Non-Financial Publicly Registered Businesses in The Philippines and The Influence of Board Characteristics on Firm Performance

Cristina Teresa N. Lim* De La Salle University

Maritoni Carnela Matibag San Pablo Colleges

Jessica Jaye Ranieses De La Salle University



ABSTRACT

This study posed the link between corporate governance mechanisms and firm performance in developing countries, specifically focusing on the Philippines. While previous research has extensively explored this relationship in developed nations that possess wellestablished and effective corporate governance systems, there is a dearth of literature examining this in the context of developing countries. The study addressed this gap by probing the impact of board characteristics on the performance of non-financial publiclylisted firms in the Philippines from 2010-2019. The two-step system generalized method of moments (GMM) is employed to approximate the relationship between board characteristics and firm performance. This approach is different from previous research that relied on multiple regression analysis and accounts for potential heterogeneity and endogeneity bias in the study. The board characteristics scanned includes (board size, board independence, CEO duality, management shareholding, and multiple directorships). Firm performance is measured using indicators such as return on assets (ROA) and Tobin's Q ratio. The findings of this study brace significant implications for practitioners and policymakers in developing countries, specifically in the Philippines. This study provides acumens into the imperative role of corporate governance practices in cultivating the performance of firms and underline the requisite to establish and compel formidable corporate governance mechanisms and regulations in such regions. Ultimately, this study provides noteworthy findings to the emergent body of literature on the relationship between corporate governance and firm performance in developing countries, considering the peculiar challenges and probabilities unique to these environments.

Keywords: Board Characteristics; Firm Performance; GMM; ROA.

Received 21 April 2023 | Revised 18 July 2023 | Accepted 19 August 2023.

1. INTRODUCTION

In the face of recent changes due to environmental, political, socio-economic shifts, and the COVID-19 pandemic, corporate governance is adapting to focus more on Environmental, Social, and Governance (ESG) factors, ensuring stakeholder welfare and

sustainable practices (Samans & Nelson, 2020; Kelly et al., 2021). Boards of directors, pivotal in strategizing corporate governance, must respond to legal, regulatory, and ethical challenges while promoting transparency and accountability (Goodstein et al., 1994; Ansarada, 2022). In the Philippines, corporate governance is largely influenced by a small group of family shareholders, emphasizing the need for regulatory reinforcement and reforms due to enforcement challenges (World Bank, 2001).

Different theoretical frameworks, such as agency, resource dependence, stakeholder, transaction cost, and political theories, offer varied insights into corporate management behavior, emphasizing the role of regulations and procedures that promote accountability and ethical conduct. Effective corporate governance, pivotal for stakeholder trust, can spur investment opportunities and company growth. Research links corporate governance to financial performance, asserting that factors like investor trust and efficient governance practices can enhance a firm's financial performance and value (Maher & Andersson, 1999; Guluma, 2021; Paniagua, Rivelles, & Sapena, 2018; Ronoowah & Seetanah, 2022; Alodat et al., 2022; Farooq et al., 2022; Kyere, 2020).

Studies on corporate governance in the Philippines have explored topics like ownership structures in public firms, the efficacy of governance reforms, and the relationship between corporate governance factors and financial performance (de Ocampo, 2000; Echanis, 2006; Antolin et al., 2016; World Bank, 2001). Nevertheless, dynamic endogeneity in corporate governance research remains an issue that needs addressing, with methodologies like the Generalized Method of Moments suggested to resolve potential endogeneity issues in the relationship between board characteristics and firm performance (Wintoki et al., 2012). Such research is crucial for understanding the role of corporate governance in the Philippines and offering valuable insights to various stakeholders.

2. REVIEW OF RELATED LITERATURE, THEORETICAL FRAMEWORK, AND HYPOTHESES DEVELOPMENT

2.2. Philippine Corporate Governance

Corporate governance in the Philippines has emerged as a subject of both concern and enhancement. Regulatory agencies have undertaken several revisions to their governance frameworks, aiming to fortify and elevate accountability, transparency, and ethical standards within the corporate sphere. To encourage effective corporate governance practices, the Securities and Exchange Commission (SEC) has put into place several programs and directives. Publicly listed companies in the Philippines must comply with the Code of Corporate Governance, which covers various aspects of corporate governance, including the roles and responsibilities of the board of directors, the protection of shareholders' rights, and the disclosure of information to stakeholders.

Amidst these initiatives, there is an imperative need for more excellent education and awareness-raising programs to highlight the significance of corporate governance since a number of companies still need help putting strong governance principles into reality. Furthermore, certain companies have come under fire for operating with little accountability and transparency. Thus, there is still much progress to be made as the Philippine government and regulatory organizations strive to improve corporate governance in the country.

2.3 Corporate Governance from an Agency Perspective

Agency theory is a theoretical framework utilized in economics and organizational behavior to study the association between principals, such as owners or shareholders, and agents, including managers or employees, who perform tasks on their behalf. The theory further investigates strategies that can harmonize the interests of principals and agents while minimizing agency expenses (Jensen & Meckling, 1976). Given asymmetric information between principals and agents, the board of directors (principal) to use different mechanisms to bring together and attune the interests of the agents (Saleh, 2020). This suggests that the procedures for monitoring management performance and ensuring that the delegation of power results in the maximum potential returns go hand in hand with the delegation of administrative tasks. This includes the analysis of different existing incentive arrangements, such as compensatory systems, and government mechanisms, obtaining vital empirical support (Jensen & Meckling., 1983).

2.4 Corporate Governance from A Stewardship Theory Perspective

Donaldson & Davis (1989, 1991) introduced stewardship theory in which managers are stewards whose motivations align with the interests of their principals rather than being driven by personal aspirations. Stewardship theory is rooted in studies of psychology and sociology as it was primarily designed for researchers to look into circumstances wherein executives are "stewards" who are in charge of making sure the company is profitable. It runs in the best interests of all of its stakeholders. The notion asserts that managers should behave as accountable stewards who are dedicated to advancing the long-term objectives of their firm and its stakeholders over their self-interest. Executives who act this way are likely to be more successful and effective in their positions (Davis et al., 1997).

