

Impacts of ownership structure on the performance of ceramic tile companies listed on the Vietnamese Securities Exchange

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Abstract: The paper studies relationships between ownership structure and the performance of firms using data of ceramic tile companies listed on securities exchanges in Vietnam. The empirical findings show positive relationships between state ownership, foreign ownership, centralized ownership, and firm profitability. The paper contributes more empirical evidence to the policies which potentially enhance state ownership and foreign ownership in ceramic tile companies.

Keywords: Ownership structure, performance, listed companies, ceramic tile companies.

1. Introduction

Many studies have found a positive impact of organizational ownership on the business performance of enterprises through a strict monitoring mechanism. Because organizational shareholders have experience in financial markets and corporate governance, organizational ownership makes the business more regulated, reduces agency costs, and increases operational efficiency (Cornett et al., 2007; Chen et al., 2008; Elyasiani & Jia, 2010; Lin & Fu, 2017; Zhong et al., 2017). However, some studies only find a short-term positive relationship (Wahal, 1996) or negative effect (Pound, 1988; Hand, 1990), other studies do not find a relationship between organizational ownership and firm performance (Karpoff, Malatesta & Walkling, 1996; Duggal & Millar, 1999; Edwards & Nibler, 2000).

Like organizational ownership, foreign ownership is gaining more attention with its growing importance in stock markets in developing countries. Many studies have focused on examining how foreign ownership affects business performance. Research results show that foreign investors directly participating in corporate governance not only help enterprises increase capital, but also improve governance and competitiveness (Chhibber et al., 1999; Douma. et al., 2006; Aydin et al 2007; Li et al., 2011; Ghahroudi, 2011; Wang & Wang, 2015). However, some empirical studies also show that not all foreign investors bring positive effects to the enterprises in which they invest, because of acquisition reasons (Afang et al., 2016) or pursue their own goals (Pung & Mishra, 2016).

In addition, in the overall corporate governance mechanism, the elements of the structure and operation of the board of directors are of interest to many economic researchers. Recent studies on the governance mechanism consider the influence of the board of directors on business performance.

It can be said that the goal of enterprises when carrying out business activities is to achieve high efficiency and at the same time to minimize risks in the process of operation. In recent years, due to the deepening of economic integration, the competition in the business process has become increasingly fierce. The economic recession combined with the immaturity in the business process has caused many Vietnamese enterprises to face many difficulties, and the business performance has not been achieved. To improve business performance, studying the impact of ownership structure on business performance is essential content, especially for ceramic tile companies listed on the Vietnamese Securities Exchange.

2. Literature review

Firstly, the relationship between ownership structure and business performance.

- The relationship between state ownership and business performance

Sun et al. (2002) study China's privatization experience and have found that government ownership has a positive effect on partially privatized state-owned enterprises. This relationship is nonlinear and has an inverted U shape. For businesses with high debt ratios and inefficient operations, the results indicate that too much government control is not really good for businesses.

Wei et al. (2003) make a different conclusion that state ownership has a negative impact on firm value when considering the relationship between state ownership and business performance on newly privatized Chinese firms in 1994 (164 companies), 1995 (175 companies), and 1996 (252 companies). Tobin's Q curve is convex for state ownership so that newly privatized firms have higher capital and market values when considering the increased size of these firms in terms of stock returns.

Yu (2013) sought empirical evidence in China by applying regression techniques to analyze panel data of 10,639 Chinese non-financial listed companies observed from 2003 to 2010 to examine the relationship between state ownership and firm performance. The results show that state ownership has a U-shaped relationship with firm performance. The Split Share Structure Reform of the period 2005-2006 played an active role in strengthening the relationship between state ownership and corporate profits. The findings suggest that higher levels of state ownership than mixed ownership structures derive from the benefits of government support and political affiliations.

