## EVALUATING THE RELATIONSHIP BETWEEN LONG-TERM LIABILITIES AND FIRM PERFORMANCE OF LISTED FIRMS IN VIETNAM

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#### **Abstract**

Long-term liabilities are an important indicator for analyzing a firm's debt structure and evaluating its long-term financial situation. In the wake of the global economic crisis caused by the Covid-19 pandemic, assessing long-term liabilities has become even more crucial in helping firms understand financial trends, assess the effectiveness of financial management, and evaluate overall firm performance. This study aims to evaluate the relationship between long-term liabilities and firm performance of listed firms in Vietnam during the period of 2019-2021. The results of this study indicate a negative correlation between long-term liabilities and firm performance in the research period. These findings can be used to make recommendations for improving firm performance by effectively managing long-term liabilities.

**Keywords:** long-term liabilities, firm performance, listed firms, Vietnam.

JEL Classification: G30, M41.

### ĐÁNH GIÁ MỚI QUAN HỆ GIỮA NỢ DÀI HẠN VÀ HIỆU QUẢ HOẠT ĐỘNG KINH DOANH CỦA CÁC DOANH NGHIỆP NIÊM YẾT TẠI VIỆT NAM Tóm tắt

Nợ dài hạn là chỉ tiêu dùng để phân tích cấu trúc nợ và đánh giá tình hình tài chính của công ty trong dài hạn. Sau khủng hoảng kinh tế toàn cầu do đại dịch Covid-19, việc đánh giá nợ dài hạn càng có vai trò quan trọng giúp doanh nghiệp hiểu rõ về xu hướng tài chính, hiệu quả quản lý tài chính và hiệu quả hoạt động kinh doanh của doanh nghiệp. Nghiên cứu này đánh giá mối quan hệ giữa nợ dài hạn và hiệu quả hoạt động kinh doanh của các doanh nghiệp niêm yết tại Việt Nam giai đoạn 2019-2021. Kết quả của nghiên cứu này cho thấy nợ dài hạn có mối quan hệ ngược chiều với hiệu quả hoạt động kinh doanh của doanh nghiệp trong giai đoạn được nghiên cứu. Kết quả này là cơ sở đưa ra các đề xuất nhằm nâng cao hiệu quả hoạt động kinh doanh của doanh nghiệp thông qua kiểm soát các khoản nợ dài hạn.

**Từ khoá**: nợ dài hạn, hiệu quả kinh doanh, doanh nghiệp niêm yết, Việt Nam. *JEL Classification: G30, M41*.

#### 1. Introduction

Long-term liabilities refer to financial obligations that an enterprise has and intends to repay over a period of more than one year. These liabilities are typically listed on the enterprise's balance sheet and may include long-term loans, bonds, and mortgages. It is important to distinguish long-term liabilities from current liabilities, which are obligations that an enterprise is expected to repay within one year. Considering long-term liabilities is crucial as they can significantly impact an enterprise's financial wellbeing and its ability to invest in future growth. Examples of long-term liabilities include bank loans with a maturity of more than one year, lease obligations, and bonds issued by the enterprise. These liabilities are often utilized to finance large capital expenditures or to support ongoing operations. Proper management of long-term liabilities is essential for enterprises to ensure that they can fulfill their financial commitments and maintain a strong balance sheet.

Long-term liabilities are a common way for enterprises to finance their operations and facilitate growth. While it can provide a source of funding, it also has both positive and negative impacts on the business. One of the positive impacts of long-term liabilities is that it allows the business to invest in long-term projects that require a large amount of capital, such as new equipment, real estate, or research and development. This can help the business to grow and expand its operations, ultimately leading to increased revenue and profits in the

long run. However, long-term liabilities also have their downsides. One of the negative impacts is that it can increase the financial risk of the business. If the business is unable to generate enough revenue to cover its liabilities payments, it may be forced to default on its loans and potentially go bankrupt. Additionally, long-term liabilities can also limit the flexibility of the business, as it may be required to make regular liabilities payments that restrict its ability to invest in other areas of the business. In conclusion, while long-term liabilities can be a useful tool for enterprises looking to finance long-term projects, it also comes with risks that should be carefully considered before taking on such liabilities. It is important for enterprises to weigh the potential benefits and drawbacks of long-term liabilities before making any decisions about financing their operations.