Compared to agency theory, stewardship is centered on the idea of collectivism as executives aim to achieve organizational objectives (such as profitability). In turn, such behavior will benefit various principals, including external owners (as profits positively impact dividends and share prices) and managerial superiors (as the steward supports their goals). Stewardship theory assumes a close link between the organization's success and the satisfaction of its principals. In essence, a steward is defined as an individual that aims to safeguard and enhance shareholders' wealth by ensuring the firm performs well, as this is in the best interest of the steward's utility functions (Donaldson, 1990).

2.5. Board Characteristics, Corporate Governance, and Firm Performance 2.5.1 Board Size

A stream of literature emphasized that a larger board size, attributed to the diversification of specialized skills, is linked with improved firm performance (Anderson et al., 2004; Williams et al., 2005). While Haniffa & Hudaib (2006) and Daily & Dalton (1993) suggested a positive relationship between board size and financial performance, studies from Di et al., (2008) found no definitive strong correlation.

On the contrary, smaller board sizes, recognized for enhancing communication and decision-making, have been associated with increased firm performance (Akshita & Sharma, 2015; Mashayekhi & Bazaz, 2008; Pathan et al., 2007). Nevertheless, studies by Levrau & Van de Berghe (2007) and Arslan et al. (2010) have noted a negative relationship between board size and firm performance.

2.5.2 Board Independence

The relationship between board independence and firm performance is complex, exhibiting varying results that can be influenced by board composition and the application of theories such as agency and stewardship. Agency theory posits that independent boards can effectively monitor performance, leading to diligent decision-making, a concept supported by U.S. lawmakers, stock exchanges, and studies in countries with weaker investor protections like India, U.K., Korea, and non-family-owned firms in Hong Kong (Beasley, 1996; Christensen et al., 2010; Fama & Jensen, 1983; Uadiale, 2010)

Contrastingly, the stewardship theory posits that independent directors, familiar with business, can identify valuable resources, improving performance (Donaldson, 1990). Several studies, however, noted negative or null relationships between board independence and firm performance in countries like India, New Zealand, and the Philippines, and in cases of information asymmetry between internal and independent directors (Garg, 2007; Fitriya Fauzi & Locke, 2012; Arslan et al., 2010; Ferrer, 2012; De Ocampo, 2000; Galvez, 2003; Hermalin & Weisbach, 1991).

2.5.3 CEO Duality

CEO duality refers to when an individual holds both the roles of CEO and Chairman of the Board, leading to a potential lack of checks and balances in decision-making (Jensen & Meckling, 1976; ASX Corporate Governance Council, 2007). A primary concern with this setup is the potential for management to manipulate board agendas to their benefit, possibly resulting in self-serving actions in the absence of robust corporate governance mechanisms (Firstenberg & Malkiel, 1994; Kyere & Ausloos, 2020; Fama & Jensen, 1983). Despite these potential risks, CEO duality can streamline decision-making, improve industry understanding, and attract top executives. Furthermore, having separate roles can prevent excessive actions that could harm shareholders, ensure decision and management control separation, and prevent conflicts of interest (Berg and Smith 1978; Boyd 1995; Finkelstein and D'Aveni 1994; Baliga et al., 1996; Daily & Schwenk 1996).

The effects of CEO duality on firm performance can differ depending on various factors. In line with stewardship theory, studies suggest that CEO duality can improve firm performance due to the clear leadership direction and reduced decision-making ambiguity (Lizares, 2020; Kyere & Ausloos, 2020; Boyd, 1995; Sherony, 1985; Christensen et al., 2010). However, the agency theory posits a negative relationship between CEO duality and firm performance due to potential conflicts of interest and the risk of insufficient independent scrutiny (Daliy & Dalton 1983; Dahya et al., 1996; Losch & MacIver, 1989).

2.5.4 Board Shareholding

Board shareholding refers to the extent executive board members or directors hold a share of the firm. Such executives are considered to have a lesser interest to behave that is damaging to the interest of shareholders. Board shareholding is found to be inversely related to conflicts within the agency among managers and shareholders (Vafeas & Theodorou, 1998). In accordance with the agency theory, Dong et al. (2020) state that agency costs can be minimized when the interests of shareholders are aligned with higher board ownership. Similarly, Gulzar and Wang (2011) also argue that higher board ownership strengthens the desire of shareholders for success thereby resulting in higher firm profitability.

2.5.5 Multiple Directorships

Saleh et al. (2020) found two perspectives to analyze the effects of multiple directorships: the busyness hypothesis and the resource dependence theory. The former suggests directors holding multiple board positions may not have adequate time to manage a company, leading to increased agency costs. In contrast, the resource dependence theory posits that holding multiple directorships may signal higher-quality directors who can leverage their experience for valuable insights and oversight. Despite this, some researchers advocate the busyness hypothesis due to negative correlations found between multiple directorships and firm performance. Shamsudin et al. (2018) suggest that directors with diverse backgrounds may overlook management advice due to their multiple commitments, negatively affecting firm performance. Additionally, studies have shown that these directors are often absent from board meetings, resulting in reduced oversight (Chiranga & Chiwira, 2014).

Several studies highlight the variable impacts of multiple directorships. A study on Spanish companies found a nonlinear correlation with firm performance, where a small number of directorships positively impacted performance due to increased skills and motivation, in line with the resource-based theory (Lopez et al., 2014). However, research in India showed that inside directors holding multiple directorships correlated with lower firm performance (Sarkar & Sarkar, 2009). Other studies suggest multiple directorships can weaken board effectiveness, impacting firm performance negatively (Pathak & Sun, 2013). This was further evidenced by Hauser (2018) who found a reduction in busyness correlated with higher profitability.

2.7 Hypotheses Development

The following hypotheses arise after analyzing the different theories and research from earlier studies:

 H_1 : Board size has a significant effect on firm performance.

 H_2 : Board Independence has a significant impact on firm performance.

 H_3 : CEO duality has a significant effect on firm performance.

 H_4 : Board shareholding has a significant impact on firm performance.

 H_5 : Multiple directorships has a significant effect on firm performance.

3. METHODOLOGY

3.1 Research Sample

The data used in this study was gathered from various sources, including Eikon Refinitiv, annual reports, corporate governance reports, and public ownership reports submitted by publicly-listed companies in the Philippines to the Philippine Stock Exchange (PSE). Specifically, financial figures required to construct firm performance indicators and control variables were obtained from Eikon Refinitiv. Additionally, board-related information necessary for analyzing corporate governance characteristics, such as board size, board independence, CEO duality, and multiple directorships, was extracted from the companies' respective annual and corporate governance reports. Data pertaining to board shareholding was sourced from public ownership reports.

