International Journal of Disclosure and Governance
https://doi.org/10.1057/s41310-025-00305-3

ORIGINAL ARTICLE

The association between corporate social responsibility disclosure and dividend policy: Insights from an emerging economy

Islam Abdeljawad[1] · Duha Jamal Rabaia[1] · Raed Abdelhaq[1] · Ammar Salem[1]

Received: 18 October 2024 / Accepted: 17 May 2025

Abstract

This study explores how corporate social responsibility (CSR) disclosures relate to dividend policy in an emerging market setting, focusing on firms listed in Palestine between 2013 and 2022. Using Logit, Tobit, and system GMM models, we examine the relationship between CSR and both the likelihood and magnitude of dividend payouts. The results reveal a positive and significant association; firms that disclose more CSR information are not only more likely to pay dividends but also tend to distribute larger amounts. This relationship is especially pronounced in non-financial firms, which face tighter financial constraints and rely more heavily on CSR as a signaling mechanism. The findings suggest that CSR helps build stakeholder trust and reduce financing frictions, enabling more consistent and generous dividend policies. The study also underscores the importance of integrating CSR into core business strategy, particularly in underreported areas such as environmental responsibility. As one of the few studies to investigate this relationship in an emerging market, the research offers new insights into how sustainability practices interact with financial decision-making. Nonetheless, the focus on disclosure quantity rather than quality, along with the limited market size, may constrain the broader applicability of the findings. Future research should explore alternative CSR metrics and test these relationships in other institutional contexts.

Keywords Corporate social responsibility disclosure · Dividend policy · Stakeholder theory · Emerging markets · Palestine

Introduction

In recent years, corporate social responsibility (CSR) disclosures have gained importance as companies face growing pressure from stakeholders to meet sustainability expectations (Dwekat et al. 2025; McGuinness et al. 2017; Ni and Zhang 2019). This shift has accelerated since the 2007 global financial crisis, which underscored the need for more ethical corporate practices. Today, many firms use CSR disclosures strategically to boost their public image, gain a competitive advantage, and enhance firm value (Maqbool et al. 2022; Robinson et al. 2011). In emerging markets, these voluntary disclosures help reduce information asymmetry, increase transparency, and build trust with stakeholders (Saeed and Zamir 2021).

Finance literature increasingly explores the link between CSR and firm outcomes like performance, productivity, and profitability (Sun and Saat 2023; Dhaliwal et al. 2011; La Rosa et al. 2018). CSR disclosures also help firms lower stock price volatility (Zaman et al. 2021), reduce financing constraints (Cheng et al. 2014), and mitigate financial risks (Bouslah et al. 2013). However, gaps remain in understanding how CSR disclosures affect corporate dividend policies, especially in emerging markets (Salah and Amar 2022; Benlemlih 2019; Sheikh et al. 2022).

Dividend policy, a key financial decision, influences investment, financing, capital structure, and cash holdings (Hendijani Zadeh 2021; Hasan and Habib 2020). While traditionally linked to financial performance (Booth and Zhou 2017), recent studies show that non-financial factors, like CSR, are shaping these decisions (Zahid et al. 2023). Firms engaging in CSR are more likely to increase dividend payouts, aligning with stakeholder expectations and signaling

✉ Islam Abdeljawad
islamjawad@najah.edu

Duha Jamal Rabaia
Duha.rabaia@gmail.com

Raed Abdelhaq
Raed.abdelhaq@najah.edu

Ammar Salem
Ammar.salem@ptuk.edu.ps

[1] An-Najah National University, Nablus, Palestine

Published online: 09 June 2025

financial stability (Sheikh 2022; Saeed 2021). In stakeholder theory, CSR disclosures enhance reputation, which can boost sales, performance, and lowering borrowing costs by reducing transaction expenses and improving competitive advantages (Oh and Park 2021). Signaling theory suggests that strong dividends signal to the market that sustainability investments can improve resource allocation and increase shareholder satisfaction (Waddock and Graves 1997; Benlemlih 2019).

Most research on the CSR–dividend relationship has centered on developed markets like the U.S., Europe, and China, which have more established regulatory frameworks and stronger investor protections (Fonseka and Richardson 2023; Ni and Zhang 2019; Benlemlih 2019). However, the inconsistent findings across these studies highlight the need for more research in emerging markets, where CSR disclosure and dividend policy dynamics may vary due to institutional and market-specific factors (Sheikh et al. 2022). For example, in many emerging markets, family-owned firms often prioritize CSR to enhance their reputation, which could lead to conflicts of interest between controlling and minority shareholders, affecting dividend payouts (Sheikh et al. 2022).

Research on the CSR–dividend link in emerging markets is still limited. These markets face distinct challenges including weaker investor protection, vague information environments, and regulatory uncertainty, which can intensify agency conflicts between dominant and minority shareholders (Yilmaz et al. 2022; Khan 2022). Firms in these contexts may use both CSR disclosures and dividend payouts to boost their reputation and improve investor satisfaction to overcome financial constraints. Conversely, firms might cut dividends to fund growth or sustainability initiatives, as seen in studies by Al-Najjar and Kilincarslan (2016) and Sheikh et al. (2022). Moreover, little attention has been paid to how differences between industries, especially between financial and non-financial firms, might influence the relationship between CSR and dividend policy. Since firms in different sectors face varying levels of financial constraints, disclosure standards, and regulatory oversight, exploring this aspect could offer a more complete and realistic understanding of how CSR affects dividend decisions.

This study aims to address these gaps by examining the relationship between CSR disclosures and dividend policy in Palestine while also considering the role of industry differences. We argue that non-financial firms face greater financial constraints than financial firms, which typically have easier access to capital. CSR disclosures help reduce information asymmetry and lower financing costs, benefiting non-financial firms that struggle more with securing external funding (Zahid et al. 2023). Palestine's unique institutional context, characterized by weak regulatory oversight and high political and economic instability, offers an interesting setting to study how CSR influences dividend payouts (Alia et al. 2022). This study seeks to answer three main questions: (1) How do CSR disclosures affect a firm's likelihood of paying dividends? (2) What is the impact of CSR disclosures on the payout ratio? (3) Does the CSR–dividend relationship differ between financial and non-financial firms?

Using a dataset of 41 out of 48 listed Palestinian firms from 2013 to 2022, this study examines how CSR disclosures influence the likelihood and amount of dividend payouts. The paper contributes to the finance literature by: (1) addressing the under-researched area of CSR disclosure and dividend policy in emerging markets, (2) providing new evidence on the role of CSR disclosures in shaping dividend decisions, extending research that has primarily focused on CSR performance (De Villiers et al. 2023; Benlemlih 2019), (3) enhancing our understanding of stakeholder theory by examining how firms balance various stakeholders' interests through CSR activities and dividend policies (Freeman 1984; Freeman and Phillips 2002), (4) highlighting the moderating role of industry sector, specifically the differences between financial and non-financial firms, in the CSR–dividend relationship, a dimension that has received limited attention in prior research, and (5) offering insights for corporate decision-makers, policymakers, and investors on aligning business practices with sustainability goals, particularly in challenging markets like Palestine.

The remainder of this study is organized as follows: Sect. "Theoretical background" reviews the literature and develops the hypotheses, Sect. "Research Methodology" outlines the study design and methodology, Sect. "Results and discussion" presents the empirical results, and Sect. "Conclusion" offers conclusions and recommendations.

Theoretical background

Dividend policy refers to how a firm distributes profits to shareholders, shaped by factors like financial performance, cash flow, growth opportunities, and strategic goals (Manneh and Naser 2015). Since it can influence stock prices and shareholder returns, dividend policy is a crucial aspect of corporate finance (Brealey et al. 2014). Building on Miller and Modigliani's (1961) dividend irrelevance theory, frameworks such as agency theory (Jensen 1986; Jensen and Meckling 1976) and signaling theory (Ross 1977) help explain firms' distribution behaviors. Stakeholder theory (Freeman 1984) later enriched this analysis by emphasizing the broader range of stakeholders beyond shareholders, linking sustainability initiatives to dividend policies.

Agency theory suggests that information asymmetry between managers and stakeholders can lead to conflicts. Managers may misuse free cash flow, overinvesting for personal gains or recognition (Zahid et al. 2023), potentially

impacting optimal sustainability investment (Yilmaz et al. 2022; Ye and Zhang 2011). Dividends help mitigate these issues by reducing free cash flow and limiting managerial opportunism (Jensen 1986; Heaton 2019). Higher dividends also increase oversight from capital markets, imposing external discipline (Oh and Park 2021).

According to signaling theory, dividends send important signals about a firm's future earnings (Badru and Qasem 2021; Cheung et al. 2018). Changes in dividend policy reveal insights into profitability, with higher dividends signaling confidence in future cash flows and reducing information asymmetry (Su et al. 2016). Paying higher dividends reassures investors and promotes fairness in resource distribution (Sheikh 2022; He et al. 2012).

Stakeholder theory (Freeman 1984) expands the governance view to include a wider array of stakeholders, such as regulators, labor unions, and environmental groups (Oates 2013). It suggests firms engage in CSR to meet stakeholder expectations, with these efforts reflected in sustainability disclosures (Dawkins 2005). CSR initiatives can align firm practices with stakeholder interests, enhancing relationships and firm value (Boesso and Michelon 2010). According to Heal (2005), CSR can boost revenues by improving asset allocation, management efficiency, and stakeholder relations, which may lead to higher earnings and dividend payouts.

Additionally, stakeholder theory sees CSR as a form of direct or indirect payout to stakeholders, through activities like volunteer programs or environmental initiatives (Freeman 1984). These efforts can enhance a firm's reputation, attract investors, and improve financial performance, leading to higher share prices and dividends (Cheng et al. 2014). By prioritizing stakeholder welfare, firms that engage in CSR tend to adopt more generous dividend policies (Cornell and Shapiro 1987). CSR disclosures also increase transparency, deterring managerial opportunism and supporting stronger dividend policies, benefiting both firms and stakeholders (Statman 2000; Hendijani Zadeh 2021). By integrating agency, signaling, and stakeholder theories, this study sheds light on how sustainability and CSR disclosures influence dividend policy, fostering better corporate governance and stakeholder relations.

