

# The Impact of Corporate Governance and Moderating Effect of Firm Performance on CSR Expenditure of Firms in India

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## ABSTRACT

This study's primary objective is to examine corporate governance's influence on the allocation of corporate social responsibility (CSR) funds by companies operating in three distinct economic sectors in India, namely fast-moving consumer goods, information technology, and automobiles. The study additionally examines the moderating effect of firm performance on the connection between corporate governance (CG) and corporate social responsibility (CSR) expenditure. Agency theory and resource dependence theory are the basis of this study. Data were collected from the top ten firms in each sector based on their market capitalization from 2014 to 2023. The pooled ordinary least squares (OLS) regression was employed to test the proposed hypotheses. The findings demonstrate a positive impact of corporate governance on corporate social responsibility (CSR) expenditure. Upon examining the moderating effect of firm performance on corporate social responsibility (CSR) expenditure, both proxies of firm performance, Tobin Q and return on equity (ROE), enhance the impact of corporate governance on corporate social responsibility (CSR) spending.

**Keywords:** Corporate Governance, CSR Expenditure, FMCG, IT, AUTO, Firm Performance

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## **INTRODUCTION**

Corporate social responsibility (hereafter, CSR) activities reveal the voluntary commitment of firms to generate value not only for their stakeholders but also for the betterment of the broader society in which they operate. CSR initiatives demonstrate that businesses care about society more than profit-making (Fahad & Rahman, 2020; Gill, 2008). Therefore, the global community has started showing a keen interest in CSR initiatives, garnering the attention of various stakeholders, including but not limited to investors, employees, and governments. Companies with robust governance mechanisms prioritize ethics and transparency while consistently producing profits (Ruangviset et al., 2014). Corporate governance (hereafter, CG) ensures ethical business practices by overseeing management's actions and choices that impact stakeholders, the environment, and society at large (Ezhilarasi & Kabra 2017; Habbash, 2016). CSR and CG are closely interconnected and mutually dependent (Fahad & Rahman, 2020). Given this connection, several countries have mandated publicly traded or government-owned firms to disclose their CSR activities. For instance, Denmark and Chinese firms began broadcasting their CSR activities in 2008, Malaysia and Sweden in 2007, the UK in 2006, and the US in 2003 (Kabir & Thai, 2017). In lieu of the global need, under the Companies Act 2013, India issued guidelines to companies to publish the details of their CSR activities in their annual reports.

Companies around the globe acknowledged that limited requisite budgets for different operations are getting squeezed by the costs of CSR initiatives. The profitability-related concern of CSR-engaged corporations has drawn the attention of academics, businesses, and governments. Social responsibility activities can enhance a company's reputation and attract socially conscious investors. Stakeholders are also putting intense pressure on corporations to act socially responsible. The board bears the statutory responsibility for developing the CSR strategy for the business (Fu et al., 2020; Ferrell et al., 2016; Eccles et al., 2014). The association between CG and CSR has been extensively examined in finance literature. Many studies have explored the connections between CG and CSR (Thuy et al., 2022; Khan, 2010). The discrepancies in empirical findings can primarily be attributed to the heterogeneous vital factors such as varied geographical regions, varied range of periods, data sources, CSR measures and diverse methodologies applied in prior research. Moreover, the interconnection of CSR, CG, and financial performance is intricate and necessitates a more comprehensive investigation from several dimensions. In the present study, the relationship among CG, CSR expenditure, and firm performance has been re-examined. This study uses data from the top ten Fast-Moving Consumer Goods (hereafter, FMCG), Information Technology (hereafter, IT), and Automobile (hereafter, AUTO) companies from 2016 to 2023 to examine the moderating influence of the performance of firms on the relationship between CG and CSR expenditure. This research attempts to make a new contribution to the existing literature. This study is crucial for the following reasons: firstly, the previous studies consider the overall set of companies from a selected country. However, significant research has yet to explore how the relationship between CG, CSR and firm performance varies across sectors. In the present study, we investigate the variation in the relationship between these three sectors, FMCG, IT, and AUTO in the Indian economy. The second significant contribution of the study comes from our focus on exploring the moderating role of firm performance. To the best of our knowledge, previous studies examined the direct relationship between CSR and financial performance or the indirect relationship between CSR and CG (Thuy et al., 2022; Maeeni et al., 2022; Kabir & Thai, 2017), but no endeavour has been made to untap the moderating role of firm performance during the examination of the direct correlation between CG and CSR. Thus, more research is needed on this topic.

The layout of this paper is as follows: Section 2 discusses the theoretical foundation and research hypotheses, Section 3 pertains to the data sample and the statistical techniques employed, Section 4 displays the results and discusses the findings of the study, and Section 5 concludes the study with implications. Finally, the study's limitations are discussed to provide the directions for future research.

