"Is corporate governance a significant factor in corporate social responsibility disclosure? Insights from China"

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IS CORPORATE GOVERNANCE A SIGNIFICANT FACTOR IN CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE? INSIGHTS FROM CHINA

Abstract

This comprehensive study delves into the intricate relationship between corporate governance and Corporate Social Responsibility Disclosure (CSRD) within the framework of China's institutional landscape. By analyzing an extensive dataset comprising 35,435 firm-year observations from 3,889 A-share listed companies spanning the years 2006 to 2019, the research scrutinizes various governance mechanisms, including board size, independence, CEO duality, and ownership concentration.

The investigation affirms that larger boards and a higher proportion of independent directors exert a positive influence on CSRD. In contrast, a substantial shareholding ratio held by the largest shareholder proves to be a hindrance to the transparent disclosure of CSR initiatives. While the impact of CEO duality on CSRD is noted, the statistical significance of this relationship remains inconclusive.

These findings underscore the nuanced dynamics of governance and ownership structures in shaping CSR initiatives. The findings highlight the nuanced impact of governance and ownership structures on CSR initiatives, offering valuable insights for managers and policymakers navigating CSR strategies in China's business landscape. The insights garnered from this study hold valuable implications for both corporate managers and policymakers navigating the landscape of CSR strategies within the unique contours of China's business environment.

Keywords

corporate governance, corporate social responsibility, corporate sustainability-related disclosure, board composition, board independence, ownership concentration, non-financial reporting, sustainability reporting

JEL Classification G34, M14, M41

INTRODUCTION

Corporate Social Responsibility (CSR) has emerged as a pivotal concept within the domain of corporate governance, reflecting a trajectory of growing significance and origination (Pucheta-Martínez & Gallego-Álvarez, 2018). The disclosure of CSR practices serves as a mechanism for companies to communicate their social initiatives to diverse stakeholders, concurrently identifying societal priorities (Hussain et al., 2018; Pasko, Chen, Proskurina, et al., 2021; Searcy & Buslovich, 2014). In tandem, the efficacy of corporate governance structures hinges not only on facilitating the harmonious coordination of stakeholder interests but also on establishing an advanced mechanism for CSR disclosures, ensuring veracious, qualitative, relevant, and reliable reporting (Al Fadli et al., 2022). The practice of Corporate Social Responsibility Disclosures (CSRD) has witnessed proliferation in the last decade, becoming a prevalent norm, albeit not universally established across all business strata (Pasko, Lagodiienko, et al., 2022). Consequently, a judicious examination of how governance components influence corporate social reporting practices, particularly disclosures, becomes imperative (Al Fadli et al., 2022; Oh et al., 2018).

As a pivotal facet of corporate governance, the board of directors assumes a crucial role in aligning the management of a firm's goals with those of stakeholders (Pasko, Chen, et al., 2022; Zaman et al., 2020). CSR, being determined and decided upon by the highest echelon of power within the company – the board of directors – implies that the characteristics of this governing body profoundly impact CSR disclosures (CSRD) (Aureli et al., 2020; Manning et al., 2019; Pasko, Zhang, et al., 2021; Tibiletti et al., 2020).

Another fundamental corporate governance mechanism lies in the ownership structure of a company, believed to exert influence on both the extent and quality of disclosures (Abdullah et al., 2011; Al Fadli et al., 2022). The variety of ownership types and their combinations are posited to have divergent effects on decision making, strategies, policies, and different types of information disclosure, thereby elevating the threshold of legitimacy (Haniffa & Cooke, 2005; Subramaniam et al., 2023). Moreover, the ownership structure significantly influences the level of CSR activity undertaken by a company (Alodat et al., 2023; Subramaniam et al., 2023).

Despite advances in understanding the influence of corporate governance on CSR disclosure, there remains a need for more comprehensive and nuanced investigations into this relationship (Walls et al., 2012). A comprehensive understanding necessitates a detailed exploration of the interplay between corporate governance features and the extent of CSR disclosure. The prevailing body of research has generated contradictory evidence, primarily within established institutional environments. However, significant research gaps persist in contexts where information disclosure is either absent, poorly structured, symbolic, or misaligned with business objectives (Diaz-Sarachaga, 2021; Emma & Jennifer, 2021). The proliferation of conceptual frameworks for CSR disclosure, each serving varied purposes, poses another challenge to forming a holistic picture, demanding focused attention on higher quality and more consistent CSR disclosure. Consequently, there is a call for further research examining the instrumental role of corporate governance features in facilitating superior-quality CSR disclosure (Alodat et al., 2023; Giannarakis, 2014; Khan et al., 2013; Subramaniam et al., 2023).

1. LITERATURE REVIEW

The concept of Corporate Social Responsibility (CSR) is intricately tied to a myriad of theories, including but not exclusively limited to agency theory, institutional theory, legitimacy theory, stakeholder theory, and stewardship theory (Ali et al., 2022; Zaid et al., 2019). Among these, stakeholder theory, legitimacy theory, and agency theory emerge prominently in the literature to elucidate the nexus between corporate governance features and CSR disclosure (Hussain et al., 2018).

Agency theory endeavors to explicate the conflicting relationships between managers and shareholders, presuming the existence of information asymmetry, opportunistic behavior by the agent, and divergent interests between principals (shareholders) and agents (managers) (Habbash, 2016; Hussain et al., 2018; Zaid et al., 2019). The phenomenon of "agency conflict" arises when the agent prioritizes personal interests over shareholder interests, stemming from the division between ownership and management. Corporate governance mechanisms are designed to mitigate this conflict between managers and owners.