- The relationship between foreign ownership and business performance

Dimelis et al. (2002) investigate the impact of foreign ownership on manufacturing firms in Greece. This study analyzes the production efficiency gained from technology transfer and labor productivity changes affected by different levels of foreign ownership using a sample of 4,056 manufacturing companies operating in Greece in 1997. By using the logarithmic function of labor productivity and applying the quantile regression model, the results show that foreign ownership has a positive effect on labor productivity.

Singhania et al (2015) focus on empirical analysis of the financial performance of firms receiving FDI. The analysis was performed using a panel dataset of 254 companies in the manufacturing, finance, basic materials, consumer goods, technology, and telecommunications sectors with ownership types such as FDI, venture capital, and private equity firms on performance in India between 2005-2014. From there, the research results show that there exists a relationship between the increase in foreign ownership and the increase in the market value of the company.

Chhibber et al. (2015) examine the relationship between ownership and profitability of companies in the Indian industry by studying ROA and ROE ratios. Research results show that after gaining control of the company and specific factors related to control, only when the level of control over assets of foreign owners is about 51%, does this control demonstrate outstanding performance.

Secondly, the relationship between state ownership, foreign ownership, and financial leverage.

Companies with large state ownership often have an advantage with loans from banks, especially state-owned commercial banks. Kasseeah (2008) and Qi, Wu, and Zang's (2000) research on the Chinese market show that banks make lending decisions not based on the company's profit but influenced by individuals representing the state capital in the company. In contrast, firms with high foreign ownership, with difficulties in accessing domestic loans and restrictive regulations from raising foreign loans, often have a lower loan ratio.

These proofs are the basis for the hypothesis of a positive relationship between state ownership and financial leverage, and a negative relationship between foreign ownership and financial leverage.

Thirdly, the relationship between financial leverage and firm performance.

With high financial leverage, firms can be subject to more control and supervision by creditors. Thus, business performance may increase. However, this relationship also depends on the level of information transparency and the nature of the borrowing activities of companies in the countries. For developed markets, borrowing activities are mainly direct borrowing in financial markets through the issuance of debt instruments. The developed market also means a better level of information transparency, and the ability to monitor the activities of creditors for the company is also easier. For these countries, the hypothesis of the relationship between financial leverage and business performance is positive.

In contrast, for countries where borrowing is primarily from commercial bank loans, loan approval may not be driven by the firm's performance, but also strongly influenced by many other factors, loan capital may increase at companies with low operating efficiency. In addition, the limited ability to monitor the post-lending activities of commercial banks in these countries also increases the possibility that companies do not really pay attention to the effective and right use of the loan. loan purposes.

Therefore, for developing countries like Vietnam, it is hypothesized that companies with high debt ratios may be underperforming companies.

3. Model and research method

3.1. Research hypothesis

Based on theories of ownership structure and previous empirical research results combined with the characteristics of Vietnam's economy, the paper focuses on studying the influence of ownership structure on the operational efficiency of ceramic tile companies listed on the Vietnam stock market in the period 2010-2020.

The hypothesis about the relationship between ownership structure and performance is as follows:

- State ownership (SO) has a negative impact (-) on the performance of listed companies.

H₁: SO has a negative relationship with return on assets (ROA)

- Foreign ownership (FO) has a positive (+) impact on the performance of listed companies.

H₂: FO has a positive relationship with Tobin-Q

3.2. Research model

Quantitative models are built to study the correlation relationship between ownership structure, financial leverage, and company performance, including:

Model 1: Research the relationship between ownership structure and performance of ceramic tile companies listed in Vietnam.

$$ROA_{ti} = \alpha + \beta_1 * OS_{i,t} + \beta_2 * CONTROL_{i,t} + \mu_{ti} \quad (1)$$

Model 2: Research the relationship between ownership structure and financial leverage of ceramic tile companies listed in Vietnam.

$$LEV_{ti} = \alpha + \beta_1 * OS_{i,t} + \beta_2 * CONTROL_{i,t} + \mu_{ti} \quad (2)$$

Model 3: Research the relationship between financial leverage and business performance of ceramic tile companies listed in Vietnam.

$$ROA_{ti} = \alpha + \beta_1 * LEV_{i,t} + \beta_2 * CONTROL_{i,t} + \mu_{ti} \quad (3)$$

In which, ownership structure (OS) is studied with four variables of ceramic tile companies listed on the Vietnamese stock market: (1) the state ownership (SO) is the ownership rate of government; (2) the foreign ownership (FO) is the ownership rate of foreign shareholders.

