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ORIGINAL

The Impact of Foreign Ownership and the Moderating Role of Ownership Concentration on the Financial Performance of Listed Non-Financial Firms in Vietnam

El impacto de la Propiedad Extranjera y el papel moderador de la Concentración de la Propiedad sobre el Desempeño Financiero de las empresas no financieras cotizadas en Vietnam

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ABSTRACT

Amidst conflicting empirical evidence on the impact of foreign ownership in emerging markets, stemming from the dichotomy between the active monitoring role posited by agency theory and concerns over information asymmetry, clarifying this relationship becomes particular pressing in Vietnam, a market characterized by high ownership concentration. This study aims to comprehensively examine (i) the direct effect, (ii) the nonlinear relationship of foreign ownership, and (iii) the moderating role of ownership concentration on firm financial performance. Using an unbalanced panel dataset of 485 non-financial listed firms over the period 2015-2024 (4125 firm-year observations), with financial performance measured by Tobin's Q and ROA, the study employs the Fixed Effects Model (FEM), complemented by robust estimation methods such as the System Generalized Method of Moments (System GMM) to address endogeneity concerns. The results yield three core findings: (i) foreign ownership has a positive and statistical significant impact on financial performance, supporting the monitoring role of foreign investors; (ii) ownership concentration plays a negative moderating role, significantly weakening this positive relationship, suggesting that the power of large shareholders can impede the benefits derived from foreign investors; and (iii) an inverted U-shaped nonlinear relationship is identified, with an optimal foreign ownership threshold between 25-28 %, beyond which marginal benefits begin to diminish. The study concludes that the benefits of foreign ownership are not absolute but are constrained by the internal governance context and that an optimal point exists.

Keywords: Foreign Ownership; Ownership Concentration; Financial Performance; Corporate Governance; Vietnam.

RESUMEN

En un contexto de evidencia empírica contradictoria sobre el impacto de la propiedad extranjera en los mercados emergentes, derivada de la dicotomía entre el rol de monitoreo activo postulado por la teoría de la agencia y las preocupaciones sobre la asimetría de la información, clarificar esta relación se vuelve particularmente apremiante en Vietnam, un mercado caracterizado por una alta concentración de la propiedad. Este estudio tiene como objetivo examinar de manera integral (i) el efecto directo, (ii) la relación no lineal de la propiedad extranjera, y (iii) el papel moderador de la concentración de la propiedad sobre el desempeño financiero de la empresa. Utilizando un conjunto de datos de panel no balanceado de 485 empresas no financieras cotizadas en bolsa durante el período 2015-2024 (4125 observaciones empresa-año),

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con el desempeño financiero medido por la Q de Tobin y el ROA, el estudio emplea el Modelo de Efectos Fijos (MEF), complementado con métodos de estimación robustos como el Método Generalizado de Momentos Sistémico (System GMM) para abordar problemas de endogeneidad. Los resultados arrojan tres hallazgos principales: (i) la propiedad extranjera tiene un impacto positivo y estadísticamente significativo sobre el desempeño financiero, lo que respalda el rol de monitoreo de los inversores extranjeros; (ii) la concentración de la propiedad desempeña un papel moderador negativo, debilitando significativamente esta relación positiva, lo que sugiere que el poder de los grandes accionistas puede obstaculizar los beneficios derivados de los inversores extranjeros; y (iii) se identifica una relación no lineal en forma de U invertida, con un umbral óptimo de propiedad extranjera situado entre el 25 % y el 28 %, punto a partir del cual los beneficios marginales comienzan a disminuir. El estudio concluye que los beneficios de la propiedad extranjera no son absolutos, sino que están limitados por el contexto de gobernanza interna y que existe un punto óptimo.

Palabras clave: Propiedad Extranjera; Concentración De La Propiedad; Desempeño Financiero; Gobierno Corporativo; Vietnam.

INTRODUCTION

In the era of globalization, international capital flows are considered a key driver of economic growth in emerging markets. These nations, including Vietnam, have active implemented extensive economic reforms and financial market liberalization to attract foreign capital, viewing it as a crucial catalyst for modernization and development. Initial, studies such as that of Alfaro et al.[1] focused on the role of FDI flows in promoting economic growth through capital and technology supplementation. However, recent trends have shifted towards a deeper analysis of the quality and impact mechanisms of these capital flows. The increasing participation of foreign institutional investors has highlighted their monitoring role in corporate governance, compelling companies to enhance transparency and market discipline.[2] Furthermore, new liberalization mechanisms such as stock market connect programs have created more complex capital channels, demanding a deeper understanding of their consequences for capital markets.[3] It is this evolution in understanding that necessitates a more multi-faceted re-examination of the impact of foreign ownership.