From a CSR perspective, managers may excessively invest in CSR for self-interests, such as personal reputation and media popularity, diverting resources without maximizing shareholder profits (Chintrakarn et al., 2016; Ness & Mirza, 1991). This self-interested disclosure of social information is posited to enhance management welfare (Ness &

Mirza, 1991). Additionally, agency theory explains voluntary CSR disclosure as a means to alleviate information asymmetry, reduce opportunistic behavior, and lower capital costs (Mio et al., 2020; Pasko, Zhang, et al., 2021; Tyson & Adams, 2019).

Stakeholder theory asserts that companies face escalating pressure from stakeholders for corporate sustainability, with the board of directors serving as a pivotal stakeholder tasked with aligning management goals with the diverse objectives of stakeholders (Ali et al., 2022; Garas & ElMassah, 2018). Legitimacy theory contends that companies disclose CSR information in response to public expectations, particularly under pressure, but its predictive power diminishes with the prevalence of mandatory CSR disclosures (Jeroh, 2020; Syed & Butt, 2017; Mio et al., 2020).

It is imperative to acknowledge that no single theory in isolation comprehensively explains the intricate relationships within the investigated issue, as "no single theory fully accounts for all the hypothesized relationships" (Hussain et al., 2018, p. 411).

Grounded in the three prominent theories and a meticulous review of existing literature, this study focuses on five key indicators for analysis: board size, independent directors, CEO duality, and equity concentration. These indicators, frequently employed in prior research, encompass governance structure (board size, independent directors, CEO duality) and ownership structures (equity concentration). The examination of ownership structure is particularly crucial in the context of the jurisdiction under scrutiny – China.

1.1. Board size and availability of CSRD

Board size stands out as one of the pivotal features of the board of directors, underlining its significance in the governance structure (Tibiletti et al., 2020). The number of directors comprising the board is posited to exert a direct influence on its functionality and overall corporate efficiency (Ali & Ayoko, 2020; Alrowwad et al., 2022; Raboshuk et al., 2023; Tibiletti et al., 2020). The rationale behind this assertion lies in the notion that board size unleashes the reservoir of expertise within the board. Intuitively, a larger board is presumed to possess a greater pool of expertise, enhancing its ability to arrive at necessary and timely decisions, even in the absence of external input (Ali & Ayoko, 2020; Tibiletti et al., 2020). Furthermore, a sizable board of directors is believed to be more adept at formulating a diverse array of corporate strategies and exerting effective oversight on the CEO, diminishing the prominence of this corporate role (Ali & Ayoko, 2020; Tibiletti et al., 2020).

1.2. Independent directors on board and presence of CSRD

Independent directors, typically mandated by corporate governance codes, play a pivotal role in domains prone to heightened conflict of interests. They commonly serve on committees dedicated to remuneration, financial control, and nomination, adhering to established governance principles (Giannarakis, 2014). Furthermore, independent directors emerge as champions of enhanced CSR disclosure, driven by their diminished susceptibility to influence from insider managers, their stakeholderoriented perspective, and their commitment to preserving their reputation (Hussain et al., 2018; Kılıç et al., 2021; Michelon & Parbonetti, 2012).

1.3. CEO duality and availability of CSRD

The overwhelming consensus among researchers posits that CEO duality serves as a factor diminishing board independence. The amalgamation of CEO and chairman positions within one individual disperses authority and has the potential to disrupt the prevailing equilibrium between managerial and stakeholder interests. This, in turn, might diminish the board's inclination to invest and escalate CSR disclosure (Kılıç et al., 2021; Mallin & Michelon, 2011; Naciti, 2019; Walls et al., 2012).

1.4. Equity concentration and presence of CSRD

A company is subject to influence from various stakeholders based on the shareholding percentage held by specific groups or individuals. When a shareholder wields significant influence over the company's operations, the perspectives and approaches of this entity play a crucial role, extending to CSR disclosure considerations (Bian et al., 2023; Cullinan et al., 2012; Nguyen et al., 2022; Pasko, Chen, Birchenko, et al., 2021). For instance, empirical evidence from the People's Republic of China indicates that a substantial ownership concentration provides fewer incentives for enhancing reporting quality, including CSR disclosure (Chen et al., 2001). Lin and Liu (2009) further exemplify, drawing from the Chinese context, that firms with a significant ownership concentration in China displayed less concern for the quality of their reporting, evident in their engagement with lower-quality auditors (Lin & Liu, 2009). Additionally, studies by Cullinan et al. (2012) and Pasko, Chen, Birchenko, et al. (2021) reveal a negative relationship between the shareholding ratio of the largest stakeholder and accounting conservatism - a distinct indicator of quality, particularly in financial reporting (Cullinan et al., 2012; Pasko, Chen, Birchenko, et al., 2021).

Therefore, the aim of this study is to examine the influence of governance mechanisms, encompassing both governance and ownership structures, on the occurrence of CSRD.

Based on the above-mentioned extent literature review and rationales within it, this study puts forward the following hypotheses:

- *H1: There is a positive relationship between board size and the occurrence of CSRD.*
- H2: There is a positive relationship between the proportion of independent directors on the board and the occurrence of CSRD.
- H3: There is a negative relationship between CEO duality and the occurrence of CSRD.
- H4: There is a negative relationship between the shareholding ratio of the largest shareholder and the occurrence of CSRD.