The association between CSR disclosure and dividend policy

The literature offers mixed views on the relationship between voluntary disclosures, such as corporate social responsibility (CSR) and environmental, social, and governance (ESG) practices, and dividend payments. Some studies argue that ESG practices negatively impact dividends, as sustainability efforts reduce the excess cash available for distribution. For example, Niccolò et al. (2020) found this to be the case in Chinese firms, where ESG investments limit available cash flow. Similarly, Ni and Zhang (2019) and Cheung et al. (2018) suggest that firms with weaker governance systems experience reduced dividends due to ESG investments. Saeed and Zamir (2021) also noted that ESG disclosures negatively affect dividends, especially in firms with high institutional ownership and growth opportunities. These studies suggest ESG and CSR disclosures may act as substitutes for dividends in addressing information asymmetry and agency conflicts.

On the other hand, several studies show a positive relationship between CSR disclosure and dividend policies. Benlemlih (2019), Rakotomavo (2012), and Cheung et al. (2018) found that firms committed to CSR tend to pay higher dividends, benefiting from improved stakeholder relationships and reduced risks. Benjamin et al. (2018) and Hendijani Zadeh (2021) also showed that greater environmental and social transparency leads to higher and more stable dividend payouts. Further support comes from Samet and Jarboui (2017), Salah and Amar (2022), and Sheikh et al. (2022), who found this positive link, particularly in European and US firms, where CSR enhances financial performance and strengthens dividends.

CSR disclosure typically involves transparent communication about a firm's social, environmental, and economic impacts (Crane et al. 2013). It fosters accountability and trust with stakeholders, ultimately enhancing firm value (Trihermanto and Nainggolan 2020). CSR's influence on dividends is linked to factors like reduced cost of capital, lower risk premiums, and increased investor loyalty (Oh and Park 2021; Cheung et al. 2018; Albuquerque et al. 2019). De Villiers et al. (2023) found that firms with strong CSR performance tend to pay higher dividends. Studies such as Benlemlih (2019), De Villiers et al. (2023), and Ellili (2022) support that firms with higher CSR disclosure are perceived as less risky and are more likely to pay dividends.

On the other hand, Saeed and Zamir (2021) argue that firms with greater external funding needs may see a negative impact on dividends. Increased monitoring from debt holders might lead to cautious CSR investments, limiting the cash available for dividends (Galema et al. 2008). Fonseka and Richardson (2023) presented inconclusive results, suggesting the CSR–dividend relationship may differ across contexts. Oh and Park (2021) suggest that the impact of CSR on dividends may depend on a firm's cost of capital and profitability from CSR activities, adding complexity to the relationship between CSR disclosure and dividend payouts. Based on the mainstream insights, this study proposes the following hypotheses:

H1 Firms with higher levels of CSR disclosure are more likely to pay dividends.

H2 Firms with higher levels of CSR disclosure have a higher payout ratio.

Do financial firms differ?

There are several reasons to expect financial and non-financial firms to differ in how CSR affects dividend propensity and payout ratio. *First*, non-financial firms typically face more financial constraints compared to financial firms, which have easier access to capital markets. Zahid et al. (2023) suggest that CSR disclosures reduce information asymmetry and lower financing costs, a benefit that is particularly crucial for non-financial firms with greater difficulty securing external financing. Since non-financial firms are more constrained, CSR can help ease financial pressures and enhance their ability to pay dividends. In contrast, financial firms, with stronger access to capital, may experience a weaker relationship between CSR and dividend propensity, as they are less reliant on CSR to overcome financial barriers.

Second, financial firms generally have more sophisticated financial reporting and stakeholder communication, which diminishes the added value of CSR disclosures in mitigating information asymmetry. Non-financial firms, however, may rely more on CSR to build stronger relationships with investors and stakeholders, making CSR disclosures more influential in their dividend decisions (Cuadrado-Ballesteros et al. 2016). This difference supports the idea that CSR's impact on dividend propensity will be weaker in financial firms.

Third, the earnings mechanism described by Zahid et al. (2023) highlights how sustainable activities contribute to earnings growth and improved cash flows through enhanced asset utilization and stronger stakeholder relationships. Therefore, CSR disclosures play a crucial role in signaling financial stability and attracting investment (Badru and Qasem 2021; Rakotomavo 2012). In non-financial sectors, which often face tighter resource constraints and higher operating costs, these improvements may directly lead to higher payout ratios.

Fourth, financial firms operate under different regulatory and operational frameworks, which influence their dividend policies. With more stable access to capital markets, CSR may play a smaller role in their payout decisions. Regulatory capital requirements often limit their ability to pay dividends, reducing CSR's impact on their payout ratios. In contrast, non-financial firms may rely more on CSR to boost earnings and cash flow (Zahid et al. 2023). This distinction suggests that the financial sector will exhibit a weaker relationship between CSR and payout ratio compared to non-financial firms.

Based on this reasoning, the following hypotheses are proposed to investigate the moderating role of financial industry:

H3: The positive relationship between CSR disclosure and the propensity to pay dividends is weaker in financial firms compared to non-financial firms.

H4: The positive relationship between CSR disclosure and the dividend payout ratio is weaker in financial firms compared to non-financial firms.

Research methodology

This section discusses the study sample, variable measurements, empirical models, and estimation methods.

Population and sample

The study includes all firms listed on the Palestine Stock Exchange (PEX) from 2013 to 2022, where complete data was available. This resulted in a sample of 41 firms out of the 48 listed, amounting to 410 firm-year observations. The data were manually collected from the publicly accessible annual reports of these firms, which were sourced from the PEX website.

Measurement of variables

The following outlines the measurement of the study's dependent, independent, and control variables.

Dependent variables: dividend policy and payout ratio

Consistent with prior research (Barros et al. 2023, 2020; Fonseka and Richardson 2023; Subramaniam and Sakthi 2022), this study employs several measures to assess dividend policy. To examine the propensity to pay dividends, a dividend policy dummy variable is used, where a value of 1 is assigned if a firm distributes dividends during the year, and 0 otherwise. The dividend payout ratio, defined as dividends paid divided by net income, is used to measure the level of dividend distribution.

Independent variable: CSR disclosure index

The CSR disclosure index is adapted for Palestine based on previous studies (Abdeljawad et al. 2024; Alia and Mardawi 2021; Dwekat et al. 2020) and takes into account PEX regulatory reporting requirements. The index consists of 28 CSR items across four categories: environmental information, human resources, community involvement, and product information (Appendix 1).

CSR disclosure is measured using an additive, unweighted score. Content analysis of annual reports determines the presence or absence of CSR items, with a score of 1 assigned for disclosed items and 0 for non-disclosed items. The disclosure score for each dimension is calculated by dividing the total number of items disclosed by the number of items in the category, with the same approach applied

to the overall index. To test the robustness of our results, we also constructed an alternative CSR index (CSR2) by averaging the scores of the four main dimensions, thereby assigning equal weight to each category rather than to individual items. Relevant models were re-estimated using this dimension-weighted index.

Control variables

To better isolate the relationship between CSR disclosure and dividend policy, the study controls for several other factors that may influence dividends. These control variables include firm size, firm age, profitability, leverage, growth opportunities, and industry sector, following existing studies (Benlemlih 2019; De Villiers et al. 2023; Ellili 2022; Nurfitri et al. 2023). Table 1 summarizes the measurements used in this study.

Empirical models and estimation methods

To investigate the relationship between CSR disclosure and dividend policy or payout ratio in the Palestinian context, we used the following linear models (Model 1a and Model 1b):

$$DividendPolicy_{it} = a + \beta 1 CSR(oraCSRDimension)_{it} + \beta 2 lnsize_{it} + \beta 3 lnAge_{it} + \beta 4 ROA_{it} + \beta 5 FLEV_{it} + \beta 6 GROWTH_{it} + \beta 7 SECTOR_{it} + \varepsilon_{it} \quad (1a)$$

$$PayoutRatio_{it} = a + \beta 1 CSR(oraCSRDimension)_{it} + \beta 2 lnsize_{it} + \beta 3 lnAge_{it} + \beta 4 ROA_{it} + \beta 5 FLEV_{it} + \beta 6 GROWTH_{it} + \beta 7 SECTOR_{it} + \varepsilon_{it} \quad (1b)$$

Table 1 The definitions, and proxies, for the dependent, independent and control variables

Variable	Label	Operational definition	References
Dependent variables			
Dividend policy	Div. policy	Dummy variable which is 1 if firm pays dividends, 0 otherwise	Dewasiri et al. (2019)
Payout ratio	Payout ratio	Dividends divided by net income	Fonseka and Richardson (2023)
Independent variables			
Corporate social responsibility disclosure	CSR	CSR = ∑ Points of CSR Index /Total possible points	Abdeljawad et al., (2024), Alia and Mardawi (2021)
	CSR2	CSR = ∑ Points of CSR dimensions/4	
Dimensions of corporate social responsibility disclosure	Environmental	∑ Points of Environmental dimension / Total possible points	
	Human resources	∑ Points of Human Resources dimension /Total possible points	
	Community involvement	∑ Points of Community involvement dimension /Total possible points	
	Products	∑ Points of Products dimension /Total possible points	
Control variables			
Firm size	ln size	Natural logarithm of the total assets of the firm	Benlemlih (2019)
Firm age	ln Age	Natural logarithm of the number of years since establishment	Ellili (2022)
Profitability	ROA	Net income divided by total Assets	Benlemlih (2019)
Firm leverage	FLEV	The total debt divided by total assets	Nurfitri et al. (2023)
Growth opportunity	Growth	Natural logarithm of sales over the previous year sales	Benlemlih (2019)
Industry sector	Sector	Dummy variable equal to 1 if the firm in the financial sector, 0 otherwise	De Villiers et al. (2023)

where α is the intercept; β1… β7 are the regression coefficients; i is the firm: t is a year; variables label explained above on Table 1; and ε is the error term.

