

CEO CSR expertise, ownership structure, and their effects on CSR budgeting and spending



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ABSTRACT

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This study investigates how CEOs with extensive CSR expertise allocate and spend financial resources on CSR initiatives, and how ownership structure moderates these decisions. Using a comprehensive dataset of Omani listed companies from 2016 to 2023, and employing unique proxies for CSR activities, the analysis reveals that CEOs with CSR expertise significantly improve firms' disclosure of CSR-related financial information, reflecting greater transparency and commitment to responsible practices. The results further show that such CEOs tend to set larger CSR budgets and allocate more financial resources to CSR programs. These relationships are not uniform across firms; they are moderated by ownership characteristics. Specifically, institutional ownership enhances the positive influence of CEO CSR expertise on CSR spending, while family ownership tends to weaken it. Additional analyses demonstrate that CEOs' CSR expertise improves the efficiency of resource allocation to CSR activities, leading to more targeted spending and contributing to higher firm value. The findings provide valuable theoretical insights into the monetary aspects of CSR and underline the strategic role of CEO expertise in shaping CSR financial decisions. They also offer practical implications for firms, boards of directors, investors, and regulators interested in improving CSR budgeting processes and increasing the social and economic value generated from CSR initiatives.

Contribution/ Originality: This study contributes to the literature by examining how CEOs' CSR expertise influences the financial dimension of CSR, particularly budgeting and spending, an area that has been neglected in prior research. It also documents how family and institutional ownership moderate this relationship, providing new evidence on CEO-driven financial decisions that shape CSR outcomes.

1. INTRODUCTION

Firms' corporate social responsibilities (CSR), the activities that firms carry out to maximize social and environmental welfare have long been recognized as a fundamental element associated with a firm's competitive advantages and survival. The implications of genuine and influential CSR activities are significant, ranging from meeting stakeholder expectations to enhancing firm value (Bhaskar, Li, Bansal, & Kumar, 2023). Existing explanations of how firms can be associated with CSR activities focus on firm-specific attributes, governance quality, and the sophistication of regulatory institutions (Ali, Bekiros, Hussain, Khan, & Nguyen, 2024; Velte, 2022). However, scholars assert that CSR activities are costly and that managers are mostly reluctant to allocate more financial resources to these activities (Ma & Yasir, 2023; Martin, 2021). Thus, firms are more likely to adopt greenwashing

CSR activities, such as deceptive CSR strategies, disclosing unverified CSR activities, or using less influential CSR initiatives, which are more likely to reduce shareholder value (Kim, Mun, & Han, 2023). In response to this possibility, a rapidly growing body of literature has emerged to examine the antecedents and consequences of corporate social responsibility (CSR) monetary disclosures and activities (e.g., Baatwah & Abdul Wahab, 2023; Baatwah, Al-Qadasi, Al-Shehri, & Derouiche, 2022; Roy, Rao, & Zhu, 2022), this literature is still innocent.

The characteristics of chief executive officers (CEOs), including their personal, cognitive, and behavioral attributes, have been overemphasized as critical determinants of organizational culture and firm success (Hambrick & Mason, 1984). They capture the power that managers can exert to influence decisions and the risks they undertake for any economic opportunity (Jia, Liao, Van der Heijden, & Li, 2022). They also determine the quality of a firm's outcomes such as the quality of financial information (Baatwah, Al-Qadasi, & Al-Ebel, 2020) innovation (You, Srinivasan, Pauwels, & Joshi, 2020) quality of investment decisions (Nadeem, Zaman, Suleman, & Atawnah, 2021) internal control quality (Lin, Wang, Chiou, & Huang, 2014) and several strategic decisions (Velte, 2020). This has motivated recent CSR studies to identify how managers' attributes cause CSR activities to differ across firms. For example, Khan, Gang, Fareed, and Yasmeen (2020) and Jeong, Kim, and Arthurs (2021) found that CEO tenure is significantly associated with CSR ratings. Gala, Kashmiri, and Nicol (2024) report that female CEO outperform male CEO in enhancing a firm's relational CSR. Malik, Wang, Naseem, Ikram, and Ali (2020) document several CEO characteristics (e.g., age, education, tenure) that affect CSR disclosure. Bhaskar et al. (2023) indicated that CEO demographics and personality characteristics play a role in firms' CSR activities. However, Velte (2020) concludes that the literature on the effect of CEO characteristics, such as expertise, on CSR requires further consideration in future research. Generally, these comprehensive insights suggest the need to expand the understanding of how CEOs engage in various CSR activities that ultimately influence a firm's value.

To evaluate the direct impact of CEO attributes on CSR activities, we focus on the monetary aspects of CSR because they (1) represent substantive CSR practices, (2) dynamically change with a firm's economic circumstances, and (3) are central determinants of CSR performance. CSR monetary activities measure the financial resources that a firm must allocate to fulfill its social and environmental commitments. They differ from indices, ratings, and disclosures, which are composite scores of aggregated CSR-related activities. Typically, CSR monetary activities involve social, environmental, and governance practices. While CSR indices treat diverse CSR activities as equivalent and are more likely to communicate symbolic actions, CSR monetary activities reflect the substantive commitments of firms and managers and capture underlying financial or operational strategies.¹ They represent a direct measure and a more reliable assessment of CSR performance, as firms determine their CSR activities based on available financial resources (Baatwah et al., 2022; Lee, Singal, & Kang, 2013). Although CSR monetary measures provide a useful gauge of CSR performance, the literature pays little attention to their drivers (Baatwah et al., 2022).