The theoretical foundation for the relationship between foreign ownership and financial performance is built upon two main streams of thought. The first, originating from agency theory[4] and the resource-based view, posits that foreign investors, particular institutional ones, act as effective monitors. With deep expertise, abundant resources, and strong incentives to close monitor management, they help mitigate agency costs, promote efficient investment decisions, and bring intangible resources such as technology and business networks, thereby creating a positive impact on firm performance.[5,6,7] Converse, the second stream of thought is more skeptical, arguing that information asymmetry, cultural conflicts, and short-term investment horizons can impede the effective monitoring capabilities of foreign entities.[8,9] They may even pursue objectives that conflict with the long-term interests of domestic shareholders.[10] This theoretical opposition has led to a series of inconsistent empirical results worldwide, and the Vietnamese context is no exception.[11]

Concurrent, a critical contextual factor shaping the impact of foreign capital is the internal ownership structure. Unlike the dispersed ownership model common in Anglo-Saxon markets, where Jensen & Meckling's[4] agency theory originated, many economies worldwide are characterized by concentrated ownership. In particular, comprehensive global studies have shown that ownership concentration in the hands of families or the state is an inherent feature of East Asian countries.[12,13] Vietnam, as a transitional economy in Asia, is a prime example of this model, where control often lies with a few large shareholders.[14] This characteristic creates two opposing effects: on the one hand, it can create an incentive effect, as large shareholders have sufficient motivation and power to monitor management, addressing the problem of passive monitoring by dispersed shareholders. On the other hand, it can lead to controlling shareholders entrenching their power to expropriate private benefits, harming the interests of minority shareholders.

However, the academic debate on the impact of foreign ownership on firm performance has not yet reached a consensus, with empirical evidence showing inconsistent results.[11] We argue that this lack of consensus stems not from a shortage of evidence, but from a fundamental limitation in the theoretical framework: the prevalent tendency to model this relationship as a linear, monotonic function, independent of the complex corporate governance context in which firms operate. This simplistic assumption becomes particular pronounced in emerging markets like Vietnam, where incoming foreign capital inevitably interacts with pre-existing, concentrated power structures.

To address these contradictions and theoretical gaps, our study moves beyond traditional linear assumptions to build a more comprehensive analytical framework capable of capturing the complex interaction between foreign capital inflows and the unique governance landscape of Vietnam. Specifical, the study sets three main

objectives: (first), to systematical assess the direct impact of foreign ownership on firm financial performance, providing a basis for deeper analysis; (second), to explore the non-linear nature of this relationship, testing the hypothesis of diminishing returns and the possible existence of an optimal ownership threshold; and (third), and most central, to analyze the moderating role of ownership concentration, aiming to clarify whether this internal power structure amplifies or neutralizes the potential benefits from foreign entities.

By achieving the aforementioned research objectives, this study expects to provide a more rigorous and contextual relevant explanation for the conflicting results in previous works, while painting a more comprehensive picture of the complex interaction between foreign capital and internal governance structures in listed Vietnamese enterprises.

METHOD

To achieve the stated objectives, this study is designed based on a quantitative methodology, with the primary research type being an observational study. This approach was chosen because we do not perform any experimental interventions or manipulations on the variables, but rather collect and analyze existing data (ex-post facto) to test relationships in their natural context. Instead, the study conducts an analysis of secondary data (ex-post facto) from published financial and annual reports. Specifical, a longitudinal panel data design is used to track the natural fluctuations of financial performance and ownership structure over the period 2015-2024, allowing for the analysis of complex dynamics and causal relationships over time.

Sample and Data Collection

To construct a comprehensive and representative dataset, we undertook a systematic, multi-step data collection and screening process. The study's data is an unbalanced panel data (*unbalanced panel*), compiled from audited financial statements and annual reports of listed companies. The primary data source was retrieved from the reputable financial data platform Vietstock (https://vietstock.vn/), ensuring the consistency and reliability of the information.

The research period is defined as 10 years, from 2015 to 2024. The choice of this timeframe is deliberate. This period begins immediate after the 2014 Law on Enterprises and the 2014 Law on Investment came into effect (from July 1, 2015), marking a new era of business environment liberalization and relaxation of regulations on foreign ownership in Vietnam. Therefore, this period allows us to ful observe the impact of foreign capital flows in a relative stable and modern legal context, while being long enough to capture fluctuations in financial performance and corporate governance structures.

The sample selection process was carried out as follows:

(i) Research population: Consists of all 736 companies listed on the Ho Chi Minh City Stock Exchange (HOSE) and the Hanoi Stock Exchange (HNX) as of the end of the 2024 fiscal year.

(ii) Exclusion criteria: We excluded 98 companies in the financial sector (banks, securities firms, insurance companies, investment funds). The reason is that these institutions have specific financial reporting structures, leverage, and regulatory environments, making direct comparisons with non-financial firms inappropriate and potential leading to biased inferences (Pomerleano[15]); Next, we excluded 153 companies that lacked complete financial or ownership data for at least 3 consecutive years. This requirement ensures that each company in the sample has a sufficient time series for panel data estimation methods (especial the fixed-effects model) to operate effective.

(iii) Outlier treatment: To mitigate the influence of extreme values that could distort regression results, all continuous variables in the model were winsorized at the 1st and 99th percentiles (winsorization at the 1st and 99th percentiles). This method is preferred over completely removing observations, as it retains the information of that observation in the sample while limiting the influence of abnormal values.[16]

After the screening process, the final research sample consists of 485 non-financial firms, forming an unbalanced panel dataset with 4125 firm-year observations.

Variable Measurement

The selection and measurement of variables are based on the legacy of foundational and prior empirical studies to ensure construct validity (*construct validity*) and the comparability of results. Table 1 presents the detailed definitions, measurements, and key references for each variable.

