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CORPORATE GOVERNANCE, AGENCY COST, AND BUSINESS PERFORMANCE: EVIDENCE FROM CONSTRUCTION AND REAL ESTATE FIRMS

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ABSTRACT

This paper aims to investigate the impact of corporate governance and agency cost on firm performance by using the Feasible Generalized Least Squares (FGLS) model and data panel analysis on Vietnamese listed firms in the construction & real estate sector in the period of 2015 - 2021. Empirical results indicate that asset turnover ratio, ownership structure, board size, percentage of female board members, total assets, and revenue growth are positively related to firm performance. We find that an emerging market like Vietnam is accepting the participation of women on the board of directors quite positively. In contrast, sales and administrative expenses to revenue ratio, short-term debt to assets ratio, and percentage of independent board members are negatively correlated with profitability. It seems that independent board members do not have much significance in decision-making, and are greatly influenced by group interests. The study also provides some recommendations to improve firm performance by addressing corporate governance and agency cost issues.

Keywords: Agency cost, Board characteristics, Business performance, Corporate governance.

INTRODUCTION

Net worth maximization is one of the different objectives of corporate governance. To achieve this, business performance improvement is among the sustainable approaches (Nguyen *et al.*, 2022). To improve business performance, corporate governance is the most influential factor (Jensen & Meckling, 1976; La Porta *et al.*, 1999; Al Farooque *et al.*, 2020; Haoujar *et al.*, 2023). Corporate governance is primarily concerned with finding ways to get investors a fair return on their investment (Shleifer & Vishny, 1997).

Agency cost is sourced from the separation between ownership and control in a joint stock company, resulting in inefficient allocation of resources (Fama, 1980; Jensen, 1986; Tabassum *et al.*, 2023). The costs are far more significant in emerging economies, where owners are less capable of supervising decisions made by executives to maximize the value of their companies (Din *et al.*, 2021; Gerged, 2021; Iwasaki *et al.*, 2022; Ahmed *et al.*, 2023b; Ozbay *et al.*, 2023). There have been various studies on the relationship between corporate governance and business performance, as well as the impacts of agency costs, in developed economies (Jensen & Meckling, 2019; Naciti, 2019; Ranganadhareddy, 2023), focusing on listed companies (Alnuwaiser *et al.*,

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2024). These firms are characterized by the separation between ownership and management, which could exert a negative impact on business performance (Abou-assy *et al.*, 2023; Lascu *et al.*, 2023). In some cases, this separation could lead to improved business performance, more financing, and more favorable restructuring, among others (Graefen *et al.*, 2023). However, information asymmetry and higher expenses (e.g., monitoring, bonding, and residual loss), which are unaligned with the previously outlined strategy, may be possible products of the separation. In this case, the higher enterprise costs are commonly known as “agency costs” (Fama, 1980; Ahmed *et al.*, 2023a).

Real estate and construction businesses in Vietnam, which is an emerging market, rapidly expanded between 2015 and 2021 (evidenced by a growth of 31.9% in seven years) (Ahmed *et al.*, 2023c; Karpov *et al.*, 2023; Temirbekova *et al.*, 2023). The number of revived companies increased significantly to 1,769 (a growth of 77.3% in seven years) (General Statistics Office of Vietnam, 2023a). This sector ranks third in Vietnam regarding the number of firms functioning in the market and has experienced rapid growth after the peak growth in 2010 – 2012. Its contribution to GDP escalated from 8.14% in 2015 to 9.56% in 2019 (Ashwinirani *et al.*, 2023; General Statistics Office of Vietnam, 2023b). From 2015 to 2021, the total assets of real estate and construction businesses in Vietnam substantially augmented, although the growth rate has gradually declined since 2019. Despite the slower growth, especially during the COVID-19 outbreaks, their business performance was impressive (Nguyen *et al.*, 2019; Patricia & Hailemeskel, 2024). Similar to other emerging markets, real estate, and construction firms are highly leveraged by banks, who help to secure their financing, and are increasingly managed by female executives (Nguyen *et al.*, 2020; Huy *et al.*, 2021; Sapunova *et al.*, 2023). The question is, taking into account agency costs, whether corporate governance affects the business performance of these firms.