2. METHODS

2.1. Data

To enhance the relevance of this study, the study focuses on Chinese listed companies, the largest developing country, as its primary subject. Utilizing the CSMAR database, comprehensive research data on Chinese listed companies, encompassing financial information, corporate governance details, and social responsibility data, is made available, facilitating an in-depth investigation into the relationship between corporate governance and Corporate Social Responsibility Disclosure (CSRD). The study spans from 2006 to 2019, capturing data from China's listed A-share companies during this period, totaling 3,889 companies and 35,435 observations. Encompassing all industries of Chinese listed companies, the sample consists of 19 industries, acknowledging the unbalanced panel resulting from companies being listed at various times.

Appendix A1 illustrates significant variations in the number of companies across diverse industries. Notably, the manufacturing industry constitutes the majority, with 22,258 observations, representing 62.81% of the entire dataset. Following closely is the information technology industry, contributing 2,050 observations (5.79%), and the wholesale and retail industry with 1,886 observations (5.32%). It is imperative to note that the sample's unbalanced nature is a consequence of different companies entering the market at distinct points in time. The data reveals a consistent growth in the number of observations from 2006 to 2019.

Table 1 shows the annual sustainability assurance statistics. In 2006, 21 companies published sustainability reports, while in 2019, this number reached 1,008, accounting for 12.66% in total sample.

Table 1. Sustainability assurance reports by year

Year	Incidence	Percentage
2006	21	0.26%
2007	42	0.53%
2008	178	2.24%
2009	186	2.34%
2010	501	6.29%
2011	590	7.41%
2012	654	8.21%
2013	686	8.61%
2014	713	8.95%
2015	761	9.56%
2016	809	10.16%
2017	871	10.94%
2018	943	11.84%
2019	1008	12.66%
Total	7963	100.00%

Industry	Incidence	Percentage
Agriculture, forestry, animal husbandry and fishery	105	1.32%
Mining industry	321	4.03%
Manufacturing	4246	53.32%
Electricity, heat, gas and water production and supply	398	5.00%
Construction industry	241	3.03%
Wholesale and retail	375	4.71%
Transportation, storage and postal industry	428	5.37%
Accommodation and Catering Industry	15	0.19%
Information transmission, software and information technology service industry	368	4.62%
Financial industry	569	7.15%
Real estate	466	5.85%
Leasing and business services	72	0.90%
Scientific research and technical service industry	32	0.40%
Water conservancy, environment and public facilities management industry	68	0.85%
Resident services, repairs and other services	2	0.03%
Education	2	0.03%
Health and social work	29	0.36%
Culture, sports and entertainment industry	129	1.62%
Comprehensive	97	1.22%
Total	7963	100.00%

Table 2. Sustainability reporting by industry

Table 2 shows the proportion of sustainable reporting by industry. Among the companies issuing sustainability reports, the manufacturing industry accounted for the highest proportion at 53.32%, followed by the financial industry at 7.15%, and the real estate industry at 5.85%.

2.2. Research model

This study uses a multiple regression analysis model that included two types of corporate governance variables to estimate the parameters. The two types of corporate governance variables are governance structure variables and equity structure variables. The governance structure variables include the board size (BoardSize), the proportion of independent directors (Indep), and CEO duality (Duality). Ownership structure variables include equity concentration (Top1), and equity nature (Nature). To eliminate the impact of different company sizes and profitability, this paper adds return on assets (ROA), company size (Lnsize), market-to-book ratio (MTB), etc. as control variables into the model. To test the robustness of the model, the paper uses ROE and EPS instead of ROA for robustness testing. The research model is as follows:

$$Prob(SusRpt_{i,t}) = \beta_0 + \beta_1 BoardSize_{i,t} + \beta_2 Indep_{i,t} + \beta_3 Duality_{i,t} + \beta_4 Top1_{i,t} + \beta_5 Nature_{i,t} + \beta_6 ROA_{i,t} + \beta_7 LnSize_{i,t} + \beta_8 MTB_{i,t} + u_{i,t},$$
(1)

where *i* goes from company 1 to company 3,889; *t* takes the values of the years from 2006 to 2019; *j* goes from industry 1 to 19; β_0 - β_9 represents the estimating parameters; $u_{i,t}$ represents the classical error term. *SusRpt* is a dummy variable. If company *i* releases a sustainability report in year *t*, the value is 1, otherwise it is 0. The paper controls for Return On Assets, Return on Equity, Earnings per Share, Firm Size and Market to book ratio.

The meanings and definitions of the variables in the formula are shown in Table 3.

3. RESULTS

3.1. Descriptive statistics

Table 4, which is divided into three parts, shows the results of descriptive statistics. The first part

Variable	Abbreviation	Definition	Unit
		Dependent variables	
Corporate Social Responsibility Disclosure	SusRpt	1=Sustainability report released 0=No sustainability report released	none
		Independent variables	
Board Size	BoardSize	Number of board members	person
Independent directors ratio	Indep	Number of independent directors / Number of Board members	none (person/person)
CEO Duality	Duality	none (Yes or No)	
Shareholding concentration ratio	Top1	Top1 Shares/Total share	
Nature of equity	Nature	1 = State Own 0 = Non-State Own	None
		Control variables	
Return On Assets	ROA	Net profit/total assets	none (Yuan/Yuan)
Return on Equity	ROE	Net profit/shareholders' equity	none (Yuan/Yuan)
Earnings per Share	EPS	Net profit/total number of shares	none (Yuan/Yuan)
Firm Size	LnSize	Ln(Total Assets)	none (Ln(Yuan))
Market to book ratio	MTB	Market-to-Book ratio	none (Yuan/Yuan)

Table 3. Definition of variables

is a full sample, the second part is a sample with a sustainability report (SusRpt group, SusRpt = 1), and the third part is a sample without a sustainability report (non-SusRpt group, SusRpt = 0). Variables can be divided into governance structure variables, equity structure variables and control variables.