Data were analyzed from 2010 to 2019 for all Philippine publicly traded companies, except for financial firms as they adhere to different regulations and accounting standards

which may lead to outliers (Ausloos et al., 2018; Mellado & Saona, 2020). To avoid survivorship bias, firms that had their initial public offering (IPO) after 2010 and firms delisted within the selected timeframe were excluded

3.2. Research Variables

Table 1. Definition of Research Variables

Variable Name	Definition
Return on Assets (ROA)	Measured as net income over total assets
Tobin's Q (TOBINS)	Measured as the sum of the market value of common stocks, the book value of long-term debt and preferred stocks all divided by the total assets
Board Size (BSIZE)	Measured as the number of board of directors on firm's board
Board Independence (BINDEP)	Measured as the number of independent board directors divided by the total number of board of directors
CEO Duality (DUAL)	A dummy variable that takes the value of 1 when the CEO and the Chairman of the Board of a firm is the same person; 0 otherwise
Board Shareholding (SHARE)	Measured as the total number of shares owned by board of directors divided by the outstanding shares of the firm
Multiple Directorships (DIRECT)	Measured as the number of board of directors who sit on different boards divided by the total number of board of directors
Firm Size (FSIZE)	Measured as the logarithmic of the firm's total assets
Leverage (LEV)	Measured as total liabilities divided by total assets

3.2.1 Measure of Firm Performance

Accounting and market-based measures were utilized as our dependent variables to estimate and capture firm performance. For the accounting measure, ROA was utilized to measure the net income divided by total assets. Preceding literature has widely used ROA as an indicator of firm performance (Ichsan et al., 2021; Keyree and Ausloos, 2020; Omondi and Muturi, 2013). According to Omondi and Muturi (2013), ROA is a good indicator of firm performance because it measures the ability of a firm to make use of its

assets to generate income. Meanwhile, for marketbased measure, Tobin's Q was utilized to measure the sum of the market value of common stocks, the book value of long-term debt and preferred stocks all divided by the total assets. Previous academic studies have also utilized tobin's q as an indicator of firm performance because it captures the current assets and future growth potentials of a firm (Keyree and Ausloos, 2020; Tamayo-Torres et al., 2019; Yoo and Managi, 2022).

3.2.2 Measure of Corporate Governance

The independent variables employed in this research are board characteristics which includes board size, board independence, board shareholding, multiple directorships, and CEO duality. Board size is measured as the number of board directors on a firm's board. Board independence is measured as the number of independent directors divided by the total number of board members. Board shareholding is the ratio between total amount of outstanding shares owned by board members and total outstanding shares of the firm. Multiple directorships are measured as the total number of multiple directors divided by the total number of board directors. lastly, CEO duality is a dummy variable that takes the value of 1 when the CEO and Chairman of the board is the same person, and 0 otherwise.

3.2.3 Control Variables

To eliminate misspecification bias in the model, control variables were utilized (Mellado and Saona, 2020). This study used firm size and leverage as control variables. Firm size is measured as the logarithmic of the firm's total assets while leverage is measured as total liabilities divided by total assets. Empirical evidence in past literature indicates that firm size is a major determinant of financial success (Pervan, 2012; Akinho, 2010, Obehioye & Osahon, 2013; DencicMihijalov; Lee, 2009). A study conducted by Akinho (2010) revealed that larger firms are most likely to have higher firm performance. Similar results were also found by Obehioye and Osahon (2013) and Dencic-Mihajalov (2014). This is because larger firms tend to have higher revenues, resulting in higher profitability.

Numerous studies have also examined the relationship between leverage and firm performance. For instance, Ibhagui and Olokoyo (2018) examined the effect of leverage on firm performance of Nigerian publicly-listed firms and found that leverage negatively impacts financial indicators such as ROA and ROE. On the other hand, Iqbal and Usman (2018) also explored this relationship but concluded the opposite as their results show that financial leverage directly influences a firm's performance.

3.3 Model Specification and Estimation

To investigate the relationship between financial performance and corporate governance mechanism, the following models were estimated where the dependent variables are ROA and Tobin's Q in Equation 1 and 2, respectively:

$$\begin{split} ROA_{i,t} &= \beta_0 + \ \rho ROA_{i,t-1} + \beta_1 SIZE_{i,t} + \beta_2 BINDEP_{i,t} + \beta_3 DUAL_{i,t} + \beta_4 SHARE_{i,t} + \beta_5 DIRECT_{i,t} \\ &+ B_6 FSIZE_{i,t} + \beta_8 LEV_{i,t} + \sum_{z=1}^{Z-1} \vartheta_z INDUS_{z,i,t} + \sum_{t=1}^{T-1} \delta_t YEAR_t + \varepsilon_{i,t} \end{split} \tag{1}$$

$$TOBINS_{i,t} = \beta_0 + \rho TOBINS_{i,t-1} + \beta_1 SIZE_{i,t} + \beta_2 BINDEP_{i,t} + \beta_3 DUAL_{i,t} + \beta_4 SHARE_{i,t} + \beta_5 DIRECT_{i,t}$$

$$+ B_6 FSIZE_{i,t} + \beta_8 LEV_{i,t} + \sum_{\tau=1}^{Z-1} \vartheta_z INDUS_{z,i,t} + \sum_{t=1}^{T-1} \delta_t YEAR_t + \varepsilon_{i,t}$$

$$(2)$$

Wintoki et al. (2008) have classified three possible causes of endogeneity, which are unobserved heterogeneity, simultaneity, and dynamic endogeneity. There is an increasing number of studies that all three of these factors are present in the connection between governance and performance. Moreover, by Hermalin & Weishback (2003) expounded that as boards are endogenously chosen by firms, its board characteristics are not considered as exogenous variables. However, Coles et al (2007) conducted simulations of firms that aim to maximize performance and have ownership structures that are endogenous to. The findings of the study revealed that corporate governance as mechanisms is considered as exogenous factors of the firm. Hence, past studies analyzing the relationship between corporate governance and firm performance may be misleading.

