | 69.16 | 4,980 |
| Tangibility | | 0.52 | 0.20 | 0.003 | 0.99 | 4,980 |
| Int_Age | Interaction | 1.39 | 4.70 | 0.001 | 172.29 | 4,980 |
| Int_Futuregrowth | | 0.08 | 0.35 | 0 | 17.85 | 4,980 |
| Int_Ownership | | 31.43 | 299.75 | 0 | 6146.40 | 4,980 |
| Int_Promoter | | 0.02 | 0.07 | 0 | 2.44 | 4,980 |

**Table 2.** Descriptive statistics

**Source(s):** Authors' analysis

analysis. Considering the wide variation in asset size and cash flow from operation (CFO), natural log transformation was used to reduce dispersion. The data covers a broad range of companies across various firm life-cycle stages. For instance, the age of the companies varies from 1 to 127 years. A similar range is observed in firm size, future growth opportunities and promoters' holdings.

The next step before proceeding is to check for the multicollinearity of the variables. The correlation matrix (refer to Table 3) is used to check for a high correlation between the variables. The correlation matrix shows a high correlation between size (log) and cash flow from operations (log). Separate models need to be built, introducing one of these variables in each model. All other pair-wise correlation coefficients are within ± 0.5, and hence, there is no possibility of multicollinearity.

The next step in the analysis is to confirm the stationarity of the variables. Panel unit root tests – Levin, Lin and Chu (LLC); Im, Pesaran and Shin W-stat (IPS); Augmented Dickey-Fuller (ADF) – Fisher Chi-square and Phillips–Perron (PP) – Fisher Chi-square were conducted to confirm the stationarity of the variables. The results of the unit-root tests are provided in Table 4. As all the *p*-values are less than 0.05, we reject the null hypothesis of the panel unit root test and conclude that all the variables are stationary at level.

After confirming the stationarity of the variable, the panel data regression models are constructed. The results of the fixed-effects (FE) panel data regression are reported in Table 5. Considering the high correlation between lnsize and lnCFO, two separate models were constructed including each variable. The model including lnCFO had higher predictability; hence, lnCFO was retained and lnsize was dropped from further models.

Models were constructed by introducing the interaction variables – Int_Age, Int_Futuregrowth, Int_Ownership and Int_Promoter – one at a time (Models 1–4 in Table 5). For each of the models, the Hausman test was used to identify whether to proceed with a fixed effect or a random effect. As shown in Table 5, the *p*-value of the Hausman statistic was below 0.05 across all the models, thereby rejecting the null hypothesis that RE is a better fit. Hence, we proceeded with the FE model. The coefficients remained consistent across the models, thereby confirming the robustness of the model. R-squared improved marginally with the inclusion of all the variables (Model 5 in Table 1).

To confirm the effect of endogeneity, the GMM model was constructed. The first lag of all the independent variables was used as an instrument for constructing the GMM model. The results of the GMM model are provided in Table 5. The results of GMM estimation are similar to the FE panel data regression results. Hence, we conclude that endogeneity is not a concern for the dataset considered. The endogeneity tests conducted at the end of the GMM model also confirmed the absence of endogeneity. Hansen's J statistic was used to confirm the appropriateness of the instruments used in GMM. As the results indicate, the *p*-value of 0.2128 indicates that the null hypothesis of Hansen's J test cannot be rejected. Hence, we conclude that the instruments used for the construction of the GMM model are valid.

## 5. Discussion

Results of the fixed effect panel data regression and GMM models provided in Table 5 indicate that the lagged CSR has a significant negative impact on financial performance, i.e. expenditure on CSR negatively impacts CFP. The results are consistent with similar studies conducted in developing economies (Zhu and Zhang, 2015). These findings indicate that with existing resource constraints in developing economies, mandatory CSR existing in these countries could be a deterrent to CFP. Age has a significant negative impact on CFP, indicating that the older, matured industries lag behind newer technology and services firms in financial performance. This is further reinforced by the significant positive impact of