- Variables in governance structure. In terms of board size, the SusRpt group (9.383) is higher than the non-SusRpt group (8.615) and the overall sample (8.788). In the proportion of independent directors, the SusRpt group (0.374) is higher than the non-SusRpt group (0.371) and the overall sample (0.372) In terms of CEO duality, the non-SusRpt group (0.277) is the highest, followed by the full sample (0.254), and the SusRpt group (0.176) is the lowest.
- (2) Variables of ownership structure. The Top1 variable representing the concentration of equity, the highest is SusRpt group (0.37), followed by the full sample (0.349), and the lowest is non-SusRpt group (0.3744). In terms of equity nature, SusRpt group (0.583) is the highest, followed by the overall sample (0.408), and the lowest is non-SusRpt group (0.358).
- (3) The control variable. Among ROA representing profitability, the highest is SusRpt group (0.045), followed by full sample (0.041), and the lowest is non-SusRpt group (0.04). Among LnSize representing company size, SusRpt group (23.245) is the highest, followed by the entire sample (21.996), the lowest is the non-SusRpt group (21.633). Among the MTBs representing market expectations,

Marchiana		Full Sample			SusRpt = 1			SusRpt = 0		
VarName	Obs	Mean	SD	Obs	Mean	SD	Obs	Mean	SD	
SusRpt	35435	0.225	0.417	7963	1	0	27472	0	0	
BoardSize	35261	8.788	1.896	7947	9.383	2.254	27314	8.615	1.74	
Indep	35261	0.372	0.053	7947	0.374	0.055	27314	0.371	0.052	
Duality	34703	0.254	0.435	7815	0.176	0.381	26888	0.277	0.447	
Top1	35429	0.349	0.153	7963	0.37	0.163	27466	0.344	0.149	
Nature	35435	0.408	0.491	7963	0.583	0.493	27472	0.358	0.479	
ROA	35434	0.041	0.071	7963	0.045	0.06	27471	0.04	0.074	
LnSize	35432	21.996	1.441	7963	23.245	1.619	27469	21.633	1.155	
MTB	33583	3.944	3.809	7771	2.902	2.622	25812	4.258	4.048	

Table 4. Descriptive statistics

	SusRpt	BoardSize	Indep	Duality	Top1	Nature	ROA	LnSize	MTB	Industry
SusRpt	1	0.145***	0.026***	-0.097***	0.066***	0.191***	-0.001	0.425***	-0.209***	0.072***
BoardSize	0.169***	1	-0.518***	-0.196***	0.010*	0.278***	-0.029***	0.245***	-0.144***	0.052***
Indep	0.023***	-0.435***	1	0.108***	0.017***	-0.084***	-0.019***	-0.000	0.023***	0.010**
Duality	-0.097***	-0.184***	0.114***	1	-0.044***	-0.295***	0.095***	-0.175***	0.124***	-0.059***
Top1	0.071***	0.016***	0.034***	-0.052***	1	0.221***	0.131***	0.156***	-0.062***	-0.033***
Nature	0.191***	0.277***	-0.081***	-0.295***	0.224***	1	-0.175***	0.298***	-0.203***	0.097***
ROA	0.032***	-0.002	-0.021***	0.061***	0.133***	-0.105***	1	-0.083***	0.236***	-0.035***
LnSize	0.467***	0.334***	0.015***	-0.168***	0.185***	0.299***	-0.011**	1	-0.487***	0.139***
MTB	-0.150***	-0.117***	0.036***	0.069***	-0.080***	-0.123***	0.022***	-0.383***	1	-0.068***
Industry	0.060***	0.057***	0.015***	-0.045***	-0.027***	0.065***	-0.026***	0.110***	0.005	1

Table 5. Correlation test

Note: 1. ***, ** and * indicate 1%, 5% and 10% levels of significance, respectively. 2. Lower-left: Pearson correlation coefficient; upper-right: Spearman correlation coefficient.

the highest is the non-SusRpt group (4.258), followed by the full sample (3.944), and the lowest is SusRpt group (2.902).

Table 5 shows the results of the correlation test: the lower-left is the Pearson test result, and the upperright is the Spearman test result. For the governance variable, the highest coefficient is BoardSize (0.169), and the highest in the equity structure variable is Nature (0.191). The correlation between independent variables and control variables and SusRpt is more significant.

3.2. Regression results and robustness test

In Table 6, (1) is the result of the multiple regression analysis of the research model, (2) and (3) are the results of the robustness test performed by replacing ROA with ROE and EPS, respectively.

Table 6.	Regression	results a	nd robu	ust test
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	(1)	(2)	(3)
	SusRpt	SusRpt	SusRpt
	0.003**	0.003**	0.003**
BoardSize	(2.09)	(2.09)	(2.05)
	0.239***	0.235***	0.235***
ndep	(5.38)	(5.27)	(5.28)
5 lu	-0.008	-0.006	-0.008
Duality	(-1.53)	(-1.28)	(-1.54)
	-0.096***	-0.083***	-0.084***
Top1	(-6.75)	(–5.88)	(–5.99)
NI 1	0.060***	0.057***	0.058***
Nature	(12.76)	(12.05)	(12.33)
DO4	0.347***		
ROA	(10.75)		
DOF		0.100***	
ROE		(6.65)	
EDC			0.031***
EPS			(7.82)
1 - Ci	0.137***	0.136***	0.134***
LnSize	(79.00)	(77.92)	(74.68)
	0.003***	0.004***	0.003***
MTB	(5.89)	(6.12)	(5.74)
	-2.928***	-2.899***	-2.849***
_cons	(–74.22)	(–73.16)	(–70.54)
N	32819	32780	32820
R ²	0.226	0.225	0.225
Adj. R²	0.226	0.224	0.225

Note: ***, ** and * indicate 1%, 5% and 10% levels of significance, respectively.