In this paper, regression models and panel data analysis are employed to find empirical evidence in Vietnam as an emerging market. The introduction (Part 1) is followed by a theoretical background and literature review (Part 2). Subsequently, the model is presented to explain the research methodology (Part 3) before discussing the model results (Part 4). Finally, some recommendations are put forward to improve the performance of Vietnamese real estate and construction businesses (Part 5).

Literature Review and Hypotheses Development

Ownership Structure and Business Performance

Insider ownership has been used as a tool to control the personal interests of executives (Myers, 1977). A higher ownership share is expected to restrain managers from investing in unprofitable projects because they have to bear costs proportional to their shares (Jensen & Meckling, 1976, 2019). This means that there is a "convergence of interests" between shareholders represented by the Board of Directors (BOD) and executives in the Board of Management (BOM) when the latter's ownership expands. Hence, the more insider ownership expands, the better business performance is.

Subsequent studies in developed countries such as the United States and the United Kingdom also displayed similar results. Based on a sample of 45 randomly selected companies in the US, DeAngelo and DeAngelo (1985) argued that, by holding a large number of shares in the



company, insiders can solve asymmetric information issues regarding investment opportunities and interests of executives, which are associated with shareholders' financial gains. Short and Keasey (1999) also demonstrated a positive relationship between insider ownership and business performance, which was supported by Din *et al.* (2021). Conversely, Al Farooque *et al.* (2020) could not find a significant relationship between insider ownership and business performance in an emerging market like Thailand. Therefore, it could be assumed that:

H1A: The impact of insider ownership on business performance is positive.

Some studies indicate that it is more possible to control agency costs sourced from the competing interests of shareholders and executives when outside stockholders' ownership is expanded (Hartzell & Starks, 2003), resulting in higher profitability. In the review of emerging markets, Iwasaki *et al.* (2022) concluded that firms with larger foreign or domestic investors perform better. Sakawa and Watanabel (2020) and Mallingu *et al.* (2020) also found evidence in both developed and emerging markets that the more ownership of external shareholders expands, the stronger business performance is. Hence, it is assumed that:

H1B: The impact of outside blockholder ownership on business performance is positive.

Board Characteristics and Business Performance

The number of board members is considered one of the determinants of business performance, even though there is no optimal board size. According to Jensen (1986), a smaller BOD could enhance their communication, engagement, and coordination. In contrast, agency theory and resource dependency theory suggest that a larger board size produces more value for the firm. A larger BOD means more resources and more effective oversight of executives, leading to higher business performance (Singh & Harianto, 1989). Coles *et al.* (2008) indicated that complex companies tended to have larger boards, which could improve their performance. Research by Naciti (2019) and Din *et al.* (2021) demonstrated that board size positively affects firm performance. The relationship explains that larger BODs tend to have more independent members (Coles *et al.*, 2008; Enwa, *et al.*, 2024), and a stronger ethnic diversity will give more opinions, resulting in a better performance (Rashid, 2018; Naciti, 2019). Additionally, independent board members are useful because they are more capable of monitoring executives to secure the best interests of shareholders (Borokhovich *et al.*, 1996; Puni & Anlesinya, 2020). However, it is evidenced that a large BOD is negatively correlated with business performance due to the involvement of interest groups or the inclusion of certain members to support other members (Uribe-Bohorquez *et al.*, 2018; Yang *et al.*, 2019; Alqahtani *et al.*, 2022).

H2A: The board size affects business performance.

