



Received: 26-10-2023
Accepted: 06-12-2023

ISSN: 2583-049X

Factors Affecting Efficient Owner's Equity in Listed Steel Production and Trading Enterprises in Vietnam

¹ Tran Thi Thu Thuy, ² Tran Thi Phuong Mai

¹ University of Labour and Social Affairs, Hanoi, Vietnam

² Military Industrial College, Hanoi, Vietnam

Corresponding Author: **Tran Thi Phuong Mai**

Abstract

Efficient capital of an enterprise is an economic category that reflects the level of exploitation, use and management of capital resources, making capital profitable at maximum, with the ultimate goal of maximizing asset value owner's property. To survive and develop, businesses must always find ways to preserve and use capital effectively and must take measures to improve the efficiency of using business capital as well as equity. This is not a simple problem and not all businesses can do it, especially in an unstable economic situation after the Covid-19 pandemic. The steel

industry is one of the industries heavily affected by the Covid-19 epidemic, disrupting the supply chain and lacking input materials. This article conducts a survey of 13 listed steel manufacturing and trading enterprises in Vietnam to study factors affecting efficient owner's equity. The results show that there are 6 factors affecting efficient owner's equity: (1) Enterprise size, (2) Capital structure, (3) Growth rate, (4) Business risk, (5) Business market, (6) Management capacity. From the research results, the author proposes solutions to increase efficient owner's equity.

Keywords: Owner's Equity, Efficient Owner's Equity, Factors Affecting Efficient Owner's Equity, Listed Steel Production and Trading Enterprises

1. Introduction

Capital is one of the important factors contributing to the development of a business. In particular, capital owners are essential for the existence and operation of any business. Especially after the Covid-19 pandemic, many businesses operating in different business sectors are facing difficulties, suffering from economic pressure and reduced demand, leading to a series of sectors reducing large-scale production products, even many factories had to temporarily stop operating. Not out of this context, the domestic steel industry continues to face synthetic formulas for steel production products such as construction industry, infrastructure... and competitive pressure from increasing supply domestic level and some neighboring countries. Rising input costs, low product sales, large inventories, plus pressure from loan interest rates and rising price differences... are big formulas for Vietnam's steel industry. Therefore, steel industry enterprises in general and listed steel production and trading enterprises in Vietnam need to increase the efficiency of using business capital as well as equity. To have solutions to increase the efficiency of equity use, listed steel manufacturing and trading enterprises in Vietnam grasp the influencing factors. This is also the research goal of the article.

2. Theoretical

Owner's equity

When a firm is founded, it must have a sufficient capital basis in order to begin operations and run efficiently. The company's various financing sources will vary based on the model. In general, there are two primary forms of capital for businesses: loan capital and owner's equity.

The source of capital possessed by the company's shareholders, joint venture partners, or business owner is called equity. Members provide funds for the construction of an energy source, which enables the business to run. Contributors to the company's capital will either endure the mistakes made in its business and production processes or split the gains.

A set and consistent source of finance for a company is owner's equity. Throughout its use, equity will get additional funding from a variety of sources, including: Profits from businesses, variations in the value of assets, variations in stock prices, etc. In

the event that the business closes, the unit is responsible for paying creditors' debts and staff wages before allocating funds to members based on their capital contribution ratio.

Elements of equity

Contribution: This is the total amount of cash that the owners put into the company. The most significant part of equity is contributions as they indicate the company's stability and gauge investors' confidence.

Contributed assets: In addition to cash contributions, owners may also provide other assets to the company, including stocks and bonds of other companies, real estate, cars, machinery, and equipment. The equity of the company will contain these assets.

Retained profits: This is the profit of the business after paying dividends to shareholders. Regularly reinvesting profits into business activities will help the business grow and develop.

In addition to main components such as contributed money, contributed assets and retained earnings, equity also includes funds, surplus from equity capital, asset valuation differences, exchange rate differences, v.v. Depending on each business model, equity consists of different components. Therefore, effective equity management is very important for businesses to ensure sustainable development and retain the trust of shareholders.

A significant part of the capital base that influences the growth of the business is owner's equity. Building the ideal database and energy source configuration will be made easier with an understanding of the owner's equity.

