EXPLORING THE MODERATING EFFECT OF GENDER DIVERSITY AND THE MEDIATING EFFECT OF GOVERNANCE STYLE ON THE RELATIONSHIP BETWEEN BOARD CHARACTERISTICS AND FINANCIAL OUTCOME

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Abstract

The purpose of the study was to ascertain the moderating and mediating effect of gender diversity and governance style a piece on the relationship between board characteristics and financial performance. The present study employed the quantitative research approach with an exploratory descriptive research design. Exactly 600 self-administered structured questionnaires were distributed to the eligible respondents to complete between May and June 2022. A response rate of 96 percent (n = 576) was obtained following the distribution of the questionnaire to eligible participants. We adopted the STATA software (version 18) to statistically analyze the primary data obtained in the present study. The partial least squares structural equation modelling (PLS-SEM) technique was used to analyze the data. The results identified governance style as a significant mediator in the relationship between board characteristics and financial performance. Gender diversity significantly influenced only the positive relationship between board independence and governance style. The study provides essential insights into the significance of considering and embracing the relevance of corporate governance dimensions such as board committee, board independence, and board diversity on financial performance, whilst appreciating the moderating and mediating contribution of gender diversity and governance style, respectively, on the board characteristics-financial performance relationship. To the researchers' knowledge, this study is one of a kind that integrates gender diversity, knowledge management, and governance style into an examination of the effects of corporate governance on the financial performance of public institutions in a developing country's higher educational context.

Keywords: Corporate Governance, Governance Style, Gender Diversity, Board Characteristics, Financial Performance

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1. INTRODUCTION

Corporate governance contributes significantly to advancing the financial strength of any organization. This is achieved by determining competent management of businesses with a special concern for the need to ensure stability while reconciling the interests of different stakeholders surrounding the organization. In contemporary corporate governance, the composition and functioning of corporate boards have emerged as critical determinants of organizational success and sustainability (Alsurayyi & Alsughayer, 2021). The nexus between board characteristics and financial performance has garnered significant scholarly and practical attention (Alsurayyi & Alsughayer, 2021). Although several dimensions of corporate governance exist, in the current context, board committees, board diversity, and board independence are critically examined in the corporate governance space vis-a-vis their role in impacting financial performance and addressing agency-related issues.

While it is acknowledged that the negation of the corporate governance and firm performance relationship leads to serious financial repercussions (Khan et al., 2019), there is a growing debate that the traditional focus of corporate governance on boards, chief executive officers, and shareholders is inadequate (Banerjee et al., 2021) for realising the financial performance of public organizations. This inadequacy points to the need to demonstrate how this relationship unfolds, including other variables that moderate and mediate this corporate governance-financial relationship. For instance, Mansour et al. (2022) argue that corporate governance frontiers have extended to embrace ethical considerations such as the essence of gender diversity in corporate governance. Studies have shown that gender diversity on boards has a positive influence on organizational performance (Pathan & Faff, 2013; Horak & Cui, 2017). By promoting gender diversity, the Sustainable Development Goal (SDG) of promoting gender equality and empowering women will be positively impacted by increasing the number of seats held by women in the governing bodies of Ghanaian technical universities.

Empirically, corporate governance has been found to minimise the incidence of corporate scandals, institutional failures, and management non-performance (Munhenga & Mbigi, 2022) and to promote organizations' financial sustainability, shareholder interests, and the retention of clients of organizations (Galema et al., 2012). It can be argued that by avoiding institutional failures and promoting the long-term financial sustainability of organizations, they will be capable of recruiting, appointing, and retaining their workforce in the long term, consequently preserving decent work. Moreover, corporate governance affects the performance of public institutions by increasing the efficiency and effectiveness of their decision-making processes (Munhenga & Mbigi, 2022). Furthermore, corporate governance is credited with improving the capacity of organizations to respond to the competing needs of multiple stakeholders in ways that increase the value for its shareholders, reduce the costs of operations, ensure the generation of value for money, minimize fraud and embezzlements, generate surplus and maintain the sustainability of organizations (Thrikawala, 2016). By promoting good governance, the SDG of developing global partnerships for development will also be impacted positively by ensuring an open, rule-based, and predictable financial system in the Ghanaian public sector. Regarding efficient decision-making, Brown and Gladwell (2009) argue that an effective corporate governance system can prevent future organizational failures through improved decision-making by the board. Similarly, Thrikawala (2016) observes that shareholder value tends to be increased through the prevention of conflicts of interest between principal and agent and the minimization of fraudulent behavior under a functioning corporate governance system.

Although the poor financial performance of Ghanaian public institutions has multiple causal factors such as corruption and financial impropriety issues (Tawiah et al., 2023), weak leadership and governance structures (Farazmand, 2015), and overreliance on external donors (Zavattaro, 2013), the chief contributing factor that has been widely reported in the literature is poor corporate governance (Adams et al., 2019; Nana Yaw Simpson, 2014; Bonney, 2015). For instance, Abebe Zelalem et al. (2022) affirm that corporate governance challenges, which lead to financial mismanagement, are the chief explanatory factor for the persistent financial performance declines in public institutions.

A major research question guiding this study is:

RQ: How does gender diversity moderate, and governance style mediate the relationship between board characteristics and financial outcome?

By addressing this research question, the study aims to provide deeper insights into the interactive and sequential effects of board composition, gender diversity, and governance mechanisms on firm performance. The present study explored the relationship between board characteristics such as board independence, board committee, and board diversity on the financial performance of academic institutions, whilst ascertaining the moderating and mediating effect of gender diversity and governance style apiece on the foregoing relationship.

This paper is structured into five major sections. Section 1 presents the introduction and background of the study, whilst highlighting the major research question and aim of the paper. Section 2 discusses the theoretical and empirical development and hypotheses of the study. Section 3 comprises the methodology employed to ensure the conduct of the research. Sub-areas such as research design, research approach, population, sample size, and statistical analysis were emphasized. Section 4 highlights the results obtained in the study. Section 5 discusses the main findings. Section 6 provides theoretical contributions, limitations, and future perspectives as well as practical implications and conclusions.

2. THEORETICAL DEVELOPMENT AND HYPOTHESES

2.1. Theoretical and conceptual framework

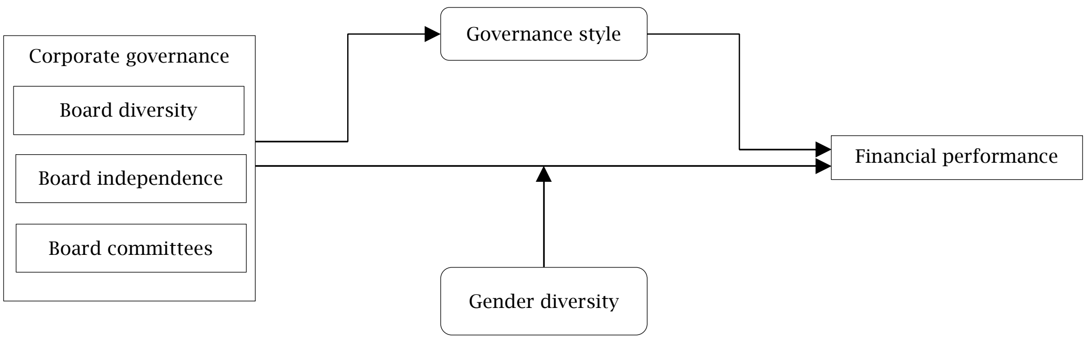
The board characteristics-firm performance relationship has been extensively studied in existing literature. Although debatable, the most proposed theory that best describes the foregoing relationship is the resource dependency theory, followed by the agency theory. The theory discloses that the board of directors is needed to help the organization respond to and adapt to constraints available in the operating environment (Pugliese et al., 2014). The resource dependence theory seeks to improve the coordination among different organizations, enable an organization's access to funds, and improve the reputation of firms through networking. The theory posits that the goal of the board is to make use of the knowledge base of members of the board to improve the process of governance, enhance the flow of needed resources into the organization, and become a tool that drives increased performance. According to Pfeffer and Salancik (2015), the board of directors has the potential to help the acquisition and sustenance of essential resources that an organization needs to survive. It is explained that the networks of board members in both personal and professional circles are advantageous to the survival of an organization because the board members offer the organization access to information and help minimize the uncertainty in the organization.