To maximize shareholders' benefits, BODs should have a combination of executive and non-executive (independent) directors to formulate strategies and perform oversight functions (Rashid, 2018). According to the agency cost theory, independent directors supervise senior executives, who are incentivized to build their reputation in decision control (Fama & Jensen, 1983), which in turn minimizes agency costs (Fama, 1980). Independent board members may share their opinions and actively participate in board discussions. However, recent studies have shown conflicting results. Al Farooque *et al.* (2020) found no relationship between independent board members and corporate performance as the board members are inefficient in their



supervisory role to executives. Some other studies even indicated a negative relationship (Naciti, 2019), because independent members, who engage more actively in BOD activities, may have close relationships with other members or shareholders, constraining them from presenting objective opinions in case of violations committed by other board members. Uribe-Bohorquez *et al.* (2018) believed that there is an intentional engagement of independent board members to dilute decisions, thereby lessening business efficiency. Therefore, it is assumed that:

H2B: The share of independent board members affects business performance.

Gender is a debatable topic when board diversity is discussed (Bennouri *et al.*, 2018). From the agency theory perspective, board members are more effective when they have diverse skills, backgrounds, and knowledge (Hillman & Dalziel, 2003; Amin *et al.*, 2022). Thus, improved supervision is more attributable to gender diversity in a BOD (Yang *et al.*, 2019; Suchy, *et al.*, 2024). From the resource dependence perspective, a board diversity can bring in more resources. Accordingly, female members will improve linkages, resources, and perspective in a BOD, potentially boosting their company's value (Valls Martinez *et al.*, 2019; Smalls & Hailemeskel, 2024). The impacts of female board members on business performance are discussed from different angles. Sah *et al.* (2022) and Nduati Kariuki (2023) indicated that a higher percentage of female members will reduce corporate risks, thereby increasing business efficiency. Although this conclusion is echoed by Bennouri *et al.* (2018) and Safiullah *et al.* (2022), they found that the percentage of female BOD members negatively impacts the Tobin'Q coefficient or market-based firm performance. Therefore, it is assumed that:

H2C: The percentage of female board members positively affects business performance.



Agency Costs and Business Performance

Jensen and Meckling (1976) indicated that the separation of ownership and control leads to conflicts of interest between shareholders and executives because the latter tend to use company resources for projects, in which they have personal interests, instead of maximizing equity valuation and shareholders' interests, causing agency costs and even bank intervention (Mubeen *et al.*, 2022; Spoorthi, *et al.* 2024).

Agency costs, which affect business results (Kalash, 2019; Rashid Khan *et al.*, 2020), are not easily measured. There have been numerous efforts, however, in quantifying it in different economic conditions Hoang *et al.* (2019); Choudhary *et al.* (2023) and Florackis and Ozkan (2009) measured agency costs by the asset turnover ratio, which compares net sales (revenues) to total assets. The low efficiency of assets represents bad investment decisions, insufficient efforts, and unprofitable resources. In this case, higher agency costs could be assumed as the result of conflicts between managers and shareholders.

H3A: The impact of the asset turnover ratio on business performance is positive.

Singh and Davidson III (2003); Sarangi *et al.* (2023); Florackis and Ozkan (2009); Wei *et al.*, 2024; Hoang *et al.* (2019), and Rashid Khan *et al.* (2020) moved further by creating another criterion, which is the ratio of total sale and administrative expenses to total revenues, to measure the performance of executives. They argued that more capable executives need less sales and administrative expenses to gain a dollar of revenue, and thus, produce better business performance. Therefore, it is assumed that:

H3B: The impact of sales and administrative expenses on the revenue ratio on business performance is negative.

In addition to conflicts with shareholders, executives may also counter against creditors - usually bondholders or banks (Jensen & Meckling, 2019; Rashid Khan *et al.*, 2020; Tilahun, *et al.*, 2024). To protect themselves from agency costs, creditors demand higher yields and shorter maturities, which inflate agency costs on firms (Salim & Yadav, 2012; Nguyen & Nguyen, 2020). As a result of higher interest rates, profitability drops (Doan, 2020; López-García, *et al.*, 2024).

H3C: The impact of short-term debt to total assets ratio on business performance is negative.