Firm performance refers to an organization's ability to achieve maximum output with minimum input of resources, such as time, money, and effort. It is a measure of how effectively an enterprise utilizes its resources to achieve its goals and objectives. A highly efficient organization is able to produce goods or services at a lower cost while maintaining a high level of quality. This can be achieved through various means, including process improvements, automation, and better utilization of technology. By improving performance, enterprises can increase profitability, gain a competitive advantage, and better serve their customers. Firm performance is a crucial component of any successful organization.

The relationship between long-term liabilities and firm performance can be explained through the resource-based theory (Werrnerfelt, 1984; Barney, 1991). Long-term liabilities can have a significant impact on firm performance, both positively and negatively. On one hand, taking on long-term liabilities can provide a firm with the necessary capital to invest in growth opportunities, such as expanding operations or purchasing new equipment. However, if a firm takes on too much long-term liabilities, it can become difficult to manage the load and lead to

financial instability. One of the key ways that long-term liabilities can negatively impact a business is through the interest payments that must be made. These payments can be a significant drain on a firm's cash flow, especially if interest rates rise or the business experiences a downturn in revenue. If a firm is unable to make its liability payments, it may face default and potentially bankruptcy. Additionally, long-term liabilities can also affect a business's credit rating, making it more challenging to secure financing in the future. This can limit a firm's ability to invest in growth opportunities and hinder its long-term prospects. In Vietnam, there have been several studies examining the impact of long-term liabilities on firm performance. For instance, Tran Trong Huy and Nguyen Thi Ngoc Han (2020) confirmed a negative relationship between these two factors. However, Tran Thi Tuan Anh et al. (2023) pointed out a positive relationship between long-term liabilities and firm performance in Vietnamese oil and gas firms.

Overall, while long-term liabilities can provide an enterprise with the necessary capital to grow and expand, it is important for enterprises to carefully manage their liabilities and ensure that they are able to make timely payments. However, research on the impact of long-term liabilities on the performance of Vietnamese enterprises is still limited. Previous studies have mainly focused on the general impact of liabilities structure on performance. Therefore, it is necessary to conduct research specifically on the impact of long-term liabilities on firm performance among listed firms in Vietnam. There has been no research conducted this relationship in Vietnamese listed firms during the period of 2019-2021. This study will include a theoretical basis and development of research hypotheses, presentation of research methods and models, and recommendations for business improving efficiency through controlling long-term liabilities.

#### 2. Theoretical and hypothesis development

This research is supported by the resourcebased theory (Wernerfelt, 1984), which explains that resources include both tangible and intangible

assets that an enterprise has control over. According to Barney (1991), enterprise resources can be divided into three main categories: physical capital resources, human capital resources, and organizational capital resources. Tangible capital resources, as defined by Barney (1991), include plants, factories, locations, and raw materials. Human capital resources, on the other hand, refer to the knowledge, intuition, judgment, experience, and learning ability of employees. Lastly, organizational resources encompass the organizational structure, coordination system within the organization, and informal relationships both within and outside the enterprise. These resources are essential for the business process, which utilizes them to transform into products and services that meet customer needs. Additionally, long-term loans can also be considered as a business resource that strengthens the financial capabilities of enterprises. This allows enterprises to expand their operations and improve the efficiency of their activities.

According to Nguyen Kim Quoc Trung (2022), long-term liabilities can have a significant impact on the financial structure of enterprises and can decrease the efficiency of their business operations. Long-term liabilities can lead to higher capital costs and create financial pressure on enterprises. If not managed properly, especially in the current climate of rising interest rates, enterprises may struggle to repay their liabilities and may lose financial control.To mitigate the negative effects of long-term liabilities on firm performance, construction enterprises must effectively manage these liabilities and diversify their sources of capital, including equity and short-term loans. This will not only help minimize capital costs, but also flexibility provide greater in financial management for construction enterprises.

Tran Trong Huy and Nguyen Thi Ngoc Han (2020) discuss the impact of capital structure on the business performance of enterprises in the energy industry. The article suggests that a well-structured capital will enable enterprises to increase investments, improve competitiveness, and enhance growth and development potential.

Conversely, a poor capital structure can hinder investment and competitiveness. The authors also highlight the significance of the relationship between long-term liabilities and business performance in determining the capital structure. While long-term liabilities can support long-term investments and improve financial capacity, mismanagement of these liabilities can create financial pressure and negatively affect business performance. In conclusion, a sound capital structure is crucial for ensuring the success of enterprises in the energy industry. To achieve this, enterprises must effectively manage long-term liabilities and invest in areas with growth potential.