Efficient owner's equity

A business's efficient owner's equity is the correlation between the results achieved according to determined goals in a certain period of time and the amount of capital spent to achieve those results. The higher the results achieved according to the goals with the lower the costs, the more efficient the business is in using capital, and vice versa, the results achieved are lower than the set goals but consume a large amount of costs. Enterprises are considered to have low capital efficiency. Thus, the efficiency of capital use reflects the level of management and use of business capital of the enterprise in maximizing benefits, minimizing business capital spent and the time of its use according to economic conditions. Identified resources consistent with business goals.

The capacity of a company to use capital with the fewest fees is reflected in capital usage efficiency, which offers useful information for future investment decision-making. The ratio of output and business outcomes to the amount of capital the firm is holding at each time is used to calculate the efficiency of capital exploitation.

The "return on equity - ROE" metric is used to gauge how efficiently equity is used.

This index provides a precise way to assess the amount of profit generated by every dollar invested and amassed. Investors frequently examine this ratio to compare it to publicly traded stocks in the same industry and use the

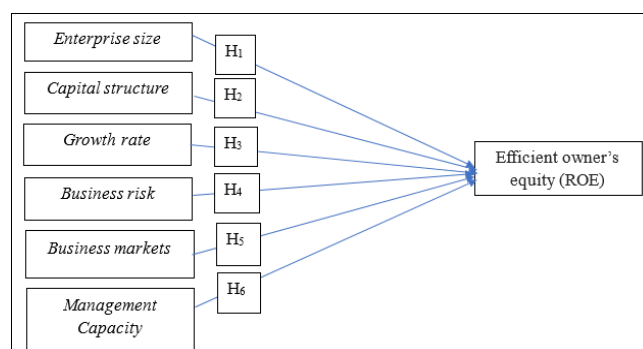
results to help them choose which company's shares to purchase.

$$\text{ROE} = \frac{\text{Profit after tax}}{\text{Average owner's equity}}$$

When evaluating investment prospects in a company's shares, the ROE ratio is frequently a crucial factor to take into account. A higher ROE ratio demonstrates that the board of directors of the firm successfully uses shareholders' cash.

3. Research model and hypothesis

From theoretical models and research overview, the research team proposed the following research model:



Source: Compiled by the authors (2023)

Fig 1: Factors affecting the efficient owner's equity

The dependent variable in the suggested study model is equity efficiency (ROE), and the independent factors are (1) enterprise size, (2) capital structure, (3) growth rate, (4) business risk, (5) business market, and (6) management Capacity. Adekunle and Kajola (2010) ^[1], Sorensen and Stuart (2000), Odalo *et al.* (2016), Pouraghajan *et al.* (2012), Nguyen Thi Hong Nga (2018) ^[6], Chu Thi Thu Thuy, Nguyen Thanh Huyen, Ngo Thi Quyen (2015) ^[10], and other research are the sources of the variables suggested in the model.

Six research hypotheses make up the proposed research model:

Hypothesis H1: There is a positive link between capital usage efficiency and enterprise size.

Hypothesis H2: The effectiveness of equity utilization is influenced by capital structure.

Hypothesis H3: Growth rate and the effectiveness of deploying equity capital have a positive correlation.

Hypothesis H4: The effectiveness of deploying equity capital is negatively correlated with business risk.

Hypothesis H5: The effectiveness of deploying equity capital is influenced by the business market.

Hypothesis H6: The effectiveness of deploying equity capital is positively correlated with management capacity.

Here is how the variables are renamed and encrypted:

Factors	Variables observed	Encryption
Enterprise size	Total revenue	S1
	Total asset	S2
	Total owner's equity	S3
Capital structure	Loan capital / Owner's equity	CS
Growth rate	Revenue growth rate	GR
Business risk	Standard deviation of revenue	R
Business market	Business markets	BM
Management Capacity	Management Capacity	MC

Hair *et al.* (2006) and Nguyen Dinh Tho (2011) state that while doing research using EFA analysis, the sample size should be at least five times the total number of variables observed. Thus, using the suggested paradigm, the author surveyed 50 managers, accountants, auditors, and staff members of 13 Vietnamese listed steel manufacturing companies.

4. Research results

Introduction to listed steel manufacturing enterprises in Vietnam

According to the listing floor, there are 7 companies listed on the Thanh Hoa Stock Exchange out of the 13 steel production and commercial enterprises functioning on the Vietnam stock market as of 2022. Hanoi Stock Exchange (HNX) and six firms in Ho Chi Minh City (HOSE).