## **THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT**

### **Theoretical Underpinning**

Through the implications of the agency theory, this study analyses the connection between CG and CSR. The resource dependence theory also examines how firm performance influences the relationship between CG and CSR. Agency theory (Jensen & Meckling, 1976) suggests that stakeholders may encounter issues with interest clash when managers prioritise their personal objectives instead of maximising the company's value. Any stakeholders and company top positions authorities think CSR as an additional financial burden on the company's resources, thereby degrading the company's performance and value. Investors may consider CSR a waste of corporate resources (Barnea & Rubin, 2010). However, CSR disclosure helps mitigate the problem of distorted knowledge among managers and different stakeholders by providing shareholders with information regarding the company's treatment of its employees, society, and environment (Said et al., 2009). Furthermore, autonomous board members can significantly mitigate conflicts of interest between executives and shareholders. According to agency theory, it is recommended to have independent individuals serving on the Board of Directors (BODs) due to their expertise, experience, and lack of affiliation with other board members, particularly the Chief Executive Officers (hereafter, CEO) who also hold the position of chairman of the board (Bathala & Rao, 1995). In addition, agency theory further posits that board independence is a crucial characteristic that can improve the effectiveness of board oversight in deterring managers' actions that prioritise their own interests. The study uses resource dependence theory to derive its hypothesis, which investigates how firm performance affects the connection between CG and CSR. Businesses cannot stay afloat without the resources offered by other parties (Pfeffer & Salancik, 1978), but they are taking a massive risk by depending on the outside world. Nevertheless, building strong links between company boards and these outside forces allows for risk management and reduction (Nadeem et al., 2017). More importantly, managers are responsible for identifying and resolving dependencies when their organisations use external resources (Lux et al., 2011). One tactic that businesses use to reduce risk and uncertainty is to form relationships with necessary outside parties (Pfeffer & Salancik, 1978). According to Hillman et al. (1999), people view government legislation as an impactful driving power that does not naturally occur. However, the relationship between the organisation and its reliance on resources depends on the level of dependence that each partner has, and the proportionate influence of the stakeholders involved in the process of asset exchange between internal and external organisations (Pfeffer & Salancik, 1978). Conservative actions (being more cautious and risk-averse) by the company will depend on how well the current regime manages its interactions with other public insiders and how much influence the government and corporations have on the board in determining policies that affect the company's future outlook (Uddin, 2016).

### **Relationship between CG and CSR**

CG and CSR activities were deemed voluntary functions of the companies until policymakers acknowledged the necessity of regulating both through an appropriate lawful context (Williamson & Lynch-Wood 2008). Prior research has yet to reach a unanimous agreement regarding the correlation between CG and CSR disclosure (Farah et al., 2021; Garas & ElMassah, 2018). Miras-Rodríguez et al. (2019) examined 281 firms based in BRICS nations and discussed the impact of various degrees of CG on CSR reporting. The study reveals that the institutional CG mechanism affects the firm's approach to reporting its CSR activities. Coffie et al. (2018) discovered that the size of the board and the presence of a CSR committee positively impact CSR disclosure. However, they found that the level of board independence does not have a significant effect on CSR disclosure. Ezhilarasi and Kabra (2017) conducted a content analysis using 177 annual reports from environmentally damaging companies in India between 2009 and 2015. Based on the results, environmental certification and firm size are the most critical factors in determining ecological disclosure after foreign institutional ownership. Habbash (2016) analysed 267 Saudi Arabian companies from 2007 to 2011. The objective was to investigate the influence of firm characteristics, ownership structure, and CG on the disclosure of CSR. The findings demonstrate that the firm's size, family ownership, government ownership, and age

positively influence the level of CSR disclosure. In contrast to this, firm leverage hurts CSR disclosure. Thus, the study proposes the following hypothesis:

*H1: CG has an impact on CSR expenditure incurred by the firms of FMCG, IT, and AUTO sectors.*

## **Relationship between Firm Performance and CSR**

Yang et al. (2019) studied CSR practices among 125 Chinese pharmaceutical businesses from 2010 to 2016. The study discovered a direct correlation between the performance of a company and its implementation of CSR. Furthermore, it can be inferred that CSR enhances a company's financial performance. In the relative analysis of public sector and private sector listed firms in the Indian stock market, Garg and Gupta (2020) also examined the relationship between firm performance and CSR expenditure. Ghelli (2013) examined the association between firm performance and CSR activities. The author studied 322 companies listed under Fortune 500. The findings proved the positive and significant relationship between Tobin's Q and ROA with CSR. ROE was found to have an insignificant relationship with the disclosure of CSR activities. Garg et al. (2021) questioned whether the CSR expenditure for the listed firms under the mandatory CSR regime in India is relevant, exhibits higher stock returns and lowers the risk to the firms, but they did not find it relevant. Further, Gupta and Garg (2022) investigated the impact of CSR expenditure compliance on firm value by using PB-ROE model. They found the negative impact of CSR expenditure compliance with a moderating effect of return on equity (hereafter, ROE) on the price-to-book (PB) ratio, a proxy of firm value, for the Indian firms listed in the National Stock Exchange (hereafter, NSE).