The primary aim of this study is to investigate how CEOs with extensive expertise in CSR activities allocate and spend financial resources on CSR initiatives and activities, and how ownership structure moderates these CSR efforts. These questions are significant and attract the attention of investors, policymakers, regulators, and other stakeholders (Baatwah & Abdul Wahab, 2023; Roy et al., 2022). We posit that CEOs with CSR expertise foster genuine and substantive CSR activities to meet stakeholders' expectations and enhance firm value, thereby increasing their financial investment in CSR activities. Upper echelons theory presumes that managers' values, cognitions, and experiences are inherently incorporated into various organizational outcomes (Hambrick & Mason, 1984). This

¹ Firms may be involved in symbolic CSR when they undertake CSR activities or disclosures to superficially create a good image, while in reality, they do not integrate CSR actions into their core strategic decisions and operations. However, substantive CSR involves genuine CSR initiatives and the integration of CSR actions into core operations, resulting in observable CSR impacts. These substantive CSR activities are usually derived from the inherent integration of ethics, values, and sustainability principles of top management and shareholders. Thus, we argue that CSR monetary aspects are one type of substantive CSR activities.

finding suggests that CEOs with CSR expertise are better positioned to translate this expertise and orientation into visible CSR activities (Jia et al., 2022), possibly manifesting in significant allocation and expenditure on CSR initiatives. They also possess distinct knowledge of a firm's stakeholders and can initiate CSR activities that meet shareholders' needs without compromising shareholder value, as they efficiently determine and utilize financial resources for these activities. Therefore, increasing CEO awareness of CSR will significantly influence their engagement in CSR-related activities, which typically results in increased financial investment in CSR initiatives and practices to sustain long-term and authentic CSR efforts. This leads to the expectation that CEOs with CSR expertise will be positively associated with monetary CSR activities.

We also posit that the effect of a CEO with CSR expertise on monetary activities is unlikely to be constant across all firms, as ownership structure plays a significant role in a firm's CSR practices (Baatwah & Abdul Wahab, 2023). We examined the moderating effect of family and institutional shareholders on the direct influence of CEO expertise. One challenge that such CEOs face when engaging in CSR activities is shareholders' perception of the credibility of CSR initiatives the belief in the economic returns of CSR activities on their investments. Because CSR activities require greater investments that may shift some financial resources from operations to CSR activities (Kim et al., 2023), they should be confident that their investment in the firm is less likely to be expropriated by CEOs with CSR experience. Chen, Dong, and Lin (2020) suggest that institutional shareholders are more informed and sophisticated investors aware of the importance of firms' CSR activities in boosting their returns. Other studies argue that family owners prioritize CSR activities because CSR activities affect family reputation, which should be protected for a long time (Meier & Schier, 2021; Sahasranamam, Arya, & Sud, 2020). However, Baatwah and Abdul Wahab (2023) reported that family firms allocate and use a limited amount of money for CSR activities. Overall, we propose that family and institutional shareholders may improve or mitigate the role of CEOs with CSR expertise in monetary activities.

Because this study focuses on the effects of the financial aspects of CSR, we restrict our focus to Oman. This setting has several institutional features. For example, Oman is among the few countries that require listed firms to disclose financial information about their CSR activities (Capital Market Authority, 2016). Uniquely, it is the only country that considers the annual disclosure of CSR budgets (Baatwah et al., 2022). This information can add more scrutiny to firms' CSR activities and prevent greenwashing by ensuring there is no deviation between the budget and actual use. Furthermore, firms currently place significant emphasis on CSR and are becoming more transparent in their CSR activities (Baatwah et al., 2022). However, the common view of CSR practices in developing and emerging markets is that they lag behind those in developed markets because little is known about these settings (Boubakri, El Ghoul, Guedhami, & Wang, 2021). Thus, Oman can reflect the sophistication of these practices and become a model for CSR practices, such as the disclosure of CSR budgets.

Using a sample of firms listed on the Omani capital market from 2016 to 2023, we find that CEOs with CSR expertise are associated with CSR budget disclosure. Interestingly, we observe that CEOs with CSR expertise are linked to increased CSR budgets and spending. Specifically, a one standard deviation increase in CEO expertise correlates with a 2% increase in CSR budgets and an 11% increase in CSR spending. Additionally, we find that family and institutional ownership moderate this effect to varying degrees. Institutional shareholders tend to support CEOs with CSR expertise in expanding their investments in CSR activities, whereas family shareholders tend to restrict such CEOs from doing so. These findings are consistent across several robustness tests. In further analysis, we observe that local CEOs with CSR expertise and CEOs who combine accounting and CSR expertise tend to have higher CSR budgets and spending. This analysis also reveals that CEOs with CSR expertise allocate CSR budgets efficiently and effectively, focusing on actual CSR activities. Moreover, CEOs with CSR expertise consider CSR monetary activities as strategic decisions, as evidenced by the greater firm value resulting from these activities. Overall, the study highlights the significant role of CEO expertise in shaping CSR strategies and outcomes, influenced by ownership structures and strategic considerations.

This study makes several theoretical contributions to the existing literature. These findings generally contribute to prior research on the relationship between CEO characteristics and CSR performance (Gala et al., 2024; Jeong et al., 2021; Khan et al., 2020; Malik et al., 2020). To the best of our knowledge, this study is the first to examine the link between CEO attributes and the financial aspects of CSR, as previous evidence has primarily focused on indirect proxies of firms' CSR activities. We also contribute to the emerging literature on CSR monetary activities (e.g., Baatwah & Abdul Wahab, 2023; Baatwah et al., 2022; Roy et al., 2022) by documenting that CEOs with comprehensive CSR expertise are a key determinant of CSR budgets and spending. Furthermore, we expand this stream of research by reporting that shareholders influence how managers practice CSR activities, indicating that institutional shareholders support the CEO in utilizing financial resources for CSR initiatives, whereas family owners tend to discourage such activities. Finally, we enhance our understanding by demonstrating the effectiveness and efficiency of CEO expertise in improving a firm's CSR activities while simultaneously increasing its value. The results suggest no deviation in the planning and execution of CSR activities, alongside a significant increase in firms' financial performance and market value.