Table 1: A list of Vietnam's publicly traded steel manufacturing companies

S. No	Stock code	Stock exchange	Company
1	DTL	HOSE	Dai Thien Loc Coporation
2	HPG	HOSE	Hoa Phat Group
3	HSG	HOSE	Hoa Sen Group
4	ITQ	HNX	Thien Quang Group JSC
5	KVC	HNX	Kim Vi Inox Import Export Production Joint Stock Company
6	MEL	HNX	Me Lin Steel Joint Stock Company
7	MHL	HNX	Minh Huu Lien JSC
8	NKG	HOSE	Nam Kim Steel Joint Stock Company
9	POM	HOSE	POMINA Steel Corporation
10	SHI	HOSE	Son Ha International Corporation
11	SSM	HNX	Steel Structure Manufacture JSC
12	VGS	HNX	Vietnam Germany Steel Pipe JSC
13	VIS	HOSE	Vietnam – Italy Steel Joint Stock Company

Source: Transaction data of listed steel sector businesses was compiled

The total capital of listed steel industry enterprises in Vietnam increased continuously in the period 2020 - 2022, accompanied by an increase in both liabilities and equity. The total capital of listed steel enterprises at the end of 2020 was 131,895,818 million VND, by the end of 2022 it had reached 188,378,172 million VND, with an average growth rate of 20% per year. However, the increase in capital size mainly comes from liabilities.

There will be 8 out of 13 listed steel firms with equity of more than 1,000 billion VND by the end of 2021. Additionally, the equity size and business size of the organization are relatively similar. Particularly, companies with high levels of business capital frequently have high levels of equity capital. Hoa Phat, Hoa Sen, and Pomina are

often the companies in the steel industry with the largest business capital size.

Results of descriptive statistics

45 observations were gathered for the study once the survey was completed. Data analysis and processing were done by the author. First descriptive outcomes are acquired:

Table 2: Describe the general characteristics of the research sample

		Frequency	Rate (%)
Sex	Male	25	55.56%
	Female	20	44.44%
Age	From 25 to 40 ages	24	53.33%
	From up 41 to 60 ages	16	35.56%
	Upto 60 ages	5	11.11%
Average monthly earnings	< 5 million VND	4	8.89%
	From 5 to 10 million VND	16	35.56%
	Up 10 to 20 million VND	18	40.00%
	> 20 million VND	7	15.56%
Academic level	high school level	0	0%
	University degree	28	62.22%
	PhD/Master's degree	12	37.78%

Cronbach's Alpha results

All of the variables' Cronbach's alpha coefficients were 0.6, allowing them to be included in component analysis. At the same time, the overall correlation coefficients of the observed variables all meet the 0.3 threshold, indicating that the offered scales can be believed statistically. The observed variable "Growth rate" has the highest Alpha coefficient (0.828).

Table 3: Reliability Statistics

Factors	Observed variables	Cronbach's Alpha
Enterprise size	S1, S2, S3	.716
Capital structure	CS	.809
Growth rate	GR	.828
Business risk	BM	.776
Business market	R	.769
Management Capacity	MC	.782
Efficient owner's equity	ROE	0.781

Source: Data processing outcomes

Exploratory factor analysis for EFA

The results of evaluating the data with KMO = 0.768 (> 0.5) and Sig of Bartlett's Test is 0.000, less than 0.05, indicating that these observations are correlated and totally consistent with factor analysis. The observed variables' factor loading factors are all greater than 0.5, the total variance retrieved is 72.345% 1.417% (greater than 50%), and Eigenvalue = 1.278 (greater than 1). For exploratory factor analysis, these tests were justified.

Regression analysis results

The following are the findings of the regression analysis of the model of factors influencing the desire to use T with six independent variables: Model fit test value sig. = 0.000 (0.05 indicates that the model variables can explain the change in the dependent variable. According to the results of

the aforesaid analysis, all six factors are significant ($p < 0.05$), and the model is as follows:

Table 4: Coefficients^a

Model	The beta coefficient is not uniform.		Beta Coefficient Standardized	t	Sig.
	B	Std. Error	Beta		
Blocking coefficient	3.328	.021		163.793	.000
S	.369	.033	.376	10.883	.000
CS	.095	.033	.123	2.823	.005
R	.034	.025	-.152	1.269	.082
GR	.064	.034	.286	1.949	.050
BM	.121	.023	.159	5.096	.000
MC	.135	.031	.176	4.410	.000

a. Dependent Variable: ROE

Source: Data processing outcomes

The effects of variables on the effectiveness of equity usage are displayed by the linear regression model.