The principal focus of the resource dependency theory has been limited to the examination of how the size and diversity of the board of directors indicate their capability to make critical resources available to the organization, however, the current study incorporates two other dimensions of corporate governance, viz., board independence and board committee. Therefore, the resource dependency theory aids in explaining the role of board size and diversity in helping to link a firm to critical resources in its operational environment and to produce important information for management with the evaluation of the organization by influential others. For instance, Hillman and Dalziel (2003) affirmed that the board of directors provides myriad services such as counsel, advice, and legitimacy to an organization, usually by leveraging vital resources gained from the external environment. A diversified board provides much more varied and crucial resources for better decision-making, resulting in better firm performance (Hillman et al., 2000). The theory provides insights into explaining board behavior concerning the external environment of organizations by emphasizing the ability of the board of directors to connect an organization with critical resources in its environment.

This theory, by introducing a critical dimension to the debate on corporate governance, accessibility to resources, and the separation of ownership and control, indicates that a board of directors generally works as a link. Again, the theory points out that, in real practical terms, organizations usually tend to reduce the uncertainty of external influences to ensure that resources are available for their survival and development. By implication, this theory seems to suggest that the issue of the dichotomy between executive and non-executive directors is irrelevant. However, board efficiency is achieved through the presence of the organization's board members on the boards of other organizations to establish relationships to have access to resources in the form of information, which could then be utilized to the organization's advantage.

The conceptual framework (Figure 1) of the study reports the relationship between dependent, independent, mediating, and moderating variables. The conceptual framework reported the relationship between board committees and financial performance as the first hypothesis (*H1*), the relationship between board diversity and financial performance was reported as the second hypothesis (*H2*), and the relationship between board independence and financial performance was noted as the third hypothesis (*H3*). Further, the mediating effect of governance style on the relationship between board characteristics and financial performance was noted as the fourth hypothesis (*H4*), whereas the moderating effect of gender diversity on the relationship between board characteristics and financial performance was reported as the last hypothesis (*H5*).

Figure 1. The conceptual framework



2.2. Influence of board characteristics on a firm's financial performance

2.2.1. Board committee and financial performance

Board committees are organs of the board established to focus on specific aspects of governance that are considered problematic (The Committee on Financial Aspects and Corporate Governance, 1992). The Committee on Financial Aspects and Corporate Governance (1992) recommends that board committees should be deployed as a mechanism for enhancing the effectiveness of the board in the exercise of its control functions. This allows for the realization of the division of labour and specialization within the board to enhance its effectiveness and timely decision-making. Board committees support the oversight function of the board and provide three benefits, namely specialized capabilities and organization-specific knowledge, greater efficiency and problem-solving, and the potential to improve board accountability to stakeholders (Chen & Wu, 2016). One would expect these benefits to positively impact the financial performance of public institutions, which are mostly compromised by bureaucratic decision-making and slow decision-making. For the financial performance purposes of the technical universities, the finance and audit committees were explored in the present study. One would expect that, given the prolonged incidence of financial underperformance of these institutions, their governing boards will comprise experts in finance and audit to bring the situation under control.

A study conducted by Abbott et al. (2000) established the relationship between internal audits and measures of financial performance (such as return on assets [ROA] and return on equity [ROE]). The authors admitted that the activities of the internal audit committee are directly involved in propelling the financial performance of an organization, as evidenced by an increase in the return on assets and return on equity. It was further recommended by the authors that every organization should have a robust audit committee to steer the financial affairs of the company (Abbott et al., 2000). Although Ernst & Young (2007) stated that the majority of the study participants (comprising mainly audit executives) confirmed that their internal audit committee function requires improvement, it was observed that having a robust audit committee can significantly advance the financial performance of an organization. Aldamen et al. (2011), assessing the linkage between a firm's financial performance and the characteristics of an audit committee, also showed that an audit committee where members have adequate financial expertise and working experience is most likely to positively impact the working and financial performance of the organization. Further, additional findings from the study established that an audit committee wherein members comprise a block holder, a chairman, as well as more experienced committee members, positively improved financial performance (Aldamen et al., 2011).

H1: Board committees (finance and audit committees) have a positive and significant effect on the financial performance of these institutions.

2.2.2. Board diversity and financial performance

Over the past several decades, the impact of board diversity on the financial performance of myriad organizations has been well-explored (Carter et al., 2003; Rhode & Packel, 2012). Previous researchers have categorized board diversity as sociodemographic diversity (such as gender, age, race, and marital status) and cognitive diversity, for example, work experience and educational status (Erhardt et al., 2003; Kang et al., 2007). A study was conducted by Kılıç and Kuzey (2016) to ascertain the relationship between board size and firm performance using panel data. The authors revealed that there was no statistically significant association between board size and the firm's financial performance (Kılıç & Kuzey, 2016). This was consistent with the work of Wahba (2015). Wahba (2015) also investigated the synergic effect of board diversity on financial performance. The author adopted the least squares method to analyze panel data (ranging from 2008 to 2010) obtained from firms in Egypt. Following the analysis and further examination, the authors concluded that board diversity, comprising sociodemographic diversity and cognitive diversity, had no impact on firm financial performance (Wahba, 2015).

Majeed et al. (2020) also enquired about the influence of board diversity on the financial performance of firms in Pakistan using secondary annual panel data. Contrary to the findings of previous authors, Majeed et al. (2020) showed that board diversity was significantly related to a firm's financial performance. Similarly, Topal and Dogan (2014) found out that ROA plus the Altman Z score (which represents measures of financial performance) were significantly related to the diversity of the board. The resource dependency theory has predicted that board diversity, such as the proportion of executive to non-executive members as well as gender diversity in a firm, can positively improve a firm's financial performance (Muchemwa et al., 2016). Muchemwa et al. (2016) also analyzed data from 2006 to 2012 to assess the relationship between board diversity and financial performance. Findings from the study analysis indicated that board diversity was not significantly related to Tobin's Q and ROA (Muchemwa et al., 2016). Bebeji et al. (2015) documented that an increase or variation in board size negatively impacted the financial performance of the organization. Consequently, a reduction in ROA and ROE was observed as the board size decreased. This was in resonance with the results published by Topal and Dogan (2014) and EmadEldeen et al. (2021).

H2: Board diversity has a positive and significant effect on the financial performance of Ghanaian technical universities.

2.2.3. Board independence and financial performance

Board independence refers to the proportion of outside directors to the total number of directors serving on the board (Ganguli & Guha Deb, 2016). Studies have shown that a higher number of outside directors than inside directors improves the integrity of decision-making (Desender et al., 2016) and enhances board monitoring and supervision of executive and top management to the benefit of shareholders (Catapan, 2024). Corporate governance theorists argue that boards composed largely of independent directors help to achieve better financial performance, as they provide a new perspective to management decisions as well as necessary oversight and alignment of management interests with stakeholders' interests (Claessens & Yurtoglu, 2012).

In today's global business environment, companies are doubling down on their efforts to maintain a strong track record of growth to attract investors eager to fund their companies' future investment projects. Stability and profitability are important elements affecting the decision to invest in businesses in the recent competitive business environment (Qadorah & Fadzil, 2018). This explains why failing businesses are unable to raise funding for their investment projects. This circumstance has the potential to harm not only certain businesses but also the whole economy. Governments all over the world have been stepping up efforts to develop corporate governance measures to ensure a stable economic climate (Ginesti et al., 2021).

Existing literature (Chahine & Filatotchev, 2008; Chahine & Saade, 2011; Bell et al., 2012; Chancharat et al., 2012; Chahine & Goergen, 2013) has unraveled the impact of board independence on the financial performance of an organization. The majority of the studies explored the role board independence has on the financial performance of an organization only in advanced countries like the United States and the United Kingdom (Zattoni et al., 2017). In this regard, most studies assessing the impact of board independence on the financial performance of an organization summarize that board independence may be inversely proportional to the financial performance of any firm (Chahine & Filatotchev, 2008; Bell et al., 2012; Chancharat et al., 2012). Very little is known about the relationship between board independence and financial performance among organizations in developing countries like Ghana. Currently, research on the impact of board independence on financial performance has been extended to other countries, with results that are inconsistent with those obtained from developed countries (Lin & Chuang, 2011; Bertoni et al., 2014).

