The Effect of State Capital Factor on the Operational Effectiveness of Hose-Listed Companies

Vo Thi Thuy Trang

Department of Accounting - Faculty of Financial Accounting Nha Trang University - Vietnam

Nguyen Thi Thuy Trang

Department of Accounting - Faculty of Financial Accounting Nha Trang University - Vietnam

Abstract

This paper examines the impact of state capital factor on the operational effectiveness of listed companies on HOSE through ROA and ROE within the financial years of 2015, with 244 listed companies on HOSE except for banks, financial entities and insurance companies. The independent variables used in this research are state capital ratio and dependent variables with positive impact are ROA and ROE. And a comparison with foreign capital factor is found. The findings show that the operational effectiveness of companies which have state capitals is higher than those that are not state-funded and those are foreign-funded. This partially testifies for studies on operational effectiveness of State-Owned Enterprises (SOE) in Vietnam and thus, suggests reasons and solutions for improvement.

Keywords: Operational effectiveness, State-owned enterprises.

1. Introduction

According to research by Nguyen Minh Nguyet (2015) [4], in recent years, State-Owned Enterprises (SOEs) have suffered poor business results, even losses to alarming levels. Now, SOEs account for 70% of total social investment capital, 50% of state capital, 60% of credit, 79% of bad debts of commercial banks and 70% of investerment capital, but only contribute about 30% to GDP growth. State-Owned Enterprise (SOEs) include groups and corporations which have key positions in the economy such as banking, energy, mechanics, chemicals, etc. However, performance in operation has not met expectations. The economic role of the SOEs sector hasn't been high and tends to decline. The majority of SOEs in Vietnam, though, have a much higher debt ratio than private enterprises, however, the Return on Equity (ROE) of SOEs is very low. However, the performance of listed companies has state capital on the stock market requires empirical research. Therefore, research on the effect of state capital on the performance of listed companies on the Ho Chi Minh Stock Exchange is necessary.

2. Theoretical Foundations and Research Hypotheses

The concept of performance is a controversial topic in finance because of its broad meaning. Business performance research comes from organizational theory and strategic management (Murphy, 1996) [4]. Performance is measured on both finance and organization. Measurement of performance can be

affected by the company's goals, which may affect the choice of how the company's performance and growth in the stock market and capital market. There are many indicators that measure the performance of the business, the criteria that the author uses to measure performance in the financial aspect and authors commonly used the most is Return on Assets (ROA) and Return on Equity (ROE) [1].

Jensen & Meekling (1976) laid the foundation for the study of ownership structures that affect business performance. Recent research on this form has attracted much interest among the authors. The results show that there are many relationships between ownership structure and business performance (Vo Xuan Vinh, 2014)[3]. Research on state capital influences on the efficiency of listed companies on Ho Chi Minh Stock Exchange (HOSE) has not been studied recently.

Based on recent audits and research by the authors on the actual effectiveness of Vietnam SOEs, as well as on the theoretical basis of capital structure [1][3], the hypothesis in the research is that "If the companies listed on Ho Chi Minh City Stock Exchange have the higher proportion of state capital, the performance will the lower."

3. Research Methods

3.1 Data Sources

The research examines the 244 listed companies on the Ho Chi Minh Stock Exchange, other than the banks, finance companies and insurance companies. These companies are listed at least one year as of December 31, 2005. The reason is because some of the data weren't announced; they were excluded from the sample collected. The final research data included 244 listed companies.

3.2 Research Models and Variables in the Model

The research model of the paper uses the OLS multiple regression model, with the dependent variable ROA and ROE. Independence is the ratio of state capital to the total equity of the enterprise and the ratio of foreign capital to the total equity of the enterprise as at 31/12/2015.

The proposed multiple regression model is as follows: *Model 1*: Effect of State capital on the return on assets

 $ROA = \alpha 1 - \beta 1. RSC + \varepsilon 1$

In which: ROA: Return on Assets, RSC: Ratio of State Capital; ε: Balancing Model 2: Effect of the State capital on the return on equity

ROE = $\alpha 2 - \beta 2$. RSC + $\epsilon 2$

Trong dó: ROE: Return on Equity, *RSC: Ratio of State Capital; ε: Balancing* Measure the variables:

ROA = Profit after tax Total average assets

ROE = Profit after tax Average equity

Ratio of State capital: The ratio of state capital in the total equity (capital actually contributed by shareholders) in the enterprise.