MATERIALS AND METHODS

Research Model

Based on the theoretical and literature review, an empirical regression model is proposed to measure the impact of ownership structure, board characteristics, and agency costs on the business performance of listed real estate and construction firms in Vietnam as follows:

$$BP(i, t) = f\{AC(i, t), OWN(i, t), BOD(i, t), CV(i, t)\}. \quad (1)$$

In which:

$BP_{i,t}$: business performance of firm i in time t , including ROA and ROE;

$AC_{i,t}$: agency costs of firm i in time t , including AC1, AC2, AC3;

$OWN_{i,t}$: ownership structure, including insider ownership (In_own) and outsider ownership (Out_own);

$BOD_{i,t}$: BOD of firm i in time t , including Board_size, In_ratio, Out_ratio, and Women_ratio.

$CV_{i,t}$: control variables of firm i in time t , including Firm_size, Debt_size, and Growth.

The model is shown in **Table 1**.

$$ROA_{i,t} = \alpha_0 + \alpha_1 AC1_{i,t} + \alpha_2 AC2_{i,t} + \alpha_3 AC3_{i,t} + \alpha_4 In_own_{i,t} + \alpha_5 Out_own_{i,t} + \alpha_6 Out_ratio_{i,t} + \alpha_7 Women_ratio_{i,t} + \alpha_8 Firm_size_{i,t} + \alpha_9 Debt_size_{i,t} + \alpha_{10} Growth_{i,t} + u_{i,t} \quad (2)$$

$$ROE_{i,t} = \beta_0 + \beta_1 AC1_{i,t} + \beta_2 AC2_{i,t} + \beta_3 AC3_{i,t} + \beta_4 In_own_{i,t} + \beta_5 Out_own_{i,t} + \beta_6 Out_ratio_{i,t} + \beta_7 Women_ratio_{i,t} + \beta_8 Firm_size_{i,t} + \beta_9 Debt_size_{i,t} + \beta_{10} Growth_{i,t} + u_{i,t} \quad (3)$$

$\alpha_0, \alpha_1, \dots, \alpha_{10}$ and $\beta_1, \beta_2, \dots, \beta_{10}$: coefficients of the regression equations;

$u_{i,t}$: error of the corresponding regression equations.

Table 1. Description of variables

Variable	Description	Explanation	Expected impact on business performance
Dependent variables of business performance			
ROA	Return on total assets	Profit after tax/Total assets	
ROE	Return on equity	Profit after tax/Equity	
Variable group of agency cost			

AC1	Agency cost 1	Revenue /Total assets	+
AC2	Agency cost 2	Sale and administrative expenses / Revenues	-
AC3	Agency cost 3	Short-term debts/ Total assets	-
Variable group of ownership structure			
In_own	Ownership share of inside shareholders	Personal ownership share of BOD and BOM	+
Out_own	Ownership share of outside blockholders	Ownership share of shareholders, who own 5% or more but are members of neither BOD nor BOM	+
Variable group of Board of Directors			
Board_size	Number of board members		+
Out_ratio	Percentage of independent board members	Independent board members who are not Director/General Director, Deputy Director/Deputy General Director, Chief Accountant, and other executives appointed by BOD, shareholders with 5% or more share ownership, or representatives of shareholders with 5% or more share ownership.	-
Women_ratio	Percentage of female BOD members		+
Control variable group			
Firm_size	Firm size	Total assets	+
Debt_size	Financial leverage	Total debts/Total assets, a measure of financial leverage	-
Growth	Revenue growth	(Sale revenue of the current period - Sale revenue of the previous period) / Sale revenue of the previous period	+

Source: Authors

Research Methodology

Data in this study is sourced from Fiinpro Group, a data provider in Vietnam, from which 95 companies were selected to collect information in seven years (between 2015 and 2021), excluding those without sufficient information on ownership structure, and BOD, among other variables. The sample size consists of 665 observations.

Stata 18 software is employed to analyze the regression of variables and determine the most suitable approach. Subsequently, the panel data regression is run to analyze different models, including Pooled OLS, Fixed Effects Model (FEM), Random Effects Model (REM), and Feasible Generalized Least Squares (FGLS).