Table 1. Variable Definitions and Measurements

Variable Type	Variable Name	Symbol	Measurement	Key Reference(s)
Dependent Variable	Firm Performance (1)	Tobin's Q	(Market value of equity + Total debt) / Total assets	Chung & Pruitt[17]
	Firm Performance (2)	ROA	Net income / Total assets	Demsetz & Lehn[18]
Independent Variable	Foreign Ownership	FOR	Percentage of shares held by foreign investors	Claessens et al.[13]

Moderating Variable	Ownership Concentration	CR5	Total ownership percentage of the top 5 largest shareholders	La Porta et al.[12]
Control Variables	Firm Size	SIZE	Natural logarithm of total assets	Fama & French[19]
	Leverage	LEV	Total debt / Total assets	Rajan & Zingales[20]
	Firm Age	AGE	Natural logarithm of the number of years from establishment to the observation year	Pindado & Requejo[21]
	Sales Growth	GROWTH	(Sales in year t - Sales in year t-1) / Sales in year t-1	Lee & O'Neill[22]

We justify the choice of key variables as follows: To measure financial performance (PERF), the study simultaneous uses two metrics. Tobin's Q is a market-based measure, reflecting investors' expectations about the company's future profit-generating ability. In contrast, ROA (Return on Assets) is an accounting-based measure, reflecting the efficiency of asset utilization to generate past profits. Using both measures allows us to have a comprehensive view and to check the consistency of the results across both performance dimensions (market-oriented and operations-oriented). The moderating variable CR5 was chosen to represent the degree of ownership concentration, a common and appropriate measure in the context of Asian markets, where control is often concentrated in the hands of a small group of shareholders.[13]

Research Model

To test the research hypotheses regarding the direct impact of foreign ownership and the moderating role of ownership concentration, we construct two panel data regression models as follows:

Model (1): Testing the direct impact:

- $PERF_it = B_0 + B_1*FOR_it + B_2*CR5_it + B_3*SIZE_it + B_4*LEV_it + B_5*AGE_it + B_6*GROWTH_it + a_i + \varepsilon_it$
- Model (2): Testing the moderating role:
- $PERF_it = B_0 + B_1*FOR_it + B_2*CR5_it + B_3*(FOR_it * CR5_it) + B_4*SIZE_it + B_5*LEV_it + B_6*AGE_it + B_7*GROWTH_it + a_i + \varepsilon_it$

Where:

- *PERF_it* is the dependent variable (Tobin's Q or ROA) of firm i at year t.
- *FOR_it* is the foreign ownership ratio.
- *CR5_it* is the ownership ratio of the 5 largest shareholders.
- *FOR_it* × *CR5_it* is the interaction term between foreign ownership and ownership concentration. The coefficient B_3 is our main interest. If B_3 is statistical significant, the hypothesis of the moderating role of ownership concentration is supported.
- *Controls* is a vector of control variables (SIZE, LEV, AGE, GROWTH).
- α_*i* are the firm-fixed effects, representing unobservable and time-invariant characteristics (e.g., corporate culture, sustainable competitive advantage).
- ε_it is the random error term.

Estimation Method and Analysis Procedure

The analysis procedure is designed to ensure econometric rigor.

(i) Choice of regression model: For panel data, the three main estimation methods considered are Pooled OLS, the REM model, and the FEM model. Pooled OLS is often unsuitable as it ignores heterogeneity (*heterogeneity*) among firms. Moreover, FEM is the preferred method in corporate governance studies. The reason is that FEM can control for all time-invariant characteristics of each firm (α_i), whether they are measured or not. This significantly reduces the problem of omitted variable bias (*omitted variable bias*), a serious concern when factors such as corporate culture or core managerial competence may be correlated with both ownership structure and financial performance.

(ii) Regression analysis and diagnostic tests: Before estimating the models, we will perform descriptive statistics and correlation matrix analysis. The Variance Inflation Factor (VIF) will be calculated to check for multicollinearity. An average VIF value close to 1 and no value exceeding 5 will indicate that multicollinearity is not a serious issue.

(iii) Addressing econometric issues: To ensure the robustness of the estimates, we will address the following potential issues:

Heteroskedasticity and Autocorrelation: Panel data regression models often encounter heteroskedasticity

(*heteroskedasticity*) and serial correlation. To simultaneous address these issues as well as cross-sectional dependence, we will report regression results with Driscoll-Kraay standard errors.[23] This method provides robust standard errors even in the presence of the aforementioned problems.

Endogeneity: The relationship between foreign ownership and financial performance may be affected by endogeneity (e.g., foreign investors may active choose well-performing firms, leading to reverse causality). To address this concern and check the robustness of the FEM results, we will use the System Generalized Method of Moments (System GMM) estimation by Arellano et al.[24] and Blundell et al.[25] System GMM is specifical designed to handle potential endogenous independent variables by using their lagged values as instruments.

Robustness Checks: To confirm that the results are not dependent on a specific measurement or model, a series of robustness checks will be performed:

(i) Alternative measures: We will re-estimate the models using alternative measures for the key variables, for example, using Return on Equity (ROE) as an alternative dependent variable for ROA, and the ownership ratio of the 3 largest shareholders (CR3) instead of CR5.