To explore the moderating effect of the financial sector on these relationships, we introduced an interaction term in Models 2a and 2b:

$$Dividend\ Policy_{it} = a + \beta 1\ CSR\ (or\ a\ CSR\ Dimension)_{it} + \beta 2\ ln\ size_{it} + \beta 3\ ln\ Age_{it} + \beta 4 ROA_{it} + \beta 5\ FLEV_{it} + \beta 6 GROWTH_{it} + \beta 7 SECTOR_{it} + \beta 8 SECTOR * CSR(oraCSRDimensions)_{it} + \varepsilon_{it} \quad (2a)$$

$$PayoutRatio_{it} = a + \beta 1 CSR(oraCSRDimension)_{it} + \beta 2 lnsize_{it} + \beta 3 lnAge_{it} + \beta 4 ROA_{it} + \beta 5 FLEV_{it} + \beta 6 GROWTH_{it} + \beta 7 SECTOR_{it} + \beta 8 SECTOR * CSR(oraCSRDimensions)_{it} + \varepsilon_{it} \quad (2b)$$

To meet the study's objectives, we applied various estimation methods. Panel logit regression was used for the binary dependent variable "dividend policy." Additionally, we used panel Tobit regression to examine the extent of dividend payments through the payout ratio. The Tobit model is well-suited for linear relationships where the dependent variable is censored, as the dividend payout ratio can be zero or positive. This approach is supported by prior research (Hendijani Zadeh 2021; Khan 2022; Badru and Qasem 2021; Yilmaz et al. 2022).

For robustness checks, we used system GMM estimators, lagged CSR variable, and dimension-based CSR index. All logit and Tobit models included robust standard errors based on bootstrapping to address small sample sizes and potential model misspecification.

Table 2 Descriptive statistics

Variable	Obs	Mean	Std. Dev	Min	Max
Payout ratio	410	0.315	0.555	0	4.606
Div. policy	410	0.517	0.5	0	1
CSR	410	0.502	0.257	0.036	.964
Environmental	410	0.381	0.325	0	1
Human Resources	410	0.446	0.273	0	1
Community involvement	410	0.555	0.304	0	1
Products	410	0.628	0.353	0	1
FLEV	410	0.46	0.262	0.004	.975
ROA	410	0.038	0.092	−0.622	0.602
ln size	410	17.781	1.661	13.542	21.769
ln Age	410	3.093	0.563	0	4.344
Growth	410	0.031	0.241	−2.531	1.42
Sector	410	0.317	0.466	0	1

Results and discussion

The results and discussion of descriptive statistics, correlation analysis, estimation results, and robustness checks are presented next.

Descriptive analysis and Bi-variate correlations

Table 2 provides the descriptive statistics for all variables, including the number of observations, mean, standard deviation, minimum, and maximum values. The average dividend payout ratio is 31.5%, with 51.7% of the sample firms paying dividends of any amount, and 31.7% of the firms classified as financial institutions.

The CSR disclosure index shows a mean score of 50.2%. Zaid et al. (2019) reported that Palestinian-listed firms disclosed approximately 46% of CSR index items between 2013 and 2016. Additionally, Alia and Mardawi (2021) found that firms on the PEX disclosed around 43.7% of CSR index items, while Abdeljawad et al. (2024) reported a 38.43% disclosure rate. The higher score in this study, which uses more recent data, suggests an improvement in CSR disclosure practices, as also illustrated in Fig. 1.

Table 2 also summarizes firm characteristics, including size, financial leverage, age, profitability (ROA), and sales growth. These results align with previous studies in the Palestinian context.

Figure 1 illustrates the annual average disclosure for each dimension of the CSR disclosure index in Palestinian firms from 2013 to 2022. The data reveal that the most disclosed dimension is product information, followed by community involvement and human resources. In contrast, environmental information is the least disclosed category. The overall CSR index demonstrates a significant increase in disclosure practices among Palestinian firms, indicating growing attention to CSR over time.

Table 3 presents the Pearson correlations between CSR disclosure, its individual dimensions, dividend payouts, and the control variables. As expected, the correlation between the CSR index and its dimensions is high, given that these components are used as independent variables in separate model specifications. The analysis reveals a significant positive relationship between CSR disclosure and dividend payouts, providing initial support for the hypothesized

relationships. Additionally, the correlation matrix indicates that none of the coefficients between the explanatory variables exceeds 0.80, suggesting that multicollinearity is unlikely to be an issue. A variance inflation factor (VIF) analysis, though not reported here, further confirms that there is no multicollinearity problem, as all VIF values are below 5, consistent with Gujarati's (2009) recommendation.

Estimation results

The effect of CSR on the propensity to pay dividends

Table 4 presents the results from estimating Model 1a, which examines the impact of overall CSR scores and its individual dimensions on the likelihood of dividend payments (Columns 1, 3, 5, 7, and 9), and Model 2a, which tests the moderating effect of industry sector on this relationship (Columns 2, 4, 6, 8, and 10), using logit regression. All models include year-fixed effects to control for time-specific influences, and

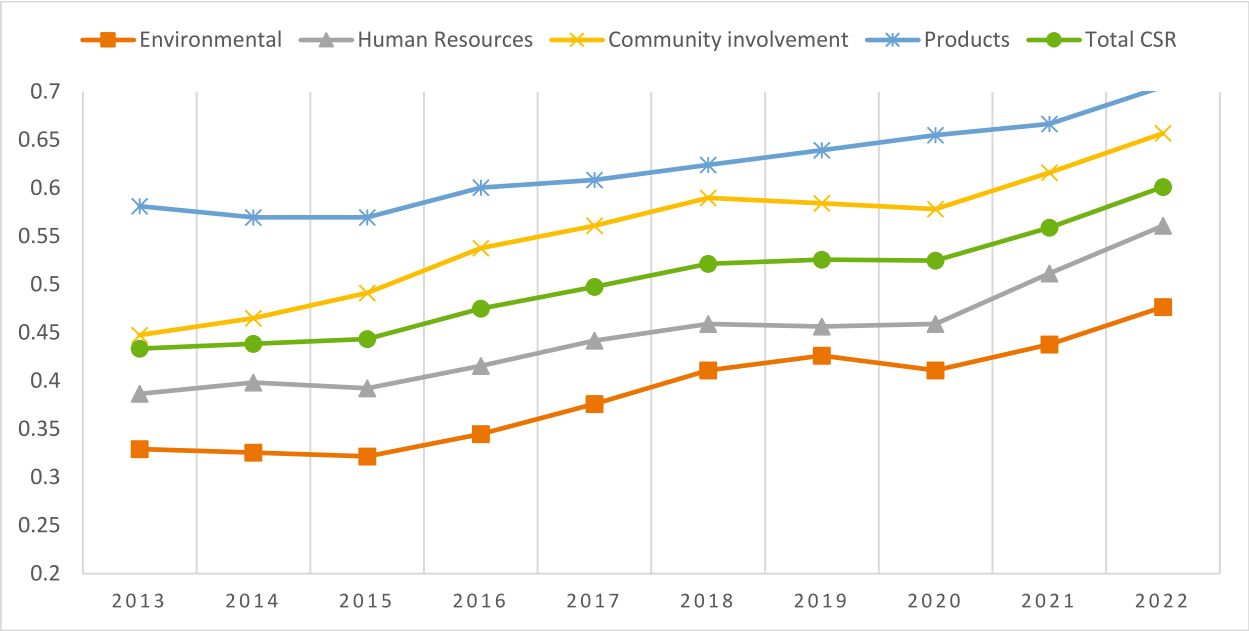

Fig. 1 CSR dimensions disclosures in PEX from 2013 to 2022

Table 3 Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Payout ratio	1.000										
(2) CSR	0.139	1.000									
(3) Environmental	0.034	0.755	1.000								
(4) Human Resources	0.143	0.849	0.492	1.000							
(5) Community involvement	0.167	0.911	0.587	0.768	1.000						
(6) Products	0.102	0.788	0.468	0.523	0.619	1.000					
(7) FLEV	−0.075	0.290	0.138	0.189	0.374	0.236	1.000				
(8) ROA	0.082	0.139	0.021	0.129	0.135	0.165	−0.151	1.000			
(9) ln size	0.175	0.542	0.447	0.428	0.597	0.308	0.455	0.058	1.000		
(10) ln Age	0.018	−0.018	0.129	−0.048	−0.020	−0.105	−0.227	0.160	−0.057	1.000	
(11) Growth	−0.034	0.044	0.011	0.044	0.062	0.024	0.065	0.076	0.042	−0.015	1.000

Table 4 Logit regression results on the effect of CSR disclosure on firms' propensity to pay dividends