RESULTS AND DISCUSSION

Descriptive Statistics Results

Table 2 indicates that ROA ranges between 25.27% and -48.31%, with an average rate of 3.96%. ROE fluctuates between 56.05% and -172.72%, with an average rate of 9.29%. The average value of AC1, AC2, and AC3 is 44.66%, 11.75%, and 40.16%, respectively. It should be noted that the average value of sales and administrative expenses to revenues ratio is low, but its standard deviation is high. The ownership of outside blockholders dominates with its average ratio of 30.38% against 15.76% of insider ownership.

Table 2. Statistical summary of variables

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	665	0.039693	0.047845	-0.48317	0.252788
ROE	665	0.0929	0.137669	-1.72727	0.560575
AC1	665	0.446689	0.426469	-0.00329	3.098765
AC2	665	0.117519	0.53674	-8	8.5
AC3	665	0.401691	0.214408	0	0.942799
In_own	665	0.15767	0.160491	0	0.652
Out_own	665	0.303897	0.247479	0	0.9988
Out_ratio	665	0.189722	0.177152	0	0.8
Women_ratio	665	0.128334	0.158959	0	0.666667
Board_size	665	5.741353	1.382721	3	10
Firm_size	665	7241.25	32645.89	32	428384
Debt_size	665	0.565934	0.19642	0	0.946136
Growth	665	140.162	213.7676	-10	2693.33

Source: Authors, exported from STATA 18

It is observed that real estate and construction firms are characterized by the large ownership of outside blockholders. The average size of BOD is 5.7 people, ranging between three and ten people. The average share of independent board members is 18.97%, in the range of 0% and 80%. The share of female board members is 12.83%, being in the 0 - 66.66% range. Total assets are averaged at VND 7,241.25 billion¹, significantly fluctuating between from VND 32 billion and VND 428,384 billion. The average ratio of debt to total assets is 56.59%, showing high financial leverage in the sector, where some firms have debts close to total assets. The average revenue growth is relatively high, which is 140.162% but unstable.

Regression Results

ROA is negatively correlated with AC2, AC3, and Out_ratio, while ROE is inversely correlated with Women_ratio (**Table 3**). Other control variables have a positive relationship with business performance, except Debt_size (for ROA). Regarding the relationship between independent variables, most coefficients are comparatively small (the absolute value is less than 0.6).

¹ 1 USD = 24,065 VND

Table 3. Correlation matrix of variables

	ROA	ROE	AC1	AC2	AC3	In_own	Out_own	Out_ratio	Women_ratio	Board_size	Debt_size
ROA	1										
ROE	0.7918	1									
AC1	0.0945	0.1023	1								
AC2	-0.1429	-0.0811	-0.0879	1							
AC3	-0.3016	-0.1355	0.4024	-0.0584	1						
In_own	0.0135	0.0685	0.027	-0.0986	0.088	1					
Out_own	0.0305	0.0236	-0.0593	0.0242	-0.0116	-0.5118	1				
Out_ratio	-0.0914	-0.133	-0.1969	0.0057	-0.032	-0.0561	0.0453	1			
Women_ratio	0.0737	-0.0048	-0.234	-0.0778	-0.1397	0.1273	-0.0237	-0.0266	1		
Board_size	0.0021	0.1073	-0.0701	0.0772	-0.0502	0.068	0.0435	0.11	-0.1204	1	



Debt_size	-0.2807	0.0228	0.1247	-0.0457	0.6277	0.1804	0.0829	-0.0691	-0.1082	0.2288	1
Growth	0.024	0.0061	0.0391	-0.0091	0.0082	-0.0415	0.0064	0.0256	-0.0084	0.0184	-0.0394

Source: Authors, exported from STATA 18

Variance Inflation Factor (VIF) is applied to control the correlation and multicollinearity of variables before running the regression (Table 4).

Table 4. VIF coefficients of variables

Variable	VIF	1/VIF
AC3	2.18	0.457938
Debt_size	2.10	0.475634
In_own	1.54	0.651380
Out_own	1.45	0.689662
AC1	1.37	0.727764
Board_size	1.28	0.781220
Women_ratio	1.16	0.863026
Firm_size	1.14	0.880031
Out_ratio	1.09	0.921517
AC2	1.03	0.966528
Growth	1.01	0.991945
Mean VIF	1.40	

Source: Authors, exported from Stata 18

Most of the VIF coefficients are less than 3, while the mean is under 2. Therefore, a multicollinearity does not exist among the independent variables.