2. RESEARCH METHODS

2.1. Sample selection data sources

The initial sampling process began by selecting all firms listed on the Muscat Stock Exchange (MSE) from 2016 to 2023, comprising 896 firm-year observations. On average, this included 112 unique firms. The start and end of the sample period, 2016 and 2023 respectively, were chosen to ensure the availability of data on CSR budgeting and spending, with 2016 marking the first year of data disclosure and 2023 being the most recent data available at the time of the study. During the data collection process, 284 firm-year observations, representing approximately 35 unique financial firms, were eliminated due to their unique regulatory and accounting systems. Additionally, 59 firm-year observations were removed because of missing data for explanatory variables. This resulted in a final sample of 553 unbalanced firm-year observations, representing around 69 unique firms, focusing on non-financial firms. For the CSR budgeting analysis, 40 firm-year observations were excluded, along with 158 observations related to CSR spending. Data for all variables of interest were manually collected from various sources, including minutes of annual general meetings, corporate governance reports, the Osiris database, and financial statements. Table 1 illustrates the sample selection process and the distribution of the final sample based on industry and year.

Table 1. Sample description.

Panel A: Sample selection					
Observations of listed firms in MSX (2016-2023)					896
Less observations from financial firms					(284)
Less observations with missing data for explanatory variables.					(59)
Sampled observations for CSR disclosures analysis					553
Sampled observations for CSR budget analysis					493
Sampled observations for CSR spending analysis					395
Panel B: Sample distribution					
Year	N	%	Industry	N	%
2016	78	14.10	Industrial	80	14.47
2017	72	13.02	Energy	141	25.50
2018	72	13.02	Consumer discretionary	81	14.65
2019	72	13.02	Materials	119	21.52
2020	70	12.66	Consumer staples	114	20.61
2021	67	12.12	Telecommunication	16	2.89
2022	63	11.39	Health care	2	0.36
2023	59	10.67			
Total	553	100	Total	553	100

2.2. Measurement of Dependent Variable

Following the literature on CSR activities (Baatwah & Abdul Wahab, 2023; Baatwah et al., 2022), we employed two measures reflecting monetary CSR activities to assess CSR budgeting and spending. Specifically, we adopted a dichotomous approach by assigning a value of one to a firm if it discloses its financial information regarding CSR budgets (*CSRBD*) or CSR spending (*CSRSD*), and zero otherwise. Additionally, we measured CSR monetary activities using the natural logarithm of the total amount allocated to CSR activities (*LNCSR_B*) and the total amount spent on CSR activities (*LNCSR_S*).

2.3. Measurement of Predictors

This study considers two sets of variables as predictors of monetary CSR activities. We examine the direct effect of CEOs with CSR expertise as the primary predictor, identifying this expertise through the tenure of holding the position (*CEOEXP*). CEO tenure reflects firm-specific knowledge, which expands as tenure increases (Darouichi, Kunisch, Menz, & Cannella Jr, 2021).² We used family ownership (*FAMILY*) and institutional ownership (*INSTIT*) as moderators of the direct effect of CEO expertise. We follow previous studies (e.g., Baatwah & Abdul Wahab, 2023; Sahasranamam et al., 2020) to define family and institutional ownership, use the percentage of common shares held by families and institutions to measure these variables.

2.4. Control Variables

We consider a set of variables related to a firm's corporate governance quality, as well as financial and operational-specific attributes. The corporate governance quality variables include board independence (*BOIND*), expertise (*BOEXP*), size (*BOSZ*), and meetings (*BOM*), while the other control variables are firm size (*SIZE*), sales growth (*GROTH*), return on assets (*ROA*), inventory ratio (*INVRTIO*), current ratio (*CURRIO*), leverage (*LEV*), and loss (*LOSS*). We follow prior research to measure and predict their effects on our CSR monetary measures (e.g., Baatwah & Abdul Wahab, 2023; Baatwah et al., 2022).

2.5. Economic Models

We estimate the following two equations to test our hypotheses: To reduce potential confounding from omitted variables, autocorrelation, heteroscedasticity, and outliers, we used fixed-effects panel data regressions with robust standard errors after winsorizing all continuous measured variables at the 1st and 99th percentiles.³

$$CSR_{B_{it}}/CSR_{S_{it}} = \beta_0 + \beta_1 CEOEXP_{it} + \beta_{2-12} Z + YEARS + \varepsilon_{it} \quad (1)$$

$$CSR_{B_{it}}/CSR_{S_{it}} = \beta_0 + \beta_1 CEOEXP_{it} + \beta_2 FAMILY_{it} + \beta_3 INSTIT_{it} + \beta_4 CEOEXP * FAMILY_{it} + \beta_5 CEOEXP * INSTIT_{it} + \beta_{6-16} Z + YEARS + \varepsilon_{it} \quad (2)$$

Where *i* reflects companies and *t* refers to time. *CSR_B* and *CSR_S* represent the measures of the dependent variables related to CSR monetary activities, whereas *CEOEXP*, *FAMILY*, *INSTIT*, *CEOEXP*FAMILY*, *CEOEXP*INSTIT* represent predictive variables. *Z* represents the control variables. Appendix A presents the definitions of all variables in this study.

² One may argue that CEO tenure is not a direct measure of a CEO's CSR expertise. We contend that CEOs with long tenures are more likely to embed the strategic processes of a firm, including the initiation and execution of CSR activities. Over time, they gain more knowledge of stakeholders' expectations, reputational risks, and institutional norms, which are critical for shaping CSR strategies. Therefore, given that the expertise of the CEO in CSR is not directly observable, we consider CEO tenure as a reasonable proxy for the familiarity and exposure of the CEO to CSR-related activities at the firm level.

³ To support the use of the fixed effects model, we compared the results between the fixed effects and pooled models using an F test, and the untabulated results indicate that the fixed effects model is suitable for this study. Then, we compared the results between fixed effect and random effect using Hausman test and find that there is significant difference between the results and that fixed effect model is more appropriate.