(ii) Non-linearity test: To explore the possibility that the relationship between foreign ownership and financial performance is not monotonic linear, we will add a quadratic term (FOR^2) to the model. A statistical significant coefficient for this term will indicate the existence of a U-shaped or inverted U-shaped relationship.

All statistical and econometric analyses in this study will be performed using the specialized software Stata, version 17.0.

RESULTS

Descriptive Statistics and Correlation Analysis

Table 2 presents the descriptive statistics for all variables used in the study with 4125 firm-year observations. The average foreign ownership (FOR) in the sample is 11,24 %, with a standard deviation of 15,48 %, indicating significant but uneven participation of foreign entities in listed firms in Vietnam. Notab, the average ownership concentration of the 5 largest shareholders (CR5) is 45,31 %, confirming the prevalent characteristic of concentrated governance in Vietnamese enterprises, where a small group of shareholders can dominate important decisions. Regarding financial performance, the average Tobin's Q is 1,158, greater than 1, suggesting that the market values the assets of the sample firms higher than their book value. The average return on assets (ROA) is 6,01 %, a reasonable level of profitability. The relative high standard deviations of performance variables like Tobin's Q (0,834) and ROA (0,081) reflect a large variation in performance among firms, which is conducive to regression analysis. The other control variables are all within reasonable ranges as seen in previous studies.

Table 2. Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max
Tobin's Q	4,125	1,158	0,834	0,412	3,567
ROA	4,125	0,061	0,081	-0,124	0,253
FOR	4,125	0,112	0,155	0,000	0,510
CR5	4,125	0,453	0,201	0,102	0,881
SIZE	4,125	14,531	1,489	11,233	18,015
LEV	4,125	0,524	0,211	0,056	0,903
AGE	4,125	2,805	0,698	1,099	3,714
GROWTH	4,125	0,142	0,256	-0,215	0,833

Table 3 presents the Pearson correlation matrix between the variables and the Variance Inflation Factor (VIF) coefficients. Preliminary correlation analysis shows a positive and statistical significant correlation between Foreign Ownership (FOR) and both measures of financial performance (correlation coefficient with Tobin's Q is 0,127 and with ROA is 0,095), providing initial evidence in support of the research hypothesis. Converse, ownership concentration (CR5) has a negligible negative correlation with financial performance. Most control variables have correlations with the dependent variable that are consistent with theoretical expectations. For instance, GROWTH has a strong positive correlation, while LEV has a negative correlation.

To check for multicollinearity, we examine the pairwise correlation coefficients and the VIF coefficients. The pairwise correlation coefficients between independent variables are all below the common threshold of 0,8. More important, the VIF calculation shows that the VIF values for all variables are significantly below the limit of 5, with an average VIF of 1,42. This allows us to conclude that multicollinearity is not a significant concern in our regression models.

Table 3. Pearson Correlation Matrix and VIF

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	VIF
(1) Tobin's Q	1,000								
(2) ROA	0,451***	1,000							
(3) FOR	0,127***	0,095**	1,000						1,18
(4) CR5	-0,041	-0,028	-0,112**	1,000					1,25
(5) SIZE	0,189***	0,103**	0,215***	0,157***	1,000				1,89
(6) LEV	-0,153***	-0,188***	0,089*	0,201***	0,412***	1,000			1,77
(7) AGE	-0,055*	-0,071*	0,043	0,133***	0,245***	0,166***	1,000		1,21
(8) GROWTH	0,254***	0,311***	0,067*	-0,039	0,081*	-0,052	-0,024	1,000	1,22
Mean VIF									1,42

Note: ***, **, and * denote statistical significance at the 1 %, 5 %, and 10 % levels, respectively.

Main Regression Results

We present the estimation results from the two main research models using the Fixed Effects method to directly answer the two research questions posed. Table 4 displays the regression results on the impact of foreign ownership and the moderating role of ownership concentration on financial performance, measured by Tobin's Q and ROA.

Before analyzing the results, we performed model selection tests. The F-test results for all models are statistical significant at the 1 % level, indicating that the fixed-effects model is more appropriate than the Pooled OLS model. More important, the Hausman test results are also high statistical significant (p-value < 0,01), indicating that the FEM model is a more appropriate and efficient choice than the REM model for controlling for time-invariant firm-specific characteristics.

Table 4. FEM Regression Results of the Impact of Foreign Ownership and Ownership Concentration on Firm Performance

Dependent Variable	Tobin's Q (1)	Tobin's Q (2)	ROA (3)	ROA (4)
FOR	0,412***	0,658***	0,055***	0,092***
	(0,121)	(0,153)	(0,014)	(0,022)
CR5	-0,105	-0,119	-0,018*	-0,023*
	(0,072)	(0,074)	(0,010)	(0,012)
FOR * CR5		-0,515***		-0,081***
		(0,188)		(0,029)
SIZE	0,089***	0,091***	0,012**	0,013**
	(0,025)	(0,026)	(0,005)	(0,005)
LEV	-0,281***	-0,275***	-0,041***	-0,039***
	(0,064)	(0,065)	(0,009)	(0,009)
AGE	-0,033	-0,031	-0,004	-0,003
	(0,028)	(0,028)	(0,004)	(0,004)
GROWTH	0,582***	0,579***	0,103***	0,102***
	(0,081)	(0,081)	(0,015)	(0,015)
Constant	0,422**	0,435**	0,051	0,058
	(0,176)	(0,179)	(0,044)	(0,046)
Observations	4,125	4,125	4,125	4,125
Number of firms	485	485	485	485
R-squared	0,187	0,204	0,211	0,223
F-test	28,45***	29,11***	31,56***	32,47***
Hausman test	p-value < 0,01	p-value < 0,01	p-value < 0,01	p-value < 0,01