From the above discussion, it is found that no significant study has been produced in the past to measure the moderating effect of firm performance on CSR spending of the firms. Hence, the following hypothesis has been proposed:

*H2: Firm performance has a moderating effect on CSR expenditure incurred by the firms of FMCG, IT, and AUTO sectors.*

## **DATA AND METHODOLOGY**

### **Data Sample**

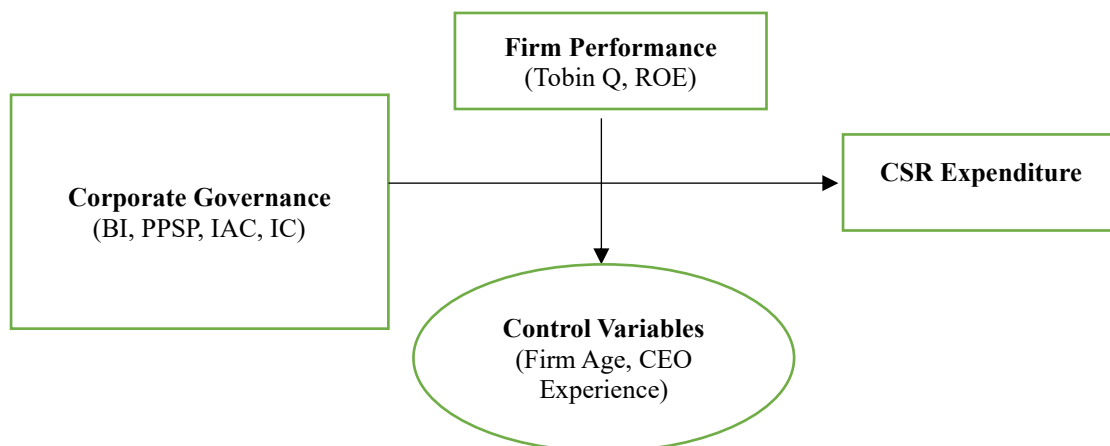
Three sectors, namely FMCG, IT, and AUTO, have been chosen based on their yearly CSR spending, as stated in the Indian CSR Spending report for the years from 2014 to 2023 because the mandatory CSR expenditure regime was legislated in India with effect from April 2014 onwards (Garg & Gupta, 2020; Garg et al., 2021). The top ten companies from each industry have been chosen based on market capitalization. The market capitalization data had been extracted from NSE of India. The financial and board-related data spanning from 2014 to 2023 was compiled from the annual reports obtained from the official websites of the chosen companies. The rationale behind considering the data from 2014 is the amendment to the Companies Act in 2013. The amendments to the Indian Companies Act in 2013 resulted in notable modifications specifically aimed at improving CG standards. The Act implemented specific additional rules concerning the structure and operations of crucial company governance committees. These amendments aimed to enhance transparency, accountability, and general governance standards in Indian firms. Consequently, Indian corporations have concentrated on these responsibilities to meet the new criteria and improve their governance procedures. Table 1 describes the variables that were used in the current study.

**Table 1: Description of Variables**

Category of Variable	Variables	Description	Previous Studies
Dependent Variable	CSR Expenditure	It is the natural log of the annual expenditure spend by the companies on the CSR activities.	Benlemilh and Bitar (2018); Samet and Jarbou (2017)
Independent Variables	Blau Index (BI)	BI is used as a representation of board gender diversity. BI was introduced by Blau in 1977. $\text{Blau Index} = 1 - \sum_{i=1}^2 P_i^2$ where i = No. of gender categories (Two categories are used: Male and Female) $P_i$ = Percentage of board members in each gender category	Bhatia et al. (2023); Nadeem et al. (2019); Sagar et al. (2022)
	Percentage of Promoters in Shareholding Pattern (PPSP)	It is the percentage of promoters in the overall shareholding pattern	Guluma (2021); Naiewi et al. (2017)
	Independence of Audit Committee (IAC)	It is measured by percentage of independent and non-executive directors in the audit committee	Al-Hadrami et al. (2020); Chen and Chen (2008)
	Investor Confidence (IC)	It is the natural log of the volume of trade for the stock of the company	Shahid and Abbas (2019)
	Tobin Q	It is used a measure of firm performance. It is calculated as market capitalization of total assets minus equity book value minus deferred tax liability divided by total assets) (Wang et al., 2014)	Sial et al. (2018)
Moderating Variables	Return on Equity (ROE)	It is the net income before extraordinary items divided by book value of common equity	Kabir and Thai, (2017); Liu et al. (2015)
Controlled Variables	Firm Age	It the natural log of the time since the company has incorporated	Bhatia et al. (2023)
	CEO Experience	It is the natural log of the number of years the person has served the company as CEO	Hao et al. (2023); Hao et al. (2021)