Dependent variable: Div. Policy	CSR Index		Community involvement		Products
Variables	(1)	(2)	(3)	(4)	(5)
CSR	1.951**	3.428***			
	(0.803)	(0.984)			
Sector*CSR		−7.233***			
		(2.094)			
Community involvement			2.366***	2.576***	
			(0.743)	(0.758)	
Sector*Community involvement				−1.445	
				(1.833)	
Products					1.181***
					(0.441)
FLEV	−1.467*	−2.380***	−1.791**	−1.844**	−1.698**
	(0.752)	(0.823)	(0.776)	(0.804)	(0.701)
ROA	22.09**	19.10**	20.92**	20.71**	22.47**
	(8.834)	(9.164)	(8.561)	(8.582)	(8.923)
Ln size	0.409***	0.381***	0.355***	0.350***	0.510***
	(0.121)	(0.114)	(0.118)	(0.112)	(0.113)
Ln Age	0.307	0.471	0.318	0.352	0.384
	(0.288)	(0.288)	(0.283)	(0.271)	(0.286)
Growth	−0.350	−0.356	−0.390	−0.395	−0.342
	(0.726)	(0.675)	(0.719)	(0.711)	(0.676)
Sector	−0.00470	4.772***	−0.0822	0.976	0.160
	(0.424)	(1.485)	(0.438)	(1.468)	(0.372)
Constant	−9.040***	−9.304***	−8.080***	−8.210***	−10.84***
	(2.097)	(2.012)	(2.046)	(1.944)	(2.080)
Years dummy	Yes	Yes	Yes	Yes	Yes
Observations	410	410	410	410	410
Pseudo-R-sq	0.295	0.322	0.308	0.310	0.295
Dependent variable: Div. Policy	Products	Human resources		Environmental	
Variables	(6)	(7)	(8)	(9)	(10)
Products	1.833***				
	(0.551)				
Sector*Products	−3.115**				
	(1.326)				
Human Resources		1.639**	1.469*		
		(0.640)	(0.859)		
Sector*Human Resources			0.526		
			(1.498)		
Environmental				−0.477	2.698***
				(0.502)	(0.918)
Sector*Environmental					−5.248***
					(1.116)
FLEV	−2.125**	−1.229*	−1.167	−1.588**	−2.187***
	(0.834)	(0.707)	(0.743)	(0.738)	(0.783)
ROA	20.48**	23.28***	23.47***	25.48**	20.65**
	(8.855)	(8.961)	(8.987)	(10.16)	(8.916)
Ln size	0.496***	0.448***	0.460***	0.588***	0.473***
	(0.106)	(0.104)	(0.116)	(0.117)	(0.118)

Table 4 (continued)

Dependent variable: Div. Policy	Products	Human resources		Environmental	
Variables	(6)	(7)	(8)	(9)	(10)
Ln Age	0.449	0.317	0.298	0.275	0.189
	(0.286)	(0.262)	(0.276)	(0.268)	(0.295)
Growth	−0.413	−0.335	−0.339	−0.307	−0.333
	(0.766)	(0.677)	(0.693)	(0.725)	(0.703)
Sector	2.583**	−0.00684	−0.320	0.413	2.740***
	(1.073)	(0.408)	(0.957)	(0.396)	(0.611)
Constant	−10.97***	−9.674***	−9.794***	−11.29***	−9.543***
	(2.003)	(1.878)	(1.948)	(2.125)	(2.129)
Years dummy	Yes	Yes	Yes	Yes	Yes
Observations	410	410	410	410	410
Pseudo-R-sq	0.310	0.295	0.296	0.281	0.339

Standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

bootstrapped robust standard errors are employed to address potential heteroscedasticity.

The results in Column 1 show a clear and significant positive relationship between overall CSR disclosure and the likelihood of paying dividends. In practical terms, a 1% increase in a firm's CSR score is linked to a 1.95% higher probability of distributing dividends. Breaking down CSR into its main components, the results show that community involvement (Column 3), product responsibility (Column 5), and human resources (Column 7) are all positively and significantly linked to the likelihood of dividend payments. This suggests that companies that actively contribute to their communities, focus on product quality and safety, and invest in employee well-being are more inclined to share profits with their shareholders. On the other hand, the environmental dimension (Column 9) does not show a significant effect on its own, which may imply that environmental efforts by themselves don't strongly influence dividend decisions, or that their impact depends on other factors, like the industry in which the firm operates. These findings echo those of Sheikh (2022), who notes that CSR initiatives can strengthen a firm's market presence and support its ability to pay cash dividends to shareholders. They also align with De Villiers et al. (2023) and Ellili (2022), who argue that CSR disclosure reflects a company's broader social commitment, enhancing reputation, financial performance, and dividend capacity. The results offer support for stakeholder theory, which emphasizes the importance of meeting diverse stakeholder expectations (Freeman 1984; Freeman and Phillips 2002), ultimately boosting firm performance and enabling more generous dividend policies. However, these findings differ from some prior studies, such as Fonseka and Richardson (2023) and Saeed and Zamir (2021), which report less consistent or even opposing patterns in the CSR–dividend relationship.

Columns 2, 4, 6, 8, and 10 examine whether the link between CSR and dividend payments varies between financial and non-financial firms. The results reveal a clear pattern: the positive effect of overall CSR (Column 2) and product responsibility (Column 6) is significantly weaker in financial firms, likely due to their easier access to capital and less reliance on CSR as a market signal. In contrast, the interaction terms for community involvement (Column 4) and human resources (Column 8) are not significant, suggesting these CSR dimensions influence dividend decisions similarly across sectors. Interestingly, while environmental disclosure was not significant on its own, it becomes positive and significant when sector is considered (Column 10), with the negative interaction indicating that this effect is stronger in non-financial firms, likely because environmental practices are more visible and relevant in those industries. Zahid et al. (2023) argue that CSR helps reduce information asymmetry and financing costs, particularly for non-financial firms that struggle with external financing. By alleviating financial pressures, CSR can help constrained firms secure financing and pay dividends. In contrast, financial firms, with easier access to capital, may have a weaker reliance on CSR disclosures to overcome financial challenges.

The associations between the control variables and dividend policy are largely consistent with prior research. Firm size shows a significant positive relationship with dividend policy, in line with Benlemlih (2019), who argues that larger firms generally have higher free cash flow, face lower risks, and are more mature. These factors allow larger firms to secure external financing at lower costs, giving them more flexibility to distribute higher dividends.

Similarly, profitability is positively associated with dividend policy, as more profitable firms are better positioned to pay dividends to shareholders. This aligns with Dewasiri

Table 5 Tobit Regression Results on the Effect of CSR Disclosure on Dividend Payout Ratio

Dependent variable: Payout ratio	CSR Index		Community involvement		Products
Variables	(1)	(2)	(3)	(4)	(5)
CSR	0.666***	0.970***			
	(0.227)	(0.263)			
Sector*CSR		−2.205***			
		(0.714)			
Community involvement			0.813***	0.854***	
			(0.204)	(0.226)	
Sector*Community involvement				−0.339	
				(0.580)	
Products					0.398**
					(0.158)
FLEV	−0.658**	−0.920***	−0.709***	−0.726**	−0.748**
	(0.260)	(0.308)	(0.257)	(0.284)	(0.296)
ROA	2.253***	1.764***	2.186***	2.134***	2.166***
	(0.582)	(0.590)	(0.588)	(0.629)	(0.670)
Ln size	0.177***	0.165***	0.148***	0.146***	0.210***
	(0.0462)	(0.0445)	(0.0448)	(0.0489)	(0.0431)
Ln Age	0.0143	0.0370	0.0160	0.0231	0.0354
	(0.116)	(0.121)	(0.122)	(0.122)	(0.123)
Growth	−0.147	−0.155	−0.163	−0.164	−0.144
	(0.253)	(0.264)	(0.284)	(0.267)	(0.255)
Sector	−0.213	1.306**	−0.231*	0.0290	−0.156
	(0.129)	(0.514)	(0.120)	(0.479)	(0.128)
Constant	−3.227***	−3.132***	−2.763***	−2.766***	−3.781***
	(0.896)	(0.883)	(0.901)	(0.935)	(0.842)
Years dummy	Yes	Yes	Yes	Yes	Yes
Observations	410	410	410	410	410
Log-Likelihood	−372.5	−367.7	−369.2	−369	−372.8
Dependent variable: Payout ratio	Products	Human resources		Environmental	
Variables	(6)	(7)	(8)	(9)	(10)
Products	0.600***				
	(0.178)				
Sector*Products	−1.295***				
	(0.390)				
Human resources		0.622***	0.608**		
		(0.208)	(0.238)		
Sector*Human resources			0.0503		
			(0.472)		
Environmental				−0.198	0.535**
				(0.179)	(0.228)
Sector*Environmental					−1.415***
					(0.284)
FLEV	−0.864***	−0.608**	−0.601**	−0.768***	−0.923***
	(0.284)	(0.265)	(0.291)	(0.281)	(0.276)
ROA	1.929***	2.271***	2.275***	2.466***	1.685***
	(0.577)	(0.579)	(0.634)	(0.628)	(0.629)
Ln size	0.197***	0.190***	0.191***	0.246***	0.209***
	(0.0459)	(0.0442)	(0.0462)	(0.0530)	(0.0461)

Table 5 (continued)

Dependent variable: Payout ratio	Products	Human resources		Environmental	
Variables	(6)	(7)	(8)	(9)	(10)
Ln Age	0.0354	0.0266	0.0253	0.0316	−0.0213
	(0.124)	(0.117)	(0.120)	(0.121)	(0.121)
Growth	−0.167	−0.138	−0.138	−0.129	−0.141
	(0.256)	(0.277)	(0.261)	(0.274)	(0.253)
Sector	0.868***	−0.252*	−0.285	−0.109	0.562***
	(0.330)	(0.131)	(0.345)	(0.119)	(0.187)
Constant	−3.644***	−3.450***	−3.460***	−4.131***	−3.455***
	(0.916)	(0.865)	(0.886)	(1.013)	(0.923)
Years dummy	Yes	Yes	Yes	Yes	Yes
Observations	410	410	410	410	410
Log-Likelihood	−368.5	−371.9	−371.9	−375.5	−366.6

and Abeysekera (2022), who found that higher profits often lead to increased dividend payments.

Leverage, on the other hand, is negatively associated with dividend policy, suggesting that firms with higher debt levels tend to prioritize meeting their financial obligations over distributing profits. This negative relationship is supported by research such as Cheung et al. (2018) and Nurfitri et al. (2023), which indicate that leveraged firms are more focused on debt repayment than on dividend distribution.