These findings may be rooted in the three causes as presented by Wintoki et al (2008). Initially, unobserved diversity could affect both board traits and firm performance, resulting in distorted outcomes in the opposite direction, which is why it is crucial to use fixed-effects or random-effects methods with panel data to adjust for such disregarded and concealed factors. These findings may be rooted in the three causes as presented by Wintoki et al (2008). Initially, unobserved heterogeneity could affect both board traits and firm performance, resulting in distorted outcomes in the opposite direction, which is why it is crucial to use fixed-effects or random-effects methods with panel data to adjust for such disregarded and concealed factors. One way to handle the issue of simultaneity is by utilizing instrumental variable methods. However, finding a suitable and reliable instrument to represent any board variable that may be endogenous can be a difficult task, as noted by Bhagat and Bolton (2013). Dynamic endogenous variables may define simultaneity concerns as previous outcomes of firm performance could impact present board appointments (Winoki et al., 2012). Lastly, the study includes controls for dynamic endogeneity by including lagged values of the dependent variable as additional independent variables, while also avoiding Nickell's (1981) dynamic panel bias.

The dynamic generalized method of moments (GMM) panel specifications was developed by Holtz-Eakin et al (1988), Arellano and Bond (1991), Arellano and Bover (1995) and Blundell and Bond (1998), and they can address the estimation issues caused by unobserved diversity, simultaneity, and dynamic endogeneity. The technique is widely utilized to validate internal instruments during estimation, resulting in reliable and unbiased estimates. Hence, GMM is widely adopted as a tool to account for the said causes of endogenous variability. Despite the previous discourse, there is still a lack of utilizing comprehensive analysis of the governance-performance relationship using dynamic GMM panel specifications while acknowledging the presence of multiple agency conflicts that require simultaneous management in a company. This paper adds to the existing research by expanding on the work of Wintoki et al. (2008) and exploring the relationship between various corporate governance mechanisms and firm performance. The study employs GMM estimation techniques to address endogeneity concerns and provide a clear understanding of the effects of these mechanisms on performance. This approach helps to mitigate the estimation issues that previous studies have faced due to unobservable heterogeneity, simultaneity, and dynamic endogeneity.

Having said these, equations (1) and (2) are estimated using two-step system GMM. As mentioned earlier, there are three econometric problems that must be considered when

analyzing the relationship between corporate governance and firm performance. More specifically, Wintoki et al. (2008) state that endogeneity problems may arise due to unobserved heterogeneity, simultaneity, and dynamic endogeneity. Unlike Ordinary Least Squares (OLS), system GMM addresses these problems by internally transforming the data. To check the validity of our model, we also utilized two diagnostics tests namely Arellano-Bond first and second-order autocorrelation tests and Sargan-Hansen test. These tests ensures that the model free from autocorrelation and are correctly specified (Ullah et al., 2018).

4. RESULTS AND DISCUSSION

Table 2 shows the descriptive statistics to provide an overview of the data used in the study. This presents the number of observations, mean, standard deviation, minimum, and maximum values.

 Table 2. Descriptive Statistics

Tuble 2. Descriptive statistics						
Variables	N	Mean	Std. Dev.	Min	Max	
Return on	1842	0.015	0.143	-0.903	0.311	
Assets (ROA)						
Tobin's Q	1842	19.314	105.78	0.056	908.383	
(TOBINS)						
Board Size	1842	9.107	1.98	4	15	
(BSIZE)						
Board	1842	0.258	0.086	0	0.727	
Independence						
(BINDEP)						
CEO Duality	1842	0.309	0.462	0	1	
(DUAL)						
Board	1842	0.135	0.233	0	0.958	
Shareholding						
(SHARE)						
Multiple	1842	0.418	0.289	0	1	
Directorships						
(DIRECT)						
Firm Size	1842	22.512	2.49	10.985	28.289	
(FSIZE)						
Leverage (LEV)	1842	0.545	1.275	0	20.416	

The return on assets has a mean value of 1.5%. The mean value for the Tobin's ration is 19.314. The maximum value for this is 909.383 which suggests that the market value of this one firm included is significantly higher than the cost of replacing its assets. In other words, the company's assets are worth less than the price investors are willing to pay for the company's shares. The average number of board members in a public company is 9.107 or approximately 9. This shows that on average, firms have 9 board members in the Philippines. Furthermore, the standard deviation for this variable is 1.98 which means that the number of board members vary significantly. The minimum value also indicates that the least number of board members is four for a company.

Concerning board independence, the standard deviation is 0.258 which indicates smaller variability of the sample. Looking at multiple directorships, on average, 41.8% of the companies have directors that also hold directorships in other companies. The standard deviation is 0.289 which means that there is small variation within the firms regarding multiple directorships. The mean for board shareholding is 15% which means that on

average, board directors hold 15% of a firm's equity in the sample. The highest s 95.8% which means that one board director holds 95.8% of the stake of a company in the sample. Regarding board duality, the mean value is 0.309 and given that this is a dummy variable, it can be concluded that more companies do not have the same CEO or Chairman of the Board as one person than the companies that have.

The control variables, firm size and leverage, are also included in Table 2. For firm size, it can be concluded that there is high variability given the standard deviation of 2.49. Surprisingly, the minimum number for leverage is 0 which means that one firm in the sample has no recorded liability or debt at all.

Table 3. *GMM Estimation Results*

	(1)	(2)	
Variables	ROA	TOBINS	
Return on Assets (ROA_{t-1})	0.347**		
	(0.162)		
Tobins Q $(TOBINS_{t-1})$		0.691***	
		(0.0830)	
Board Size (BSIZE)	-0.0194**	9.953	
,	(0.00936)	(10.96)	
Board Independence (BINDEP)	0.00756	110.9	
. , ,	(0.143)	(144.1)	
Multiple Directorships (DIRECT)	-0.0908*	131.8	
	(0.0498)	(86.23)	
Board Shareholding (SHARES)	0.0165	52.97	
5 . ,	(0.0788)	(66.30)	
CEO Duality (DUAL)	-0.00660	-1.088	
• •	(0.0331)	(20.07)	
Firm Size (FSIZE)	0.0186***	-12.18**	
	(0.00603)	(5.958)	
Leverage (LEV)	-0.0224*	10.82*	
	(0.0116)	(6.396)	
Constant	-0.182*	81.13	
	(0.0961)	(79.71)	
Observations	1,615	1,615	
Number of Groups	206	206	
Number of Instruments	65	65	