Source: Authors' compilation

**Model and Techniques**



**Figure 1: Theoretical Model**

The present analysis applied Ordinary Least Squares (hereafter, OLS) regression on panel data (Harjoto et al., 2015). To test the first hypothesis, the following OLS regression model is estimated:

**Model 1 (without moderating variables)**

$$CSR\ Expenditure = \beta_0 + \beta_1 BI_{it-1} + \beta_2 PPSP_{it-1} + \beta_3 IAC_{it-1} + \beta_4 IC_{it-1} + \beta_5 Firm\ Age_{it-1} + \beta_6 CEO\ Experience_{it-1} + \varepsilon_{it}$$

In order to address concerns such as reverse causality and the potential correlation of error terms within firms over time, we adopt a dynamic model (Barnett & Salomon, 2012; Isidro & Sobral, 2014). This model incorporates a one-year lag of the CG and controlled variable. The second hypotheses on the moderating effect of firm performance factors, Tobin Q and ROE, by estimating the following OLS regression model (Matta & Beamish, 2008; Peng & Yang, 2014).

**Model 2 (with moderating variable of Tobin Q)**

$$CSR\ Expenditure = \beta_0 + \beta_1 BI_{it-1} + \beta_2 PPSP_{it-1} + \beta_3 IAC_{it-1} + \beta_4 IC_{it-1} + \beta_5 Tobin\ Q + \beta_6 [BI\ x\ Tobin\ Q]_{it-1} + \beta_7 [PPSP\ x\ Tobin\ Q]_{it-1} + \beta_8 [IAC\ x\ Tobin\ Q]_{it-1} + \beta_9 [IC\ x\ Tobin\ Q]_{it-1} + \beta_{10} Firm\ Age_{it-1} + \beta_{11} CEO\ Experience_{it-1} + \varepsilon_{it}$$

**Model 3 (with moderating variable of ROE):**

$$CSR\ Expenditure = \beta_0 + \beta_1 BI_{it-1} + \beta_2 PPSP_{it-1} + \beta_3 IAC_{it-1} + \beta_4 IC_{it-1} + \beta_5 ROE + \beta_6 [BI\ x\ ROE]_{it-1} + \beta_7 [PPSP\ x\ ROE]_{it-1} + \beta_8 [IAC\ x\ ROE]_{it-1} + \beta_9 [IC\ x\ ROE]_{it-1} + \beta_{10} Firm\ Age_{it-1} + \beta_{11} CEO\ Experience_{it-1} + \varepsilon_{it}$$

**RESULTS AND FINDINGS**

**Table 2: Descriptive Statistics**

Variables	Name of Variables	N	Descriptives					
			FMCG Sector		IT Sector		AUTO Sector	
			Mean	Std Dev.	Mean	Std Dev.	Mean	Std Dev.
Dependent Variable	CSR Expenditure	80	3.291	1.183	0.0361	0.0302	0.113	0.125
Independent Variables	BI	80	0.256	0.116	0.289	0.089	0.259	0.085
(Proxies of Corporate Governance)	PPSP	80	56.777	20.646	53.325	20.354	45.35	11.18
	IAC	80	0.864	0.131	0.863	0.153	0.821	0.123
	IC	80	12.764	2.347	11.0307	1.440	13.94	1.935
Moderating Variables	Tobin Q	80	13.703	6.414	5.425	4.041	4.210	4.404
(Proxies of Firm Performance)	ROE	80	42.051	21.744	30.044	21.239	15.171	16.538
Controlled Variables	Firm Age	80	7.578	0.0139	3.488	0.455	3.869	0.427
	CEO Experience	80	3.345	0.197	3.348	0.177	3.477	0.284

Source: Authors' compilation

Table 2 displays the descriptive statistics of all the variables being examined for the FMCG, IT, and AUTO sectors. The findings show that the average CSR expenditure for the FMCG sector is 3.291, while the IT and AUTO sectors are 0.0361 and 0.113 respectively. The Blau Index, which measures

gender diversity, is nearly the same across all three industries. The tendency is consistent in the case of audit committee independence as all the values for the selected industries fall within the range of 0.80 and 0.90. The mean proportion of promoters in India's shareholding structure of FMCG, IT, and AUTO industries is 56.77%, 53.325%, and 45.35% respectively. Among the three sectors, FMCG companies have the highest Tobin Q value of 13.703, followed by the IT industry with a value of 5.425 and the AUTO sector with a value of 4.210. FMCG companies have an average age of nearly twice as long as IT and AUTO sectors organisations. The average age for FMCG companies is 7.5 years, whereas the average for IT and AUTO companies are 3.488 years and 3.869 years respectively. In a nutshell, companies in the FMCG sector on average, outweigh the IT and AUTO sectors in all the variable values.