The regression results from Model (1), presented in columns (1) and (3) of table 4, provide the answer to the first research question. The coefficient of the foreign ownership variable (FOR) is positive and statistical significant at the 1 % level for both financial performance measures (β = 0,412 for Tobin's Q and β = 0,055 for ROA). This provides strong evidence that, when considered independent, an increase in the ownership percentage of foreign investors has a positive impact on the financial performance of listed non-financial

firms in Vietnam. This finding supports the argument of agency theory that foreign investors act as effective monitors, helping to improve governance and enhance firm performance.

The core of the study lies in Model (2), presented in columns (2) and (4), which tests the moderating role of ownership concentration. The results show that the coefficient of the interaction term (FOR * CR5) is negative and high statistical significant (β = -0,515 for Tobin's Q and β = -0,081 for ROA, both at the 1 % significance level). This result indicates that ownership concentration (CR5) plays a moderating role that weakens the positive relationship between foreign ownership and financial performance. In other words, the benefits from the monitoring role of foreign investors are diminished in firms where power is concentrated in the hands of a small group of large shareholders. The higher the degree of ownership concentration, the weaker the positive impact of foreign ownership on financial performance.

The control variables general have impacts consistent with theoretical expectations and previous studies. Firm size (SIZE) and revenue growth (GROWTH) have a positive impact, while financial leverage (LEV) has a negative impact on financial performance.

Robustness Checks and Further Analyses

To ensure that the main results are not spurious and are high reliable, we perform several robustness checks as follows.

Addressing Endogeneity with System GMM

To address concerns about potential endogeneity, arising from reverse causality (high-performing firms attract foreign investors) or omitted variables, we re-estimate the model using the System Generalized Method of Moments (System GMM). This method uses lagged values of variables as instruments to control for endogeneity.

Table 5. Estimation results using System GMM

Dependent Variable	Tobin's Q (1)	Tobin's Q (2)	ROA (3)	ROA (4)
FOR	0,435***	0,681***	0,059***	0,098***
	(0,142)	(0,175)	(0,016)	(0,025)
CR5	-0,112	-0,128	-0,020*	-0,025*
	(0,081)	(0,083)	(0,011)	(0,013)
FOR * CR5		-0,542***		-0,089***
		(0,203)		(0,032)
SIZE	0,085***	0,088***	0,011**	0,012**
	(0,028)	(0,029)	(0,005)	(0,006)
LEV	-0,274***	-0,269***	-0,038***	-0,036***
	(0,070)	(0,071)	(0,010)	(0,010)
AGE	-0,030	-0,028	-0,005	-0,004
	(0,031)	(0,031)	(0,004)	(0,004)
GROWTH	0,571***	0,568***	0,099***	0,098***
	(0,089)	(0,090)	(0,017)	(0,017)
Observations	3,640	3,640	3,640	3,640
Number of firms	485	485	485	485
AR(1) p-value	0,024	0,027	0,031	0,034
AR(2) p-value	0,215	0,198	0,244	0,229
Hansen test p-value	0,189	0,173	0,205	0,191

The results in table 5 remain remarkab consistent with the main FEM results. Specifical, the coefficient of the FOR variable remains positive and statistical significant, while the coefficient of the interaction term FOR * CR5 remains negative and high statistical significant in both the Tobin's Q and ROA models. More important, the diagnostic tests all show good results: there is no evidence of second-order autocorrelation in the errors (the p-value of the AR(2) test is greater than 0,1 for all), and the instruments used are valid (the p-value of the Hansen test is greater than 0,1 for all). These results confirm the robustness of the main conclusions against the issue of endogeneity.

Estimation with Driscoll-Kraay Standard Errors

Panel data often suffer from problems of heteroskedasticity, autocorrelation, and cross-sectional dependence (due to common industry or economic shocks, such as the Covid-19 pandemic). To ensure that our statistical

inferences are reliable, we re-estimate the FEM model with Driscoll-Kraay (D-K) standard errors. This method generates robust standard errors in the presence of the aforementioned issues.

When we simultaneous control for heteroskedasticity, autocorrelation, and cross-sectional dependence using Driscoll-Kraay standard errors (table 6), the coefficients of the FOR variable and the interaction term FOR * CR5 retain the same sign and statistical significance as in the basic FEM model. This indicates that our results are not affected by common econometric problems in panel data, and the statistical inferences are robust.

