

DETERMINANTS OF PROFITABILITY: EVIDENCE IN VIETNAMESE LISTED REAL ESTATE COMPANIES

1.1. Background of The Research

Corporate profitability measures a firm's ability to generate profits from its operation, evaluated through various metrics, including profit margins, return on assets and return on equity. As profit is one of the primary goals of any business, and is directly tied to a company's survivability and sustainability (Nanda & Panda, 2018), it is the main concern to many stakeholders, both internal and external. Determining the parameters for corporate profitability movement can prove immensely valuable, as it not only provide insight into past data, but also prediction for the future.

Real Estate is defined as immovable assets, including land, houses, land related construction, and any other property attached to land. The real estate sector in Vietnam, due to its immense impact, hold a special role in maintaining the health of Vietnam's overall economy. Despite the impact of the global pandemic, the domestic real estate sector, specifically the residential sub-sector, is still one of the fastest-growing markets in the country. Research into the sector is more important than ever, due to the need for a foundation to properly manage, forecast, and maintain the growth of one of Vietnam's largest sector.

There exist several studies that have looked into the determinants of corporate profitability. (Batra & Kalia, 2016) found that corporate profitability correlates positively with business scale, and negatively with debt-equity ratio for Indian firms. Jim Nugent, when investigating firms residing in Ireland, suggested economic activity and exchange rate as possible predictors for profits (NUGENT, 1998). John Goddard, Manouche Tavakoli & John O. S. Wilson documented a link between liquidity, market share, leverage and, profits for UK 's manufacturing firm (Goddard, et al., 2006). And in Vietnam, Bui Men Thi & Nguyen Hieu proposed leverage, government ownership, dividend, and exchange rate have a statistically significant impact on ROA of firms in the Oil and Gas industry. (Bui & Nguyen, 2020)

1.2. Research Purposes and Research Questions

The purpose of this study is to identify key determinants of corporate profitability (measured through ROA and ROE) for listed companies in the real estate sector in Vietnam. What external (macro) and internal (firm-specifics) factors can be used as reliable predictors for profits, and what are the levels of impact for each considered factor?

After conducting the research, the desired result will include:

- A comprehensive review on the financial status of public firms in the real estate sector

- A suitable model to accurately determine the factors that significantly affect firms' profitability, measured through ROA.

1.3. Scope of The Research

To find variables that can significantly explain firm's profit variance, we investigated 45 public real-estate companies listed on Ho Chi Minh Stock Exchange. The time frame of the research will range from 2015 to 2020.

1.4. Research Method (approach)

The research will be employed first through the collection of secondary data on firms' specifics (including overall financial states and financial ratios), and macro indicators. And secondly, by combining various quantitative statistical analysis; The research will then try to build a framework for predicting profitability using collected internal and external historical data.

1.5. Data and Research Models

The goal of the research will be to develop models to explain the main determinants of profitability for companies in the real estate sector over the period of 2015 and 2020. Based on previous researches (Nanda & Panda, 2018), ROA will be used to measure firms' performance, characterized as a function of Log of Total Asset ($\log(TA)$), Debt/Equity ratio (DE), Current Ratio (CR), Receivables Turnover (RT), and Annual Interest Rate (INT), which form the following function:

$$ROA_i = \alpha_1 + \alpha_2 \log TA + \alpha_3 DE + \alpha_4 CR + \alpha_5 RT + \alpha_6 INT$$

In the study, we will use *generalized least square (GLS)* with random and fixed effects to analyze the explanation for the variance for our target (ROA), and normalizing the coefficients for comparative purposes.

The following statistical model is estimated in this study:

Fixed Effects Model:

$$ROA_{it} = \alpha_{1t} + \alpha_2 \log TA_t + \alpha_3 DE_t + \alpha_4 CR_t + \alpha_5 RT_t + \alpha_6 INT_t + \varepsilon_{it}$$

Random Effects Model

$$ROA_{it} = \alpha_{1t} + \alpha_2 \log TA_t + \alpha_3 DE_t + \alpha_4 CR_t + \alpha_5 RT_t + \alpha_6 INT_t + v_i + \varepsilon_{it}$$

Where α_{1t} describes fixed effects and v_i describes random effects

The models shown above will give enable the analysis of corporate profitability through the view of capital management, resource utilization and operational efficiency.

Table 1: Variable Descriptions

Symbol	Variables	Descriptions
<i>Dependent Variables</i>		
ROA	Return on Assets	Return on Assets
<i>Independent Variables</i>		
Log(TA)	Total asset	log of Total Asset will be used
DE	Debt/Equity Ratio	Debt/Equity Ratio
CR	Current Ratio	Measured by Current Asset/Current liabilities
RT	Receivable Turnover	Measured by Net Sales/Average Account Receivables
INT	Annual Interest Rate	Vietnam Central Bank Annual Interest Rate

1.6. Significance of The Research

The research will be beneficial not only to the academic side of obtaining valuable insight into the industry, but also to the practical usage of its result. External stakeholders, such as investor, creditors, suppliers, customers and the government can use the outcome of the research to improve their decision making process regarding the companies in the real estate sector. Having a framework to predict firms' profitability can allow external patrons to anticipate future circumstances and adjust their action accordingly. On the other hand, Internal Stakeholders can leverage the result to further optimize their operational pipeline. Managing their companies, in regard to obtaining fund, and usage of fund will prove more efficient due to a more concrete, visible path to profit provided by the research.

1.7. Structure of The Dissertation

To achieve the research objectives, in addition to the list of references and appendices, the thesis is structured into 5 chapters as following:

Chapter 1: Introduction. The content of this chapter introduces the overview of the thesis, research problem and the reasons for choosing the topic, and identifies four research questions and research objectives.

Chapter 2: Literature Review. The content of this chapter introduces the theoretical basis and summarizes the empirical studies related to the finding of the determinants of corporate profitability, especially in the real estate sector in Vietnam.

Chapter 3: Theoretical Framework and Research Methodology. This chapter presents the

research model, research hypothesis and research methods used to test the research hypothesis related to the research questions.

Chapter 4: Data Analysis and Findings. This chapter describes data samples used in research models and results of testing hypotheses related to research questions.

Chapter 5: Conclusion and Recommendations. This chapter presents a summary of the conclusions about the research results; suggests implications for solutions to the problem of investigating factors that significantly affect profitability, and subsequently providing insight for both internal and external stakeholders to improve decision making process.

References

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