From the regression analysis result (1), this study deduces the following conclusions.

- (1) Variables in governance structure. The board size is positively correlated with SusRpt (coefficient of 0.003), and it is significant at the 0.5% level. This shows that the larger the board, the higher the likelihood of CSRD being present. The proportion of independent directors is positively correlated with SusRpt (coefficient is 0.241), and it is significant at 1%. This shows that a listed company with a higher proportion of independent directors has a higher probability of issuing CSR reports. CEO duality and SusRpt have a negative correlation (coefficient of -0.007), but they are not significant.
- (2) Variables of ownership structure. The shareholding ratio of the largest shareholder is negatively correlated with SusRpt (coefficient of -0.109), and it is significant at 1%. This shows that listed companies with a higher degree of equity concentration have a lower probability of issuing CSR reports. The degree of equity checks and balances is negatively correlated with SusRpt (coefficient of -0.000). Although the coefficient is small, it is significant at the 5% level. In the subsequent robustness test, this relationship does not exist.
- (3) Control variables. LnSize and SusRpt have a positive correlation (coefficient of 0.138), and they are significant at the 1% level. The larger the company, the higher the probability of issuing a CSR report. MTB and SusRpt have a positive correlation (coefficient of 0.003), and they are significant at the 1% level, meaning that the higher the public expectation of the company, the higher the probability of issuing CSR report.

In the regression analysis result (2), this study obtains a conclusion similar to that of (1). The same conclusion was obtained in the regression result (3).

4. DISCUSSION

The objective of this study is to scrutinize the pivotal role of corporate governance in catalyzing companies towards Corporate Social Responsibility (CSR) disclosure within the Chinese institutional framework. The hypotheses posited that the board of directors, especially its size and independence, would positively contribute to CSR disclosure. Conversely, CEO duality was expected to impede CSR disclosure due to increased agency conflicts and the greater influence of insiders over stakeholders. Additionally, the study assumed that any concentration of ownership would negatively impact a company's inclination to disclose information about CSR.

Examining a robust dataset of 35,435 firm-year observations from 3,889 listed A-share companies in China between 2006 and 2019, this research delves into two critical aspects of governance mechanisms: governance structure (board size, independent directors, CEO duality) and ownership structures (equity concentration). The findings broadly align with the hypothesized connections, with full confirmation of three hypotheses (H1. Board size, H2. Proportion of independent directors on the board, and H4. The shareholding ratio of the largest shareholder). However, the negativity of the relationship in the case of CEO duality was confirmed but was not statistically significant.

The study's conclusions regarding board size resonate with prior research (Hussain et al., 2018; Kılıç et al., 2021; Pucheta-Martínez & Gallego-Álvarez, 2018), as a larger board enhances expertise and orientation in stakeholder-centric economics, making CSR disclosures indispensable.

While the findings on board independence align with several studies (Biswas et al., 2018; Hussain et al., 2018; Jizi et al., 2014; Liao et al., 2015; Uyar et al., 2020), they contradict others (Naciti, 2019; Tibiletti et al., 2020) that established a negative relationship between corporate governance and CSR disclosure presence. Meanwhile, Kılıç et al. (2021) found no association.

The negative impact of CEO duality on CSR disclosure corroborates previous research (Hussain et al., 2018; Kılıç et al., 2021; Naciti, 2019; Tibiletti et al., 2020). However, conflicting findings from authors like Jizi et al. (2014) and Pucheta-Martínez & Gallego-Álvarez (2018), as well as null associations found by Giannarakis (2014) and Kılıç et al. (2021), emphasize the nuanced nature of this relationship. Consistent with existing literature (Bian et al., 2023; Chen et al., 2001; Cullinan et al., 2012; Lin & Liu, 2009; Nguyen et al., 2022; Pasko, Zhang, et al., 2021), the study affirms the significance of ownership concentration.

The negligible role ascribed to ownership concentration prompts a call for future studies to delve deeper into why it incongruently correlates with the advancement of CSR disclosure. This underscores the need for more comprehensive and consistent CSR disclosure, urging further research into the governance features instrumental to such disclosures, as well as enhancing their quality (Alodat et al., 2023; Giannarakis, 2014; Khan et al., 2013; Subramaniam et al., 2023).

CONCLUSION

This study aims to scrutinize the influence of governance mechanisms, encompassing both governance and ownership structures, on the presence of Corporate Social Responsibility Disclosures (CSRD). The established relationships affirm that board size and the proportion of independent directors exert a positive impact on CSRD, whereas the shareholding ratio of the largest shareholder constrains transparency in CSR. Conversely, CEO duality negatively influences CSRD, although these associations lack statistical significance.

The divergent impacts of corporate governance attributes on firms' capacity to generate CSR disclosures underscore the imperative to meticulously consider both governance and ownership structure components. In the context of China's institutional environment, the study recommends the adoption of large boards of directors with a substantial degree of independence, emphasizing the significance of independent directors' proportions. However, a pronounced concentration of ownership typically correlates with a dearth of initiatives in CSR, indicating a diminished likelihood of CSR disclosure.