**Table 3.**
Correlation matrix

| | RoA | CSR (lag) | Age | lnSize | Tobin's Q | Ownership | Promoter | Liquidity | Tangibility | lnCFO | Leverage |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RoA | 1 | | | | | | | | | | |
| CSR (lag) | −0.212 | 1 | | | | | | | | | |
| Age | −0.027 | 0.016 | 1 | | | | | | | | |
| lnSize | −0.001 | −0.024 | 0.221 | 1 | | | | | | | |
| Tobin's Q | 0.174 | −0.027 | −0.007 | 0.065 | 1 | | | | | | |
| Ownership | −0.033 | 0.003 | 0.102 | 0.352 | −0.031 | 1 | | | | | |
| Promoter | −0.020 | 0.008 | 0.006 | −0.098 | 0.082 | 0.028 | 1 | | | | |
| Liquidity | 0.273 | −0.018 | −0.004 | −0.130 | 0.003 | −0.022 | 0.018 | 1 | | | |
| Tangibility | −0.106 | 0.031 | 0.111 | 0.256 | −0.003 | 0.067 | −0.037 | −0.201 | 1 | | |
| lnCFO | 0.157 | −0.045 | 0.188 | 0.883 | 0.089 | 0.302 | −0.089 | −0.133 | 0.262 | 1 | |
| Leverage | −0.272 | 0.022 | −0.031 | 0.187 | −0.037 | 0.069 | −0.029 | −0.198 | 0.393 | 0.164 | 1 |

**Source(s):** Authors' analysis

| Variable | Unit-root test statistic ($p$-value) LLC | IPS | ADF | PP |
|---|---|---|---|---|
| RoA | −75.20 (0.000) | −15.23 (0.000) | 1604 (0.000) | 1989 (0.000) |
| CSR (lag) | −189.69 (0.000) | −54.31 (0.000) | 1831 (0.000) | 2163 (0.000) |
| lnSize | −133.28 (0.000) | −32.45 (0.000) | 1704 (0.000) | 2298 (0.000) |
| Tobin's Q | −670.18 (0.000) | −34.54 (0.000) | 1424 (0.000) | 1735 (0.000) |
| Promoter | −1072.27 (0.000) | −2750.44 (0.000) | 1630 (0.000) | 1865 (0.000) |
| Liquidity | −50.10 (0.000) | −12.16 (0.000) | 1480 (0.000) | 1802 (0.000) |
| Tangibility | −78.59 (0.000) | −24.08 (0.000) | 1812 (0.000) | 2306 (0.000) |
| lnCFO | −154.38 (0.000) | −49.91 (0.000) | 2353 (0.000) | 2913 (0.000) |
| Leverage | −385.91 (0.000) | −67.42 (0.000) | 2047 (0.000) | 2537 (0.000) |

**Source(s):** Authors' analysis

**Table 4.** Panel unit root test results

future growth prospects on CFP. The companies projected to grow in the future (as reflected by Tobin's Q) are shown to have better CFP.

The interaction variables representing the lifecycle of the organization have a significant negative impact on the CSR–CFP relationship. CSR expenditure seems to have a higher impact on the financial performance of legacy firms. This observation is consistent with our expectations based on the literature (Han and Kim, 2020). The older organizations typically operate in saturated markets with low margins and stable sales. The profits of such organizations, after distribution to the investors, will be utilized for effective liquidity management for the upcoming year. The firms could be borrowing short-term capital for their liquidity requirements, which could increase their financing costs. Similarly, for companies with high growth opportunities, a constant stream of investment is required to attain their growth projections. Stakeholders expect the financial slack in these organizations to be utilized for future investment opportunities rather than for CSR (Lin *et al.*, 2020). Typically, such companies retain their profits and reinvest in their business rather than distributing them as dividends to investors. With mandatory CSR requirements, the proportion of the profits available for reinvestment decreases, which forces the organization to raise long-term capital for their investments. This again raises the financing cost of the organization, thereby further worsening the financial performance. Hence, the negative impact of CSR expenditure on CFP is significantly higher for legacy organizations and those with future growth opportunities. Table 6 summarizes the results of the hypotheses tested in this study.