3. RESULTS

3.1. Statistical Summary

Tables 2 and 3 summarize the results of the descriptive statistics and univariate correlations between the variables. The proxies for CSR monetary activities, *CSRBD*, *CSRSD*, *LNCSR**B*, and *LNCSR**S*, have means (standard deviations) of 0.89 (0.31), 0.71 (0.45), 8.79 (3.40), and 8.02 (4.07), respectively, indicating considerable variation in CSR monetary activities among Omani firms. The mean of *CEOEXP* is 6.66, with a standard deviation of 6.06, suggesting that CEOs possess a moderate level of expertise in monetary CSR activities. The moderators, *FAMILY* and *INSTIT*, have means (standard deviations) of 11.40 (16.65) and 48.54 (25.59), respectively, implying that many firms with family ownership and institutional investors dominate the ownership structure. We have omitted the results for the control variables for brevity and consistency with prior research (e.g., Baatwah & Abdul Wahab, 2023; Baatwah et al., 2022; Roy et al., 2022). Additionally, the correlation coefficients among the predictors were below 0.70, indicating that multicollinearity was unlikely to bias our empirical results. Supporting this, we conducted a Variance Inflation Factor (VIF) analysis, and as shown in Table 3, the highest VIF value was below three, indicating no multicollinearity issues.

Table 2. Descriptive Statistics

Variable	N	Mean	SD.	25%	Median	75%
CSRBD	553	0.89	0.31	1.00	1.00	1.00
CSRB (OR)	493	50306.66	92824.85	3500.00	15000.00	50000.00
LNCSR	493	8.79	3.40	8.16	9.62	10.82
CSRSD	553	0.71	0.45	0.00	1.00	1.00
CSRS (OR)	395	56759.18	125054.41	1000.00	12000.00	50000.00
LNCSR	395	8.02	4.07	6.91	9.39	10.82
CEOEXP	553	6.66	6.06	2.00	4.00	10.00
FAMILY	553	11.40	16.65	0.00	0.00	16.31
INSTIT	553	48.54	25.59	30.49	51.00	65.48
BOIND	553	0.73	0.43	0.43	0.60	1.00
BOEXP	553	0.32	0.34	0.09	0.25	0.43
BOSZ	553	6.96	1.67	6.00	7.00	7.00
BOM	553	5.84	1.82	5.00	5.00	6.00
SIZE	553	17.37	1.69	16.19	17.52	18.60
GROTH	553	0.57	4.42	-0.16	-0.00	0.13
ROA	553	0.07	0.26	0.00	0.03	0.08
INVRTIO	553	0.10	0.10	0.01	0.06	0.15
CURRIO	553	1.99	2.31	0.79	1.18	2.21
LEV	553	0.57	0.55	0.26	0.49	0.70
LOSS	553	0.24	0.43	0.00	0.00	0.00
See Appendix for definitions						

Table 3. Correlation matrix and VIF.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) CSRSD	1.00																	
(2) CSRBD	0.38*	1.00																
(3) LNCSRBD	-0.11*	-	1.00															
(4) LNCSRSD	-	-0.14*	0.86*	1.00														
(5) CEOEXP	0.05	0.07	0.12*	0.06	1.00													
(6) FAMLY	0.02	-0.02	-0.40*	-0.38*	0.27*	1.00												
(7) INSTITUTE	-0.05	-0.01	0.11*	0.15*	-0.22*	-0.58*	1.00											
(8) BOIND	-0.17*	-0.08	0.06	0.04	0.03	0.03	-0.06	1.00										
(9) BOEXP	-0.16*	0.02	0.15*	0.14*	-0.08	-0.02	-0.14*	0.53*	1.00									
(10) BOSZ	0.21*	0.09*	0.10*	0.12*	-0.07	-0.10*	0.09*	-0.45*	-0.29*	1.00								
(11) BOM	-0.02	-0.07	0.25*	0.15*	-0.05	0.00	-0.11*	0.03	0.06	0.02	1.00							
(12) SIZE	0.14*	0.01	0.54*	0.54*	-0.23*	-0.35*	0.14*	-0.05	0.11*	0.32*	0.17*	1.00						
(13) GROTH	0.02	0.03	-0.03	-0.03	-0.01	0.02	-0.01	-0.05	0.06	0.04	0.03	-0.02	1.00					
(14) ROA	0.14*	0.06	0.11*	0.11*	0.02	0.01	-0.06	-0.10*	-0.09*	0.08	-0.03	0.08	-0.12*	1.00				
(15) INVERTIO	-0.06	0.02	0.04	0.00	0.05	0.08	-0.05	0.03	0.11*	-0.11*	0.00	-0.29*	0.03	0.03	1.00			
(16) CURRIO	0.00	0.01	0.00	0.03	0.11*	0.05	-0.15*	0.09*	-0.08	-0.16*	0.01	-0.30*	-0.14*	0.09*	0.14*	1.00		
(17) LEV	0.04	-0.03	-0.17*	-0.20*	-0.04	-0.03	0.04	-0.01	0.02	-0.05	0.07	-0.04	0.06	-0.25*	-0.06	-0.38*	1.00	
(18) LOSS	-0.11*	0.02	-0.26*	-0.37*	-0.05	0.11*	-0.01	0.05	0.06	-0.11*	0.05	-0.36*	0.17*	-0.43*	0.10*	-0.15*	0.30*	1.00
VIF	-	-	-	-	1.16	1.82	1.64	1.73	1.70	1.47	1.11	2.06	1.07	1.30	1.17	1.50	1.28	1.64

Note: * Shows significance at $p < 0.05$.
See Appendix for definitions.

3.2. Empirical Results

Table 4 reports the regression results for the direct effect of CEO expertise on CSR monetary activities. Columns (1) and (2) present the results of fixed-effects logistic regressions and reveal that the coefficients of *CEOEXP* are positive for *CSRBD* and *CSRSD*, but only statistically significant at the 5% level in the *CSRBD* model. This result suggests that increasing the expertise of the CEO related to CSR activities is associated with disclosing information about the firm's CSR budgets to the public, but this effect is not observable for CSR spending. Using the natural log of amounts allocated or used for CSR activities, columns (3) and (4) report the results of fixed-effect regressions and suggest that *CEOEXP* has positive and significant coefficients in the *LNCSRBD* and *LNCSRSD* models, indicating that CEOs with extensive CSR expertise allocate and spend significant amounts on CSR activities. These results are economically significant. Specifically, using regression coefficients and some descriptive statistics, the results suggest that increasing the CEO's CSR expertise by one standard deviation is associated with an increase in CSR budgets and spending by 2% and 11%, respectively.⁴ Therefore, the results generally confirm our prediction, arguing that CEOs with more expertise in a firm's CSR activities tend to invest more in genuine and influential CSR initiatives. This is because they are aware of the reciprocation effect of these significant investments on their self-returns, such as securing their jobs, enhancing their reputation, and increasing remunerations, as well as on the firm's overall value.