**Table 3: FMCG Sector Regression Analysis**

Type of Variables	Name of Variables	Dependent Variable: CSR Expenditure		
		Model 1 (Without Moderating variable)	Model 2 (With Moderating variable of Tobin Q)	Model 3 (With Moderating variable of ROE)
Independent Variables	BI	0.494 [0.087]** (1.71)	-5.004 [0.004]* (-2.84)	-1.936 [0.242] (-1.17)
	PPSP	0.007 [0.406] (0.83)	-0.052 [0.000]* (-5.32)	-0.072 [0.000]* (-6.71)
	IAC	0.038 [0.927] (0.09)	0.452 [0.705] (0.38)	1.625 [0.189] (1.31)
	IC	0.261 [0.000]* (4.0)	0.064 [0.462] (0.74)	0.172 [0.060]** (1.71)
	Tobin Q	--	-0.567 [0.000]* (-4.35)	--
	BI x Tobin Q	--	0.3230 [0.002]* (3.06)	--
	PPSP x Tobin Q	--	0.004 [0.000]* (4.59)	--
Moderating Variables	IAC x Tobin Q	--	0.0825 [0.301] (1.04)	--
	IC x Tobin Q	--	0.011 [0.035]* (2.11)	--
	ROE	--	--	-0.177 [0.000]* (-3.90)
	BI x ROE	--	--	0.050 [0.190] (1.131)
	PPSP x ROE	--	--	0.002 [0.000]* (6.24)
	IAC x ROE	--	--	0.008 [0.809] (0.24)
Controlled variables	IC x ROE	--	--	0.000 [0.709] (0.37)
	Firm Age	50.45 [0.009]* (-2.62)	36.535 [0.000]* (-5.42)	40.976 [0.000]* (-6.04)
	CEO Experience	0.067 [0.724] (0.35)	0.372 [0.216] (-1.24)	0.461 [0.119] (-1.56)
	Intercept	381.45 [0.009]* (2.62)	284.02 [0.000]* (5.54)	316.700 [0.000]* (6.13)
	N	80	80	80
	R- Square	0.7115	0.8858	0.8862
	Hausman test	Prob>Chi2: 0.9639 (Random Effect Regression)		

Notes: p-statistics of the regression coefficients are shown in square brackets. t-statistics are shown in parentheses. All variables are winsorized at 5% level of significance.

\* Significant at 5% significance level, \*\* significant at 10% significance level

Table 3 displays the panel data regression's statistical output for selected firms from the FMCG sector. Random effect regression technique was applied as the Hausman test value was higher than 0.05 (Prob>chi2 = 0.9639). The first column of the statistical value presents the regression output without any moderating variable effect. The results show that the Blau Index, investor confidence, and firm age significantly impact the CSR expenditure of the firms. The sign of the regression coefficient indicates a positive effect of the Blau Index and investor confidence on CSR expenditure. In contrast, firm age negatively impacts the firm's CSR expenditures. This means that the proposed hypothesis H1 is supported in the case of FMCG sector. This indicates that firms in the FMCG sector spend more on CSR activities to attract consumers and improve their trust in their products.

With the introduction of Tobin Q (proxy of firm performance) as the moderating variable in the analysis, the role of promoters becomes significant in CSR expenditure as the p-value for promoters, and Tobin Q with promoters become lower than 0.05. Blau Index, firm age, and investor confidence also remain significant with the moderating effect of Tobin Q. Investor confidence is another variable which turns into substantial and is found to have a considerable impact on the CSR expenditure incurred by the firms. The findings show that when the firm performance improved, the impact of CG variables increased on the CSR expenditure.

With ROE as the moderating variable, the Blau index is insignificant. Still, investor confidence has a significant effect on the CSR expenditure of FMCG companies.

The inclusion of Tobin Q and ROE as moderating variables resulted in a significant 17% improvement in the explanatory capacity of the independent variables. The study demonstrates that firm performance enhances the connection between CG and CSR expenditure, with CG factors gaining more influence when firm performance acts as a moderating factor. This shows how the proposed hypothesis H2 is also supported in the FMCG sector. The firms in the FMCG sector with high performance spend relatively high expenditure on CSR activities to retain society's trust.

Table 4 shows the results of the statistical analysis of the panel data regression for the selected firms in the IT sector. Since the statistical value of Hausman test were higher than 0.05 (Prob>chi2 = 0.8080), the random effect regression technique was utilised. Without a moderating variable influence, the regression statistical values were shown in the first column of the statistical value. The findings indicate that the firms' CSR expenditure is significantly affected by the CEO's experience and the independence of the audit committee. While CEO experience had a negative effect on CSR expenditure, audit committee independence had a positive effect as indicated by the sign of the regression coefficient. This shows that the proposed hypothesis H1 is supported in the IT sector. However, the impact of CG variables is mixed. This indicates that firms in the IT sector are inclined to spend less on CSR activities.