Notes: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 3 reports GMM estimation results for ROA and Tobin's Q ratio as dependent variables. When ROA was used as a measure of firm performance, board size, multiple directorships, and leverage have been found to have negative and statistical relationships. As for board size, the results deviated from prior literature, which often upheld a positive relationship between board size and financial performance, as evidenced by studies conducted by Kyere et al. (2019), Anderson et al. (2004), Williams et al. (2005), and Haniffa & Hudaib (2006). These studies supported the notion that that larger boards can positively influence financial outcomes by bringing diverse expertise and perspectives to the decision-making process. Aligned with the study's findings on board size and firm performance, Arslan et al. (2010), put forth an alternative interpretation to the negative relationship between board size and firm performance. They posited that the intricacies of communication dynamics within larger boards may be a contributing factor. That is, as board size increases, the potential for communication challenges among members

intensifies. The exchange of ideas, information dissemination, and effective deliberation could become compromised within a larger group of directors. This, in turn, can lead to delayed decision-making processes and hindered responsiveness to rapidly evolving market conditions, culminating in reduced financial performance as reflected by ROA.

The results regarding the negative relationship between multiple directorships and firm performance is parallel to Hundal (2017) where their findings showed that multiple directorships lead to lower firm performance. In this light, Shamsudin et al. (2018) delve into the rationale behind these negative relationships and shed light on the underlying dynamics that contribute to this phenomenon. One notable factor is the potential for directors with multiple directorships to inadvertently overlook or undervalue the advice and guidance provided by a firm's management team. This could lead to a decreased level of oversight and vigilance regarding the company's operations and strategic direction. This is also supported by the busyness theory which posits that directors who hold multiple board positions might not be able to devote adequate time to manage a company which could lead to increased agency costs (Saleh et al., 2020). Consequently, the effectiveness of corporate governance mechanisms may be compromised, potentially leading to suboptimal decisions and reduced firm performance, as proxied by ROA.

The results for firm leverage are consistent with Ibhagui and Olokoyo (2018) where it was concluded that leverage negatively affects financial indicators in Nigerian publicly-listed firms. As a company accumulates significant debt, it becomes obligated to make regular interest payments and repayments of principal, regardless of its profitability. This can place a strain on a firm's cash flow, potentially restricting its ability to invest in growth opportunities or respond effectively to market fluctuations. That said, heightened leverage ratios can elevate the cost of capital for a firm, as lenders demand higher interest rates to compensate for the increased risk associated with lending to a company with significant debt obligations. This can further impede a firm's ability to invest in value-enhancing projects and can ultimately diminish shareholder returns. The negative relationship between leverage and firm performance, underscored in this study, streamlines the need for prudent debt management and capital structure decisions for PSE-listed firms.

Furthermore, the GMM estimation demonstrated a positive and statistically significant correlation between firm size and Return on Assets (ROA). This relationship can be attributed to the inherent advantages enjoyed by larger firms, enabling them to generate elevated revenues that consequently translate into enhanced profitability. This aligns with the insights provided by Dencic-Mihajalov (2014), who expounds that larger firms often possess the capacity to tap into economies of scale and scope, as well as access diverse markets, all of which contribute to their ability to achieve higher ROA figures.

Column 2 demonstrates Tobin's Q ratio as a measure of firm performance (Table 3). The same observation holds for the lagged Tobin's Q ratio regarding the effect of past performance to current performance. Using this measure, it was found that firm size has negative statistical relation with firm performance. This is inconsistent with the results found in Column 1. Similar studies on the relation of firm size and firm performance have also demonstrated positive relations (Pervan, 2012; Akinho, 2010, Obehioye & Osahon, 2013; Dencic-Mihijalov; Lee, 2009).

While the relationship between firm size and performance does not always result in negative statistical relations, the recent findings offer a nuanced view. Multiple studies indicate a positive relationship between firm size and performance (Tornyveya, 2012), while others fail to establish any significant connection. Recent research supports the

perspective of a positive effect, arguing that larger companies tend to have better capabilities to generate profits, thus enhancing future performance (Purwaningsih, 2022). However, studies such as Pallayil and Ambrammal (2022) have shown that the negative relationship between a firm's size and its performance could stem from complications associated with corporate governance. Larger firms may suffer from increased bureaucracy and inefficiencies, resulting in slower decision-making and reduced innovation. Additionally, these firms may find it challenging to adapt quickly to market changes or adopt new technologies due to their size and complexity, which can create internal resistance to change (Al-Moataz & Hussainey, 2013). Furthermore, challenges in implementing effective corporate governance practices are often faced by large firms. Ineffective corporate governance can lead to poor decision-making, conflicts of interest, and a lack of accountability, all of which can negatively impact firm performance (Dahya et al., 1996; ASX Corporate Governance Council, 2007; (Arslan et al., 2010; Zaharia, 2011). Moreover, research indicates that companies with a weak board of directors or a lack of independent directors may be more likely to engage in financial misconduct, harming performance. Similarly, firms with weak internal control systems or a lack of transparency may be more susceptible to fraud and corruption, further impacting performance negatively (Morehead, 2007; Neville et al., 2018; Zaman, 2021).

Interestingly, we find a positive correlation between firm leverage and firm performance, as proxied by the Tobin's Q ratio. Iqbal and Usman (2018) identified a direct influence of financial leverage on firm performance. Echoing such findings, Ibhagui and Olokoyo (2018) highlighted a context-specific dynamic wherein leverage positively affects market performance for small-sized firms, particularly evident in the context of small enterprises in Nigeria. For these smaller companies, the strategic utilization of short-term debt to leverage investments appears to strike a delicate balance between optimizing market results and mitigating potential losses. The nuanced nature of this relationship becomes more pronounced when considering the optimal leveraging strategy for different firm sizes. Ibhagui and Olokoyo's (2018) research indicates that, while larger firms may benefit from relying more on long-term debt and less on short-term debt, thereby minimizing the risk associated with debt fluctuations, this strategy may not hold the same advantages for smaller firms. In the realm of smaller enterprises, the trade-off between leveraging investments and avoiding overburdening debt can prompt the adoption of short-term debt as a means of driving positive market outcomes. Consistent with this perspective, Iqbal and Usman (2018) also suggest that a favorable relationship between financial leverage and firm performance materializes as long as a firm's debts remain within reasonable bounds relative to its equity.