4. Research Results4.1 Descriptive Statistics

Table 1: Statistics describing the research indicators

	Minimum	Maximum	Total	Average
Total assets (million VND)	47.277	71.849.700	585.245.784	2.398.548
Liabilities (million VND)	2.037	44.740.654	267.207.805	1.095.113
Equity (million VND)	31.897	41.132.564	318.037.979	1.303.434
Total revenue (million VND)	0	57.474.076	468171617	1.918.736
Profit after tax (thousand VND)	-1.350.699	8.720.127	51.894.675	204.692
State capital ratio (%)	0%	96,7%		11,77%
Foreign capital ratio (%)	0%	96,4%		12,35%
ROA	-1,69	0,82		0,0674
ROE	-2,62	1,02		0,1117

In Table 1, all companies in the research data have a return rate not over low. The lowest ROA (-1.69) was for companies with losses, the highest rate was 8.2% per annum in 2015, and the average rate was 6.74%, higher than the bank interest rate at the time of the study (an average of 6% per year). The return on equity of some companies was high at 102%, averaging 11.17%.

Table 2.1: Statistics describing the performance of enterprises without State capital

Item	Number of companies	Minimum	Maximum	Average
ROA	176	-1,69	0,82	0,0602
ROE	176	-2,62	1,02	0,1008

Table 2.2: Statistics describing the performance of enterprises with State capital

Item	Number of companies	Minimum	Maximum	Average
ROA	68	-0,06	0,60	0,0859
ROE	68	-0,30	0,72	0,1401

According to Table 2.1 and Table 2.2, the number of State-owned companies is 68 companies, accounting for 27.86% of the sample. In terms of operating efficiency, state-owned enterprises had lower the return than non-state-owned enterprises. However, the average return on equity (ROE) of the state-owned enterprises was higher.

Table 3: Statistics describing the performance of foreign capital enterprises

	Number of companies	Minimum	Maximum	Average
ROA	203	-1,69	0,82	0,0763
ROE	203	-2,62	1,02	0,1263

Compared to foreign capital companies, there were 203 foreign-owned companies, which were more efficient than state-owned companies, but were equivalent to companies in Table 3.

However, in the 244 samples, 61 companies owned both state capital and foreign capital. The results of the research are shown in Table 4.

Table 4: Statistics describing the performance of enterprises with both State capital and foreign capital

Item	Number of companies	Minimum	Maximum	Average
ROA	61	-0,06	0,60	0,0915
ROE	61	-0,30	0,72	0,1458

Overall, according to Table 4, the performance of these 61 companies was higher than the comparable companies with either State or foreign capital, as per Table 2.1; 2.2, 3 and 4.

Among the 10 companies in the research data set, the 10 highest performance companies in 2015 were in turn TCT, DRL, VNM, MHC, HTL, NNC, SKG, DSN, NCT, KDC which had the lowest ROA of 26% and the highest at 82%; ROE was lowest at 27% and highest at 102%. These companies were foreign-invested companies, with a 49% foreign-invested capital and the stock code of VNM, of which three were state-owned companies with the code of DRL, NNC and NCT with the proportion of state capital of 30.42%; 37.73 and 65.07% respectively.

4.2 Regression Model

According to Section 3, the regression model is applied as a simple regression model, considering whether or not the effect of the State capital on the performance of listed companies on the Ho Chi Minh Stock Exchange

4.2.1 Examine the Relative Model Conditions between the Dependent Variable ROA and the Ratio of State Capital

Model	D	D ²	Adjustment R ²		Statistical ir	ndex ch	anged	
Wiodei	N	N	Aujustinent K	R ² changed	F changed	df1	df2	Sig. F changed
ROA	0,085 ^a	0,007	0,003	0,007	1,746	1	242	0,188

Table 5.2: ANOVA

	Model	Sum of squares	Df	Average squared	F	Sig.
	Regression	0,039	1	0,039	1,746	0,188 ^b
ROA	Balance	5,414	242	0,022		
	Total	5,453	243			

a. Dependent variable: ROA

b. Forecast variable (independent): (Constant), RSC (Ratio of State Capital)