Zattoni et al. (2017) measured board independence as the fraction of directors (non-executive directors) serving on the board per the overall number of board members to explore the influence of board independence on the financial performance of an organization. Zattoni et al. (2017) reported that a very weak relationship existed between board independence and financial performance. On the contrary, Mishra and Nielsen (2000) regressed the financial performance of an organization on board Independence and noted that board independence positively or directly influenced the firm's financial performance. A similar study by Qadorah and Fadzil (2018) showed that there was a strong positive correlation between board independence and the firm's financial performance (thus an increase in the return on assets). The scholars further explained that observing the responsibility performed by the independent board may positively impact the financial performance of a firm. According to Bosse and Phillips (2013), having an independent board of directors adds value to a company by increasing responsibility, providing self-governance judgment, cumulative business connections, especially between the board members and other executives, plus curbing the authorities of directors and board chairman which is already excessively powerful in many companies (Bosse & Phillips, 2013). As a result, when board members are independent of management, they may be able to provide superior benefits to the firm's financial performance. On the other hand, Ramachandran et al. (2015) discovered that greater board of director independence had a detrimental impact on business financial performance. The authors recommended that firms should make it a point to involve external directors whose decisions are free from bias and favoritism to help advance the financial performance of an organization (Ramachandran et al., 2015).

H3: Board independence has a positive and significant effect on the financial performance of these universities.

2.2.4. Mediating effect of governance style on the relationship between board characteristics and financial performance

Governance style refers to how organizations are purposively guided and steered by the board of directors in representing and protecting stakeholders' interests (Kooiman, 2020). The governance style ranges from the market, hierarchical, network, or hybrid styles (Lowndes & Skelcher, 1998). The hybrid style of governance seems to be popular in recent studies because of its focus on institutional settings where public and private sector actors operate according to public interests (Johnason & Vakkuri, 2017). According to Laihonen and Mäntylä (2018), hybrids are often able to address problems that individual actors are not able to solve independently. Poor financial performance is prevalent across technical universities, suggesting the existence of challenges that warrant external solutions such as the hybrid governance model.

Although there is an increasing emphasis on governance concerns such as board composition or leadership structure, the results in terms of business performance remain uncertain (Dalton et al., 1998). Statistical analysis from existing literature reveals favourable associations between board characteristics and company performance, showing reverse associations and no statistically significant correlation (Dalton et al., 1998). "Conflicting rustles in the literature may be wholly manufactured" (Hunter et al., 1990, p. 28).

Notwithstanding, compliance with corporate governance makes an organization more appealing since it is governed and directed visibly (Alexander, 2006). Recent events have provided abundant evidence that poor corporate governance norms in several firms may have contributed to their downfall. Inadequate corporate governance enhances a company's risk profile and exposes the firm, particularly lending institutions, to a higher chance of default. Banks, financial organizations, and academic institutions must adhere to formal (or enforced) corporate governance processes since poor or inadequate corporate governance standards usually result in ineffective risk management and, as a result, financial instability (Singh & Pillai, 2022).

H4: Governance style (hybrid governance) partially mediates the relationship between board characteristics and the financial performance of these institutions.

2.2.5. Moderating effect of gender diversity on the relationship between board characteristics and financial performance

A substantial volume of existing studies has reported that gender diversity positively contributes to improving the relationship between various dimensions of corporate governance (such as board committees, board independence, and board diversity) and financial performance. Regarding board committees and financial performance, empirical evidence suggests that a committee comprised of more females than males or a balance between male and female board members can enhance governance practices, improve decision-making, and strengthen stakeholder engagement. For instance, Srinidhi et al. (2011) opined that gender diversity in audit committees is linked to higher financial reporting quality and a reduced incidence of financial restatements as diverse perspectives foster greater scrutiny and diligence (Srinidhi et al., 2011). Similar studies have also indicated that gender diversity is positively related to more balanced and equitable executive compensation policies, which can align better with an organization's long-term strategic goal (Joecks et al., 2013). Some scholars believe that the moderating effect of gender diversity on financial performance is instigated by contextual factors. For example, Torchia et al. (2011) mentioned that the positive effects of gender-diverse committees are prominent in institutions that are innovation-driven, wherein diverse perspectives are critical to drive creativity and strategic thinking

(Torchia et al., 2011). The incorporation of gender diversity in board committees not only enhances governance quality but also positively influences financial performance, underscoring the need for inclusive and diverse board practices.

Gender diversity significantly influences the relationship between board independence and financial performance. It is well established that the presence of independent directors is essential for effective corporate governance due to their capability to provide unbiased oversight and protect shareholders' interests. The inclusion of gender diversity in independent committees such as audit and financial committees improves the quality of oversight and decision-making. Notably, research by Adams and Ferreira (2009) indicated that gender-diverse boards are more diligent and have better attendance records, thereby advancing board effectiveness. In addition, Srinidhi et al. (2011) found that audit committees with more female members are linked with higher financial reporting quality, as diverse perspectives lead to more rigorous scrutiny and reduced likelihood of financial restatement. Whereas the extent of the impact of gender diversity on the relationship between board independence and financial performance varies depending on industry, culture, and the type of firm, it is factual from existing studies that gender diversity enhances the effectiveness of independent committees, leading to better governance and improved financial performance.

H5: Gender diversity on the board positively and significantly moderates the relationship between board characteristics and the financial performance of these institutions.

3. RESEARCH METHODOLOGY

3.1. Research design and approach

A quantitative research approach with an explorative descriptive research design was adopted in the present study to comprehend the effect of board committees, board diversity, and board independence on the financial performance of technical universities in Ghana, with gender diversity and governance style as moderating and mediating factors apiece.

3.2. Target population, sample size, and procedures

The target population for the present study encompassed all seven Technical Universities (Accra Technical University, Ho Technical University, Tamale Technical University, Takoradi Technical University, Suyani Technical University, Cape Coast Technical University, and Kumasi Technical University) in Ghana. We used the purposive sampling technique to recruit 576 participants for the study. The participants comprised council members (n = 128), senior management (for example, Vice Chancellor, Registrar, Pro Vice Chancellor, Librarian, Director of Audit, Director of Finance, etc.) (n = 47), finance and audit committee members (n = 129), and finance and audit committee staff (n = 272) were recruited from all the seven Technical Universities in Ghana.

Exactly 600 self-administered structured questionnaires were distributed to the eligible respondents to complete between May and June 2022. Thus, we approximately used three continuous months to collect and collate the entire data from the respondents. Out of the 600 administered questionnaires, 576 completed forms were found to be usable, representing a response rate of 96%.

3.3. Data analysis

We adopted the STATA software (version 18) to statistically analyze the primary data obtained in the present study. Particularly, we examined frequencies, percentages, collinearity, construct reliability, convergent and divergent validity, and direct and indirect effects of variables to achieve the aim of the study.

The indirect effects of mediation and moderation were also analyzed in structural equation modelling (SEM) by determining significant levels between independent and dependent variables and drawing on bootstrapping techniques. We used the partial least squares structural equation modelling (PLS-SEM) to evaluate the validity and reliability of the measurements (Hair et al., 2019; Henseler et al., 2015). Thus, reliability and validity analyses were conducted to test the appropriateness of the various scales used to measure the constructs explored in this study. Following the establishment of acceptable and satisfactory construct reliabilities and convergent validities for all the constructs, the measurement model was tested for discriminant validity. Discriminant validities were established using both the Fornell-Larcker criterion and Heterotrait-Monotrait (HTMT) technique (Fornell & Larcker, 1981; Hair et al., 2017; Henseler et al., 2015). The Fornell-Larcker criterion states that a construct demonstrates adequate discriminant validity if the square root of its average variance extracted, AVE (diagonal values) is greater than the correlations it shares with other constructs (off-diagonal values in the corresponding row or column). This shows that the construct shares more variance with its indicators than with other constructs (Fornell & Larcker, 1981).