Table 6. FEM regression results with Driscoll-Kraay standard errors

Dependent Variable	Tobin's Q (1)	Tobin's Q (2)	ROA (3)	ROA (4)
FOR	0,412***	0,658***	0,055***	0,092***
	(0,135)	(0,169)	(0,016)	(0,025)
CR5	-0,105	-0,119	-0,018*	-0,023*
	(0,079)	(0,082)	(0,011)	(0,013)
FOR * CR5		-0,515***		-0,081***
		(0,201)		(0,031)
SIZE	0,089***	0,091***	0,012**	0,013**
	(0,029)	(0,030)	(0,006)	(0,006)
LEV	-0,281***	-0,275***	-0,041***	-0,039***
	(0,071)	(0,072)	(0,010)	(0,010)
AGE	-0,033	-0,031	-0,004	-0,003
	(0,032)	(0,032)	(0,005)	(0,005)
GROWTH	0,582***	0,579***	0,103***	0,102***
	(0,092)	(0,093)	(0,018)	(0,018)
Constant	0,422**	0,435**	0,051	0,058
	(0,191)	(0,195)	(0,049)	(0,051)
Observations	4,125	4,125	4,125	4,125
Number of firms	485	485	485	485
R-squared	0,187	0,204	0,211	0,223

Using Alternative Measures

We replace ROA with Return on Equity (ROE), another important measure of financial performance. Second, we use a narrower measure for ownership concentration, the ownership ratio of the 3 largest shareholders (CR3), instead of CR5.

Table 7. Robustness test results with alternative variables

Dependent Variable	ROE (1)	ROA (2)
FOR	0,121***	0,089***
	(0,041)	(0,021)
CR5	-0,035*	
	(0,020)	
CR3		-0,015
		(0,014)
FOR * CR5	-0,155**	
	(0,068)	
FOR * CR3		-0,105***
		(0,035)
SIZE	0,015**	0,012**
	(0,007)	(0,005)
LEV	-0,052***	-0,040***
	(0,015)	(0,009)
AGE	-0,007	-0,004

	(0,006)	(0,004)
GROWTH	0,125***	0,102***
	(0,022)	(0,015)
Constant	0,071	0,056
	(0,055)	(0,045)
Observations	4,125	4,125
Number of firms	485	485
R-squared	0,195	0,219

The results in table 7 show that the study's main findings remain unchanged. Specifical, in column (1), when using ROE as the dependent variable, the coefficient of the interaction term (FOR * CR5) is still negative and high statistical significant (β = -0,155, p < 0,05). Similarly, in column (2), when using CR3 as the moderating variable, the weakening role of ownership concentration is still clearly demonstrated by the negative and statistical significant interaction coefficient FOR * CR3 at the 1 % level (β = -0,105).

Testing for Non-linear Relationship

We argue that the relationship between foreign ownership and financial performance may not be monotonical linear. Instead, based on suggestions from the theoretical overview that the benefits of monitoring may diminish, we test for the possibility of a threshold effect by adding a quadratic term of foreign ownership (FOR^2) to the regression model.

The results in table 8 reveal a very noteworthy finding. For both measures of financial performance, the coefficient of FOR is positive and statistical significant, while the coefficient of FOR^2 is negative and also high statistical significant. Specifical, in the ROA model (column 2), the coefficient of FOR is 0,181 (p < 0,01) and the coefficient of FOR^2 is -0,352 (p < 0,05). This indicates a clear inverted U-shaped relationship.

Table 8. Results of testing the nonlinear relationship of Foreign Ownership

Dependent Variable	**Tobin's Q (1)**	**ROA (2)**
FOR	0,853***	0,181***
	(0,288)	(0,065)
FOR^2	-1,506**	-0,352**
	(0,651)	(0,158)
CR5	-0,108	-0,019*
	(0,072)	(0,010)
SIZE	0,088***	0,011**
	(0,025)	(0,005)
LEV	-0,283***	-0,042***
	(0,064)	(0,009)
AGE	-0,034	-0,004
	(0,028)	(0,004)
GROWTH	0,580***	0,101***
	(0,081)	(0,015)
Constant	0,431**	0,053
	(0,177)	(0,044)
Observations	4,125	4,125
Number of firms	485	485
R-squared	0,194	0,215

Based on the estimated coefficients from table 8, we calculate the turning point, i.e., the optimal foreign ownership threshold at which the positive impact on financial performance begins to decline. The formula for the turning point is: FOR Threshold = -β(FOR) / (2 * β(FOR^2)).

For Tobin's Q: Threshold = -0,853 / (2 * -1,506) ≈ 28,3 %

For ROA: Threshold = -0,181 / (2 * -0,352) ≈ 25,7 %

This result indicates that, on average, the positive impact of foreign ownership peaks when their ownership ratio is in the range of 25 % - 28 %. Beyond this threshold, the benefits of further increases in foreign ownership begin to diminish, possib due to issues of coordination costs, cultural conflicts, or an increase in the power of foreign entities leading to the pursuit of private objectives, creating new agency costs.

To visualize this inverted U-shaped relationship, figure 1 below illustrates the impact of foreign ownership on ROA, based on the regression results in column (2) of table 8.