**Table 4: IT Sector Regression Analysis**

Type of Variables	Name of Variables	Dependent Variable: CSR Expenditure		
		Model 1 (Without Moderating variable)	Model 2 (With Moderating variable of Tobin Q)	Model 3 (With Moderating variable of ROE)
Independent Variables	BI	-0.021 [0.594] (-0.53)	-0.030 [0.738] (-0.33)	-0.0418 [0.751] (-0.32)
	PPSP	-0.0002 [0.457] (-0.74)	-0.000 [0.763] (-0.30)	-0.001 [0.045]* (-2.00)
	IAC	0.051 [0.033]* (2.13)	0.065 [0.136] (-1.49)	0.122 [0.023]* (2.28)
	IC	0.005 [0.250] (1.15)	[0.004] 0.482 (0.70)	-0.001 [0.829] (-0.22)
	Tobin Q	--	0.009 [0.354] (0.93)	--
Moderating Variables	BI x Tobin Q	--	0.000 [0.997] (0.00)	--
	PPSP x Tobin Q	--	-0.000 [0.554] (-0.59)	--
	IAC x Tobin Q	--	0.001	--



			[0.822] (0.23)	
	IC x Tobin Q	--	-0.000	--
			[0.482] (-0.70)	
	ROE	--	--	-0.002
				[0.580] (-0.55)
	BI x ROE	--	--	0.000
				[0.943] (0.07)
	PPSP x ROE	--	--	0.000
				[0.125] (1.53)
	IAC x ROE	--	--	-0.001
				[0.404] (-0.83)
	IC x ROE	--	--	0.000
				[0.712] (0.37)
Controlled variables	Firm Age	0.020	0.015	0.129
		[0.263] (-1.12)	[0.118] (-1.56)	[0.191] (-1.31)
	CEO Experience	0.054	0.028	0.033
		[0.019]* (-2.34)	[0.141] (-1.47)	[0.081]** (1.74)
	Intercept	0.210	0.099	0.191
		[0.039]* (2.06)	[0.262] (1.12)	[0.093]** (1.68)
	N	80	80	80
	R- Square	0.1769	0.2253	0.2462
	Hausman test	Prob>Chi2: 0.8080 (Random Effect Regression)		

Notes: p-statistics of the regression coefficients are shown in square brackets. t-statistics are shown in parentheses. All variables are winsorized at 5% level of significance.

\*Significant at 5% significance level, \*\* significant at 10% significance level

Including Tobin Q, a proxy of firm performance as a moderating variable, renders all independent and controlled variables non-significant as their p-values surpass 0.05. When considering ROE as the moderating variable, the figures demonstrate that the independence of the audit committee, the influence of promoters, and the expertise of the CEO have a beneficial impact on the expenditure of IT sector companies in CSR activities. The p-values support it as it becomes significant at a 5% level of significance for the independence of the audit committee while promoters and CEO experience become significant at a 10% level of significance.

When the moderating effect of ROE is considered, the R-square value increases to 24.62%, which is greater than the value of 17.62% when the moderating influence of firm performance is not considered. Therefore, by considering the influence of firm performance with ROE, the independent variable's explanatory power was enhanced by approximately 7%.

The statistical analysis of the panel data regression for the selected firms in the IT sector is presented in Table 5. Given that the Hausman test yielded a value greater than 0.05 (Prob>chi2 = 4.65), the random effect regression technique was utilised. In the absence of a moderating variable's influence, the regression output is displayed in the initial column of the statistical value. The results suggest that the Blau Index, the independence of the audit committee, and the number of promoters in the shareholding pattern strongly influence the company's spending on CSR. This is supported by the fact that the p-values for these variables are below the 5% significance level. The R-square value is insignificantly small. This means that the proposed hypothesis H1 is supported in the AUTO sector.

When Tobin Q is considered as a moderating variable, then only investor confidence turns out to be significant as its p-value becomes lower than a 5% level of significance. The p-value of all other variables surpasses the threshold limit of 5% and turns out to be insignificant with the moderating effect of Tobin Q.

The presence of ROE as a moderating variable reveals that the proportion of promoters in shareholding patterns and investor confidence substantially impact the amount of money spent on CSR initiatives by automobile businesses. The R-square value increased to 45.75% after considering the moderating variable, compared to 0.009% without its influence. This shows how the proposed hypothesis H2 is also supported in the AUTO sector. The firms in the AUTO sector with high performance spend moderately on CSR activities to retain society's trust.