The financial leverage (LEV) of ceramic tile companies in the sample is the ratio between liabilities and total assets of the company.

Operating efficiency is studied from the perspective of efficiency for the company's total assets (ROA).

Control variables specific to ceramic tile companies in the sample include board ownership (BO), centralized ownership (CO), operating leverage (OL), operating time (OT), and total assets turnover (TATO)

3.3. Research data

Researching the impact of ownership structure on the business performance of ceramic tile companies listed on the Vietnamese stock market over a period from 2010 to 2020. The data of these companies is collected from their financial statements.

4. Research results

4.1. Descriptive statistics

All main variables give values consistent with the observed statements. Accordingly, the foreign ownership rate, which has an average value of 26%, is higher than the average value (12%) of the state ownership ratio. This shows the tendency of the foreign control of the activities of ceramic tiles companies in Vietnam. The ROA and LEV variables of the companies have average values of 7.65% and 52.52%, respectively.

The Pearson correlation coefficient between the variables shows that the correlation is low, thus eliminating the possibility of multicollinearity in the regression analysis of the proposed research models.

Table 1. Descriptive statistics of variables in the model

Variables	Mean	Standard deviation	Min	Max
ROA	0.0765	0.0815	-0.2934	0.2944
FO	0.2630	0.2197	0	0.5107
SO	0.1241	0.2782	0	1
BO	0.0779	0.1240	0	0.726
CO	0.1375	0.1903	0	0.8416
LEV	0.5252	0.1969	0.0713	1.0113
OL	0.0834	1.1656	-7.2111	3.8011
OT	23.4	15.3618	4	62
TATO	1.3083	0.4701	0.3609	2.5716

Source: Author's calculation from Stata

Table 2. Pairwise correlations of variables in the model

	ROA	FO	SO	BO	CO	LEV	OL	OT	TATO
ROA	1								
FO	-0.1488	1							
SO	-0.3046	-0.3931	1						
BO	-0.2051	-0.1154	0.0417	1					
CO	0.1953	-0.4923	0.3367	-0.1277	1				
LEV	-0.5598	0.2447	0.0549	0.1687	-0.1086	1			

OL	-0.1017	-0.0366	0.0752	-0.0258	0.1176	0.2408	1		
OT	0.0385	-0.1650	-0.0839	-0.0056	-0.1869	0.1244	0.1998	1	
TATO	0.2205	0.2931	-0.2228	-0.0019	-0.3558	0.0589	0.0825	0.2499	1

Source: Author's calculation from Stata

4.2. Regression results

4.2.1. Regression results of the impact of ownership structure on the business performance

The experimental results are statistically significant and are consistent with the proposed hypothesis. Specifically, the higher the state ownership, the lower the business performance of ceramic tiles companies. Meanwhile, the higher the foreign ownership, the higher the business performance of the ceramic tiles company.

Table 3. Regression results of the impact of ownership structure on business performance

Variables	Foreign ownership		State ownership	
	VIF	Coefficient	VIF	Coefficient
FO	1.79	.0328795	-	-
SO	-	-	1.16	-.3221955*
BO	1.14	-.0738004	1.05	-.0591253
CO	1.66	.2815452*	1.34	.3637371*
LEV	1.24	-.5434326*	1.12	-.5102191*
OL	1.15	-.0498959	1.15	-.0384415
OT	1.34	.0928041	1.13	.0773405
TATO	1.27	.3238227*	1.22	.2918981*
Prob (F Statistic)		0.0000		0.0000
R-squared		0.4495		0.5382

Source: Author's calculation from Stata

4.2.2. Regression results of the impact of ownership structure on the financial leverage

The experimental results show that state ownership is confirmed to have a negative relationship with financial leverage and foreign ownership has a positive relationship with financial leverage in ceramic tiles companies listed on the Vietnamese stock market.