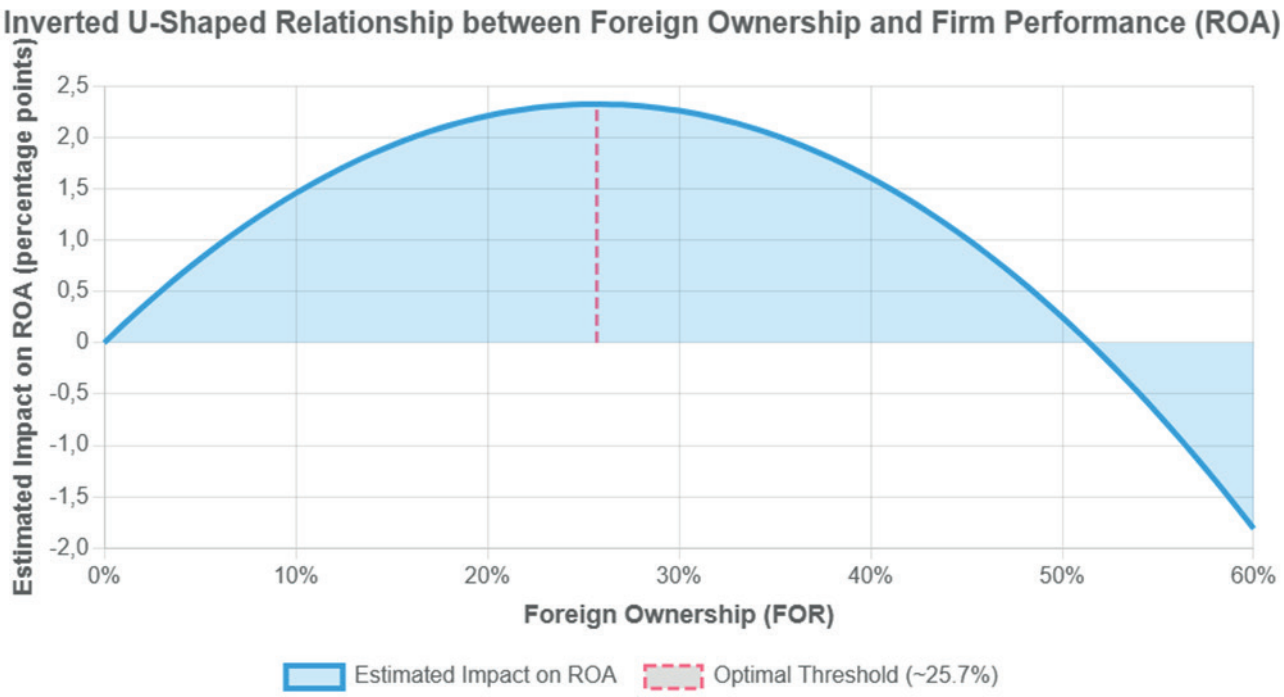

Figure 1. Inverted U-Shaped Relationship between Foreign Ownership and Firm Performance (ROA)

Figure 1 illustrates the non-linear, inverted U-shaped relationship between the foreign ownership ratio and firm financial performance (as measured by ROA). The graph shows that as foreign ownership increases from low levels, financial performance also increases, reflecting the benefits of improved governance and monitoring. However, this positive impact peaks at an "optimal threshold" (around 25,7 %). If the foreign ownership ratio continues to increase beyond this threshold, the marginal benefits diminish, and the impact on financial performance begins to weaken. This implies that increasing foreign ownership is not always better, and the greatest benefits are achieved only at a moderate level.

DISCUSSION

Our study yields three core findings. First, and consistent across all models, foreign ownership has a positive and statistical significant impact on the financial performance of listed non-financial firms in Vietnam. This result provides empirical evidence supporting the perspectives of Agency Theory and the Resource-Based View. According, foreign investors, especial institutional ones, are not merely capital contributors. They act as *"active monitors"*, bringing with them advanced governance standards, demanding greater transparency, and imposing stricter market discipline. Their presence helps mitigate agency costs arising from the separation of ownership and management, compelling executives to act in the best interests of shareholders. At the same time, they also bring valuable intangible resources such as technology, international management experience, and global business networks, thereby enhancing the firm's competitiveness and operational efficiency. This finding of ours aligns with many international studies in emerging markets, such as Aggarwal et al.[5] and Liu et al.[7], which affirm the active monitoring role of foreign entities, and is particular relevant to the Vietnamese context. In an economy undergoing transition and refining its corporate governance legal framework, the "knowledge transfer" and "discipline imposition" roles of foreign entities become especial important. They create positive pressure, forcing businesses to operate more professional and transparent, thus improving financial performance. However, our results challenge more pessimistic studies or those in Vietnam with inconsistent findings. This difference may arise from our use of the FEM model, which effective controls for unobserved fixed firm characteristics, thereby better isolating the true impact of foreign ownership. Furthermore, focusing on the post-2015 period also shows that the role of foreign entities has become more pronounced in an improved

legal context. The policy and managerial implications of this finding are clear. On one hand, it provides an empirical basis for policymakers, affirming the correctness of attracting foreign capital and continuing to lift the foreign ownership limit ("room"). On the other hand, it also sends a message to firms: attracting foreign strategic shareholders not only solves capital problems but is also a lever to modernize governance and enhance competitiveness.