**Table 5: AUTO Sector Regression Analysis**

Type of Variables	Name of Variables	Dependent Variable: CSR Expenditure		
		Model 1 (Without Moderating variable)	Model 2 (With Moderating variable of Tobin Q)	Model 3 (With Moderating variable of ROE)
Independent Variables	BI	-0.240 [0.036]* (-2.09)	0.215 [0.533] (0.62)	-0.2399 [0.180] (-1.34)
	PPSP	-0.005 [0.004]* (2.89)	-0.002 [0.344] (-0.95)	-0.009 [0.000]* (-4.45)
	IAC	-0.144 [0.058]** (-1.90)	0.176 [0.452] (0.75)	-0.015 [0.895] (-0.13)
	IC	-0.155 [0.126] (-1.53)	0.046 [0.002]* (3.95)	0.0306 [0.010]* (2.59)
	Tobin Q	--	0.1400 [0.109] (1.60)	--
	BI x Tobin Q	--	-0.0709 [0.460] (-0.74)	--
	PPSP x Tobin Q	--	0.000 [0.987] (0.02)	--
Moderating Variables	IAC x Tobin Q	--	-0.0595 [0.420] (-0.81)	--
	IC x Tobin Q	--	-0.005 [0.091]* (-1.69)	--
	ROE	--	--	-0.004 [0.587] (-0.54)
	BI x ROE	--	--	0.000 [0.999] (0.00)
	PPSP x ROE	--	--	0.0003 [0.000]* (3.63)
	IAC x ROE	--	--	-0.008 [0.205] (-1.27)
	IC x ROE	--	--	-0.0006 [0.095]** (-1.67)
Controlled variables	Firm Age	0.0343 [0.739] (0.33)	0.007 [0.189] (-1.31)	0.127 [0.009]* (-2.63)
	CEO Experience	0.028 [0.384] (0.87)	0.102 [0.041]* (2.04)	0.077 [0.061]** (1.87)
	Intercept	0.515 [0.212] (1.25)	-0.659 [0.111] (-1.59)	0.407 [0.157] (1.42)
	N	80	80	80
	R- Square	0.009	0.2262	0.4574
	Hausman test	Prob>Chi2: 4.65 (Random Effect Regression)		

Notes: p-statistics of the regression coefficients are shown in square brackets. t-statistics are shown in parentheses. All variables are winsorized at 5% level of significance

\*Significant at 5% significance level, \*\* significant at 10% significance level

## Discussions

The study examines the impact of CG on the CSR expenditure of firms. The following table demonstrates the summary of overall results of the analysis conducted on FMCG, IT and AUTO sectors. Table 6 presents a concise overview of the statistical findings from all three sectors. The FMCG sector has the highest number of significant variables of 15, compared to the IT sector which has three, and the AUTO sector which has 12.

**Table 6: Summary of Results**

Model	Variables	SECTOR		
		FMCG	IT	AUTO
Without any Moderating Variable	BI	**	-	*
	PPSP	-	-	*
	IAC	-	*	**
	IC	*	-	-
	Firm Age	*	-	-
	CEO Experience	-	-	-
	BI	*	-	-
With Tobin Q as Moderating variable	PPSP	*	-	-
	IAC	-	-	-
	IC	-	-	*
	Tobin Q	*	-	-
	BI x Tobin Q	*	-	-
	PPSP x Tobin Q	-	-	-
	IAC x Tobin Q	*	-	-
	IC x Tobin Q	*	-	*
	Firm Age	*	-	-
	CEO Experience	-	-	*
	BI	-	-	-
	PPSP	*	*	*
	IAC	-	*	-
With ROE as Moderating variable	IC	**	-	*
	ROE	*	-	-
	BI x ROE	-	-	-
	PPSP x ROE	-	-	-
	IAC x ROE	*	-	*
	IC x ROE	-	-	*
	Firm Age	*	-	*
	CEO Experience	-	-	**
	No. of Significant variables without moderating	3	1	3
	No. of significant variables with moderating of Tobin Q	7	0	3
No. of significant variables with moderating of ROE	5	2	6	
<b>Total No. of Significant Variables</b>	<b>15</b>	<b>3</b>	<b>12</b>	

Source: Authors' Compilation \*Significant - Non-Significant

The results of Table 6 indicate that the Blau Index (BI), Investor Confidence (IC), and Firm age (FA) are statistically significant for the FMCG sector when the moderating variables are not considered. The Independence of Audit Committee (IAC) substantially influences CSR expenditure in the IT sector. In the AUTO sector, the Blau Index (BI), the Percentage of Promoters in Shareholding Pattern (PPSP), and the Independence of the Audit Committee (IAC) emerged as significant variables.

Tobin Q, as a moderating variable, plays a crucial role in determining the impact of investor confidence (IC) and the independence of the audit committee (IAC) on CSR spending. Tobin Q has no moderating influence in the IT sector. In relation to the AUTO industry, the Tobin Q ratio influences investor confidence and enhances the relationship between this measure and CSR expenditure. The findings indicate that when the firm's performance improves, there is an increased inclination for corporations to allocate more funds towards CSR expenses. According to Pratiwi (2016), a profitable firm has high level of CSR spending, and it tends to rise in investor perception towards the company. Hence, the findings of the study support the resource dependence theory which posit that by improving the firm performance, the relationship between CG and CSR will strengthen.