## 6. Implications

(1) Theoretical implications

The study extends the literature connecting CSR and CFP, providing more evidence to the question, "Is it worthy to be socially responsible?" (Brammer *et al.*, 2007; Brammer and Millington, 2006; Orlitzky *et al.*, 2011). It also adds to the sparse literature connecting CSR and CFP in the context of developing countries. The study establishes the importance of firm characteristics in the CSR–CFP relationship. The importance of firm characteristics in the financial performance of an organization is well theorized. However, the influence of firm characteristics in moderating the relationship between CSR and CFP is still in the nascent stage. This empirical study contributes to building theory on how the firm lifecycle and ownership structure influence the impact of CSR expenditure on CFP. It also indicates that CSR expenditure limits the retained earnings available for liquidity management and investment, thereby showing the importance of financial slack in the CSR–CFP relationship.

**Table 5.**
Results of FE panel data regression – OLS (Model 1–5) and GMM results

| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | GMM |
|---|---|---|---|---|---|---|
| CSR intensity (lag) | −0.0568*** (0.000) | −0.0334*** (0.000) | −0.0567*** (0.000) | −0.0737*** (0.000) | −0.0542*** (0.000) | −0.1911*** (0.007) |
| Age | −0.0007*** (0.014) | −0.0006** (0.020) | −0.0007** (0.013) | −0.0007** (0.010) | −0.0006** (0.031) | −0.0002*** (0.000) |
| Future growth | 0.0002*** (0.002) | 0.0008*** (0.000) | 0.0002*** (0.002) | 0.0002*** (0.002) | 0.0010*** (0.000) | 0.0051*** (0.000) |
| Promoters' holding | −0.0001 (0.346) | −0.0001 (0.605) | −0.0001 (0.357) | −0.0001 (0.479) | −0.0001 (0.734) | −0.0002 (0.565) |
| Liquidity | 0.0046*** (0.000) | 0.0046*** (0.000) | 0.0046*** (0.000) | 0.0046*** (0.000) | 0.0046*** (0.000) | 0.0081*** (0.000) |
| CFO (log) | 0.0057*** (0.000) | 0.0056*** (0.000) | 0.0057*** (0.000) | 0.0058*** (0.000) | 0.0055*** (0.000) | 0.0039*** (0.000) |
| Leverage | −0.0729*** (0.000) | −0.0721*** (0.000) | −0.0728*** (0.000) | −0.0730*** (0.000) | −0.0722*** (0.000) | −0.0951*** (0.000) |
| Tangibility | −0.0504*** (0.000) | −0.0503*** (0.000) | −0.0505*** (0.000) | −0.0505*** (0.000) | −0.0491*** (0.000) | −0.0454* (0.096) |
| Int_Age | −0.0003*** (0.001) | – | – | – | −0.0006*** (0.001) | −0.0006* (0.080) |
| Int_Futuregrowth | – | −0.0151*** (0.000) | – | – | −0.0214*** (0.000) | −0.0844*** (0.008) |
| Int_Ownership | – | – | −0.0363 (0.173) | – | −0.0429 (0.107) | −0.1664 (0.185) |
| Int_Promoter | – | – | – | 0.0003* (0.089) | 0.0009*** (0.000) | 0.0021** (0.038) |
| Constant | 0.0716*** (0.000) | 0.0716*** (0.000) | 0.0722*** (0.000) | 0.0731*** (0.000) | 0.0698*** (0.000) | 0.0403*** (0.000) |
| Observations | 4,980 | 4,980 | 4,980 | 4,980 | 4,980 | Observations: 3112 |
| Number of firms | 1,419 | 1,419 | 1,419 | 1,419 | 1,419 | |
| *R*-squared | 0.1330 | 0.1461 | 0.1336 | 0.1316 | 0.1540 | 0.2147 |
| *F*-Statistic (*p*-value) | 49.18*** (0.000) | 51.69*** (0.000) | 49.14*** (0.000) | 49.23*** (0.000) | 44.72*** (0.000) | Endogeneity GMM C Statistic (*p*-value) 0.4306 (0.5117) |
| Hausman Statistic (*p*-value) | 161.68*** (0.000) | 157.88*** (0.000) | 158.35*** (0.000) | 159.26*** (0.000) | 150.43*** (0.000) | Hansen's J (*p*-value) 19.435 (0.2128) |