Firm age and sales growth do not show significant effects on dividend decisions, suggesting that maturity and growth alone do not strongly influence payout behavior in this context. This contrasts with the findings of Trihermanto and Nainggolan (2020), who reported that more established firms are more likely to pay dividends regularly, reflecting greater financial stability compared to younger firms. The sector dummy is mostly insignificant, indicating that while industry differences matter when interacted with CSR, they are not consistently influential on their own.

The effect of CSR on payout ratio

Table 5 presents the estimation results of Model 1b, which examines the impact of overall CSR disclosure and its dimensions on the dividend payout ratio (Columns 1, 3, 5, 7, and 9), and Model 2b, which tests the moderating effect of sector on these relationships. All regressions are estimated using the Tobit model. Consistent with the study's hypothesis, the analysis reveals a significant positive relationship between CSR disclosure and the amount of dividends paid. In Column 1, the overall CSR index shows a positive and statistically significant effect, suggesting that firms with stronger CSR disclosure tend to distribute a larger portion of their earnings to shareholders. This supports the idea that socially responsible firms build stakeholder trust, which in turn promotes more generous profit distribution.

Examining the individual CSR dimensions, community involvement (Column 3), product responsibility (Column 5), and human resources (Column 7) all show strong and significant positive associations with dividend payouts. These findings suggest that firms actively engaged in their communities, committed to product quality, and supportive of employee welfare are more likely to reward shareholders. In contrast, the environmental dimension (Column 9) does not show a significant effect on its own, indicating that environmental initiatives may only influence dividend decisions in specific sectors or contexts.

Overall, the results are in line with those of Ellili (2022), Dahiya et al. (2023), and Sheikh et al. (2022), who argue that transparent CSR disclosures provide shareholders with clearer insights into firm cash flows, leading to higher dividend payments. CSR, in this view, signals a firm's commitment to social responsibility, enhances its reputation, and encourages dividend distribution.

This positive relationship suggests that CSR practices not only improve profitability but also reduce agency issues, mitigate information asymmetry, and send positive market signals, supporting both agency and signaling theories. These findings align with previous research by Salah and Amar (2022) and Verga Matos et al. (2020), which show that higher CSR disclosure scores contribute to increased dividends through mechanisms such as reputation building, risk mitigation, profitability improvement, attracting long-term investors, and responsiveness to regulatory and stakeholder demands. In turn, these factors enable firms to initiate, raise, and maintain consistent dividend payments. These results also support "the earnings channel" concept, as described by Cheung et al. (2018), whereby CSR investments enhance earnings and lead to higher dividend payments, consistent with studies by Dewasiri and Abeysekera (2022), Hendijani Zadeh (2021), Benlemlih (2019), and Samet and Jarboui (2017).

Columns 2, 4, 6, 8, and 10 test whether the relationship between CSR and dividend payouts differs by sector. In Column 2, the negative and highly significant interaction term suggests that the positive effect of overall CSR disclosure on dividends is weaker for financial firms, likely because they face fewer financial constraints and rely less on CSR as a signal of stability. A similar pattern appears in Column 6, where the interaction for product responsibility is also negative and significant, indicating that product-related CSR efforts are more relevant in non-financial, consumer-facing sectors.

In contrast, the interaction terms for community involvement (Column 4) and human resources (Column 8) are not significant, suggesting that these dimensions influence dividend payouts similarly across both sectors. Interestingly, while environmental disclosure was not significant on its own, it becomes positive and significant in Column 10 when interacted with the sector dummy. The negative interaction term implies that environmental CSR has a stronger effect in non-financial firms, where such practices are more visible and financially material.

Zahid et al. (2023) explain that CSR disclosures help reduce information asymmetry and lower financing costs, an advantage particularly valuable for non-financial firms that often face greater challenges accessing external capital. In such firms, CSR plays a more prominent role in signaling stability and enhancing credibility, which in turn supports dividend payments. Financial firms, on the other hand, typically enjoy easier access to funding and are less dependent on CSR to bridge financing gaps, weakening the CSR–dividend link.

Moreover, financial institutions generally have more developed reporting systems and communication channels, reducing the marginal value of CSR disclosures in addressing information asymmetry. In contrast, CSR disclosure in non-financial firms serves as a more critical tool for investor engagement and trust-building, making it more influential in dividend-related decisions (Cuadrado-Ballesteros et al. 2016).

Zahid et al. (2023) further emphasize that CSR initiatives can improve asset utilization and stakeholder relations, leading to stronger long-term earnings and cash flows, especially in non-financial sectors, where firms often operate under tighter resource constraints. These improvements may translate into higher payout ratios as firms signal financial health to investors.

Finally, financial firms are subject to different regulatory and capital requirements, which can restrict their ability to pay dividends. These constraints reduce the role CSR plays in influencing dividend payouts in the financial sector, whereas in non-financial firms, CSR serves as a strategic lever to enhance earnings, mitigate risk, and justify higher distributions. As a result, the CSR–dividend relationship clearly stronger for non-financial sectors.

Regarding the control variables, the results align with expectations and previous studies (Hasan and Habib 2020; Benlemlih 2019; Cheung et al. 2018). Profitability (ROA) and firm size both have positive and significant effects, suggesting that more profitable and larger firms are better positioned to distribute dividends. Larger firms typically generate more free cash flow, while higher profitability provides surplus cash, both of which facilitate dividend payments. The positive effect of size also implies that larger firms can support dividend payouts while simultaneously investing in CSR activities.

Leverage is negatively associated with dividend payouts, consistent with the idea that highly indebted firms prioritize debt servicing, leaving less cash for shareholders, a result also found by Ellili (2022) and Su et al. (2014). Firm age and sales growth remain statistically insignificant, indicating that maturity and growth are not key determinants of dividend policy in this context, unlike the findings of Fatemi and Bildik (2012).

Although the sector dummy is inconsistently significant, the interaction terms clearly highlight that industry differences do matter, particularly in how environmental and product-related CSR efforts influence dividend behavior in financially constrained, non-financial firms.

Robustness analysis

The study performs several additional analyses to test the robustness of the findings subject to alternative measures of independent variable and different estimation methods.

Dynamic nature of the CSR–dividend payout relationship

If a firm follows a smoothing strategy for dividends, a partial adjustment model is the appropriate specification for estimating the relationship between CSR and dividends. In this case, the generalized method of moments (GMM) is the suitable estimation method to address potential endogeneity issues (Blundell and Bond 2000). The system GMM approach, in particular, is effective in handling concerns like reverse causality, simultaneity bias, and omitted variable problems. Table 6 presents the results of System GMM estimations. Diagnostic tests support model validity, with no signs of second-order serial correlation (AR2 $p > 0.6$) and acceptable Hansen test results (p-values well above 0.1), indicating that the instruments used in the GMM estimation are valid and the model is not overfitted.

In Column 1, the overall CSR index remains positively and significantly linked to dividend payout, echoing earlier findings that socially responsible firms tend to distribute more to shareholders. This suggests that CSR enhances trust

Table 6 System GMM regression results on the effect of CSR disclosure on dividend payout ratio

Dependent variable: Payout ratio	CSR Index		Environmental		Human resources
Variables	(1)	(2)	(3)	(4)	(5)
CSR	0.326**	0.446**			
	(0.158)	(0.179)			
Sector*CSR		−0.764**			
		(0.322)			
Environmental			−0.002	0.264	
			(0.096)	(0.172)	
Sector*Environmental				−0.513**	
				(0.198)	
Human Resources					0.261
					(0.198)
FLEV	−0.278**	−0.369**	−0.266*	−0.335**	−0.235*
	(0.137)	(0.138)	(0.145)	(0.150)	(0.137)
ROA	−0.196	−0.286	−0.150	−0.280	−0.179
	(0.215)	(0.239)	(0.210)	(0.258)	(0.211)
Ln size	0.045	0.038	0.061**	0.053*	0.051*
	(0.027)	(0.028)	(0.027)	(0.027)	(0.026)
Ln Age	−0.035	−0.031	−0.009	−0.045	−0.021
	(0.087)	(0.086)	(0.088)	(0.092)	(0.092)
Growth	−0.067	−0.069	−0.060	−0.061	−0.066
	(0.099)	(0.099)	(0.095)	(0.097)	(0.100)
Sector	−0.104	0.428	−0.040	0.220	−0.103
	(0.118)	(0.260)	(0.103)	(0.134)	(0.138)
L.Payout ratio	0.248	0.235	0.250	0.240	0.249
	(0.189)	(0.185)	(0.184)	(0.188)	(0.185)
Constant	−0.465	−0.376	−0.695	−0.501	−0.591
	(0.413)	(0.416)	(0.430)	(0.439)	(0.399)
Observations	369	369	369	369	369
Number of ID	41	41	41	41	41
AR1 p	0.0617	0.0629	0.0587	0.0594	0.0579
AR2 p	0.630	0.627	0.624	0.580	0.615
Hansen p	0.211	0.219	0.224	0.196	0.229
Dependent variable: Payout ratio	Human resources	Community involvement		Products	
Variables	(6)	(7)	(8)	(9)	(10)
Human Resources	0.192				
	(0.224)				
Sector*Human Resources	0.279				
	(0.371)				
Community involvement		0.355**	0.396***		
		(0.139)	(0.144)		
Sector*Community involvement			−0.307		
			(0.357)		
Products				0.171	0.255**
				(0.109)	(0.121)
Sector*Products					−0.492*
					(0.292)
FLEV	−0.202	−0.321**	−0.338**	−0.299**	−0.346**
	(0.127)	(0.149)	(0.149)	(0.141)	(0.146)

Table 6 (continued)

Dependent variable: Payout ratio	Human resources	Community involvement		Products	
Variables	(6)	(7)	(8)	(9)	(10)
ROA	−0.165	−0.198	−0.228	−0.227	−0.262
	(0.213)	(0.218)	(0.221)	(0.210)	(0.206)
Ln size	0.056**	0.038	0.035	0.057**	0.050*
	(0.027)	(0.026)	(0.026)	(0.027)	(0.028)
Ln Age	−0.027	−0.043	−0.038	−0.013	−0.014
	(0.092)	(0.091)	(0.093)	(0.079)	(0.074)
Growth	−0.065	−0.073	−0.076	−0.062	−0.065
	(0.100)	(0.102)	(0.103)	(0.096)	(0.097)
Sector	−0.276	−0.109	0.126	−0.067	0.328
	(0.240)	(0.112)	(0.300)	(0.101)	(0.263)
L.Payout ratio	0.250	0.234	0.230	0.253	0.249
	(0.184)	(0.197)	(0.197)	(0.182)	(0.181)
Constant	−0.641	−0.328	−0.316	−0.692*	−0.599
	(0.402)	(0.415)	(0.414)	(0.396)	(0.416)
Observations	369	369	369	369	369
Number of ID	41	41	41	41	41
AR1 p	0.0571	0.0696	0.0712	0.0578	0.0590
AR2 p	0.621	0.624	0.632	0.632	0.661
Hansen p	0.232	0.202	0.205	0.227	0.242

and financial credibility, encouraging more generous dividend practices. When breaking CSR into its components, community involvement (Column 7) and product responsibility (Column 9) both show significant positive effects, indicating that companies active in these areas are more likely to increase dividends. In contrast, environmental and human resource disclosures do not show a significant impact on their own, implying their influence may depend more on industry context.