Table 4. Regression results for the main analysis.

Variable	(1)	(2)	(3)	(4)
	CSRBD	CSRSD	LNCSRBD	LNCSRSD
CEOEXP	0.32** (2.30)	0.06 (1.12)	0.03** (2.56)	0.14*** (4.90)
BOIND	-1.90* (-1.70)	-0.08 (-0.12)	0.10 (1.00)	-0.60** (-2.11)
BOEXP	4.64*** (2.78)	-0.55 (-0.67)	0.02 (0.07)	0.88*** (4.58)
BOSZ	1.58*** (3.33)	1.05*** (3.78)	0.02 (0.37)	-0.17** (-2.57)
BOM	0.13 (0.65)	0.02 (0.14)	0.08*** (2.71)	-0.06 (-0.76)
SIZE	2.13 (1.32)	3.42*** (3.27)	0.01 (0.08)	-0.25** (-2.36)
GROTH	0.01 (0.24)	0.06* (1.69)	0.01* (1.68)	0.03*** (3.33)
ROA	0.76 (0.39)	2.32* (1.73)	-1.24 (-1.54)	-0.47 (-1.08)
INVRTIO	16.95 (1.59)	3.64 (0.86)	0.44 (0.32)	6.64** (2.07)
CURRIO	0.39 (1.14)	0.42** (2.51)	-0.07*** (-3.56)	-0.15*** (-4.95)
LEV	0.88 (0.66)	1.60* (1.79)	-1.23*** (-3.16)	-1.80*** (-3.46)
LOSS	1.29 (1.10)	1.20** (1.96)	-0.09 (-0.77)	-0.16 (-0.33)
YEARS	Controlled			
_cons	6.31** (2.10)	-11.02 (-1.41)	7.97*** (4.63)	13.16*** (6.33)
Observations	553	553	493	395
Pseudo/ Within R ²	0.56	0.43	0.09	0.16

Note: t-values are in parentheses.
 *** p<0.01, ** p<0.05, * p<0.1.
 See Appendix for definitions.

⁴ Following Baatwah et al. (2022) we derive the economic significance by multiplying the regression coefficient by standard error of independent variable and then dividing the results by the mean of dependent variable (e.g., $0.03 \times 6.06 / 9.79 = 0.02$ for *LNCSRBD*).

Table 5 presents the results of the moderating effects of family and institutional ownership on the relationship between CEO expertise and monetary CSR activities. Columns (1) and (4) report the results for the moderating effect of family ownership and reveal that $CEOEXP*FAMILY$ has insignificant coefficients for $CSRBD$ and $CSRSD$, but the coefficients are negative and statistically significant for $LNCSRBD$ and $LNCSRSD$. These results indicate that family ownership does not boost the disclosure of financial information about a firm's CSR budgets or actual spending by CEOs with CSR expertise but significantly reduces the amount allocated or spent on CSR activities. For institutional ownership, we find in columns (5) and (8) that $CEOEXP*INSTIT$ has positive and insignificant coefficients with $CSRBD$ and $CSRSD$ and positive and significant coefficients with $LNCSRBD$ and $LNCSRSD$. Furthermore, the moderating effects are plotted. Appendix B shows that institutional and family ownership moderate the relationship between CSR expertise and CSR spending and budgeting. Overall, these findings imply that firms' CSR budgets and spending are not affected by the presence of institutional investors but play a significant role in amplifying the effect of CEO expertise on CSR budgets and spending.

Table 5. Regression results for the moderating effect.

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	CSRBD	CSRSD	LNCSRBD	LNCSRSD	CSRBD	CSRSD	LNCSRBD	LNCSRSD
CEOEXP	0.41*** (2.82)	0.05 (0.98)	0.04*** (2.78)	0.15*** (4.00)	0.37*** (2.71)	0.08 (1.45)	0.04*** (3.09)	0.14*** (4.69)
FAMILY	-0.14** (-2.39)	0.00 (0.00)	-0.14*** (-3.59)	-0.08** (-2.32)				
CEOT*FAMILY	-0.01 (-0.87)	0.00 (0.12)	-0.00* (-1.74)	-0.01*** (-2.94)				
INSTIT					0.09* (1.77)	0.08* (1.85)	0.11*** (12.38)	0.06*** (6.04)
CEOT*INSTIT					0.00 (0.71)	0.00 (1.43)	0.00* (1.69)	0.00** (2.29)
BOIND	-2.58* (-1.91)	-0.19 (-0.28)	0.10 (0.86)	-0.73*** (-2.91)	-2.26* (-1.85)	-0.28 (-0.39)	0.13 (1.05)	-0.63** (-2.37)
BOEXP	6.09*** (2.85)	-0.57 (-0.67)	-0.05 (-0.17)	0.93*** (5.13)	5.47*** (2.82)	-0.56 (-0.66)	0.09 (0.39)	1.11*** (7.57)
BOSZ	1.73*** (3.19)	0.97*** (3.48)	0.04 (0.57)	-0.22*** (-2.97)	1.67*** (3.28)	1.09*** (3.72)	0.07 (1.44)	-0.16** (-2.58)
BOM	0.16 (0.75)	0.04 (0.32)	0.08*** (2.71)	-0.06 (-0.74)	0.17 (0.84)	0.08 (0.55)	0.07** (2.19)	-0.07 (-0.92)
SIZE	1.13 (0.64)	3.36*** (3.25)	0.10 (0.91)	-0.14 (-1.17)	1.97 (1.15)	3.92*** (3.58)	0.26*** (2.72)	0.01 (0.08)
GROTH	-0.00 (-0.06)	0.00 (0.58)	0.01* (1.95)	0.02*** (4.84)	-0.00 (-0.32)	0.00 (0.51)	0.00 (0.05)	0.02*** (5.25)
ROA	3.55 (1.64)	2.30* (1.73)	-1.10 (-1.40)	-0.28 (-0.69)	2.12 (1.05)	2.46* (1.88)	-0.72 (-1.07)	-0.06 (-0.18)
INVRTIO	18.55 (1.58)	4.59 (1.16)	0.90 (0.65)	7.77** (2.32)	23.68* (1.86)	5.80 (1.39)	1.03 (1.02)	6.87** (2.13)
CURRIO	0.54 (1.29)	0.39** (2.37)	-0.06*** (-3.59)	-0.14*** (-4.18)	0.45 (1.19)	0.43** (2.48)	-0.06*** (-3.29)	-0.13*** (-3.65)
LEV	0.06 (0.04)	1.44 (1.63)	-1.08*** (-3.18)	-1.73*** (-3.73)	0.58 (0.42)	1.59* (1.76)	-0.77** (-2.49)	-1.56*** (-3.49)
LOSS	2.36 (1.59)	1.25** (2.04)	-0.18* (-1.75)	-0.21 (-0.55)	1.98 (1.48)	1.38** (2.20)	-0.13 (-1.23)	-0.17 (-0.39)
YEARS	Controlled							
_cons	0.16 (0.02)	-8.03 (-1.22)	6.32*** (3.72)	12.56*** (5.39)	0.13 (0.02)	-7.83 (-1.16)	3.15** (2.05)	9.55*** (3.89)
Observations	553	553	493	395	553	553	493	395
Pseudo/Within R ²	0.62	0.42	0.15	0.18	0.59	0.44	0.18	0.19