4. RESULTS

4.1. Characteristics of the study respondents

The social and demographic characteristics of the respondents were explored, and the findings were summarized in Table 1. The demographic profile exhibits a predominant male representation (63.2%) across the sampled population, with a significant concentration in the age groups of 21–40 (45.5%) and 41–60 (50.7%), indicating a mature participant base. The educational qualifications of respondents are notably high, with a majority holding Bachelor's (41.3%) or Master's degrees (44.3%), reflecting a well-educated demographic. The respondents are primarily engaged in finance/internal audit roles (47.2%), alongside substantial representation from council members (22.2%) and finance/audit committee members (22.4%). Experience levels are varied, with a notable plurality (42.2%) possessing 5–10 years of experience in council/committee/management or internal audit/finance roles. Board size predominantly falls within the 21–25 range (60.2%), and the executive management's representation on the council is overwhelmingly in the 25–50% bracket (86.1%). However, women's representation on the council remains significantly low, with 70.7% of councils having 0–25% female representation, highlighting a gender disparity in governance positions.

Table 1. Demographic profile of respondents

Characteristics	Frequency	Percent
Gender		
Female	212	36.8
Male	364	63.2
Total	576	100.0
Age group		
Below 20	2	0.3
21–40	262	45.5
41–60	292	50.7
Above 60	20	3.5
Total	576	100.0
The highest level of educational qualification		
Senior secondary/high school	1	0.2
Diploma/Higher National Diploma (HND)	42	7.3
Bachelor's degree	238	41.3
Master's degree	255	44.3
Doctoral degree	32	5.6
Institute of Chartered Accountants Ghana (ICAG)	8	1.4
Total	576	100.0
Your current work position		
Council member	128	22.2
Finance/Audit committee member	129	22.4
Finance/Internal audit staff	272	47.2
Senior/Executive management member	47	8.2
Total	576	100.0
Number of years of experience as a council/committee/management member or internal audit/finance staff		
Less than 5	165	28.6
5–10	243	42.2
11–15	132	22.9
More than 15	36	6.3
Total	576	100.0
Board size		
16–20	229	39.8
21–25	347	60.2
Total	576	100.0
Proportion of executive management serving on the council		
0–25%	80	13.9
25–50%	496	86.1
Total	576	100.0
Proportion of women serving on the council		
0–25%	407	70.7
25–50%	169	29.3
Total	576	100.0

4.2. Measurement model assessment

Our evaluation of the measurement model, employing the PLS-SEM approach, affirms the adequacy of our study constructs in terms of collinearity, reliability, and validity. Specifically, the collinearity assessment through variance inflation factor (VIF) values (Table 2) ranged from 1.295 to 2.157 across constructs, suggesting no collinearity concerns, as all values are well below the threshold of 5 (Hair et al., 2017). Construct reliability was substantiated by satisfactory levels of Cronbach's alpha (ranging from 0.737 to 0.879) and composite reliability (rho_c) (ranging from 0.832 to 0.903), all exceeding the commonly accepted benchmark of 0.7 (Kline, 1999). Furthermore, the AVE values exceeded the 0.5 criterion, establishing a convergent validity for the constructs (Fornell & Larcker, 1981). Table 3 represents a proof of the discriminant validity via the HTMT, where all HTMT values were below the conservative threshold of 0.85 (Henseler et al., 2015), suggesting distinctiveness among the constructs. Gender diversity, assessed as a single-item construct, inherently avoids issues of collinearity and demonstrates the model's simplicity and focus. Collectively, the foregoing findings affirm the reliability and validity of the measurement model, setting a robust foundation for subsequent structural model analysis.

Table 2. Collinearity, construct reliability, and convergent validity assessment

Latent variable	Loadings	VIF	Cronbach's alpha	Composite reliability (rho_c)	AVE
Board committees (BC)	0.714–0.814	1.332–1.723	0.763	0.849	0.586
Board diversity (BD)	0.656–0.766	1.365–1.600	0.750	0.832	0.511
Board independence (BI)	0.657–0.802	1.295–1.633	0.737	0.836	0.561
Gender diversity (GD)	1-Item	1.000	1-Item	1-Item	1-Item
Financial performance (FP)	0.622–0.762	1.522–1.675	0.754	0.833	0.501
Governance style (GS)	0.685–0.772	1.698–2.157	0.879	0.903	0.509

Table 3. HTMT results for discriminant validity

Latent variable	*BC*	*BD*	*BI*	*FP*	*GD*	*GS*
BC						
BD	0.637					
BI	0.682	0.723				
FP	0.551	0.654	0.601			
GD	0.156	0.135	0.196	0.264		
GS	0.580	0.635	0.666	0.630	0.248	

4.3. Structural model assessment

The structural model assessment, depicted in Table 4 and illustrated in Figure 2, reveals significant direct effects between board characteristics and financial performance. The direct effect of board diversity on financial performance was positively significant, indicating that diverse boards are associated with improved financial outcomes (β = 0.204; t = 3.895; p < 0.001; confidence interval, CI = 0.098 to 0.302). This result underscores the beneficial impact of diversity in enhancing financial performance. Similarly, the influence of board diversity on governance style was pronounced (β = 0.290; t = 5.822; p < 0.001; CI = 0.189 to 0.383), suggesting that diversity within boards also plays a critical role in shaping the governance approaches adopted by firms. Board independence's effect on financial performance, although positive, was somewhat more modest (β = 0.141; t = 2.335; p = 0.020; CI = 0.021 to 0.256), indicating that while independence was valuable for financial outcomes, its impact was less pronounced than that of diversity. The path from board independence to governance style also shows a significant positive relationship (β = 0.223; t = 3.937; p < 0.001; CI = 0.108 to 0.332), reinforcing the notion that independent boards contribute to the adoption of effective governance styles. Board committees' influence on financial performance was not statistically significant (β = 0.125; t = 1.719; p = 0.086; CI = -0.016 to 0.272), suggesting that the presence and functioning of board committees might not directly impact financial performance within the scope of this study. However, the board committees' positive effect on governance style was significant (β = 0.202; t = 4.207; p < 0.001; CI = 0.106 to 0.294), indicating that the structure and activity of board committees play a crucial role in governance style. The direct effects of gender diversity on both financial performance (β = 0.282; t = 3.745; p < 0.001; CI = 0.132 to 0.428) and governance style (β = 0.261; t = 3.383; p = 0.001; CI = 0.104 to 0.404) highlight the substantial role gender diversity plays in enhancing both financial performance and governance quality.

Our model assessment further identified governance style as a significant mediator in the relationship between board characteristics and financial performance. The mediated paths demonstrated the transformative impact of governance style, with BD -> GS -> FP (β = 0.073; t = 3.280; p = 0.001; CI = 0.036 to 0.124), BI -> GS -> FP (β = 0.056; t = 2.758; p = 0.006; CI = 0.023 to 0.105), BC -> GS -> FP (β = 0.051; t = 2.907; p = 0.004; CI = 0.023 to 0.093), and GD -> GS -> FP (β = 0.066; t = 3.388; p = 0.001; CI = 0.036 to 0.113), substantiating governance style as a critical mechanism through which board characteristics influence financial performance.

Furthermore, our analysis of the moderating effects of gender diversity on the relationship between board characteristics and outcomes (financial performance and governance style) reveals a complex interplay, with gender diversity enhancing only one relationship while not significantly affecting others (Table 5 and Figure 3). Precisely, the interaction between gender diversity and board diversity in predicting financial performance, though positive, did not reach statistical significance (β = 0.178; t = 1.636; p = 0.102; CI = -0.023 to 0.402), suggesting that the positive effect of board diversity on financial performance is not significantly altered by gender diversity within the sampled firms. Conversely, the negative coefficient for GD × BI -> FP (β = -0.155; t = 1.422; p = 0.155; CI = -0.355 to 0.070) indicated a potential adverse effect of gender diversity on the influence of board independence on financial performance, although this effect is also not statistically significant. In the context of governance style, the interaction term GD × BI -> GS demonstrated a significant positive effect (β = 0.230; t = 2.246; p = 0.025; CI = 0.036 to 0.437), suggesting that gender diversity within boards enhances the positive impact of board independence on governance style. This finding highlights the importance of gender diversity in strengthening governance mechanisms, as visualized through the simple slope analysis in Figure 2. On the other hand, the interactions of gender diversity with board diversity and board committees in predicting governance style (β = -0.148; t = 1.409; p = 0.159; CI = -0.341 to 0.075 and β = 0.022; t = 0.177; p = 0.860; CI = -0.224 to 0.273, respectively) did not reveal statistically significant effects, indicating that gender diversity does not substantially modify the relationships between these board characteristics and governance style.