$$\text{ROE} = 3.328 + 0.376 * S + 0.123 * \text{CS} + 0.286 * \text{GR} - 0.152 * R + 0.159 * \text{BM} + 0.176 * \text{MC}$$

5. Conclusion

Based on the study findings, the researchers verified that the research model has six elements that influence the effectiveness of equity utilization at steel manufacturing and trading companies listed on the Vietnam stock exchange. Of these elements, five have a positive correlation with one another: At a significance level of $\leq 10\%$, the following factors have opposing effects on the efficient use of equity: enterprise scale, capital structure, growth rate, business market, management ability, and business risk factor. In light of this, the authors made suggestions to enhance the effectiveness of capital use by steel manufacturing and trading companies on the Vietnamese stock exchange.

(1) Increase equity

Increase equity mobilization by issuing shares. Because business equity does not have to pay interest on loans, net profit will increase, thereby increasing capital efficiency ROE. Depending on the specific context of the economy, when the Vietnamese economy grows normally or slowly, businesses should increase equity mobilization, and when the economy grows hot, they can mobilize more. Part of long-term bank loans or issuance of corporate bonds to take advantage of tax shields.

(2) Build a reasonable capital structure

Regression results show that the debt/equity ratio of a business has a positive relationship with capital use efficiency. Therefore, to increase the efficiency of using equity capital, businesses need to limit the use of debt to finance their activities. Instead, businesses can use other forms of capital mobilization such as: Issuing additional shares: to employees, to existing shareholders or widely issued on the stock market; Financial leasing: granting credit in the form of financial leasing does not require pre-existing asset guarantees, creating conditions for businesses to access new forms of credit while helping businesses avoid risks. Due to changes in science and technology; Mobilize capital from investment funds.

(3) Promote revenue development

To develop revenue, businesses first need to create many opportunities to cooperate with customers. From then on, building a brand for businesses is an inevitable requirement. To build their brand, each business needs solutions to improve their business capacity and develop their reputation. Specifically: ensuring the quality of sold goods and transparency of company information.

(4) Improve management capacity

Business managers not only increasingly improve their professional capacity, but to manage business operations well, managers need to better understand the business, the employees in the business, and have the connection between employees in the enterprise. On the other hand, being able to make decisions quickly in response to the market also requires managers to constantly grasp market information.

6. References

- Adekunle OA, SO Kajola. Capital structure and firm performance: Evidence from Nigeria, *European Journal of Economics, Finance and Administrative Sciences*. 2010; 25(2):p77.
- Almajali AY, *et al.* Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange, *Journal of Management Research*. 2012; 4(2):266-289. 2012.
- Berzkalne I, Zelgalve E. Return on equity and company characteristics: An empirical study of industries in Latvia, the 8th International Days of Statistics and Economics, Prague, 2014, 94-103.
- Luu Huu Duc. Solutions to increase the listed Vietnamese steel sector businesses' efficiency in using working capital, *Academy level topic*, 2018.
- Gill A, *et al.* The Effect of Capital Structure on Profitability: Evidence from the United States, *International Journal of Management*. 2011; 28(4):3-15.
- Dang Thi Huong, Nguyen Thi Hong Nga. Factors affecting business performance of enterprises: empirical research from data of listed Vietnamese construction enterprises, *Journal of Science and Technology Technology*. 2018; 46:72.
- Odalo SK, *et al.* Relating Company Size and Financial Performance in Agricultural Firms Listed in the Nairobi Securities Exchange in Kenya. *International Journal of Economics and Finance*. 2018; 6(9):34-40. 2016.
- Sheikh NA, Wang Z. The impact of capital structure on performance: An empirical study of nonfinancial listed firms in Pakistan. *International Journal of Commerce and Management*. 2013; 23(4):354-368.
- Taani K, Banykhaled MEHH. The effect of financial ratios, firm size and cash flows from operating activities on earnings per share: An applied study: On Jordanian industrial sector. *International Journal of Social Sciences and Humanity Studies*. 2011; 3(1):197-205.
- Chu Thi Thu Thuy, Nguyen Thanh Huyen, Ngo Thi Quyen. Analyzing factors affecting financial performance: Case study at non-financial joint stock companies listed on the stock exchange Ho Chi Minh City, *Development Economics Magazine*. 2015; 215.
- Steel industry report 2020, 2021, 2022.