Having said that, the nuance in the relationship between firm leverage and performance, as observed when comparing Tobin's Q with Return on Assets (ROA), is significantly influenced by the distinction between market-based and accounting-based measures of firm performance. The positive relationship between firm leverage and Tobin's Q suggests that, in the eyes of the market, leveraging investments may lead to increased perceived value and growth potential. Higher leverage may signal that the firm is utilizing debt strategically to finance growth opportunities, expand operations, or invest in value-enhancing projects, which can positively impact its market valuation. Investors may interpret such actions as indicative of the firm's confidence in its ability to generate returns that exceed the cost of debt. Conversely, the negative relationship between firm leverage and ROA indicates that, from an accounting standpoint, excessive debt may lead to higher interest payments, potentially compromising the firm's ability to generate profits from its

assets. This might result in reduced net income and lower ROA, which can adversely affect the firm's accounting-based performance evaluation.

5. CONCLUSION

Ensuring robust corporate governance is pivotal as it fosters confidence and trust among stakeholders and shareholders. This, in turn, paves the way for increased investment opportunities and expansion for a company. Effective corporate governance frameworks aid organizations in managing risks and improving their long-term financial standing, with these benefits accumulating over time. While corporate governance has traditionally been a focus in developed nations, this paper aimed to shed light on its significance in a developing country, specifically the Philippines. By doing so, this study contributes significantly to the existing body of knowledge on corporate governance.

Corporate governance encompasses a diverse range of theoretical frameworks, including agency theory, resource dependence theory, stakeholder theory, transaction cost theory, and political theory, which were utilized in this study. These theories offer different viewpoints on the obligations and responsibilities inherent in corporate governance. By drawing upon these perspectives, businesses are able to formulate and implement effective governance approaches.

Outcomes indicate that board size, multiple directorships, and leverage have negative and statistical relationships with firm performance using ROA as a financial measure. Moreover, firm size has a positive and statistical relationship with ROA. This convenes with contemporary literature on corporate governance mechanisms. Firm size has negative statistical relation with firm performance using Tobin's Q ratio as a measure of financial performance. Leverage has also been found to be positively related to firm performance.

Findings show that (board size, multiple directorships, leverage) are only among the variables that affect firm performance. This presents avenues for opportunities in improving the current state of corporate governance laws in the Philippines. The results suggest that the corporate governance mechanisms in the Philippines may not be as vigorous as anticipated. In light of this, regulators may work on improving the existing corporate governance codes in the country, particularly in the areas of multiple directorships, leverage, and board size. To ensure that companies have stronger internal control systems, it is suggested that regulators prioritize this as one of the key arguments for improvement. By focusing on these zones, regulators can foster long-term success of public companies in the Philippines and guarantee that they are able to operate in a way that is accountable and sustainable.

Future research endeavors can extend the time horizon of analysis for firms and apply this framework to other developing nations, thus offering a more comprehensive understanding of how corporate governance mechanisms impact firm performance. By doing so, firms and regulatory bodies can access additional perspectives to inform decision-making processes that foster long-term success and sustainability.

REFERENCES

[1] Al-Moataz, E., & Hussainey, K. (2013). Determinants of Corporate Governance Disclosure in Saudi Corporations. JKAU: Econ. & Adm., 27(2), 411-430. https://doi.org/10.4197/eco.27-2.8

- [2] Ali, S., Naseem, M. A., Jiang, J., Rehman, R. U., Malik, F., & Ahmad, M. I. (2022). "How" and "When" CEO Duality Matter? Case of a Developing Economy. SAGE Open, 12(3), 21582440221116113.
- [3] Alodat, A. Y., Salleh, Z., Hashim, H. A., & Sulong, F. (2022). Corporate governance and firm performance: Empirical evidence from Jordan. Journal of Financial Reporting and Accounting, 20(5), 866-896.
- [4] Amedi, A., & Mustafa, A. (2020). Board Characteristics and Firm Performance: Evidence from Manufacture Sector of Jordan. Accounting Analysis Journal, 9(3), 146-151.
- [5] Ansarada. (2022). A history of corporate governance and why it remains so important. Retrieved from https://www.ansarada.com/blog/history-of-corporate-governance.
- [6] Antolin, R. P. J., Sabay, E. A., & Sarmiento, A. J. B. (2016). Primary determinants of corporate governance disclosures: Evidence from the Philippine publicly listed companies.
- [7] Arellano M, Bond S. (1991) Some tests of specification for panel data: Monte Carlo evidence and an application to employment equation. Review of Economic Studies 58: 277–297.
- [8] Arellano M, Bover O (1995) Another look at the instrumental variable estimation of error component models. Journal of Econometrics 68: 29–51.
- [9] Ausloos, M., Bartolacci, F., Castellano, N. G., & Cerqueti, R. (2018). Exploring how innovation strategies at time of crisis influence performance: A cluster analysis perspective. *Technology Analysis & Strategic Management*, 30(4), 484–497. https://doi.org/10.1080/09537325.2017.1337889
- [10] Bhagat, S., & Bolton, B. (2013). Director ownership, governance, and performance. Journal of Financial and Quantitative Analysis, 48(1), 105–135. https://doi.org/10.1017/S0022109013000045
- [11] Black, B. S., Jang, H., & Kim, W. (2006). Does corporate governance predict firms' market values? Evidence from Korea. Journal of Law, Economics, and Organization, 22(2), 366-413.
- [12] Blundell R, Bond S (1998) Initial conditions and moment restrictions in dynamic panel data models. Journal of Econometrics 87: 115–143.
- [13] Bouteska, A. (2020). Do Board Characteristics affect Bank Performance? Evidence from Eurozone. Journal of Asset Management, 21, 535-548. https://doi.org/10.1057/s41260-020-00181-2
- [14] Boyd, B. (1990). Corporate linkages and organizational environment: A test of the resource dependence model. *Strategic Management Journal*, *11*, 419-430. https://doi.org/10.1002/smj.4250110602
- [15] Chen, G., Chen, X., & Wan, P. (2022). Naive independent directors, corporate governance and firm performance. Frontiers in Psychology, 13.
- [16] Chiranga, N. and Chiwira, O. (2014), "Impact of multiple directorships on performance for companies listed on the Johannesburg Stock Exchange (JSE)", Economics, Vol. 2 No. 6, pp. 378-387, doi: 10.17265/2328-7144/2014.06.003.
- [17] Coles J, Lemmon M, and Meschke F (2007) Structural models and endogeneity in corporate finance: The link between managerial ownership and corporate performance. EFA 2003 Glasgow.