Note: t-values are in parentheses.
 *** p<0.01, ** p<0.05, * p<0.1.
 See Appendix for definitions.

Regarding the control variables, the results in Tables 4 and 5 suggest quantitatively consistent results for all variables across these tables and align with the findings of related research (e.g., Baatwah & Abdul Wahab, 2023; Baatwah et al., 2022).

3.3. Additional Analyses

3.3.1. Heterogeneity: Accounting Expertise

Prior research has argued that CEO personal attributes play a critical role in affecting CEO orientation and decision-making (Bhaskar et al., 2023; Velte, 2020). To examine the heterogeneity in our main results based on CEO personal attributes, we consider how the accounting expertise of the CEO influences different outcomes. The accounting expertise of the CEO reflects their sophistication in allocating and utilizing financial resources effectively and efficiently. To capture this heterogeneity, we split our sample into firms with an accounting expertise CEO (AXCEO) and firms without an accounting expertise CEO (NAXCEO). Table 6 presents the results of the subsamples and reveals that CEOs with CSR expertise, *CEOEXP*, have positive and significant coefficients on *LNCSR*B and *LNCSR*S across all the subsamples. However, our coefficient differential analysis of unreported results suggests that CEOs with accounting and CSR expertise allocate and spend more financial resources on CSR activities than CEOs without accounting and CSR expertise.

Table 6. Regression results for the effect of CEO accounting expertise.

Variable	(5)	(6)	(7)	(8)
	AXCEO	NAXCEO	AXCEO	NAXCEO
	LNCSR	LNCSR	LNCSR	LNCSR
CEOEXP	0.54*** (2.98)	0.03*** (2.75)	0.18** (2.38)	0.17*** (5.13)
CONTROLS	Controlled			
YEARS	Controlled			
_cons	14.52*** (7.23)	6.93** (2.57)	5.66*** (5.60)	10.69*** (4.35)
Observations	61	432	50	345
Within R ²	0.39	0.10	0.67	0.18

Note: t-values are in parentheses

*** p<.01, ** p<.05

CONTROLS is an indicator for our control variables in the main equations; See Appendix for definitions

3.3.2. Matching the Budget with the Spend

This section examines whether CEO expertise in corporate social responsibility (CSR) activities enhances the accuracy of budgeted amounts in actual CSR expenditures. The analysis explores whether CEOs with CSR expertise are more likely to allocate funds in accordance with their budgets or if they tend to communicate misleading financial information regarding CSR efforts (Kim et al., 2023).

To investigate this, the study analyzes the relationship between CEO CSR expertise and the deviation between budgeted and actual CSR spending. The deviation is calculated by subtracting the CSR budget from the actual CSR expenditure, where a positive deviation indicates underspending relative to the budget, and a negative deviation indicates overspending. The results are presented in Table 7. Using the absolute value of the deviation (*CSR*DIV), column (1) shows that CEO expertise (*CEOEXP*) is not significantly associated with deviations in CSR budgets and expenditures, suggesting that CEOs with CSR expertise tend to adhere to their budgeted amounts for CSR activities. Further analysis in columns (2) and (3) involves splitting the sample into positive deviations (*POS*DIV) and negative deviations (*NEG*DIV).

The findings reveal that CEO expertise is negatively and significantly associated with deviations in the positive deviation sample, indicating that CEOs with CSR expertise are less likely to overspend relative to their budgets.

Conversely, in the negative deviation sample, CEO expertise shows no significant correlation. These results imply that CEOs with CSR expertise are more disciplined in managing CSR budgets, reducing the likelihood of exceeding allocated funds, although they do not significantly influence underspending behavior.

Table 7. Regression results for the effect of CEO expertise on CSR deviations.

Variable	(1)	(2)	(3)
	CSRDIV		
	Full	POSDIV	NEGDIV
CEOEXP	-0.10 (-1.36)	-0.04* (-1.68)	-0.05 (-1.24)
CONTROLS	Controlled		
YEARS	Controlled		
_cons	-18.72 (-1.38)	1.75 (0.32)	-28.41*** (-4.09)
Observations	382	158	224
Within R ²	0.08	0.15	0.20

Note: t-values are in parentheses.

*** p<.01, * p<.1.

CONTROLS is an indicator for our control variables in the main equations; See Appendix for definitions.