Table 5.3: Model factors

Model	Nor	n-standard factor		Standard factor	+	Sig
Model	В	Std. H	Error	Beta	L	Sig.
ROA	(Constant)	0,061	0,011		5,603	0,000
KOA	RSC	0,001 0,000		0,085	1,321	0,188

a. Dependent variable: ROA

b. RSC: Ratio of State Capital

According to Table 5.1; 5.2; 5.3, there is no existence between the return on assets and the ratio of state capital, because the adjustment R2 is too small (0.003), Sig = 18.8% > 10%. Thus, this relationship does not exist. This can be explained by the fact that listed companies in the stock market, including SOEs, are interested in the return, as this is also a factor influencing stock prices in the market. Sensitive accounting information affects decisions of investors. Thus, executives of companies in the stock market try to improve the performance of their companies. In addition, the independence of capital and management of the stock market partly improves the performance of the company.

4.2.1 Examine the Relative Model Conditions between the Dependent Variable ROE and the Ratio of State Capital

Table 6.1: Summary of indices in the ROE model

Model	р	\mathbf{P}^2	Adjustment R ²	D ² Statistical index changed					
Model R	ĸ	Adjustment K	R ² changed	F changed	df1	df2	Sig. F changed		
ROE	$0,085^{a}$	0,007	0,003	.007	1.767	1	242	0,185	

 Table 6.2: ANOVA

Model		Sum of squares	Df	Average squared	F	Sig.
	Regression	.096	1	.096	1.767	.185 ^b
ROE	Balance	13.123	242	.054		
	Total	13.219	243			

a. Dependent variable: ROE

b. Forecast variable (independent): (Constant), RSC (Ratio of State Capital)

Table 6.3: Model factors

Model		Non-standard factor		Standard factor	+	Sig
	Model	В	Std. Error	Beta	ι	Sig.
DOA	(Constant)	0,101	0,017		6,004	0,000
ROA	TL_VNN	0,001	0,001	0,085	1,329	0,185

a. Dependent variable: ROEb. RSC: Ratio of State Capital

Similarly, according to Table 6.1; 6.2; 6.3, there is no existence between return on equity and the ratio of state capital, because the adjustment is too small (0.003), Sig = 18.5% > 10%. Thus, this relationship does not exist.

According to the analysis in section 4.2, it can be explained that companies listed on the stock market, including SOEs, are interested in the return, as this is also a factor influencing stock prices in the market. Sensitive accounting information will affects the decision of investor, performance will also affect the value of the enterprise in the future [3], affecting the decision of investor. Thus, executives of companies in the stock market try to improve the performance of their companies. In addition, the independence of capital and management of the stock market partly improves the performance of the company.

5. Conclusions and Recommendations

Based on the results of the analysis, the performance of listed companies on the Ho Chi Minh City Stock Exchange has no influence on the performance of these companies. Hence, the role of the stock market is reflected in the performance of the business. Since then, recommendations have been made to improve the efficiency of capital use of state-owned enterprises: (1) to enhance the restructuring of state-owned enterprises, to equitize state-owned enterprises and to list companies on the stock market; (2) towards the operation of the stock market, it is necessary to have policies to promote disclosure of information, to create transparent information for market activities and to disclose information of state capital enterprises and to develop a set of criteria to disclose detailed information and encourage companies to disclose information voluntarily.

References

- [1] T. H. (2016). *Study the factors affecting the business performance of oil and gas enterprises in Vietnam* (Vol. 12B). Science and Technology of Vietnam.
- [2] Ngo, G. D. (1997). *General business administration curriculum in enterprise book*. Hanoi: Science Technology.
- [3] Vo, V. X. (2014). *Ownership structure, performance and value of the enterprise in the securities market of Vietnam* (Vol. 16). Journal of Development and Integration.
- [4] (n.d.). Retrieved May 3rd, 2017, from http://vaa.net.vn/Tin-tuc/Tin-chitiet/newsid/3812/Doanh-nghiep-Nha-nuoc-hoat-dong-kem-hieu-qua-Nguyen-nhan-va-giai-phap
- [5] Neely, A., Kennerley, M., & Adams, C. (2007). Performance measurement frameworks: A review. In A. Neely (Ed.), *Business performance measurement: Unifying theory and integrating practice* (pp. 143–162). Cambridge: Cambridge University Press.