According to a study conducted by Saeeedi and Mohmoodi (2011), there is a correlation between a firm's capital structure and its performance, as measured by EPS and Tobin's Q. Additionally, research by Corriea et al. (2014) supports this finding, showing a negative relationship between long-term liabilities and profitability in European countries. On the other hand, Evbayiro-Osagie (2022) discovered a positive impact of long-term liabilities on business performance. This is further supported by Tran Thi Tuan Anh et al. (2023), who found a positive effect of long-term liabilities on the performance of 31 Vietnamese oil and gas firms from 2012 to 2021. Based on these theories, this study proposes the following hypothesis:

**Hypothesis H1:** Long-term liabilities have an impact on firm performance of Vietnamese listed firms.

#### 3. Research method and research model

#### 3.1. Data and research method

The research sample includes 130 listed enterprises in Vietnam. Research data is collected from public financial reports of enterprises for the period 2019-2021. The initial research data was 146 enterprises, then 16 enterprises were eliminated because they lacked relevant data. Therefore, the final research sample includes data from 130 enterprises with 390 observations. Data was processed to remove outliers and then analyzed using STATA

software. Data analysis techniques utilize multivariate regression models for analysis.

#### 3.2. Research model

This study examines the relationship between firm performance, measured by the Return to Equity (FP) (Copeland, Koller and Murrin, 1996; Gavetti, Greve, Levinthal, and Ocasio, 2012), and long-term liabilities measured by the logarithm of long-term liabilities (LTL). Control variables, including firm size (measured by the logarithm of total assets - SIZE) (Martin-Reyna and Durán-Encalada, 2012), listing age (measured by the logarithm of the difference between the year of observation and the year the firm started listing - AGE) (Imam and Malik, 2007), and financial leverage (measured by the ratio of liabilities to total assets - LEV) (Boachie and Mensal, 2022), are also considered.

To test the research hypothesis, this study uses the following research model:

FPi,t =  $\beta$ 0 +  $\beta$ 1 \* LTLi,t +  $\beta$ 2 \* SIZEi,t +  $\beta$ 3 \* AGEi,t +  $\beta$ 4 \* LEV,t + ui,t (1)

#### 4. Research results and discussion

Table 1 provides a detailed description of the data used in the study. The data in Table 2 reveals that there are enterprises with poor firm performance, as indicated by the negative value of the FP variable (Min FP = -0.308). This can be attributed to the ongoing Covid-19 pandemic, which has greatly affected the production and consumption of goods. It is worth noting that all of the enterprises included in the study are among the top 500 largest enterprises in Vietnam for 2023, according to the Vietnam Report Joint Stock Company (Vietnam Report JSC, 2023). Some of these enterprises have been listed since 2002, while others were listed more recently, resulting in the lowest value of the AGE variable being 0 (listed 1 year from the time of observation).

Table 1: Descriptive statistics for 2019-2021 period

Variable	Mean	Std.Dev	Min	Max
FP	0.134	0.105	-0.308	0.492
LTL	5.325	1.227	1.934	8.170
SIZE	6.856	0.546	5.505	8.761
AGE	0.840	0.334	0.000	1.322
LEV	0.556	0.189	0.090	0.962

Number of obs: 390 observations.

The p-value for the F test in Table 3 is 0.0000, indicating that the significance level is less than 5%. This suggests that the R2 of the population is not equal to 0, and that the regression coefficients of the overall equation are not equal at the same time. The adjusted R2 of

0.7596 shows that the independent and control variables explain 75.86% of the variation in the dependent variable. Additionally, the p-value in Table 2 is less than 0.05, providing further evidence that there is a statistically significant relationship between the independent and dependent variables.

**Table 2:** Linear regression results

Prob > F = 0.0000; Adjusted  $R^2 = 0.7596$ 

Variables	Coefficient	Std.err	t	P>   t	[95% conf	f. interval]
LTL	-0.026	0.006	-4.31	0.000	-0.038	-0.014
SIZE	0.026	0.013	2.08	0.038	0.001	0.051
AGE	-0.039	0.016	-2.42	0.016	-0.071	-0.007
LEV	-0.151	0.028	-5.34	0.004	0.068	0.349
_cons	0.208	0.071	2.92	0.004	0.068	0.349

*Independent variable: FP* 

*Note:* + p < .1; \*p < .05; \*\*p < .01; \*\*\*p < .001

Table 3 displays the variance inflation factor (VIF) values for the independent and control variables in the study. All of these variables have

a VIF value of less than 2, indicating that the model does not suffer from multicollinearity.