The interaction results highlight important sector differences. In Column 2, the negative and significant interaction between CSR and the financial sector suggests that the positive CSR–dividend link is weaker in financial firms, likely due to easier access to capital and tighter regulatory oversight. A similar pattern appears for environmental (Column 4) and product responsibility (Column 10), where CSR's positive effect is concentrated in non-financial firms, where these activities tend to be more visible and relevant. Meanwhile, the interactions for human resources (Column 6) and community involvement (Column 8) are not significant, suggesting their influence on payouts is relatively consistent across sectors.

The impact of lagged CSR disclosure on dividend policy: Addressing reverse causality concerns

The findings Table 7 consistently reveal that lagged CSR disclosure is positively and significantly linked to both the likelihood of paying dividends and the amount paid. This suggests that firms engaging in CSR activities are not only acting responsibly but are also more inclined to reward their shareholders. By using lagged CSR, the analysis helps reduce concerns about reverse causality, ensuring that CSR efforts come before dividend decisions, not the other way around. Interestingly, the interaction term shows that this positive relationship is weaker for financial firms, likely because they already have easier access to capital and rely less on CSR to signal credibility. Finally, the system GMM models reinforce the robustness of these results.

Re-estimating models with dimension-weighted CSR disclosure

To check the reliability of our results, we created an alternative version of the CSR index by averaging the scores of the four main disclosure dimensions; environmental, human resources, community involvement, and product information, giving equal weight to each category instead of to each individual item. We then re-estimated all relevant models using this dimension-based index (CSR2).

Table 7 Logit, Tobit, and system GMM estimates on the influence of lagged CSR disclosure on dividend policy and payout ratio

Dependent variable	Logit estimate		Tobit estimate		System GMM estimates	
	Div. policy		Payout ratio		Payout ratio	
Variables	(1)	(2)	(3)	(4)	(5)	(6)
L.CSR	2.609***	4.777***	0.873***	1.271***	0.303*	0.435**
	(0.764)	(1.043)	(0.209)	(0.248)	(0.172)	(0.195)
Sector*L.CSR		−10.08***		−2.710***		−0.818**
		(2.559)		(0.669)		(0.303)
FLEV	−1.705**	−3.117***	−0.799***	−1.170***	−0.271*	−0.377**
	(0.840)	(0.944)	(0.227)	(0.254)	(0.136)	(0.145)
ROA	19.73**	16.36*	2.001***	1.316**	−0.186	−0.289
	(9.132)	(8.768)	(0.655)	(0.600)	(0.212)	(0.256)
Ln size	0.417***	0.390***	0.181***	0.166***	0.045	0.038
	(0.116)	(0.131)	(0.0481)	(0.0488)	(0.028)	(0.028)
Ln Age	0.332	0.553	−0.0566	−0.0381	−0.029	−0.024
	(0.317)	(0.349)	(0.124)	(0.117)	(0.087)	(0.087)
Growth	−0.208	−0.133	−0.0553	−0.0374	−0.058	−0.056
	(0.730)	(0.717)	(0.235)	(0.226)	(0.098)	(0.099)
Sector	0.00121	6.541***	−0.181	1.662***	−0.097	0.458*
	(0.441)	(1.774)	(0.126)	(0.464)	(0.118)	(0.245)
L.Payout ratio					0.253	0.242
					(0.190)	(0.188)
Constant	−9.253***	−9.834***	−3.092***	−2.952***	−0.474	−0.387
	(2.157)	(2.427)	(0.940)	(0.950)	(0.422)	(0.421)
Years dummy	Yes	Yes	Yes	Yes		
Observations	369	369	369	369	369	369
Pseudo-R-sq	0.303	0.347				
Number of ID					41	41
AR1 p					0.0607	0.0630
AR2 p					0.631	0.641
Hansen p					0.228	0.236
Log-Likelihood			−321.6	−314.6		

As shown in Table 8, the results remained in line with our earlier findings. The CSR2 index continued to show a positive and significant link with both the likelihood of paying dividends and the payout ratio across the Logit, Tobit, and System GMM models. The interaction between CSR2 and the financial sector also stayed negative and significant, reinforcing the idea that CSR2's effect on dividend policy is less pronounced in financial firms.

These results strengthen our overall conclusions, showing that the relationship between CSR disclosure and dividend policy holds steady regardless of how the CSR index is constructed.

We also conducted additional robustness checks using ordinary least squares (OLS) models instead of Tobit models. The results from these unreported OLS analyses are consistent with our previously reported findings, further reinforcing the reliability and robustness of the study's conclusions.

Conclusion

This study contributes to the expanding literature on the intersection of corporate social responsibility (CSR) and dividend policy, with a focus on emerging markets, a context that remains insufficiently examined. Using firm-level data from Palestine between 2013 and 2022, we employed Logit, Tobit, and system GMM models to investigate how CSR disclosure affects both the propensity to pay dividends and the payout ratio. The use of lagged CSR variables and a dimension-weighted index further enhances the robustness of our findings and mitigates concerns about endogeneity and index construction bias.

The results consistently demonstrate that CSR disclosure is positively associated with dividend policy outcomes. Firms that are more transparent about their CSR practices are more likely to pay dividends and to distribute higher amounts. This relationship is particularly strong among

Table 8 Logit, Tobit, and system GMM estimates on the influence of dimension-weighted CSR disclosure on dividend policy and payout ratio

Dependent variable	Logit estimate		Tobit estimate		System GMM estimates	
	Div. policy		Payout ratio		Payout ratio	
Variables	(1)	(2)	(3)	(4)	(5)	(6)
CSR2	1.792**	3.518***	0.604***	0.960***	0.304*	0.445**
	(0.782)	(0.996)	(0.220)	(0.268)	(0.151)	(0.173)
Sector*CSR2		−8.125***		−2.497***		−0.870***
		(2.089)		(0.698)		(0.315)
FLEV	−1.469**	−2.548***	−0.664**	−0.968***	−0.278**	−0.382***
	(0.749)	(0.842)	(0.264)	(0.306)	(0.137)	(0.141)
ROA	22.28**	18.67**	2.275***	1.667***	−0.194	−0.305
	(8.885)	(9.180)	(0.617)	(0.630)	(0.214)	(0.242)
Ln size	0.420***	0.396***	0.182***	0.169***	0.046*	0.039
	(0.120)	(0.115)	(0.0443)	(0.0470)	(0.027)	(0.028)
Ln Age	0.300	0.478*	0.0136	0.0345	−0.034	−0.031
	(0.286)	(0.289)	(0.121)	(0.118)	(0.086)	(0.084)
Growth	−0.346	−0.359	−0.145	−0.157	−0.066	−0.069
	(0.725)	(0.681)	(0.262)	(0.272)	(0.098)	(0.098)
Sector	0.0296	5.367***	−0.201	1.505***	−0.099	0.504*
	(0.420)	(1.464)	(0.125)	(0.499)	(0.116)	(0.253)
L.Payout ratio					0.249	0.234
					(0.188)	(0.184)
Constant	−9.158***	−9.553***	−3.287***	−3.182***	−0.481	−0.387
	(2.090)	(2.041)	(0.877)	(0.891)	(0.413)	(0.417)
Years dummy	Yes	Yes	Yes	Yes		
Observations	410	410	410	410	369	369
Pseudo-R-sq	0.293	0.329				
Number of ID					41	41
AR1 p					0.0612	0.0623
AR2 p					0.631	0.625
Hansen p					0.211	0.221
Log-Likelihood			−373	−366.6		

non-financial firms, which often face significant financing constraints in emerging markets. In such institutional environments, where capital markets are less mature and investor protections are limited, CSR appears to serve as an important signaling mechanism, enhancing a firm's legitimacy, reducing information asymmetry, and building stakeholder trust.

By contrast, financial firms, typically subject to tighter regulatory oversight and possessing more stable access to capital, exhibit a weaker CSR–dividend relationship. This industry variation underscores the relevance of contextual factors in shaping the financial consequences of CSR, particularly in economies where institutional voids make voluntary disclosure more consequential.

Our disaggregated analysis reveals that not all CSR dimensions exert equal influence. Community involvement, product responsibility, and human resources consistently enhance dividend payouts, while environmental disclosure shows sector-dependent effects. This suggests that in emerging markets, where stakeholders may prioritize visible and socially impactful CSR efforts, firms benefit from tailoring their CSR strategies to meet local expectations and sectoral relevance.

From a strategic perspective, these findings imply that CSR in emerging economies should not be viewed merely as a compliance or branding tool, but as a financially strategic practice that aligns with shareholder and stakeholder interests alike. In environments marked by economic volatility, limited investor protection, and resource constraints, CSR can strengthen financial credibility, reduce agency conflicts, and enable firms to sustain dividend policies.