Table 5. Impacts of corporate governance and agency costs on business performance

Variables	Dependent variable: Business performance (ROA)			
	(1)	(2)	(3)	(4)
	Pooled OLS	FEM	REM	FGLS
AC1	0.0254*** (5.52)	0.0342*** (4.9)	0.0292*** (5.26)	0.0214*** (8.87)
AC2	-0.0125*** (-3.93)	-0.0114*** (-3.90)	-0.0118*** (-4.16)	-0.00738** (-2.41)
AC3	-0.0657***	-0.00499	-0.0456***	-0.0470***

	(-5.68)	(-0.24)	(-3.01)	(-8.89)
In_own	0.0289**	0.0121	0.0207	0.0196***
	(2.23)	(0.46)	(1.18)	(3.62)
Out_own	0.0211***	0.00665	0.0163	0.0160***
	(2.58)	(0.41)	(1.48)	(4.72)
Out_ratio	-0.0189*	-0.0128	-0.0135	-0.0102**
	(-1.92)	(-1.03)	(-1.25)	(-2.11)
Women_ratio	0.0193*	0.027	0.0258*	0.0197***
	(1.70)	(1.64)	(1.92)	(3.67)
Board_size	0.00263*	-0.0011	0.001	0.00272***
	(1.92)	(-0.58)	(0.64)	(5.46)
Firm_size	-0.000000104*	-4.92E-08	-7.73E-08	-0.000000101***
	(-1.89)	(-0.42)	(-1.01)	(-5.60)
Debt_size	-0.0406***	-0.0761***	-0.0472***	-0.0468***
	(-3.28)	(-3.50)	(-2.99)	(-7.77)
Growth	2.92E-06	-1.8E-06	3.14E-07	0.00000917*
	(0.37)	(-0.25)	(0.05)	(1.65)
_cons	0.0545***	0.0728***	0.0589***	0.0501***
	(5.72)	(4.42)	(4.82)	(12.01)
N	665	665	665	665
R-sq	0.5262	0.14		

Source: Authors, exported from STATA 18

Corresponding significance levels are *p<0.1, **p<0.05, ***p<0.01

Table 6. Impacts of corporate governance and agency costs on business performance

Variables	Dependent variable: Business performance (ROE)			
	(1)	(2)	(3)	(4)
	Pooled OLS	FEM	REM	FGLS
AC1	0.0618***	0.0734***	0.0642***	0.0639***
	(4.41)	(3.29)	(3.80)	(10.87)
AC2	-0.0189*	-0.0163*	-0.0177**	-0.0119*
	(-1.96)	(-1.75)	(-1.96)	(-1.87)
AC3	-0.202***	-0.00507	-0.148***	-0.168***
	(-5.75)	(-0.08)	(-3.26)	(-11.68)
In_own	0.0715*	0.0395	0.067	0.0434***
	(1.82)	(0.47)	(1.28)	(2.86)
Out_own	0.0358	0.0409	0.0416	0.0277***
	(1.44)	(0.79)	(1.27)	(3.03)
Out_ratio	-0.0780***	-0.0895**	-0.0839**	-0.0357***



	(-2.60)	(-2.25)	(-2.52)	(-3.01)
Women_ratio	0.014	-0.0149	0.00468	0.0350**
	(0.41)	(-0.28)	(0.11)	(2.42)
Board_size	0.00991**	-0.00184	0.00591	0.00848***
	(2.38)	(-0.30)	(1.22)	(5.15)
Firm_size	-0.000000281*	-0.000000173	-0.000000213	-0.000000277***
	(-1.69)	(-0.46)	(-0.94)	(-5.12)
Debt_size	0.105***	-0.0503	0.0674	0.106***
	(2.79)	(-0.72)	(1.42)	-6.86
Growth	0.00000609	-0.00000728	-0.00000174	0.0000197**
	(0.25)	(-0.32)	(-0.08)	(2.05)
_cons	0.0243	0.106**	0.0476	0.00934
	(0.84)	(2.00)	(1.30)	(0.80)
N	665	665	665	665
R-sq	0.4282	0.045		