**Note(s):** [1] Ownership variable dropped because of FE model
[2] Size (log) dropped due to high correlation with CFO (log); better fit obtained using CFO (log)
[3] *p*-values in parenthesis ***$p < 0.01$, **$p < 0.05$ and *$p < 0.1$
[4] Coefficient of time variables not included in the table
**Source(s):** Authors' analysis

With companies forced to raise short-term and long-term capital in the absence of financial slack, any further allocation to CSR worsens CFP. Further analysis is required to understand the impact of CSR expenditure on the short-term and long-term financial slack of organizations. Though the existing theories show that CSR has a negative impact on the long-term cost of capital of organizations due to indirect benefits (el Ghoul *et al.*, 2016), this study provides early evidence of the negative impact of CSR expenditure on financial slack. Existing studies indicate that the absence of financial slack is a major cause of financial distress in organizations (Boubaker *et al.*, 2020). Hence, in developing economies where resources are scarce and the cost of raising capital is already high, this could be a major concern for organizations.

(2) Practical implications

The results show a significant negative impact of CSR intensity on CFP. This result could have policy implications for a developing economy such as India. The findings raise pertinent questions on whether the mandating of CSR expenditure on profit-making entities is justified in the Indian context. For a growing economy with high capital costs, mandatory expenditure on CSR strains the financial performance of organizations. Researchers have already shown that actual corporate expenditure on CSR has in fact reduced after the implementation of this mandate (RAJGOPAL and TANTRI, 2022). The setting of a minimum expenditure also reduces the motivation of corporate entities to spend more than is required on non-profit activities. Further, the findings show that the impact of CSR expenditure on CFP is not uniform across organizations. It depends on the firm characteristics, such as life-cycle stage and ownership structure. Hence, a blanket rule across organizations puts strain on some organizations while reducing the CSR appetite of others. The research also highlights the need for exploring cheaper sources of capital. In the Indian context, the shallow debt market remains a concern across corporate entities. The primary source of capital for corporate India is bank loans and equity – both options being much more expensive than raising capital through bond issues.

## 7. Limitation and conclusion

The present study attempts to answer whether the financial performance of companies improves because of their CSR expenditures. It also explores whether the benefit is different for companies based on their firm life-cycle and ownership structure. The results indicate that both firm life-cycle and ownership structure significantly moderate the CSR–CFP relationship. The findings provide interesting discussion points and have immense theoretical and practical implications. The study has its limitations as well. For instance, it considers the companies located in one country for analysis, which limits the generalization of the results. Furthermore, the external factors impacting the CSR–CFP relationship, such as economic and institutional factors, were not included in the current analysis. As the study was limited to a particular country, the time variables were expected to capture the change in

| | |
|---|---|
| *H1*: CSR has a significant negative impact on the CFP of publicly traded companies in India | Accepted |
| *H2*: Firm age has a significant negative moderating impact on the CSR–CFP relationship | Accepted |
| *H3*: Future growth opportunities have a significant negative impact on the CSR–CFP relationship | Accepted |
| *H4*: Promoters' holding has a significant positive moderating impact on the CSR–CFP relationship | Accepted |
| *H5*: Government ownership has a significant negative moderating impact on the CSR–CFP relationship | Accepted |

**Source(s):** Authors' analysis

**Table 6.** Summary of hypotheses tested

these common variables. However, studies with a wider scope should include external factors in their analysis. Future studies can also focus on modelling the CSR–CFP relationship of specific categories of companies based on industry, life-cycle stage or ownership. As alternative measures of CSR performance emerge, future research can adopt more refined measures to model the CSR–CFP relationship. With more granular data emerging on the contribution of CSR to specific activities such as healthcare, education, poverty alleviation and women empowerment, future researchers can investigate which of these activities yield significant financial returns to the company. Further research could also extend the moderating impact of firm characteristics that we introduced in this study to similar countries in Asia.

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