For corporate leaders, the study highlights the importance of embedding CSR into core operations to reinforce firm reputation and investor confidence. For investors, CSR disclosure offers a useful lens for evaluating long-term governance and financial resilience. For policymakers and

regulators in emerging markets, these insights can inform efforts to design disclosure frameworks that encourage CSR transparency, market discipline, and financial inclusion.

Nonetheless, this study is not without limitations. It focuses exclusively on dividend payouts and excludes other forms of capital distribution, such as share repurchases, which are not permitted in the Palestinian market. Additionally, while our findings are robust within the Palestinian context, their generalizability may be constrained by institutional differences across other regions. Future research could extend this line of inquiry to comparative settings or explore how specific CSR regulations affect payout behavior in diverse emerging economies.

Appendix 1

CSR Discloser index	Average Score
Environmental dimension	
Environmental management system	0.409
Anti-pollution	0.498
Make financial contributions in the field of environmental protection	0.258
Compliance with environmental regulations and requirements	0.498
Recycling plant of waste products	0.323
Contribute to environmental protection programs	0.330
average	0.386
Human resources dimension	
Number of employees	0.858
Information about employee benefits	0.312
Employee satisfaction	0.328
Workplace safety	0.467
Holidays and vacations	0.163
Education facilities	0.574
Employee salaries	0.474
Provide information on the stability of workers' work and the future of the company	0.409
average	0.448
Community dimension	
Charitable donations and activities	0.879
Support for public health	0.681
Education support	0.679
Supporting arts and culture	0.486
Parks and gardens	0.233
Social welfare	0.474
Medical institutions	0.393
Conferences	0.598
average	0.553
Products dimension	
Ensure product safety	0.730
Product quality	0.744
Product development	0.665
Consumer complaints and satisfaction	0.479
Providing services to clients	0.523
Information about research projects	0.591
average	0.622

Declarations

Conflict of interests On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

Abdeljawad, I., M. Rashid, N. A. R. Arafat, H. Naifeh, and N. Ghanem. 2024. CSR and firm performance nexus in a highly unstable political context: Institutional influence and community cohesion. *International Journal of Business Governance and Ethics* 18 (6): 678–701. https://doi.org/10.1504/ijbge.2023.10054626.

Abu Alia, M., I. Abdeljawad, S. E. Jallad, and M. Rashid. 2022. Voluntary disclosure-cost of equity nexus and the moderating role of corporate governance: Evidence from an extremely politically unstable context. *International Journal of Islamic and Middle Eastern Finance and Management* 15 (6): 1035–1052. https://doi.org/10.1108/IMEFM-02-2021-0069.

Albuquerque, R., Y. Koskinen, and C. Zhang. 2019. Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science* 65 (10): 4451–4469. https://doi.org/10.1287/mnsc.2018.3043.

Alia, M. J. A., and Z. M. Mardawi. 2021. The impact of ownership structure and board characteristics on corporate social responsibility disclosed by Palestinian companies. *Jordan Journal of Business Administration* 17 (2): 254–277. https://doi.org/10.35516/0338-017-002-006.

Al-Najjar, B., and E. Kilincarslan. 2016. The effect of ownership structure on dividend policy: Evidence from Turkey. *Corporate Governance: The International Journal of Business in Society* 16 (1): 135–161. https://doi.org/10.1108/CG-09-2015-0129.

Badru, B. O., and A. Qasem. 2021. Corporate social responsibility and dividend payments in the Malaysian capital market: The interacting effect of family-controlled companies. *Journal of Sustainable Finance & Investment* 14 (2): 283–306. https://doi.org/10.1080/20430795.2021.1979926.

Barros, V., P. V. Matos, and J. M. Sarmento. 2020. What firm's characteristics drive the dividend policy? A mixed-method study on the Euronext stock exchange. *Journal of Business Research* 115:365–377. https://doi.org/10.1016/j.jbusres.2019.11.042.

Barros, V., P. V. Matos, J. M. Sarmento, and P. R. Vieira. 2023. High-tech firms: Dividend policy in a context of sustainability and technological change. *Technological Forecasting and Social Change* 190:122434. https://doi.org/10.1016/j.techfore.2023.122434.

Benjamin, S., P. K. Biswas, and B. Yang. 2018, August. CSR performance and cash dividends in China. In *31st Australasian Finance and Banking Conference*.

Benlemlih, M. 2019. Corporate social responsibility and dividend policy. *Research in International Business and Finance* 47:114–138. https://doi.org/10.1016/j.ribaf.2018.07.005.

Blundell, R., and S. Bond. 2000. GMM estimation with persistent panel data: An application to production functions. *Econometric Reviews* 19 (3): 321–340. https://doi.org/10.1080/07474930008800475.

Boesso, G., and G. Michelon. 2010. The effects of stakeholder prioritization on corporate financial performance: An empirical investigation. *International Journal of Management* 27 (3): 470–496.

Booth, L., and J. Zhou. 2017. Dividend policy: A selective review of results from around the world. *Global Finance Journal* 34:1–15. https://doi.org/10.1016/j.gfj.2017.07.002.

Bouslah, K., L. Kryzanowski, and B. M'zali. 2013. The impact of the dimensions of social performance on firm risk. *Journal of Banking & Finance* 37 (4): 1258–1273. https://doi.org/10.1016/j.jbankfin.2012.12.004.

Brealey, R. A., S. C. Myers, and F. Allen. 2014. *Principles of corporate finance*. McGraw-hill.

Cheng, B., I. Ioannou, and G. Serafeim. 2014. Corporate social responsibility and access to finance. *Strategic Management Journal* 35 (1): 1–23. https://doi.org/10.1002/smj.2131.

Cheung, A., M. Hu, and J. Schwiebert. 2018. Corporate social responsibility and dividend policy. *Accounting & Finance* 58 (3): 787–816. https://doi.org/10.1111/acfi.12238.

Cornell, B., and A. C. Shapiro. 1987. Corporate Stakeholders and Corporate Finance. *Financial Management* 16 (1): 5–14. https://doi.org/10.2307/3665543.

Crane, A., D. Matten, and L. J. Spence. 2013. Corporate social responsibility in a global context. Corporate Social Responsibility: Readings and Cases in a Global Context. Retrieved from www.ssrn.com

Cuadrado-Ballesteros, B., I. M. Garcia-Sanchez, and J. M. Ferrero. 2016. How are corporate disclosures related to the cost of capital? The fundamental role of information asymmetry. *Management Decision* 54 (7): 1669–1701. https://doi.org/10.1108/MD-10-2015-0454.

Dahiya, M., S. Singh, and N. Chaudhry. 2023. Corporate social responsibility and dividend policy in India. *Management Decision* 61 (10): 3144–3168. https://doi.org/10.1108/MD-08-2022-1152.

Dawkins, J. 2005. Corporate responsibility: The communication challenge. *In Journal of Communication Management* 9 (2): 108–119. https://doi.org/10.1108/13632540510621362.

De Villiers, C., D. Ma, and A. Marques. 2023. Corporate social responsibility disclosure, dividend payments and firm value – Relations and mediating effects. *Accounting and Finance.* 64 (1): 185–219. https://doi.org/10.1111/acfi.13140.

Deng, X., J.-K. Kang, and B. S. Low. 2013. Corporate social responsibility and stakeholder value maximization: Evidence from mergers. *Journal of Financial Economics* 110 (1): 87–109. https://doi.org/10.1016/j.jfineco.2013.04.014.

Dewasiri, N. J., and N. Abeysekera. 2022. Corporate social responsibility and dividend policy in Sri Lankan firms: A data triangulation approach. *Journal of Public Affairs* 22 (1): 2283. https://doi.org/10.1002/pa.2283.

Dewasiri, N. J., W. B. Yatiwelle Koralalage, A. Abdul Azeez, P. G. S. A. Jayarathne, D. Kuruppuarachchi, and V. A. Weerasinghe. 2019. Determinants of dividend policy: Evidence from an emerging and developing market. *Managerial Finance* 45 (3): 413–429. https://doi.org/10.1108/MF-09-2017-0331.

Dhaliwal, D. S., O. Z. Li, A. Tsang, and Y. G. Yang. 2011. Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review* 86 (1): 59–100. https://doi.org/10.2308/accr.00000005.

Dwekat, A., E. Seguí-Mas, G. Tormo-Carbó, and P. Carmona. 2020. Corporate governance configurations and corporate social responsibility disclosure: Qualitative comparative analysis of audit committee and board characteristics. *Corporate Social Responsibility and Environmental Management* 27 (6): 2879–2892. https://doi.org/10.1002/csr.2009.

Dwekat, A., M. Abu Alia, I. Abdeljawad, and R. Meqbel. 2025. Governing for the green: How European board attributes are driving environmental innovation. *Corporate Social Responsibility and Environmental Management* 32 (2): 2128–2146.

Ellili, N. O. D. 2022. Impact of environmental, social and governance disclosure on dividend policy: What is the role of corporate governance? Evidence from an emerging market. *Corporate Social Responsibility and Environmental Management* 29 (5): 1396–1413. https://doi.org/10.1002/csr.2277.

Fatemi, A., and R. Bildik. 2012. Yes, dividends are disappearing: Worldwide evidence. *Journal of Banking & Finance* 36 (3): 662–677. https://doi.org/10.1016/j.jbankfin.2011.10.008.

Fonseka, M., and G. Richardson. 2023. The effect of mandatory corporate social responsibility disclosure and performance on firms' dividend decisions: Evidence from China. *Economic Modelling* 120:106152. https://doi.org/10.1016/j.econmod.2022.106152.

Freeman, R. E. 1984. *Strategic management: A stakeholder approach*. Retrieved from www.cambridge.org: Cambridge University Press.