Table 4. Direct and mediating effects results

Path	*β*	*SE*	*t-statistics*	*p-values*	*LCI (2.50%)*	*UCI (97.50%)*
Direct effects						
BD -> FP	0.204	0.052	3.895	0.000	0.098	0.302
BI -> FP	0.141	0.060	2.335	0.020	0.021	0.256
BC -> FP	0.125	0.073	1.719	0.086	-0.016	0.272
BD -> GS	0.290	0.050	5.822	0.000	0.189	0.383
BI -> GS	0.223	0.057	3.937	0.000	0.108	0.332
BC -> GS	0.202	0.048	4.207	0.000	0.106	0.294
GD -> FP	0.282	0.075	3.745	0.000	0.132	0.428
GS -> FP	0.253	0.061	4.113	0.000	0.136	0.374
GD -> GS	0.261	0.077	3.383	0.001	0.104	0.404
Mediating effect of governance style						
BD -> GS -> FP	0.073	0.022	3.280	0.001	0.036	0.124
BI -> GS -> FP	0.056	0.020	2.758	0.006	0.023	0.105
BC -> GS -> FP	0.051	0.018	2.907	0.004	0.023	0.093
GD -> GS -> FP	0.066	0.019	3.388	0.001	0.036	0.113

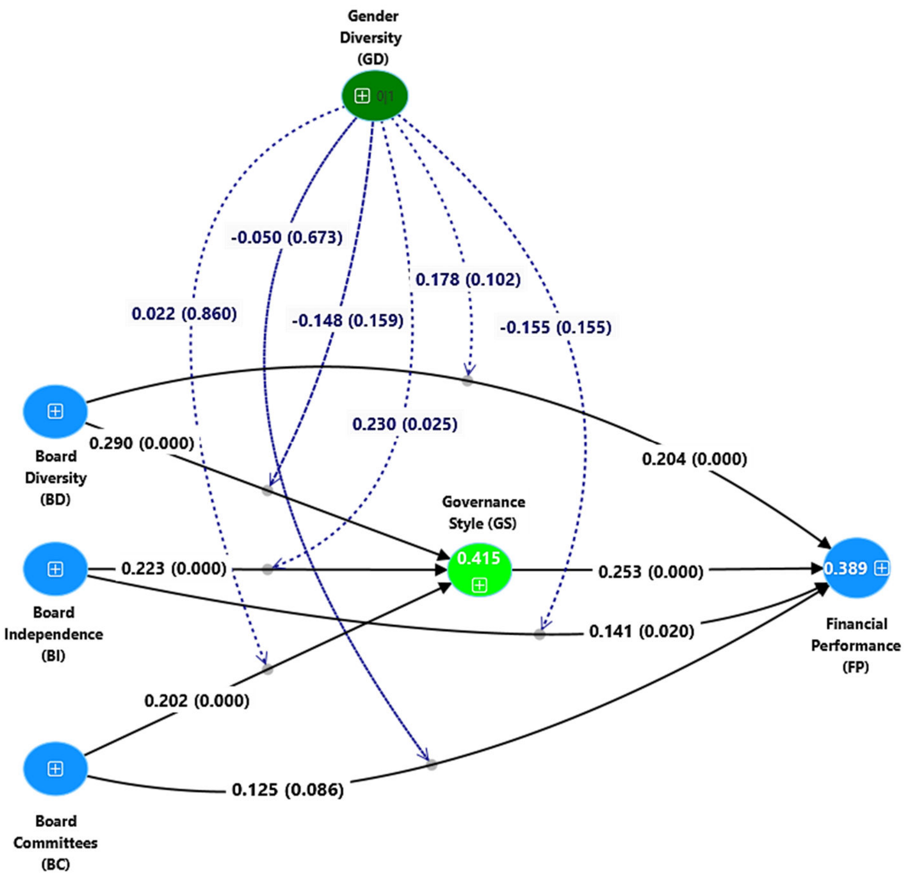
Note: LCI — Lower confidence interval, UCI — Upper confidence interval.

Table 5. Moderating effects of gender diversity

Path	*β*	*SE*	*t-statistics*	*p-values*	*LCI (2.50%)*	*UCI (97.50%)*
GD × BD -> FP	0.178	0.109	1.636	0.102	-0.023	0.402
GD × BI -> FP	-0.155	0.109	1.422	0.155	-0.355	0.070
GD × BC -> FP	-0.050	0.117	0.422	0.673	-0.294	0.166
GD × BD -> GS	-0.148	0.105	1.409	0.159	-0.341	0.075
GD × BI -> GS	0.230	0.102	2.246	0.025	0.036	0.437
GD × BC -> GS	0.022	0.126	0.177	0.860	-0.224	0.273

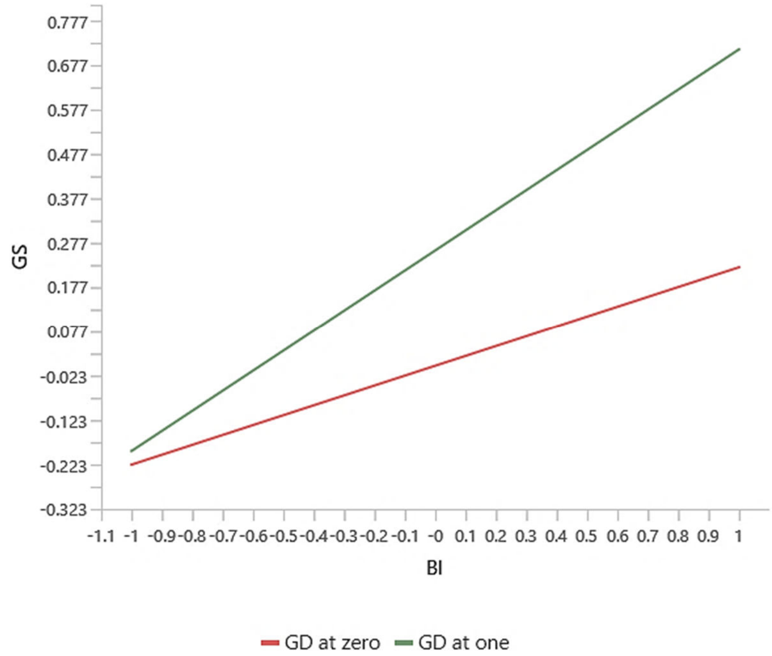
Note: LCI — Lower confidence interval, UCI — Upper confidence interval.

Figure 2. Structural model result



Note: Model summary (SRMR) = 0.070; Q^2 predict for FP and GS = 0.315, 0.383, respectively; R^2 for FP and GS = 0.389, 0.415, respectively.

Figure 3. Simple slope for the moderating effect of gender diversity on the board independence and governance style relationship



5. DISCUSSION

Findings from our study demonstrated a significant direct effect between board characteristics and financial performance. Notably, it was established that a positive significant association existed between board diversity and financial performance. This finding highlights that the financial performance of the sampled academic institutions was substantially influenced by a diverse board. Our results were in concordance with a previous similar study conducted by Song et al. (2020) wherein the authors comprehensively investigated the relationship between board diversity and firm performance. According to research conducted by Song et al. (2020), board diversity comprises gender diversity and age diversity. The scholars reported a significant positive relationship only between gender board diversity and a firm's financial performance. Our findings also presented a significant influence of board diversity on governance style, underscoring that the diversity within boards among the included academic institutions plays an invaluable role in advancing the governance style adopted by these institutions. Correspondingly, Mirza et al. (2020) affirmed that a board that exhibits diverse characteristics in terms of age, gender, and composition has a substantial positive influence on the governance style. The scholars argue that the influence of board diversity on governance style is multifaceted and can significantly shape how a company is managed and how it interacts with its stakeholders.

The result also highlighted a positive significant association between board independence and financial performance, with the degree of influence being rather modest. Whereas the impact of board independence on financial performance was noted to be less, there was still evidence to indicate that board independence was valuable in improving financial outcomes.