3.3.3. Using CSR Expertise for Strategic Incentives

We examine whether CEOs use their CSR expertise to increase firm value or to meet institutional or legitimacy requirements. Prior research suggests that firms consider CSR practices to meet stakeholders' expectations while maximizing their future value (Bhaskar et al., 2023; Kim et al., 2023).

We utilize the COVID-19 pandemic as a context to evaluate this possibility by examining how the interaction between CEOs' expertise and corporate social responsibility (CSR) monetary activities influences firm value during and after the pandemic. Initially, we divide our sample into two groups: the COVID-19 sample and the post-COVID-19 sample.

The COVID-19 sample includes accounting periods ending in 2020 and 2021, while the post-COVID-19 sample comprises periods ending in 2020 and 2023. Second, we employ return on assets (*ROA*) and equity market value (*MV*) as proxies for firm value, and the interaction terms between *CEOEXP* and *LNCSR*B and *LNCSR*S (*CEOEXP*LNCSR*B and *CEOEXP*LNCSR*S) to measure why expert CEOs use CSR monetary activities.

Table 8 reports the results for this analysis. In Panel A of Table 8, we observe that *CEOEXP*LNCSR*B has negative and insignificant coefficients, and *CEOEXP*LNCSR*S has positive and significant coefficients in both *ROA* and *MV* models during the COVID-19 period.

These results suggest that CEOs with CSR expertise used CSR spending during COVID-19 to enhance the firm's value. Furthermore, we find in panel B of Table 8 that for the period after COVID-19, *CEOEXP*LNCSR*B has positive but only significant coefficient in *MV* models during, and *CEOEXP*LNCSR*S has positive and significant coefficients in both *ROA* and *MV* models.

These findings suggest that CEOs consider the importance of CSR budgeting and spending in increasing the value of firms. Overall, these results indicate that CEOs with CSR expertise use CSR monetary aspects to enhance the firm's value.

Table 8. Regression results for CEO expertise and CSR practices on firm value.

Panel A: Results for COVID19 sample				
Variable	(1)	(2)	(3)	(4)
	ROA	ROA	MV	MV
CEOEXP	0.00*** (5.08)	0.00*** (3.55)	0.01** (2.55)	-0.01 (-1.39)
LNCSRB	-0.00 (-0.18)		0.02** (2.20)	
CEOEXP*LNCSRB	-0.00 (-1.62)		-0.00 (-0.82)	
LNCSRS		-0.01 (-1.37)		0.02* (1.71)
CEOEXP*LNCSRS		0.00** (2.11)		0.00** (2.39)
CONTROLS	Controlled			
YEARS	Controlled			
INDUST	Controlled			
_cons	1191.80*** (19.80)	1174.18*** (17.34)	1027.24*** (10.75)	945.97*** (24.72)
Observations	130	114	130	114
R-squared	0.58	0.57	0.22	0.35
Panel B: Results for post COVID19 sample				
	(1)	(2)	(3)	(4)
	ROA	ROA	MV	MV
CEOEXP	0.00 (0.97)	-0.00 (-0.07)	0.22* (1.69)	-0.06*** (-5.43)
LNCSRB	-0.00 (-0.64)		0.49 (1.03)	
CEOEXP*LNCSRB	0.00 (0.44)		0.12*** (4.34)	
LNCSRS		0.01*** (17.46)		1.03 (1.26)
CEOEXP*LNCSRS		0.00*** (12.26)		0.03*** (7.99)
CONTROLS	Controlled			
YEARS	Controlled			
INDUST	Controlled			
_cons	46.23** (2.53)	38.30 (1.63)	-45453.15*** (-35.09)	-101.77* (-1.68)
Observations	111	89	111	89
R-squared	0.72	0.69	0.54	0.50

Note: t-values are in parentheses
 *** p<.01, ** p<.05, * p<0.1.
 CONTROLS is an indicator for our control variables in the main equations; See Appendix for definitions.

3.3.4. Robust Check

Several analyses were conducted to verify the robustness of the results. However, for brevity, the reporting of these results has been omitted. First, the primary independent variable was replaced with three measures: low expertise if the CEO's tenure is between one and three years, middle expertise if the tenure is between four and seven years, and high expertise if the tenure exceeds seven years. Second, the main independent variables were substituted with total CSR budget and spending. Third, a subsample approach was employed to examine the moderating effects of family and institutional shareholders on the main findings. Specifically, the sample was divided based on the median of *FAMILY* and *INSTIT*, and the main model was run separately for each subsample. Finally, the robustness of the main results was tested against endogeneity using a one-year lagged dependent variable approach and the two-stage least squares (2SLS) method. It is worth noting that the fixed effects model used also addresses part of this issue by controlling for time-invariant variables. Overall, the results indicate that CEOs with CSR expertise are associated

with larger CSR budgets and spending. Additionally, family ownership appears to negatively influence this relationship, while institutional ownership enhances it.

4. CONCLUSION

This study examines how CEOs with CSR expertise influence the monetary aspects of CSR, utilizing unique data on CSR budgets and expenditures in Omani firms. Our empirical analysis indicates that CEOs possessing CSR expertise allocate and spend larger amounts on CSR activities. These effects are mitigated by family ownership and are more pronounced in firms with institutional ownership. The findings remain robust across various checks. Additionally, we observe that the increase in CSR budgets and expenditures attributable to CEOs with CSR expertise is more significant when the CEOs hold accounting qualifications. Furthermore, CEOs with CSR expertise are less likely to overspend beyond their approved CSR budgets. Finally, the study finds that CSR expertise enhances CEOs' strategic activities, and the results suggest that increasing CSR financial activities during and after the COVID-19 pandemic is associated with higher firm value.

There are several limitations that require attention from readers. First, although Oman has some cultural and institutional similarities with emerging markets, the generalizability of the results to developed markets requires caution. Second, we were unable to find publicly available information about the direct measures of CEO expertise in CSR, and we used CEO tenure to estimate this expertise. Finally, endogeneity cannot be fully addressed using our techniques. Therefore, we urge future research to expand this analysis and focus on addressing these limitations.