Table 4. Regression results of the impact of ownership structure on financial leverage

Variables	Foreign ownership		State ownership	
	VIF	Coefficient	VIF	Coefficient
FO	1.35	-.1580561***	-	-
SO	-	-	1.65	.2792689*
BO	1.05	.064398	1.12	.1186677
CO	1.59	.147981	1.73	.214126**
ROA	1.44	-.6544034*	1.27	-.5564272*

OL	1.12	.1369458***	1.12	.1269677***
OT	1.13	.0902842	1.30	.1768597**
TATO	1.35	.186884**	1.43	.1214877
Prob (F Statistic)		0.0000		0.0000
R-squared		0.4077		0.4363

Source: Author's calculation from Stata

4.2.3. Regression results of the impact of financial leverage on business performance

According to the developed hypothesis, in the context of developing countries like Vietnam, the higher the debt ratio, the lower the company's performance. The experimental results show that the hypothesis is consistent with the high significance level (1%).

Table 5. Regression results of the impact of financial leverage on business performance

Variables	VIF	Coefficient
LEV	1.12	-.5349173*
BO	1.05	-.0811327
CO	1.24	.2654398*
OL	1.15	-.0497336
OT	1.13	.0816986
TATO	1.21	.329974*
Prob (F Statistic)		0.0000
R-squared		0.4489

Source: Author's calculation from Stata

5. Conclusion and recommendation

Quantitative analysis results have shown significant relationships in financial management activities of ceramic tiles companies listed on Vietnam's stock market.

Ownership structure and financing decisions

State ownership has a negative effect on leveraged financing decisions of listed companies, while foreign ownership has a positive effect. Thus, it can be clearly seen that there are opposite results in the effects of state ownership and foreign ownership.

Ownership structure and business performance

The results of empirical research also show a fairly clear impact, tested as significant, between ownership structure and firm performance. The effects of state ownership and foreign ownership have opposite results. Specifically, state ownership has a negative effect, while foreign ownership has a positive effect on business performance. This result is also consistent with the comments that enterprises with high state ownership often show weakness in business and governance activities. The selection of managers in these companies is also influenced by many factors, not really because of the benefits and values of the company. In addition, the activities of these companies are often less flexible, reacting more slowly to

market fluctuations because governance and reporting mechanisms at all levels require more time.

In contrast, companies with a high percentage of foreign ownership often take advantage of a modern and flexible management system and management tools, and managers work for their own benefit. Prioritizing management activities towards the company's performance goals.

Financing decisions and company performance

The results of empirical research show that companies with higher debt ratio have lower business performance. This is logical with the analysis of the impact mechanism of the high state ownership structure leading to a high loan ratio, but making the company's performance low.

The results of empirical research on the impact of ownership structure on firm performance confirmed the negative relationship of state ownership and the relationship positive relationship of foreign ownership on the performance of listed companies. Moreover, the study also complements and clarifies the impact mechanism of ownership structure on performance through studying the relationship between ownership structure and financial leverage. Financial leverage is considered as an intermediary tool showing the interaction between ownership structure and performance. Research results are also consistent and consistent with the phenomenon: when the state ownership rate is high, the debt ratio is high, but it leads to low performance of the company. In contrast, when the foreign ownership ratio is high, the financial leverage ratio is low and leads to high operating efficiency of the company. These empirical research results can prove to support the State's management policies, which tend to reduce the state ownership rate and increase the foreign ownership rate in ceramic tiles companies in Vietnam.

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