The findings from this study also established that board independence had a significant impact on governance style, which reinforces the notion that independent boards contribute to the adoption of effective governance style. The relationship between board independence and financial performance has presented inconsistent findings in existing literature. In affirmation of the findings in the present study, Zattoni et al. (2017), in their research to ascertain whether board independence was significantly related to the financial performance of 18 selected firms, reported a very weak relationship between board independence and financial performance. A study conducted by Upadhyay and Öztekin (2020), on the contrary, reported a statistically insignificant association between an independent board of directors and financial performance.

Unlike the individual impact of board diversity and board independence on financial performance, our findings showed that board committees did not significantly predict the financial performance of the selected institutions. This result further explicates that the presence and functionality of a board committee in an academic institution might not significantly contribute to improving its financial performance. This insignificant relationship reported between the board committee and financial performance resonates with reports in previous studies. Zhou et al. (2018) investigated the role of board committee characteristics on the financial performance of an organization. Zhou et al. (2018) did not establish any positive correlation between the board committee and financial performance. Bansal and Sharma (2016) in an agreeing study explored the influence of other measures on board committees, such as the rate of meetings and degree of board committee independence, in enhancing the financial performance of an organization. The authors specifically mentioned that the characteristics of the audit/finance committee had no significant influence on the financial performance of the studied firms. Contradictorily, studies by Abbott et al. (2020) and Ernst & Young (2007) have reported a positive significant influence of board committees on a firm's financial performance. However, the impact of the board committee on governance style was statistically significant in our study. This positive relationship is supported by numerous empirical studies. For example, studies by Khudhair et al. (2019) and Sadegh et al. (2021) demonstrate that board committees significantly enhance the quality of financial reporting. Firms with robust audit committees have fewer financial restatements and lower instances of earnings management (Abbott et al., 2002).

Our model assessment further identifies governance style as a significant mediator in the relationship between board characteristics and financial performance. The relationship between board characteristics and financial performance is complex and influenced significantly by governance style. Governance style mediates this relationship by shaping how board characteristics are translated into effective governance practices. Empirical evidence (Johnason & Vakkuri, 2017) supports the notion that aspects such as board diversity, independence, committee effectiveness, and leadership structure are linked to financial performance, with governance style playing a critical mediating role. This underscores the importance of fostering a strong, ethical, and effective governance style to harness the full potential of board characteristics for improved financial outcomes.

Furthermore, our analysis of the moderating effects of gender diversity on the relationship between board characteristics and financial outcomes showed that gender diversity significantly influenced the positive relationship between board independence and governance style. This finding highlights the importance of gender diversity in strengthening governance mechanisms. The present result is reconciled with the findings in the existing literature. For instance, Hazaea et al. (2023) in a comprehensive review disclosed that a gender-diverse board can significantly influence the relationship between several board characteristics and firm outcomes.

6. CONCLUSION

According to Hillman and Dalziel (2003), the resource dependency theory perceives an organization in this context of academic institutions as an open system that is reliant on its external environment and vice versa for financial growth. Boards that are well-composed and diversified enough can create powerful links to key resources and neutralize external risks, thereby increasing revenue streams and boosting the performance of the organization. For Ghanaian technical universities that are dependent on government subventions and other external aids to engage in capital investment, members of the university councils would be expected to be influential and resourceful parties who can provide legitimacy and prestige with their knowledge, skills, and important external linkages to resources (Hillman & Dalziel, 2003) that boost the financial position of their institutions. The theory provides insights into explaining board behavior concerning the external environment of organizations by emphasizing the ability of the board of directors to connect an organization with critical resources in its environment. Over the past several decades, the focus of the resource dependency theory has been on examining how the size and diversity of the board of directors indicate their capability to make critical resources available to the organization. The present study extended this theory by demonstrating that board committees also leverage the principle of the resource dependency theory to improve organizational performance. The composition of the board committee often comprises members with specific expertise, connections, and influence. The merit is that these members can assist the institution in accessing necessary resources such as funding, strategic partnerships, and market opportunities. For example, including finance and audit committee members can facilitate better access to capital and provide insights and oversight critical to the institution navigating a complex environment.

Although the descriptive research design adopted in the current study provided a detailed description of the phenomenon under investigation, it failed to provide an overview of the role of the studied board characteristics on the past financial performance of the institutions. Further studies can employ a retrospective study design to comprehensively understand the trend of the influence of board characteristics on an organization's financial outcome.

Due to the limitation of resources, such as capital and time, the study was limited to only technical universities in Ghana. This makes the generalization of the findings of this study problematic. Future studies can be conducted to include both public and private universities in the country. This will help to better comprehend the role of gender diversity and governance style on the relationship between board characteristics and financial performance.

While quantitative data and PLS-SEM allowed for the full description and analysis of variables as well as the formation of their associations, these tools were less helpful in determining the reasons behind how relationships between variables developed. Perhaps by using a mixed-method approach, future research can offer a more thorough explanation of these interactions and their configurations.

The practical implications of board characteristics on financial performance are significant and multifaceted. Corporate governance literature consistently highlights the pivotal role that board characteristics play in shaping a company's strategic direction and, consequently, its financial outcomes.

A significant correlation exists between a board's committee, particularly the executive-to-non-executive directors' ratio, and financial performance. Higher percentages of non-executive directors on a board are frequently associated with more effective oversight and direction of management. The impartial viewpoint that non-executive directors provide can improve decision-making procedures and lessen the possibility of managerial opportunism.

Gender diversity is becoming more widely acknowledged as a factor in higher financial performance. Diverse boards promote more creative and thorough decision-making by bringing a range of viewpoints and techniques to problem-solving. Studies indicate that improved financial measures are particularly associated with gender-diverse boards. For instance, organizations with a higher proportion of female directors frequently show better profitability, stronger sales growth, and higher returns on equity. In addition to improving a company's financial performance, having a diverse group of directors can also improve stakeholder relations and the company's reputation.

Board independence is essential to efficient governance and oversight. Since they are not involved in the day-to-day operations of the organization, independent directors can render objective decisions. Businesses that have more independent boards are better able to maintain accountability, steer clear of conflicts of interest, and serve the interests of shareholders.

In conclusion, the study explored the relationship between board characteristics such as board independence, board committees, and board diversity on the financial performance of academic institutions, whilst ascertaining the moderating and mediating effect of gender diversity and governance style apiece on the foregoing relationship.

REFERENCES

Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance, 26*(11), 55–68. https://doi.org/10.1108/03074350010766990

Abbott, L. J., Parker, S., & Peters, G. F. (2002). *Audit committee characteristics and financial misstatement: A study of the efficacy of certain Blue Ribbon Committee Recommendations*. https://doi.org/10.2139/ssrn.319125

Abebe Zelalem, B., Ali Abebe, A., & Wodajo Bezabih, S. (2022). Corporate governance and financial performance in the emerging economy: The case of Ethiopian insurance companies. *Cogent Economics & Finance, 10*(1), Article 2117117. https://doi.org/10.1080/23322039.2022.2117117

Adams, D., Adams, K., Ullah, S., & Ullah, F. (2019). Globalisation, governance, accountability and the natural resource 'curse': Implications for socio-economic growth of oil-rich developing countries. *Resources Policy, 61*, 128–140. https://doi.org/10.1016/j.resourpol.2019.02.009

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

Aldamen, H., Duncan, K., Kelly, S., McNamara, R., & Nagel, S. (2011). Audit committee characteristics and firm performance during the global financial crisis. *Accounting and Finance, 52*(4), 971–1000. https://doi.org/10.1111/j.1467-629X.2011.00447.x

Alexander, K. (2006). Corporate governance and banks: The role of regulation in reducing the principal-agent problem. *Journal of Banking Regulation, 2*(1), 17–40. https://doi.org/10.1057/palgrave.jbr.2340003

Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management, 30*(1), 514–538. https://doi.org/10.1108/IJCHM-10-2016-0568

Alsurayyi, A. I., & Alsughayer, S. A. (2021). The relationship between corporate governance and firm performance: The effect of internal audit and enterprise resource planning (ERP). *Open Journal of Accounting, 10*(2), 56–76. https://doi.org/10.4236/ojacct.2021.102006

Banerjee, A., Nordqvist, M., & Hellerstedt, K. (2021). The role of the board chair — A literature review and suggestions for future research. *Corporate Governance: An International Review, 28*(6), 372–405. https://doi.org/10.1111/corg.12350