The second crucial finding, and the core contribution of the study, is that ownership concentration plays a moderating role that weakens the positive relationship between foreign ownership and financial performance. This result reinforces the argument of the 'entrenchment effect' in agency theory, where large shareholders can expropriate private benefits.[6] It shows that the two governance mechanisms (foreign ownership and large shareholders) do not operate independent but interact and counterbalance each other. Specifical, in the context of Vietnam, where ownership concentration is very high, often in the hands of founding families or state shareholders, these controlling shareholders have enough power to "neutralize" the monitoring efforts of foreign entities. They can use their control to pursue *private benefits of control* through related-party transactions or sub-optimal investment decisions, harming the interests of minority shareholders, including foreign investors. In such cases, even if foreign investors attempt to impose discipline, they remain *"outsiders"* and can hard counter the entrenched power of the dominant internal shareholder bloc. Our novelty lies in connecting and empirical testing two separate theoretical streams (foreign ownership and ownership concentration) within the same model. While Claessens et al.[13] only described the characteristic of ownership concentration in Asia, our study has quantified the extent to which this feature neutralizes the benefits of foreign capital. This provides a rigorous explanation for the contradictory results of previous studies in Vietnam, which often overlooked this interaction term.

The implication from this research finding is a profound warning: (i) For foreign investors, analyzing a company for investment cannot stop at financial indicators or existing foreign ownership ratios. They need to deeply analyze the power structure to see who the major shareholders are. Do they dominate the board? What is the history of related-party transactions? A company with excessively high ownership concentration can be a *"value trap"*, where efforts to improve governance will not yield results; (ii) For policymakers, "lifting the foreign ownership limit" is necessary but not sufficient. The policy must be accompanied by a substantive strengthening of minority shareholder protection mechanisms. Stricter regulations on the independence of board members, transparency of related-party transactions, and sufficiently strong sanctions are needed to prevent the expropriation of benefits by controlling shareholders. Otherwise, increasing foreign ownership may not bring the expected benefits.

The third finding, through testing the non-linear relationship, reveals that the impact of foreign ownership on financial performance has an *inverted U-shape*, with an optimal threshold between 25 % - 28 %. This means that the benefits of increasing foreign ownership are not infinite. The upward phase (before the 25 % threshold): At low levels of ownership, each percentage increase in foreign capital brings significant marginal benefits. Foreign investors begin to have a voice, their monitoring role is activated, and governance standards improve without causing significant conflicts. The downward phase (after the 28 % threshold): When the foreign ownership ratio becomes too large, potential costs begin to outweigh the benefits. First, a new agency problem may arise between the controlling foreign investor and other shareholders. They may direct the company to pursue objectives within their global value chain, which may not always be optimal for the company itself in Vietnam (e.g., transfer pricing issues). Second, the increased power of the foreign bloc leads to cultural and strategic conflicts with management and domestic shareholders, causing a lack of cooperation and slowing down decision-making. Third, over-reliance on one group of foreign shareholders reduces the company's flexibility and sensitivity to the specific business environment in Vietnam. This finding is a significant extension and challenges the linearity assumption in most previous studies. It shows that both streams of thought (positive and skeptical) are partly correct, but at different 'dosages' of ownership. While previous studies only concluded 'yes' or 'no' impact, we identify an optimal threshold (25-28 %). This reconciles the view of Douma et al.[10] on conflicts of interest, suggesting that these issues only become prominent when foreign ownership crosses a certain power threshold.

The practical implication of this threshold effect is crucial: (i) For policymakers: Instead of a 100 % open-door policy for all sectors, a more flexible approach may be needed. Maintaining a certain foreign ownership limit (e.g., 49 %) in some sectors could be a wise strategy to maximize the benefits of foreign capital while preserving strategic autonomy and mitigating potential risks; (ii) For firms: The goal should not be to maximize foreign ownership at all costs. Instead, firms should aim for a "balanced" shareholder structure, where foreign investors are large enough to play a monitoring and strategic support role, but not so large as to completely impose their will, creating a healthy balance of power among shareholder groups.

The findings of this study offer several important contributions. Theoretical, the research enriches agency theory by providing empirical evidence of a complex moderating mechanism, showing that the effectiveness of one governance mechanism (foreign ownership) is intimately dependent on another governance context

(ownership concentration). More important, by discovering the inverted U-shaped relationship, we challenge the monotonic linearity assumption and show that the effectiveness of a governance mechanism also depends on its "dosage".

CONCLUSION

This study was conducted to elucidate the complex nature of the relationship between foreign ownership and financial performance, within the specific corporate governance context of Vietnam. Through a rigorous econometric analysis process, the results do not offer a one-sided perspective, but rather reveal a multifaceted reality: foreign ownership is a positive but conditional driver. The benefits from the monitoring role and resource transfer of foreign entities are tangible, but their effectiveness is systematical diminished by the entrenched power of large domestic shareholders. Furthermore, the study indicates that this benefit follows the law of diminishing returns, with an optimal threshold, suggesting that "more" is not always "better".

In summary, the study's findings are not only valuable for the Vietnamese context but also carry a broader implication for policymakers in emerging markets. The success of financial liberalization policy lies not just in opening doors to attract capital, but crucial in simultaneous building strong internal governance institutions to direct and optimize the benefits from that capital flow. Without effective monitoring and minority shareholder protection mechanisms to counterbalance the power of controlling shareholders, relaxing ownership limits may not yield the expected results and may even create new risks.

Although the research objectives have been achieved, we recognize that our study focuses only on the total amount of foreign ownership without disaggregating the nature of this ownership bloc. Future research could explore this further by distinguishing between different types of foreign investors (e.g., strategic versus financial) to clarify whether their impacts differ.

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Formal analysis: Huy Oanh Nguyen.
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