In light of these findings, managers involved in CSR initiatives are encouraged to factor in these dynamics when formulating recommendations for the composition of the board of directors. Policymakers, too, are urged to develop guidelines aimed at fostering CSRD, aligning with the nuanced insights drawn from this study.

AUTHOR CONTRIBUTIONS

Conceptualization: Oleh Pasko, Tetyana Kharchenko. Data curation: Tetyana Kharchenko, Oleksandr Kovalenko, Oleksandr Kuts. Formal analysis: Tetyana Kharchenko, Viktoriia Tkachenko, Oleksandr Kuts. Funding acquisition: Oleh Pasko. Investigation: Oleh Pasko, Tetyana Kharchenko, Oleksandr Kovalenko, Viktoriia Tkachenko, Oleksandr Kuts. Methodology: Oleh Pasko, Tetyana Kharchenko, Oleksandr Kovalenko. Project administration: Oleh Pasko, Tetyana Kharchenko, Viktoriia Tkachenko. Resources: Oleh Pasko. Software: Tetyana Kharchenko, Viktoriia Tkachenko, Oleksandr Kuts. Supervision: Oleh Pasko. Validation: Tetyana Kharchenko, Oleksandr Kovalenko, Viktoriia Tkachenko, Oleksandr Kuts. Visualization: Oleh Pasko, Tetyana Kharchenko, Oleksandr Kovalenko, Viktoriia Tkachenko, Oleksandr Kuts. Writing – original draft: Oleh Pasko, Tetyana Kharchenko, Oleksandr Kovalenko, Viktoriia Tkachenko, Oleksandr Kuts. Writing - review & editing: Oleh Pasko.

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REFERENCES

- Al Fadli, A., Sands, J., Jones, G., Beattie, C., & Pensiero, D. (2022). The influence of ownership structure on the extent of CSR reporting: An emerging market study. *Business and Society Review*, 127(3), 725-754. https://doi. org/10.1111/basr.12286
- Ali, M., & Ayoko, O. B. (2020). The impact of board size on board demographic faultlines. Corporate Governance: The International Journal of Business in Society, 20(7), 1205-1222. https://doi. org/10.1108/CG-03-2020-0100
- Ali, W., Wilson, J., & Husnain, M. (2022). Determinants/Motivations of Corporate Social Responsibility Disclosure in Developing Economies: A Survey of the Extant Literature. Sustainability, 14(6), 3474. https://doi.org/10.3390/ su14063474
- Alodat, A. Y., Salleh, Z., & Hashim, H. A. (2023). Corporate governance and sustainability disclosure: evidence from Jordan. *Corporate Governance: The International Journal of Business in Society, 23*(3), 587-606. https://doi. org/10.1108/CG-04-2022-0162
- Alrowwad, A. M., Alhasanat, K. A., Sokil, O., Halko, S., & Kucherkova, S. (2022). Sustainable transformation of accounting in agriculture. Agricultural and Resource Economics: International Scientific E-Journal, 8(2), 5-29. https://doi. org/10.51599/are.2022.08.02.01
- 6. Aureli, S., Del Baldo, M., Lombardi, R., & Nappo, F. (2020).

Nonfinancial reporting regulation and challenges in sustainability disclosure and corporate governance practices. *Business Strategy and the Environment*, *29*(6), 2392-2403. https://doi.org/10.1002/ bse.2509

- Bian, H., Kuo, J., Pan, H., & Zhang, Z. (2023). The role of managerial ownership in dividend tunneling: Evidence from China. *Corporate Governance: An International Review*, 31(2), 307-333. https://doi. org/10.1111/corg.12478
- Biswas, P. K., Mansi, M., & Pandey, R. (2018). Board composition, sustainability committee and corporate social and environmental performance in Australia. *Pacific Accounting Review*, 30(4), 517-540. https://doi.org/10.1108/PAR-12-2017-0107
- Chen, C. J. ., Chen, S., & Su, X. (2001). Is accounting information value-relevant in the emerging Chinese stock market? *Journal of International Accounting, Auditing and Taxation, 10*(1), 1-22. https://doi.org/10.1016/S1061-9518(01)00033-7
- Chintrakarn, P., Jiraporn, P., Kim, J.-C., & Kim, Y. S. (2016). The Effect of Corporate Governance on Corporate Social Responsibility. *Asia-Pacific Journal of Financial Studies*, 45(1), 102-123. https://doi. org/10.1111/ajfs.12121
- Cullinan, C. P., Wang, F., Wang, P., & Zhang, J. (2012). Ownership structure and accounting conservatism in China. *Journal of*

International Accounting, Auditing and Taxation, 21(1), 1-16. https:// doi.org/10.1016/j.intaccaudtax.2012.01.001

- Diaz-Sarachaga, J. M. (2021). Shortcomings in reporting contributions towards the sustainable development goals. *Corporate Social Responsibility and Environmental Management*, 28(4), 1299-1312. https://doi.org/10.1002/ csr.2129
- Emma, G.-M., & Jennifer, M.-F. (2021). Is SDG reporting substantial or symbolic? An examination of controversial and environmentally sensitive industries. *Journal of Cleaner Production*, 298, 126781. https://doi.org/10.1016/j. jclepro.2021.126781
- Garas, S., & ElMassah, S. (2018). Corporate governance and corporate social responsibility disclosures. *Critical Perspectives* on International Business, 14(1), 2-26. https://doi.org/10.1108/ cpoib-10-2016-0042
- Giannarakis, G. (2014). Corporate governance and financial characteristic effects on the extent of corporate social responsibility disclosure. *Social Responsibility Journal*, 10(4), 569-590. https://doi.org/10.1108/SRJ-02-2013-0008
- Habbash, M. (2016). Corporate governance and corporate social responsibility disclosure: evidence from Saudi Arabia. Social Responsibility Journal, 12(4), 740-754. https://doi.org/10.1108/SRJ-07-2015-0088

- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391-430. https://doi.org/10.1016/j.jaccpubpol.2005.06.001
- Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance. *Journal of Business Ethics*, 149(2), 411-432. https://doi. org/10.1007/s10551-016-3099-5
- Jeroh, E. (2020). Firms Attributes, Corporate Social Responsibility Disclosure and the Financial Performance of Listed Companies in Nigeria. Asian Economic and Financial Review, 10(6), 727-743. https://doi.org/10.18488/journal. aefr.2020.106.727.743
- Jizi, M. I., Salama, A., Dixon, R., & Stratling, R. (2014). Corporate Governance and Corporate Social Responsibility Disclosure: Evidence from the US Banking Sector. *Journal of Business Ethics*, 125(4), 601-615. https://doi.org/10.1007/ s10551-013-1929-2
- Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate Governance and Corporate Social Responsibility Disclosures: Evidence from an Emerging Economy. *Journal of Business Ethics*, 114(2), 207–223. https://doi.org/10.1007/ s10551-012-1336-0
- 22. Kılıç, M., Uyar, A., Kuzey, C., & Karaman, A. S. (2021). Drivers and consequences of sustainability committee existence? Evidence from the hospitality and tourism industry. *International Journal* of Hospitality Management, 92, 102753. https://doi.org/10.1016/j. ijhm.2020.102753
- Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*, 47(4), 409-424. https://doi. org/10.1016/j.bar.2014.01.002
- 24. Lin, Z. J., & Liu, M. (2009). The impact of corporate governance on auditor choice: Evidence from China. *Journal of International Accounting, Auditing and*

Taxation, *18*(1), 44-59. https:// doi.org/10.1016/j.intaccaudtax.2008.12.005

- Mallin, C. A., & Michelon, G. (2011). Board reputation attributes and corporate social performance: an empirical investigation of the US Best Corporate Citizens. *Accounting and Business Research*, 41(2), 119-144. https://doi.org/10. 1080/00014788.2011.550740
- 26. Manning, B., Braam, G., & Reimsbach, D. (2019). Corporate governance and sustainable business conduct-Effects of board monitoring effectiveness and stakeholder engagement on corporate sustainability performance and disclosure choices. *Corporate Social Responsibility and Environmental Management*, 26(2), 351-366. https://doi.org/10.1002/ csr.1687
- Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management* & Governance, 16(3), 477-509. https://doi.org/10.1007/s10997-010-9160-3
- Mio, C., Fasan, M., Marcon, C., & Panfilo, S. (2020). The predictive ability of legitimacy and agency theory after the implementation of the EU directive on non-financial information. *Corporate Social Responsibility and Environmental Management*, 27(6), 2465-2476. https://doi.org/10.1002/csr.1968
- 29. Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production, 237*, 117727. https://doi.org/10.1016/j. jclepro.2019.117727
- 30. Ness, K. E., & Mirza, A. M. (1991). Corporate social disclosure: A note on a test of agency theory. *The British Accounting Review, 23*(3), 211-217. https://doi. org/10.1016/0890-8389(91)90081-C
- Nguyen, T. M. H., To, A. T., Phan, T. H., Ngo, N. P. D., & Ho, T. T. H. (2022). Ownership Concentration and Accounting Conservatism: The Moderating Role of Board Independence. *Emerging Science*

Journal, 7(1), 90-101. https://doi. org/10.28991/ESJ-2023-07-01-07

- Nwude, E. C., & Nwude, C. A. (2021). Board Structure and Corporate Social Responsibility: Evidence From Developing Economy. SAGE Open, 11(1), 215824402098854. https://doi. org/10.1177/2158244020988543
- Oh, W.-Y., Chang, Y. K., & Kim, T.-Y. (2018). Complementary or Substitutive Effects? Corporate Governance Mechanisms and Corporate Social Responsibility. *Journal of Management*, 44(7), 2716-2739. https://doi. org/10.1177/0149206316653804
- Pasko, O., Chen, F., Birchenko, N., & Ryzhikova, N. (2021). Corporate Governance Attributes and Accounting Conservatism: Evidence from China. *Studies in Business and Economics*, *16*(3), 173-189. https://doi.org/10.2478/ sbe-2021-0053
- Pasko, O., Chen, F., Kuts, T., Sharko, I., & Ryzhikova, N. (2022). Sustainability reporting nexus to corporate governance in scholarly literature. *Environmental Economics*, 13(1), 61-78. https://doi. org/10.21511/ee.13(1).2022.06
- 36. Pasko, O., Chen, F., Proskurina, N., Mao, R., Gryn, V., & Pushkar, I. (2021). Are corporate social responsibility active firms less involved in earnings management? Empirical evidence from China. Business: Theory and Practice, 22(2), 504-516. https://doi. org/10.3846/btp.2021.14940
- Pasko, O., Lagodiienko, N., Kudlaieva, N., Riabenko, L., & Gerasymenko, N. (2022). Does corporate governance moderate the effect of corporate social responsibility on a firm's financial performance? *Problems and Perspectives in Management*, 20(4), 588-601. https://doi.org/10.21511/ ppm.20(4).2022.44
- Pasko, O., Zhang, L., Tuzhyk, K., Proskurina, N., & Gryn, V. (2021). Do sustainability reporting conduct and corporate governance attributes relate? Empirical evidence from China. *Problems and Perspectives in Management*, 19(4), 110-123. https://doi.org/10.21511/ ppm.19(4).2021.10

- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2018). Environmental reporting policy and corporate structures: An international analysis. Corporate Social Responsibility and Environmental Management, 25(5), 788-798. https://doi.org/10.1002/csr.1494
- 40. Raboshuk, A., Zakharov, D., Lehenchuk, S., Morgulets, O., & Hryhorevska, O. (2023). The relationship between corporate governance mechanisms and financial performance: The case of listed industrial companies in Oman. *Investment Management* and Financial Innovations, 20(2), 244-255. https://doi.org/10.21511/ imfi.20(2).2023.21
- Searcy, C., & Buslovich, R. (2014). Corporate Perspectives on the Development and Use of Sustainability Reports. *Journal of Business Ethics*, 121(2), 149-169. https://doi. org/10.1007/s10551-013-1701-7
- Subramaniam, N., Akbar, S., Situ, H., Ji, S., & Parikh, N. (2023). Sustainable development goal reporting: Contrasting effects of institutional and organisational factors. *Journal of Cleaner Produc-*

tion, *411*, 137339. https://doi. org/10.1016/j.jclepro.2023.137339

- 43. Syed, M. A., & Butt, S. A. (2017). Financial and non-financial determinants of corporate social responsibility: empirical evidence from Pakistan. Social Responsibility Journal, 13(4), 780-797. https:// doi.org/10.1108/SRJ-08-2016-0146
- 44. Tibiletti, V., Marchini, P. L., Furlotti, K., & Medioli, A. (2020). Does corporate governance matter in corporate social responsibility disclosure? Evidence from Italy in the "era of sustainability." Corporate Social Responsibility and Environmental Management, csr.2097. https://doi.org/10.1002/csr.2097
- 45. Tyson, T., & Adams, C. A. (2019). Increasing the scope of assurance research: new lines of inquiry and novel theoretical perspectives. *Sustainability Accounting, Management and Policy Journal*, 11(2), 291-316. https://doi.org/10.1108/ SAMPJ-03-2018-0067
- Uyar, A., Kilic, M., Koseoglu, M. A., Kuzey, C., & Karaman, A. S. (2020). The link among board characteristics, corporate

social responsibility performance, and financial performance: Evidence from the hospitality and tourism industry. *Tourism Management Perspectives*, *35*, 100714. https://doi.org/10.1016/j. tmp.2020.100714

- Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: is there really a link? *Strategic Management Journal*, 33(8), 885-913. https://doi.org/10.1002/ smj.1952
- Zaid, M. A. A., Wang, M., & Abuhijleh, S. T. F. (2019). The effect of corporate governance practices on corporate social responsibility disclosure. *Journal* of Global Responsibility, 10(2), 134-160. https://doi.org/10.1108/ JGR-10-2018-0053
- Zaman, R., Nadeem, M., & Carvajal, M. (2020). Corporate governance and corporate social responsibility synergies: evidence from New Zealand. *Meditari Accountancy Research, ahead-of-p* (ahead-of-print), 2879-2892. https://doi.org/10.1108/ME-DAR-12-2019-0649

APPENDIX A1

Table A1. Sample distribution

Industry	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total	%
Agriculture, forestry, animal husbandry and fishery	37	36	37	35	44	43	40	41	41	45	45	45	42	41	572	1.61
Mining industry	24	33	35	41	52	57	63	66	72	76	76	76	76	74	821	2.32
Manufacturing	886	956	990	1078	1329	1493	1583	1608	1695	1804	1976	2228	2274	2358	22258	62.81
Electricity, heat, gas and water production and supply	61	62	62	66	74	75	83	82	84	91	98	108	109	107	1162	3.28
Construction industry	33	37	37	43	43	50	61	64	66	79	91	99	98	94	895	2.53
Wholesale and retail	98	97	98	99	112	124	152	154	152	154	156	163	164	163	1886	5.32
Transportation, storage and postal industry	64	67	69	72	75	78	83	84	84	87	90	98	103	104	1158	3.27
Accommodation and Catering Industry	8	9	9	10	11	11	12	12	12	12	11	9	9	9	144	0.41
Information transmission, software and information technology service industry	53	57	62	83	108	127	121	132	138	156	212	248	263	290	2050	5.79
Financial industry	19	27	27	30	36	40	42	43	45	50	68	79	96	108	710	2.00
Real estate	68	76	85	97	124	129	145	139	136	137	130	129	127	122	1644	4.64
Leasing and business services	17	18	19	20	25	28	22	24	24	29	43	50	52	54	425	1.20
Scientific research and technical service industry	1	3	3	7	10	10	12	12	18	22	27	43	51	58	277	0.78
Water conservancy, environment and public facilities management industry	12	13	14	11	9	11	24	24	30	31	33	43	49	54	358	1.01
Resident services, repairs and other services	5	7	8	8	9	12	0	0	0	0	0	1	1	1	52	0.15
Education	0	0	0	0	0	0	1	1	1	1	3	3	3	8	21	0.06
Health and social work	0	1	1	2	2	3	3	3	4	5	6	9	10	12	61	0.17
Culture, sports and entertainment industry	4	5	6	9	12	18	23	24	28	38	46	58	58	58	387	1.09
Comprehensive	67	67	63	63	54	54	22	23	23	25	25	24	22	22	554	1.56
Total	1457	1571	1625	1774	2129	2363	2492	2536	2653	2842	3136	3513	3607	3737	35435	100.00