Source: Authors, exported from STATA 18

Corresponding significance levels are *p<0.1, **p<0.05, ***p<0.01

Discuss the Impacts of Corporate Governance on Business Performance

Based on the results in **Tables 5 and 6**, hypothesis H1A is accepted: Insider ownership affects ROA and ROE with regression coefficients of 0.0195 and 0.0434, respectively. In the sample, the average insider ownership is 15.76%, which is equivalent to the rate in the study of Singh and Davidson III (2003) (15.62%), showing the harmonized benefits of BOD and BOM members (i.e., the higher board ownership share is, the more efficiently firms perform). Because of the "interest convergence", the performance of executives is driven by the perception that "a penny saved is a penny earned". They are encouraged to refrain from taking advantage of power and violating management principles or moral risks for their interests rather than for the sake of shareholders. This is considered one of the effective mechanisms to reduce agency costs and information asymmetry in Vietnamese real estate and construction businesses. This finding is consistent with the conclusions of Kalash (2019), Al Farooque *et al.* (2020), Rashid Khan *et al.* (2020), Din *et al.* (2021), Gerged (2021), and Iwasaki *et al.* (2022).

Hypothesis H1B is accepted: outside block holder ownership positively affects business performance with a significance level of 1%. This result is similar to the studies of Sakawa and Watanabel (2020), and Mallinguh *et al.* (2020); and different from those of Al Farooque *et al.* (2020), Iwasaki *et al.* (2022). The difference is caused by a dummy variable, which is a measurement of outside ownership and is separated into two components, including Foreign Own and Domestic Outside Ownership. In this study, these components are combined to measure the outside block holder ownership. A company with a high outside block holder ownership is often found to better manage governance, finance, and risks. Outside blockholders engage in supervising, monitoring, and assessing the performance of BOD and contribute to transparency in business operations. The share of outside blockholder ownership is, therefore, considered an essential driver of growth and business efficiency.

Hypothesis H2A is accepted: board size positively affects business performance with a significance level of less than 1%. This result is comparable to Coles *et al.* (2008); Uribe-Bohorquez *et al.* (2018); Naciti (2019); Yang *et al.* (2019); Chandra and Yadav (2023); Din *et al.* (2021) and Alqahtani *et al.* (2022). A larger board may perform better oversight, extend independence, and resist the conservatism of BOM. As a result, a board size expansion could effectively help monitor the performance of BOM and achieve long-term strategies for the company.

Hypothesis H2B is accepted: share of independent directors hurts ROA and ROE with regression coefficients of -0.0099 and -0.0357, respectively. This result is contradictory to the previous studies by Rashid (2018); Uribe-Bohorquez *et al.* (2018); Naciti (2019); Yang *et al.* (2019); Bhavyasri *et al.* (2023) and Alqahtani *et al.* (2022) among others. In the context of Vietnam, companies have not recognized the importance of independent board members, resulting in a limited presence of independent members in BODs (as shown in annual reports). Companies usually do not have independent board members or create an ambiguity between non-executive and independent members. In some other cases, a board member or an outside blockholder may also fill the role of an independent board member. Moreover, the election of independent board members may be subject to different laws of different countries or different regulations of different firms. As shown in the research sample, small and medium enterprises (SMEs) are dominant in Vietnam in terms of number. The presence and expansion of independent board members in these companies are unnecessary, while the additional managerial and operational costs would be a burden for businesses.

Hypothesis H2C is accepted: the share of female board members positively affects ROA and ROE with regression coefficients 0.0197 and 0.035, respectively. This result is also found in other studies by Hillman and Dalziel (2003), Bennouri *et al.* (2018); Valls Martinez *et al.* (2019); Sah *et al.* (2022); Amin *et al.* (2022); Nwankwo *et al.* (2023) and Nduati Kariuki (2023). The studies indicate a stronger position of women in the corporate governance of Vietnam. The presence of female board members reduces the chance of "groupthink" in companies by creating multi-dimensional perspectives in decision-making and strengthening critical thinking and flexibility in management. Therefore, companies could avoid similarities in attitudes and better understand their customers and employees, leading to improved business performance.