Bansal, N., & Sharma, A. K. (2016). Audit committee, corporate governance and firm performance: Empirical evidence from India. *International Journal of Economics and Finance, 8*(3), 103–116. https://doi.org/10.5539/ijef.v8n3p103

Bebeji, A., Mohammed, A., & Tanko, M. (2015). The effect of board size and composition on the financial performance of banks in Nigeria. *African Journal of Business Management, 9*(16), 590–598. https://doi.org/10.5897/AJBM2015.7797

Bell, R. G., Moore, C. B., & Filatotchev, I. (2012). Strategic and institutional effects on foreign IPO performance: Examining the impact of country of origin, corporate governance, and host country effects. *Journal of Business Venturing, 27*(2), 197–216. https://doi.org/10.1016/j.jbusvent.2010.11.001

Bertoni, F., Meoli, M., & Vismara, S. (2014). Board independence, ownership structure and the valuation of IPOs in Continental Europe. *Corporate Governance: An International Review, 22*(2), 116–131. https://doi.org/10.1111/corg.12051

Bonney, S. (2015). *Strategies to improve the financial performance of state-owned enterprises in Ghana* [Doctoral dissertation, Walden University]. Walden University. https://www.proquest.com/openview/b30bf2d26ac9c5a3f4c8ec4545df4fd8/1?cbl=18750&pq-origsite=gscholar

Bosse, D. A., & Phillips, R. A. (2013). Agency theory and bounded self-interest. *Academy of Management Review, 41*(2). https://doi.org/10.5465/amr.2013.0420

Brown, R., & Gladwell, J. (2009). *Governance and decision-making in public institutions*. Cambridge University Press.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *The Financial Review, 38*, 33–53. https://doi.org/10.2469/dig.v33.n3.1310

Catapan, D. (2024). *Approaches to environmental, social and corporate governance*. Brazilian Journals Editora. https://doi.org/10.35587/brj.ed.978-65-6016-045-3

Chahine, S., & Filatotchev, I. (2008). The effects of information disclosure and board independence on IPO discount. *Journal of Small Business Management, 46*(2), 219–241. https://doi.org/10.1111/j.1540-627X.2008.00241.x

Chahine, S., & Goergen, M. (2013). The effects of management-board ties on IPO performance. *Journal of Corporate Finance, 21*(1), 153–179. https://doi.org/10.1016/j.jcorpfin.2013.02.001

Chahine, S., & Saade, S. (2011). Shareholders' rights and the effect of the origin of venture capital firms on the underpricing of US IPOs. *Corporate Governance: An International Review, 19*(6), 601–621. https://doi.org/10.1111/j.1467-8683.2011.00857.x

Chancharat, N., Krishnamurti, C., & Tian, G. (2012). Board structure and survival of new economy IPO firms. *Corporate Governance: An International Review, 20*(2), 144–163. https://doi.org/10.1111/j.1467-8683.2011.00906.x

Chen, K. D., & Wu, A. (2016). *The structure of board committees* (Working Paper No. 17-032). Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/17-032_22ea9e7a-4f26-4645-af3d-042f2b4e058c.pdf

Claessens, S., & Yurtoglu, B. B. (2012). *Corporate governance and development: An update*. International Finance Corporation. https://doi.org/10.1596/26874

Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal, 19*(3), 269–290. https://doi.org/10.1002/(SICI)1097-0266(199803)19:3%3C269::AID-SMJ950%3E3.0.CO;2-K

Desender, K. A., Aguilera, R. V., Lópezpuertas-Lamy, M., & Crespi, R. (2016). A clash of governance logics: Foreign ownership and board monitoring. *Strategic Management Journal, 37*(2), 349–369. https://doi.org/10.1002/smj.2344
EmadEldeen, R., Elbayoumi, A. F., Basuony, M. A. K., & Mohamed, E. K. A. (2021). The effect of the board diversity on firm performance: An empirical study on the UK [Special issue]. *Corporate Ownership and Control, 18*(3), 337–347. https://doi.org/10.22495/cocv18i3siart8
Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review, 11*(2), 102–111. https://doi.org/10.1111/1467-8683.00011
Ernst & Young. (2007). *The Ernst & Young tax guide*. Vanguard Pr.
Farazmand, A. (2015). Governance in the age of globalization: Challenges and opportunities for South and Southeast Asia. In I. Jamil, S. Aminuzzaman, & S. Haque, (Eds.), *Governance in South, Southeast, and East Asia: Trends, issues and challenges* (pp. 11–26). Springer. https://doi.org/10.1007/978-3-319-15218-9_2
Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.2307/3151312
Galema, R., Lensink, R., & Mersland, R. (2012). Do powerful CEOs determine microfinance performance? *Journal of Management Studies, 49*(4), 718–742. https://doi.org/10.1111/j.1467-6486.2012.01046.x
Ganguli, S. K., & Guha Deb, S. (2016). *Board composition, ownership structure and firm performance: New Indian evidence in a unique regulatory environment*. https://doi.org/10.2139/ssrn.2746773
Ginesti, G., Spanò, R., Ferri, L., & Caldarelli, A. (2021). The chief financial officer (CFO) profile and R&D investment intensity: Evidence from listed European companies. *Management Decision, 59*(13), 99–114. https://doi.org/10.1108/MD-05-2020-0650
Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Richter, N. F., & Hauff, S. (2017). *Partial least squares Strukturgleichungsmodellierung: Eine anwendungsorientierte Einführung*. C.H.BECK. https://doi.org/10.15358/9783800653614
Hazaea, S. A., Al-Matari, E. M., Farhan, N. H., & Zhu, J. (2023). The impact of board gender diversity on financial performance: A systematic review and agenda for future research. Corporate Governance: *The International Journal of Business in Society, 23*(7), 1716–1747. https://doi.org/10.1108/CG-07-2022-0302
Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*, 115–135. https://doi.org/10.1007/s11747-014-0403-8
Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review, 28*(3), 383–396. https://doi.org/10.2307/30040728
Hillman, A. J., Cannella, A. A., Jr., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies, 37*, 235–255. https://doi.org/10.1111/1467-6486.00179
Horak, S., & Cui, J. (2017). Financial performance and risk behavior of gender-diversified boards in the Chinese automotive industry: Initial insights. *Personnel Review, 46*(4), 847–866. https://doi.org/10.1108/PR-10-2015-0274
Hunter, J. E., Schmidt, F. L., & Judiesch, M. K. (1990). Individual differences in output variability as a function of job complexity. *Journal of Applied Psychology, 75*(1), 28–42. https://doi.org/10.1037//0021-9010.75.1.28
Joecks, J., Pull, K., & Vetter, K. (2013). Gender diversity in the boardroom and firm performance: What exactly constitutes a "critical mass?" *Journal of Business Ethics, 118*, 61–72. https://doi.org/10.1007/s10551-012-1553-6
Johanson, J.-E., & Vakkuri, J. (2017). *Governing hybrid organisations: Exploring diversity of institutional life*. Routledge. https://doi.org/10.4324/9781315622293
Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance: An International Review, 15*(2), 194–207. https://doi.org/10.1111/j.1467-8683.2007.00554.x
Khan, M. T., Al-Jabri, Q. M., & Saif, N. (2019). Dynamic relationship between corporate board structure and firm performance: Evidence from Malaysia. *International Journal of Finance & Economics, 26*(1), 644–661. https://doi.org/10.1002/ijfe.1808
Khudhair, D. Z., Al-Zubaidi, F. K. A., & Raji, A. A. (2019). The effect of board characteristics and audit committee characteristics on audit quality. *Management Science Letters, 9*, 271–282. https://doi.org/10.5267/j.msl.2018.11.012
Kılıç, M., & Kuzey, C. (2016). The effect of board gender diversity on firm performance: Evidence from Turkey. *Gender in Management, 31*(7), 434–455. https://doi.org/10.1108/GM-10-2015-0088
Kline, R. B. (1999). [Review of the book *Psychometric theory*, by J. C. Nunnally & I. H. Bernstein]. *Journal of Psychoeducational Assessment, 17*(3), 275–280. https://doi.org/10.1177/073428299901700307
Kooiman, J. (2020). Exploring the concept of governability. In I. Geva-May, B. G. Peters, & J. Muhleisen (Eds.), *Institutions and governance in comparative policy analysis studies* (pp. 240–259). Routledge.
Laihonen, H., & Mäntylä, S. (2018). Strategic knowledge management and evolving local government. *Journal of Knowledge Management, 22*(1), 219–234. https://doi.org/10.1108/JKM-06-2017-0232
Lin, C.-P., & Chuang, C.-M. (2011). Principal-principal conflicts and IPO pricing in an emerging economy. *Corporate Governance: An International Review, 19*(6), 585–600. https://doi.org/10.1111/j.1467-8683.2011.00870.x
Lowndes, V., & Skelcher, C. (1998). The dynamics of multi-organizational partnerships: An analysis of changing modes of governance. *Public Administration, 76*(2), 313–333. https://doi.org/10.1111/1467-9299.00103
Majeed, M. K., Jun, J. C., Zia-Ur-Rehman, M., Mohsin, M., & Rafiq, M. Z. (2020). The board size and board composition impact on financial performance: An evidence from the Pakistani and Chinese's listed banking sector. *The Journal of Asian Finance, Economics and Business, 7*(4), 81–95. https://doi.org/10.13106/jafeb.2020.vol7.no4.81
Mansour, M., Hashim, H. A., Salleh, Z., Al-ahdal, W. M., & Almaqtari, F. A., & Qamhan, M. A. (2022). Governance practices and corporate performance: Assessing the competence of principal-based guidelines. *Cogent Business & Management, 9*(1), Article 2105570. https://doi.org/10.1080/23311975.2022.2105570
Mirza, N. I., Malik, Q. A., & Mahmood, C. K. (2020). The value of board diversity in the relationship of corporate governance and investment decisions of Pakistani firms. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(4), Article 146. https://doi.org/10.3390/joitmc6040146