- [18] Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. 1999. Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, 42, 674-686. https://doi.org/10.2307/256988.
- [19] Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. *The Academy of Management Review*, 22(1), 20–47. https://doi.org/10.2307/259223.
- [20] De Ocampo, R. F. (2000, May-June). Corporate ownership and corporate governance: Issues and concerns in the Philippines. Paper presented at the ADB-OECD-World Bank 2nd Asian Roundtable on Corporate Governance, Hong Kong.
- [21] Dong, N., Wang, F., Zhang, J., & Zhou, J. (2020). Ownership structure and real earnings management: Evidence from China. Journal of Accounting and Public Policy, 39(3), 106733. https://doi.org/10.1016/j.jaccpubpol.2020.106733
- [22] Echanis, E. S. (2006). Philippine corporate governance: Issues and reforms. Philippine Management Review, 13.
- [23] Fama, E.F., Jensen, M.C. (1983). Separation of ownership and control. *The Journal of Law & Economics*, 26(2), 301–325. http://dx.doi.org/10.1086/467037
- [24] Fariha, R., Hossain, M., & Ghosh, R. (2021). Board Characteristics, Audit Committee Attributes and Firm Performance: Empirical Evidence from Emerging Economy. Asian Journal of Accounting Research, 7(1), 84-96. https://doi.org/10.1108/AJAR-11-2020-0115
- [25] Farooq, M., Noor, A., & Ali, S. (2022). Corporate governance and firm performance: empirical evidence from Pakistan. Corporate Governance: The International Journal of Business in Society, 22(1), 42-66.
- [26] Ferrer, R. C., & Banderlipe, M. S. (2012). The influence of corporate board characteristics on firm performance of publicly listed property companies in the Philippines. Academy of Accounting and Financial Studies Journal, 16 (4), 123-142. Retrieved from https://animorepository.dlsu.edu.ph/faculty_research/2351
- [27] Galvez, C. R. (2003). Can trust be regulated? Corporate governance in the Philippine context. The SGV Review, 1 (1), 18-26.
- [28] Guluma, T. F. (2021). The impact of corporate governance measures on firm performance: the influences of managerial overconfidence. Future Business Journal, 7(1), 1-18.
- [29] Gulzar, M. A., & Wang, Z. (2011). Corporate governance characteristics and earnings management: Empirical evidence from Chinese listed firms. International of Accounting and Financial Reporting, 1(1), 2162–3082. https://doi.org/10.5296/ijafr.v1i1.854
- [30] Hauser, R. (2018), "Busy directors and firm performance: evidence from mergers", Journal of Financial Economics, Vol. 128 No. 1, pp. 16-37.
- [31] Hermalin BE, Weisbach MS (2003) Board of directors as an endogenously determined institution: A survey of the economics literature. Economic Policy Review, Federal Reserve Bank of New York, April: 7–26.
- [32] Holtz-Eakin D, Newey W and Rosen H (1988) Estimating vector autoregressions with panel data. Econometrica 56: 1371–1395.
- [33] Hundal, S. (2017). Multiple directorships of corporate boards and firm performance in India. *Corporate Ownership & Control*, *14*(4), 150-164. http://dx.doi.org/10.22495/cocv14i4art13

- [34] Ibhagui, O., & Olokoyo, F. (2018). Leverage and firm performance: New evidence on the role of firm size. The North American Journal of Economics and Finance, 45, 57-82. https://doi.org/10.1016/j.najef.2018.02.002
- [35] Ichsan, R.N., Suparmin, S., Yusul, M., Ismal, R., & Sitompul, R. (2021). Determinant of Sharia Bank's Financial Performance during the Covid-19 Pandemic. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(1), 298-309. https://doi.org/10.33258/birci.v4i1.1594
- [36] Iqbal, U., & Usman, M. (2018). Impact of Financial Leverage on Firm Performance: Textile Composite Companies of Pakistan. SEISENSE Journal of Management, 1(2), 70–78. https://doi.org/10.33215/sjom.v1i2.13
- [37] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, *3*(4), 305-360. https://doi.org/10.1007/978-94-009-9257-3_8
- [38] Keyree, M., & Ausloos, M. (2020). Corporate governance and firms financial performance in the United Kingdom. *International Journal of Finance & Economics*, 26(2), 1871-1885. https://doi.org/10.1002/ijfe.1883
- [39] Kyere, M., & Ausloos, M. (2021). Corporate governance and firms financial performance in the United Kingdom. International Journal of Finance & Economics, 26(2), 1871-1885.
- [40] La Rocca, M., Fasano, F., La Rocca, T., & Neha, N. (2023). Women in CEO duality and firm performance in Europe. Journal of Management and Governance, 1-38.
- [41] Lee, J. (2009). Does Size Matter in Firm Performance? Evidence from US Public Firms. International Journal of the Economics of Business, 16(2), 189-203. https://doi.org/10.1080/13571510902917400
- [42] Lee, K.W., & Lee, C.F. (2014). Are multiple directorships beneficial in East Asia? *Accounting & Finance*, 54(3), 999–1032. https://doi.org/10.1111/acfi.12008
- [43] Levrau, A., & Van den Berghe, L. A. A. (2007). Corporate governance and board effectiveness: beyond formalism. The Icfai Journal of Corporate Governance, 6(4), 58-85.
- [44] Maher, M., & Andersson, T. (2000). Corporate governance: effects on firm performance and economic growth. Available at SSRN 218490.
- [45] Mellado, C., & Saona, P. (2020). Real earnings management and corporate governance: a study of Latin America. *Economic Research-Ekonomska Istraživanja*, 33(1), 2229-2268. https://doi.org/10.1080/1331677X.2019.1691930
- [46] Morehead, W. A. (2007). Internal control and governance in non-governmental organizations designed to provide accountability and deter, prevent and detect fraud and corruption. The University of Southern Mississippi.
- [47] Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A cross-national meta-analysis. Journal of Management, 45(6), 2538-2569.
- [48] Nickell, S. (1981). Biases in dynamic models with fixed effects. Econometrica, 49(6), 1417–1426. https://doi.org/10.2307/1911408
- [49] O'Kelley, R. et al., (2023). 2021 Global and Regional Trends in Corporate Governance. Harvard Law School Forum on Corporate Governance. https://corpgov.law.harvard.edu/2021/03/03/2021-global-and-regional-trends-in-corporate-governance/#1b.