Despite these limitations, this study has several implications. Theoretically, we contribute to the literature on the effect of CEO expertise on CSR activities by providing unique evidence on the impact of this expertise on monetary CSR activities and the moderating roles of family and institutional ownership. Practically, our findings are informative for firms, shareholders, and regulators. A firm's board of directors should recognize the importance of increasing CEO tenure, as this could enhance the social and economic value of the firm and benefit its shareholders. Shareholders should understand that increasing CSR monetary activities is associated with greater value for their investments, and CEOs with CSR expertise primarily utilize these activities to maximize shareholder value. For regulators, the results support the ongoing emphasis on CSR disclosure and suggest that mandatory reporting of CSR input information, such as CSR budgets, could be beneficial. Such requirements may help prevent greenwashing by firms, ensuring that CSR activities are genuine and transparent.

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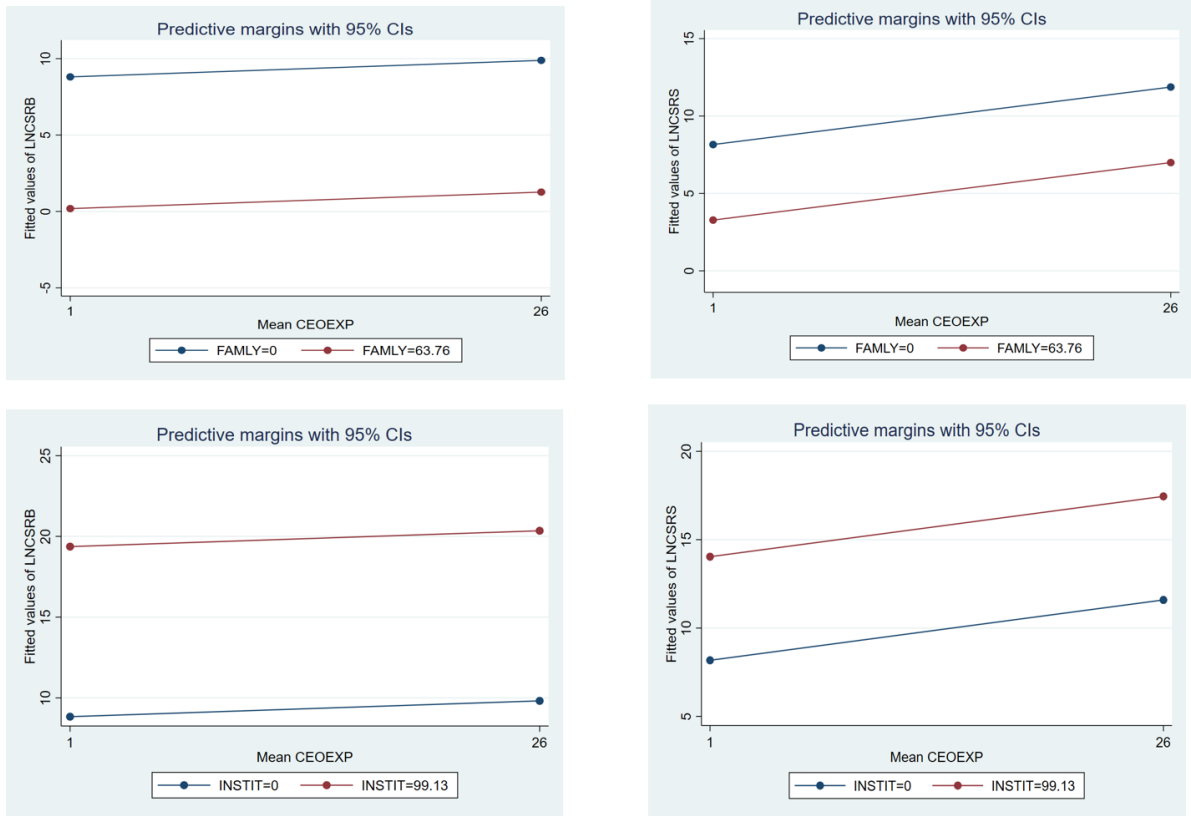
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Appendix A. Variables measurement.

Variable	Measurement
CSRBD	1 if a firm discloses information about its CSR budgeted amount, it is indicated by a 1; otherwise, it is indicated by a 0.
CSRB (OR)	The total amount in Riyal Omani disclosed as a firm CSR budget.
LNCSRB	Natural log of total amount of CSR budgets.
CSRSD	1 if a firm discloses information about its CSR expenditure amount, it is indicated with a 1; otherwise, it is indicated with a 0.
CSRS (OR)	Total amount in Riyal Omani disclosed as a firm CSR spending.
LNCSRS	Natural log of total amount of CSR spending.
CEOEXP	CEO expertise in CSR is reflected by the number of years the CEO has held this position.
FAMILY	Percentage of common shares held by family members.
INSTIT	Percentage of common shares held by institutional shareholders.
BOIND	Proportion of independent directors on the board.
BOEXP	Proportion of directors designated as experts based on their directorships on other boards.
BOSZ	Number of directors on the board.
BOM	Number of board meetings held during the year.
SIZE	Natural log of total assets.
GROTH	Sale growth is based on the changes in sales scaled by the previous year's sales.
ROA	Net income scaled by total assets.
INVRTIO	Inventory ratio based on the total inventory scaled by total assets.
CURRIO	Total current assets scaled by total current liabilities.
LEV	Total liabilities scaled by total assets.
LOSS	1 if a firm incurred a loss during the year, record 1; otherwise, record 0.
YEARS	Indicator for year fixed effects.
AXCEO	1 if the CEO has an accounting qualification and 0 otherwise (NAXCEO).
CSRDIV	Natural logarithm of the difference between the CSR budget and the actual CSR expenditure.
POSDIV	Indicator for sampled firms with a positive CSR deviation between the budget and actual spending.
NEGDIV	Indicator for the sampled firms with a negative CSR deviation between the budget and spending.
MV	Natural logarithm of a firm's market capitalization
INDUST	Indicator for the industry fixed effects.



Appendix B. Plotting the moderating effects.

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