Freeman, R. E., and R. A. Phillips. 2002. Stakeholder Theory: A Libertarian Defense. *Business Ethics Quarterly* 12 (3): 331–349. https://doi.org/10.2307/3858020.

Galema, R., A. Plantinga, and B. Scholtens. 2008. The stocks at stake: Return and risk in socially responsible investment. *Journal of Banking and Finance* 32 (12): 2646–2654. https://doi.org/10.1016/j.jbankfin.2008.06.002.

Gujarati, D. 2009. *Basic Econometrics*. New Delhi: Tata McGrawhill.

Hasan, M. M., and A. Habib. 2020. Social capital and payout policies. *Journal of Contemporary Accounting and Economics* 16 (1): 100183. https://doi.org/10.1016/j.jcae.2020.100183.

He, T. T., W. X. Li, and G. Y. Tang. 2012. Dividends behavior in state-versus family-controlled firms: Evidence from Hong Kong. *Journal of Business Ethics* 110:97–112. https://doi.org/10.1007/s10551-011-1150-0.

Heal, G. 2005. Corporate social responsibility: An economic and financial framework. *The Geneva Papers on Risk and Insurance-Issues and Practice* 30:387–409. https://doi.org/10.1057/palgrave.gpp.2510037.

Heaton, J. B. 2019. Managerial optimism: New observations on the unifying theory. *European Financial Management* 25 (5): 1150–1167. https://doi.org/10.1111/eufm.12218.

Hendijani Zadeh, M. 2021. The effect of corporate social responsibility transparency on corporate payout policies. *International Journal of Managerial Finance* 17 (5): 708–732.

Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 76 (2): 323–329. https://doi.org/10.1108/IJMF-07-2020-0386.

Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics* 3 (4): 305–360.

Khan, A. 2022. Ownership structure, board characteristics, and dividend policy: Evidence from Turkey. *Corporate Governance: The International Journal of Business in Society* 22 (2): 340–363. https://doi.org/10.1108/CG-04-2021-0129.

La Rosa, F., G. Liberatore, F. Mazzi, and S. Terzani. 2018. The impact of corporate social performance on the cost of debt and access to debt financing for listed European non-financial firms. *European Management Journal* 36 (4): 519–529. https://doi.org/10.1016/j.emj.2017.09.007.

Manneh, M. A., and K. Naser. 2015. Determinants of Corporate Dividends Policy: Evidence from an Emerging Economy. *International Journal of Economics and Finance* 7 (7): 229–239. https://doi.org/10.5539/ijef.v7n7p229.

Maqbool, Z., A. Abid, and A. I. Bhutta. 2022. Effect of corporate social responsibility performance on dividend pay-out: Role of corporate governance quality. *Frontiers in Psychology* 13:883952. https://doi.org/10.3389/fpsyg.2022.883952.

McGuinness, P. B., J. P. Vieito, and M. Wang. 2017. The role of board gender and foreign ownership in the CSR performance of Chinese listed firms. *Journal of Corporate Finance* 42:75–99. https://doi.org/10.1016/j.jcorpfin.2016.11.001.

Miller, M. H., and F. Modigliani. 1961. Dividend policy, growth, and the valuation of shares. *The Journal of Business, 34*(4), 411–433. Retrieved from www.jstor.org/stable/2351143

Ni, X., and H. Zhang. 2019. Mandatory corporate social responsibility disclosure and dividend payouts: Evidence from a quasi-natural experiment. *Accounting & Finance* 58 (5): 1581–1612. https://doi.org/10.1111/acfi.12438.

Niccolò, N., E. Battisti, A. Papa, and N. Miglietta. 2020. Shareholder value and dividend policy: The role of ESG strategies. In *2020 IEEE International Conference on Technology Management, Operations and Decisions*, 1–5. https://doi.org/10.1109/ICTMOD49425.2020.9380585.

Nurfitri, K., R. Abadi, R. P. Udipta, and F. M. Leon. 2023. Corporate social responsibility and dividend policy in Indonesia: advent of firm size as a moderator. *International Journal of Social Science and Human Research* 06 (01): 453–459. https://doi.org/10.47191/ijsshr/v6-i1-60.

Oates, G. 2013. Exploring the links between stakeholder type, and strategic response to stakeholder and institutional demands in the public sector context. *International Journal of Business and Management* 8 (21): 50–62. https://doi.org/10.5539/ijbm.v8n21p50.

Oh, H., and S. Park. 2021. Corporate sustainable management, dividend policy and Chaebol. *Sustainability* 13 (13): 7495. https://doi.org/10.3390/su13137495.

Rakotomavo, M. T. 2012. Corporate investment in social responsibility versus dividends? *Social Responsibility Journal* 8 (2): 199–207. https://doi.org/10.1108/17471111211234833.

Robinson, M., A. Kleffner, and S. Bertels. 2011. Signaling sustainability leadership: Empirical evidence of the value of DJSI membership. *Journal of Business Ethics* 101:493–505. https://doi.org/10.1007/s10551-011-0735-y.

Ross, S. A. 1977. The determination of financial structure: The incentive-signaling approach. *The Bell Journal of Economics* 8 (1): 23–40. https://doi.org/10.2307/3003485.

Saeed, A. 2021. The impact of employee friendly practices on dividend payments: Evidence from emerging economies. *Journal of Business Research* 135:592–605.

Saeed, A., and F. Zamir. 2021. How does CSR disclosure affect dividend payments in emerging markets? *Emerging Markets Review* 46:100747. https://doi.org/10.1016/j.ememar.2020.100747.

Salah, O. B., and A. B. Amar. 2022. Does corporate social responsibility affect dividend policy? Empirical evidence in the French context. *Journal of Global Responsibility* 13 (3): 268–289.

Samet, M., and A. Jarboui. 2017. Corporate social responsibility and payout decisions. *Managerial Finance* 43 (9): 982–998. https://doi.org/10.1108/MF-01-2017-0020.

Seth, R., and S. Mahenthiran. 2022. Impact of dividend payouts and corporate social responsibility on firm value–Evidence from India. *Journal of Business Research* 146:571–581. https://doi.org/10.1016/j.jbusres.2022.03.053.

Sheikh, S. 2022. Corporate social responsibility and corporate payout policy: The impact of product market competition. *International Journal of Managerial Finance* 18 (1): 49–74. https://doi.org/10.1108/IJMF-09-2020-0465.

Sheikh, M. F., A. I. Bhutta, B. Rehman, M. Bazil, and A. Hassan. 2022. Corporate social responsibility and dividend policy: A strategic choice in family firms. *Journal of Family Business Management* 12 (2): 296–315. https://doi.org/10.1108/JFBM-10-2020-0096.

Statman, M. 2000. Socially Responsible Mutual Funds. *Financial Analysts Journal* 56 (3): 30–39. https://doi.org/10.2469/faj.v56.n3.2358.

Su, Z. Q., H. G. Fung, D. S. Huang, and C. H. Shen. 2014. Cash dividends, expropriation, and political connections: Evidence from China. *International Review of Economics & Finance* 29:260–272. https://doi.org/10.1016/j.iref.2013.05.017.

Su, W., M. W. Peng, W. Tan, and Y. L. Cheung. 2016. The signaling effect of corporate social responsibility in emerging economies. *Journal of Business Ethics* 134:479–491. https://doi.org/10.1007/s10551-014-2404-4.

Subramaniam, R., and M. Sakthi. 2022. Board performance and its relation to dividend payout: Evidence from Malaysia. *International Journal of Managerial Finance* 18 (2): 286–316. https://doi.org/10.1108/IJMF-08-2020-0409.

Sun, L., and N. A. M. Saat. 2023. How does intelligent manufacturing affect the ESG performance of manufacturing firms? *Evidence from China. Sustainability* 15 (4): 2898. https://doi.org/10.3390/su15042898.

Trihermanto, F., and Y. A. Nainggolan. 2020. Corporate life cycle, CSR, and dividend policy: empirical evidence of Indonesian listed firms. *Social Responsibility Journal*. https://doi.org/10.1108/SRJ-09-2017-0186.

Verga Matos, P., V. Barros, and J. Miranda Sarmento. 2020. Does ESG affect the stability of dividend policies in Europe? *Sustainability* 12 (21): 8804. https://doi.org/10.3390/su12218804.

Waddock, S. A., and S. B. Graves. 1997. The corporate social performance–financial performance link. *Strategic Management Journal* 18 (4): 303–319. https://doi.org/10.1002/(SICI)1097-0266(199704)18:4%3c303::AID-SMJ869%3e3.0.CO;2-G.

Ye, K., and R. Zhang. 2011. Do lenders value corporate social responsibility? Evidence from China. *Journal of Business Ethics* 104:197–206. https://doi.org/10.1007/s10551-011-0898-6.

Yilmaz, M. K., M. Aksoy, and A. Khan. 2022. Moderating role of corporate governance and ownership structure on the relationship of corporate sustainability performance and dividend policy. *Journal of Sustainable Finance & Investment* 14 (4): 988–1017. https://doi.org/10.1080/20430795.2022.2100311.

Zahid, R. A., A. Taran, M. K. Khan, and I. C. Chersan. 2023. ESG, dividend payout policy and the moderating role of audit quality: Empirical evidence from Western Europe. *Borsa Istanbul Review* 23 (2): 350–367. https://doi.org/10.1016/j.bir.2022.10.012.

Zaid, M. A. A., M. Wang, and S. T. F. Abuhijleh. 2019. The effect of corporate governance practices on corporate social responsibility disclosure: Evidence from Palestine. *Journal of Global Responsibility* 10 (2): 134–160. https://doi.org/10.1108/JGR-10-2018-0053.

Zaman, R., N. Atawnah, M. Haseeb, M. Nadeem, and S. Irfan. 2021. Does corporate eco-innovation affect stock price crash risk? *The British Accounting Review* 53 (5): 101031. https://doi.org/10.1016/j.bar.2021.101031.