The FMCG and Auto sectors are notable for their audit committee independence, with ROE serving as a moderating component. The results demonstrate that as a company's financial situation improves, so does its CSR expenditure. The study's results are consistent with those of other research that has looked at the relationship between CSR spending and financial performance (Oladele & Mokuolu, 2020; Malik et al., 2019; Shukla, 2017).

The firm age has a strong and positive correlation with its CSR expenditure. Older firms tend to be more cognizant of their reputation and therefore takes a more cautious approach to CSR related expenditure. This result is also supported by previous studies (Francoeur et al., 2019).

The results also show a positive influence of CEO experience on the CSR expenditure. The CEO with high number of work experience is more focussed towards the stakeholders, leading to promoting better CSR activities and reputation of the firm. Hence, they spend more on CSR expenditures. These findings are on the same lines of the existing studies (Martínez et al., 2019; Francoeur et al., 2019; Sial et al., 2018; Boulouta, 2013).

## **CONCLUSION AND IMPLICATIONS**

Expenditure on CSR is a strategic tactic for reaching a broader audience of stakeholders, investors, and consumers. Companies can boost their reputation and get a competitive edge by participating in CSR or by positively influencing society. CSR can only be effective if top executives devise a thorough plan to allocate firm funds wisely. With its deep insights into the impact of business performance, this study adds to the extant literature on CG and CSR. Particularly for developing nations like India, the success of individual businesses is crucial. Our findings corroborate that Tobin Q has a beneficial influence on the correlation between CSR expenditure and CG proxies across the FMCG and AUTO sectors.

The current study investigates the influence of CG on the expenses associated with CSR initiatives undertaken by companies. Given that most research examines how CSR activities affect a company's performance, we have chosen to investigate how firm performance influences the connection between CG and CSR expenditure. India is recognised as one of the top five global economic powers and one of the fastest growing economies worldwide. Following the implementation of the Companies Act 2013, Indian firms have intensified their emphasis on CSR initiatives. The empirical analysis uses the Ordinary Least Squares (OLS) regression technique using sectoral data. The present study primarily picked three sectors (FMCG, IT, and AUTO) based on their annual expenditure on CSR operations. The analysis reveals that when considering the influence of firm performance, CG has a more significant impact on CSR expenditure across all sectors.

The findings of the study are opposed by the previous studies (Bhatnagar et al., 2023; Barnea & Rubin, 2010) who observed that CSR could deteriorate the performance of companies because it can lead to agency costs and wasted companies' resources. Our study finds that with CSR expenditure, the reputation of firm increases and enhances the value to the stakeholders' investment. It also suggests, with the support of the previous studies, that more women on the board lead to increase CSR performance. Hafsi and Turgut (2013) as well as Zhang et al. (2013) discovered a direct correlation between gender diversity and CSR. In their research, they posit that men tend to prioritize competition over ethical behavior whereas women prioritize loving and harmonious relationships over competitiveness.

Furthermore, including firm performance as a moderating variable leads to an observed rise in the R-square value, providing additional support for the argument. The Blau Index, which serves as a proxy for board gender diversity, substantially impacts the extent to which corporations engage in CSR activities in the FMCG sector. The correlation between more women on corporate boards and increased CSR in corporations is apparent. In the IT sector, the presence of women directors exerts a small impact on corporations' CSR initiatives. Further, in the context of moderating variables, results from the current study show that out of two indicators of firm performance, Tobin Q and ROE as the moderating variables, ROE has a more significant impact in the AUTO sector compared to Tobin Q. In contrast, Tobin Q outweighs the ROE in the FMCG sector due to the higher R-square value of the regression statistics.

From a policy implications perspective, it is recommended that CSR spending be increased by increasing the performance of companies and by appointing additional female independent members to the boardroom. An in-depth comprehension of the impact of firm performance on the connection between CG and CSR expenditure will aid business managers in discerning how various categories of shareholders perceive the value of CSR activities. This understanding will enable managers to

effectively address the expectations of these shareholders by aligning the CSR budget accordingly. CSR expenditures constitute a significant portion of a company's operational expenses, and they can substantially influence the company's performance. The study's results, particularly the unutilized CSR expenditure, require a more thorough policy approach aimed at reducing the unspent CSR money rather than allowing them to gradually accumulate. Therefore, it is recommended that policymakers persist in implementing new policies regarding unspent CSR funds. This will enhance trust and faith among the investors in the Indian stock market. The policymakers want to pinpoint where CG regulations limit their regulatory areas regarding confirmed investment choices. In that case, they should investigate the board compositions that promote and drive external aids. It is further advisable that management prioritise allocating capital resources to firms that have a beneficial and sustainable impact on the environment, society, and governance.

## LIMITATIONS

The current research is subject to specific constraints that future investigations can address. The sample size of this study was limited to only three sectors and ten listed companies from each sector in India. The subsequent research endeavours might prolong the number of economic sectors and scrutinise the data from more companies. Furthermore, future research can investigate supplementary aspects of CG, such as board size and business size.

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