Discuss the Impacts of Agency Costs on Business Performance

As demonstrated in **Tables 5 and 6**, hypothesis H3A is accepted: AC1 positively impacts ROA and ROE with regression coefficients of 0.02 and 0.06, respectively. Thus, a higher asset turnover ratio indicates a company has more effectively utilized its assets to generate revenue. When the conflict intensity between shareholders and executives lessens, the latter will try to maximize the use of resources to enhance business efficiency. Nonetheless, the actual asset turnover is relatively low (44.66% on average), reflecting limitations in asset management. In addition, the average ROA is only 3%, which is not commensurate with the available resources in the sector, indicating the existence of agency costs. The studies of Hoang *et al.* (2019) and Ahmed *et al.* (2023a) have similar results.

Hypothesis H3B is accepted: AC2 hurts ROA and ROE, consistent with the studies by Hoang *et al.* (2019); Rashid Khan *et al.* (2020), and Alqahtani *et al.* (2022). The high ratio of sales and administrative expenses to revenues shows that executives have not effectively used resources,



resulting in moderate rates of ROE (9%) and ROA (3%). This also implicitly signals potential abuses of operating expenses, thereby reducing business efficiency.

Hypothesis H3C is accepted: AC3 hurts ROA and ROE with regression coefficients of -0.05 and -0.17, respectively. This result indicates that an increase in the short-term debt-to-total assets ratio lowers profitability. In other words, the higher the debt ratio is, the more profitability shrinks. This does not support the trade-off theory but the pecking order theory. In this study, short-term debts account for 40.16% of total assets on average, showing a significant dependence on liabilities in real estate and construction firms. If profits are below expectations, they still have to repay loans. Large borrowing combined with unstable growth in the sector produces a "negative leverage". In addition, the structure of liabilities could be more reasonable in reducing short-term debts to an optimal level in line with the business cycle. Vietnam's real estate and construction sector was susceptible to macroeconomic policies in the 2015-2021 period, and business performance in the sector was unsustainable. This finding supports the results of previous studies made by Florackis and Ozkan (2009); Kalash (2019) and Doan (2020).

Among the control variables, which are firm size, revenue growth, and financial leverage, firm size has a positive influence on the performance measure ROA whereas revenue growth is negatively correlated with ROE. This result could be interpreted that a company with higher revenue growth and fewer total assets is more efficient in doing business. Meanwhile, financial leverage has a positive impact on ROE and a negative impact on ROA, resulting in unclear conclusions on the correlation between financial leverage on business performance.

CONCLUSION

In this study, the FGLS model is applied to analyze the impacts of agency cost, ownership structure, and board characteristics on business performance and shed light on the relationship between these factors and the business performance of Vietnamese-listed real estate and construction companies.

On the ground of research results, recommendations are provided to enhance the performance of listed construction and real estate firms in Vietnam. First, it is important to make wise financial decisions in debt structure and dividend policy to minimize agency costs. Second, a reasonable remuneration policy is critical to linking the interests of executives and shareholders. Third, women should be encouraged to participate in BOD to promote gender diversity. Moreover, investors are advised to assess the financial position of the targeted company carefully and objectively to forecast their potential growth, taking a close look at the managerial experience and expertise and ownership share of board members, board size as well as the gender diversity in the BOD.

The sample was based on observations of board gender in Vietnamese-listed construction and real estate firms while excluding other aspects of diversity as ethnicity and nationality. In addition, agency cost is measured from the perspective of short-term debts, while long-term debts also drive business performance as shown in other studies. Last but not least, business performance is viewed from a financial perspective expressed by ROA and ROE indicators, while businesses can measure their performance using other metrics like customer retention rates,



operating margins, failure rates, costs per lead, conversion rates, or acquisition costs, creating several avenues for future research.

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