- [50] Obehioye, A.H. & O.H. Osahon (2013). Creative accounting and firm's market value in Nigeria. Kuwait Chapter of Arabian Journal of Business and Management Review, 2(3), 38 -50.
- [51] Omondi, M., & Muturi, W. (2013). Factors Affecting the Financial Performance of Listed Companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4(15), 99-104.
- [52] Osman, M., & Samontaray, D. P. (2022). Corporate Governance And Firm Performance of Insurance Companies in the Saudi Market. Journal of Asian Finance, Economics and Business, 9(4), 213-228.
- [53] Pallayil, B., & Ambrammal, S. K. (2022). Size and performance of Indian manufacturing firms: new evidence from dynamic panel system GMM approach. SN Business & Economics, 2(12), 188.
- [54] Paniagua, J., Rivelles, R., & Sapena, J. (2018). Corporate governance and financial performance: The role of ownership and board structure. Journal of Business Research, 89, 229-234.
- [55] Pathak, J. and Sun, J. (2013), "Does investor protection regime affect the effectiveness of outside directorship on the board?", Journal of Multinational Financial Management, Vol. 23 Nos 1-2, pp. 19-33, doi: 10.1016/j.mulfin.2012.10.004.
- [56] Pathan, S., & Faff, R. (2013). Does board structure in banks really affect their performance? Journal of Banking and Finance, 37(5), 1573-1589. https://doi.org/10.1016/j.jbankfin.2012.12.016
- [57] Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies*, 29(4), 411-438. https://doi.org/10.1111/j.1467-6486.1992.tb00672.x
- [58] Pfeffer, J. (1972). Size and composition of corporate boards of directors. *Administrative Science Quarterly, 17*(2), 218-229. https://doi.org/10.2307/2393956
- [59] Pfeffer, J. (1973). Size, composition, and function of hospital boards of directors: A study of Organization Environment Linkage. *Administrative Science Quarterly*, 18(3), 349-364. https://doi.org/10.2307/2391668
- [60] Pfeffer, J. and Salancik, G.R. (1978), The External Control of Organizations: A Resource Dependence Perspective, Harper and Row, New York, New York.
- [61] Purwaningsih, A. (2022). Real Earnings Management Practices in Indonesia: Opportunist or Efficient Earnings Management Practices? *Review of Integrative Business and Economics Research*, *11*(1), 191–200.
- [62] Rouyer, E. (2016), "Family ownership and busy boards: impact on performance", Management Decision, Vol. 54 No. 4, pp. 832-853, doi: 10.1108/MD-04-2015-0144.
- [63] Saleh, M., Surafa, R., Shukeri, S., Nour, A., & Maigosh, Z. (2020). The effect of board multiple directorships and CEO characteristics on firm performance: evidence from Palestine. *Journal of Accounting in Emerging Economies*, *10*(4), 637-654. https://doi.org/10.1108/JAEE-12-2019-0231
- [64] Samans, R. & Nelson, J. (2020). Integrated Corporate Governance: A Practical Guide to Stakeholder Capitalism for Boards of Directors. World Economic Forum.
- [65] Sarkar, J. and Sarkar, S. (2009), "Multiple board appointments and firm performance in emerging economies: evidence from India", Pacific-Basin Finance Journal, Vol. 17 No. 2, pp. 271-293.

- [66] Securities and Exchange Commission (SEC). "Partial Report of the Investigation Conducted by the Commission Pursuant to its Authority under Revised SecuritiesAct, March 23, 2000".
- [67] Securities and Exchange Commission. (2016). SEC Memorandum Circular No. 19 Series of 2016: Code of Corporate Governance for Publicly-listed Companies. https://www.sec.gov.ph/wp-content/uploads/2019/11/2016_memo_circular_no.19.pdf
- [68] Susan, M., Winarto, J., & Gunawan, I. (2022). The Determinants of Corporate Profitability in Indonesia Manufacturing Industry. *Review of Integrative Business and Economics Research*, *11*(1), 184–190.
- [69] Tamayo-Torres, I., Gutierrez-Gutierrez, L., & Ruiz-Moreno, A. (2019). Boosting sustainability and financial performance: the role of supply chain controversies. *International Journal of Production Research*, *57*(11), 3719-3734. https://doi.org/10.1080/00207543.2018.1562248
- [70] Wintoki MB, Linck JS, and Netter JM (2010) Endogeneity and the dynamics of internal corporate governance. CELS 2009 4th Annual Conference on Empirical Legal Studies. Available at SSRN: http://ssm.com/abstract=970986
- [71] Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. Journal of Financial Economics, 105(3), 581–606. https://doi.org/10.1016/j.jfineco.2012.03.005
- [72] World Bank. 2001. Corporate Governance Country Assessment: Republic of the Philippines. © Washington, DC. http://hdl.handle.net/10986/14523 License: CC BY 3.0 IGO.
- [73] Yermack, D. (1996). Higher market valuation of companies with a small board of directors. Journal of Financial Economics, 40(2), 185-211.
- [74] Yoo, S., & Managi, S. (2022). Disclosure or action: Evaluating ESG behavior towards financial performance. Finance Research Letters, 44, 102108. https://doi.org/10.1016/j.frl.2021.102108
- [75] Yu, M. (2022). CEO duality and firm performance: A systematic review and research agenda. European Management Review.
- [76] Zaharia, R. M., & Grundey, D. (2011). Corporate social responsibility in the context of financial crisis: A comparison between Romania and Lithuania. Amfiteatru Economic Journal, 13(29), 195-206.
- [77] Zaman, R., Atawnah, N., Baghdadi, G. A., & Liu, J. (2021). Fiduciary duty or loyalty? Evidence from co-opted boards and corporate misconduct. Journal of Corporate Finance, 70, 102066.
- [78] Zhang, L. (2020). An institutional approach to gender diversity and firm performance. Organization Science, 31(2), 439-457.