Mishra, C. S., & Nielsen, J. (2000). Board independence and compensation policies in large bank holding companies. *Financial Management, 29*(3), 51–69. https://www.researchgate.net/publication/5054999_Board_Independence_and_Compensation_Policies_in_Large_Bank_Holding_Companies
Muchemwa, M. R., Padia, N., & Callaghan, C. W. (2016). Board composition, board size and financial performance of Johannesburg stock exchange companies. *South African Journal of Economic and Management Sciences, 19*(4), 497–513. https://doi.org/10.4102/sajems.v19i4.1342
Munhenga, T., & Mbigi, L. (2022). Corporate governance and the effectiveness of boards of directors: The case of state owned enterprises in Zimbabwe. *Asian Journal of Social Sciences and Management Technology, 4*(2), 341–475. https://www.ajssmt.com/Papers/42341475.pdf
Nana Yaw Simpson, S. (2014). Boards and governance of state-owned enterprises. *Corporate Governance, 14*(2), 238–251. https://doi.org/10.1108/CG-08-2012-0063
Pathan, S., & Faff, R. (2013). Does board structure in banks really affect their performance? *Journal of Banking & Finance, 37*(5), 1573–1589. https://doi.org/10.1016/j.jbankfin.2012.12.016
Pfeffer, J., & Salancik, G. (2015). External control of organizations — Resource dependence perspective. In J. B. Minner (Ed.), *Organizational behavior 2: Essential theories of process and structure* (pp. 355–370). Routledge.
Pugliese, A., Minichilli, A., & Zattoni, A. (2014). Integrating agency and resource dependence theory: Firm profitability, industry regulation, and board task performance. *Journal of Business Research, 67*(6), 1189–1200. https://doi.org/10.1016/j.jbusres.2013.05.003
Qadorah, A. A. M., & Fadzil, F. H. B. (2018). The effect of board independence and board meeting on firm performance: Evidence from Jordan. *Journal of Finance and Accounting, 6*(5), 105–109. https://doi.org/10.11648/j.jfa.20180605.11
Ramachandran, J., Ngete, Z. A., Subramanian, R. S., & Sambasivan, M. (2015). Does corporate governance influence earnings management? Evidence from Singapore. *The Journal of Developing Areas, 49*(3), 263–274. https://doi.org/10.1353/jda.2015.0169
Rhode, D., & Packel, A. K. (2012). Diversity on corporate boards: How much difference does difference make? *Delaware Journal of Corporate Law (DJCL), 39*(2), 377–426. https://doi.org/10.2139/ssrn.1685615
Sadegh, M., Mokhtarzadeh, M., & Adibian, M. S. (2021). El efecto de las características del comité de auditoría y los cambios de auditor en el restablecimiento financiero en Irán [The effect of audit committee characteristics and auditor changes on financial restatement in Iran]. *Revista De Métodos Cuantitativos Para La Economía Y La Empresa, 31*, 397–416. https://doi.org/10.46661/revmetodoscuanteconempresa.3816
Singh, K., & Pillai, D. (2022). Corporate governance in small and medium enterprises: A review. *Corporate Governance: The International Journal of Business in Society, 22*(1), 23–41. https://doi.org/10.1108/CG-10-2020-0470
Song, H. J., Yoon, Y. N., & Kang, K. H. (2020). The relationship between board diversity and firm performance in the lodging industry: The moderating role of internationalization. *International Journal of Hospitality Management, 86*, Article 102461. https://doi.org/10.1016/j.ijhm.2020.102461
Spitzeck, H. (2009). The development of governance structures for corporate responsibility. *Corporate Governance: The International Journal of Business in Society, 9*(4), 495–505. https://doi.org/10.1108/14720700910985034
Srinidhi, B. I. N., Gul, F. A., & Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research, 28*(5), 1610–1644. https://doi.org/10.1111/j.1911-3846.2011.01071.x
Tawiah, V., Zakari, A., & Xede, J. (2023). Who benefits from corruption: The private individual or the public purse? *International Journal of Finance & Economics, 28*(3), 2900–2914. https://doi.org/10.1002/ijfe.2570
The Committee on Financial Aspects and Corporate Governance. (1992). *The report of the Committee on Financial Aspects and Corporate Governance*. https://www.jbs.cam.ac.uk/wp-content/uploads/2024/10/cadbury-report.pdf
Thrikawala, S. S. (2016). *Corporate governance and performance of microfinance institutions (MFIs): A comparative study in Sri Lanka and India* [Doctoral dissertation, University of Waikato]. University of Waikato. https://hdl.handle.net/10289/9940
Topal, Y., & Dogan, M. (2014). Impact of board size on financial performance: The case of BIST manufacturing industry. *International Journal of Business Management and Economic Research (IJBMER), 5*(4), 74–79. https://ijbmer.com/docs/volumes/vol5issue4/ijbmer2014050403.pdf
Torchia, M., Calabrò, A., & Huse, M. (2011). Women directors on corporate boards: From tokenism to critical mass. *Journal of Business Ethics, 102*, 299–317. https://doi.org/10.1007/s10551-011-0815-z
Upadhyay, A., & Öztekin, Ö. (2020). What matters more in board independence? Form or substance? *Journal of Corporate Finance*. Advance online publication. https://doi.org/10.2139/ssrn.3678355
Wahba, H. (2015). The joint effect of board characteristics on financial performance: Empirical evidence from Egypt. *Review of Accounting and Finance, 14*(1), 20–40. https://doi.org/10.1108/RAF-03-2013-0029
Zattoni, A., Michael A. Witt, M. A., Judge, W. Q., Talaulicar, T., Chen, J. J., Lewellyn, K., Hu, H. W., Gabrielsson, J., Rivas, J. L., Puffer, S., Shukla, D., Lopez, F., Adegbite, E., Fassin, Y., Yamak, S., Fainshmidt, S., & van Ees, H. (2017). Does board independence in fluence financial performance in IPO firms? The moderating role of the national business system. *Journal of World Business, 52*(5), 628–639. https://doi.org/10.1016/j.jwb.2017.04.002
Zavattaro, S. M. (2013). Management movements and phases of the image: Potential for closing the loop. *Administration & Society, 45*(1), 97–118. https://doi.org/10.1177/0095399711433406
Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. *Journal of International Accounting, Auditing and Taxation, 31*, 20–36. https://doi.org/10.1016/j.intaccaudtax.2018.03.002