Table 3: Variance Inflation Indicator value

Variables	VIF	1/VIF
LTL	1.8	0.556
SIZE	1.79	0.560
AGE	1.07	0.939
LEV	1.05	0.948
Mean VIF	1.43	

Based on the research findings, the regression equation can be formulated as follows:

FP = 0.208 - 0.026\*LTL + 0.026\*SIZE - 0.039\*AGE - 0.151\*LEV (1)

Research results have shown that there is a negative correlation between long-term liabilities and the FP variable, which measures firm performance. This indicates that as the ratio of long-term liabilities increases, the firm's performance tends to worsen. This finding is consistent with the research conducted by Tran Thi Tuan Anh et al. (2023), who found that longterm liabilities have a negative impact on the performance of oil and gas enterprises in Vietnam during the Covid-19 outbreak, as measured by ROA and ROE. This study presents new findings in comparison to the study conducted by Tran Thi Tuan Anh et al. (2023) as it is applicable to all types of listed firms in Vietnam. Furthermore, this research uses ROE instead of ROA, as ROE measures the return on equity, which is directly related to the capital of enterprises. It is important to note that long-term liabilities are also a significant source of capital that supports business development.

# **5. Solutions to improve business performance through controlling long-term liabilities**

Controlling long-term liabilities is essential for any business, particularly in light of the 4.0 industrial revolution and the rapid growth of digital technology, as well as during economic crises. Research has demonstrated that effectively managing long-term liabilities can decrease the ratio of long-term liabilities to total liabilities, ultimately leading to improved performance for enterprises, especially during times of economic

hardship. To enhance business performance through the management of long-term liabilities, the following practical solutions are recommended:

Firstly, it is important to develop a comprehensive liabilities management plan. This plan should include strategies to efficiently monitor and pay off liabilities. This can be achieved by creating a budget, prioritizing liabilities, negotiating with creditors, and establishing a repayment plan. A well-defined plan for liabilities will enable enterprises to effectively manage the costs associated with them and identify appropriate revenue sources to cover these expenses. This task requires a manager with extensive knowledge in financial management and a thorough understanding of the business's operations and partnerships.

Secondly, it is crucial to utilize technology in managing finances. With the rapid advancement of digital technology, enterprises can take advantage of financial management software to monitor their cash flow, track expenses, and manage liabilities. These tools can provide valuable insights and assist enterprises in making informed decisions. They can also provide specific information about liabilities and help identify which ones can be eliminated to reduce costs for the enterprise.

Thirdly, reducing costs is crucial for enterprises to manage their long-term liabilities. Financial analysts typically focus more on a business's long-term liabilities rather than its short-term liabilities, as the latter can be volatile and not accurately reflect the overall liabilities situation. Long-term credit poses significant risks, as the longer the term, the higher the chances of

unexpected fluctuations, such as prolonged losses that can make it difficult for the business to repay its loans. If the ratio of long-term liabilities increases over time, it indicates that the business is becoming more reliant on debt. On the other hand, a decreasing ratio shows that the business is becoming less dependent on liabilities.

Fourth, increasing revenue is another effective way for enterprises to pay off their liabilities faster. This can be achieved by diversifying their product or service offerings, expanding into new markets, and investing in marketing and advertising.

Fifth, during an economic crisis, lenders may be open to renegotiating loan terms to help businesses stay afloat. Enterprises can negotiate for lower interest rates, longer repayment periods, or reduced monthly payments.

Sixth, seeking professional advice from financial planners or liabilities counselors can also be beneficial. They can provide guidance on liabilities management strategies, negotiate with creditors on behalf of the business, and offer ongoing support to help enterprises stay on track.

In conclusion, managing long-term liabilities is crucial for enterprises in today's economic

climate. While long-term liabilities may not always be detrimental, they can actually contribute to the growth of a company if used wisely. Additionally, having a low amount of long-term liabilities does not necessarily equate to a positive reputation for an enterprise, as it may indicate difficulties in expanding and growing the business. Therefore, it is important for enterprises to find a balance between growth and risk in order to attract potential investors. By implementing these practical solutions, enterprises can enhance their financial performance and position themselves for long-term success.

This study cannot avoid limitations. The data was collected during the period 2019-2021 when the Covid-19 pandemic was prevalent worldwide. As a result, it is possible that the data for some enterprises may have been impacted compared to a period without a crisis. To address this, future researchers could gather additional data to compare the findings of this study during the Covid-19 period to a normal economic period. Additionally, future studies could analyze the data set by dividing it into different sectors to determine if there are variations in this relationship among different sectors.

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