Print ISSN: 2288-4637 / Online ISSN 2288-4645
doi:10.13106/jafeb.2022.vol9.no6.0325

# Factors Affecting Firm Performance of Small and Medium Enterprises: Empirical Evidence from Hanoi, Vietnam

**Thi Van Khanh VO**[1]

**Received: February 25, 2022 Revised: May 06, 2022 Accepted: June 15, 2022**

## Abstract

Enterprises play an increasingly important role in economic development in each country. Effective businesses will make the economies of countries also become efficient and develop. Enterprises play a role in creating jobs, improving labor productivity, and connecting foreign trade and import-export activities. The study aims to evaluate the factors affecting the profitability of small and medium enterprises in Hanoi by using a study of 210 enterprises in the area as well as advanced econometric regression analysis. The research results show that firm size and human capital have no impact on business performance. However, older firms are likely to have higher firm performance, and conversely, younger firms have lower firm performance. The research also confirms that the growth of businesses often has higher firm performance than low-growth ones. Furthermore, a firm with greater value is also more likely to stimulate business performance than lower its value, and this effect is the largest among the analyzed factors. Finally, the study also has some recommendations for the Vietnamese government to develop small and medium enterprises. Specifically, the government needs to create an open mechanism for the start-up movement and create a favorable financial mechanism for small and medium-sized enterprises to be able to access.

**Keywords:** Small and Medium-Sized Enterprises, Firm Performance, Firm Size, Firm Value, Labor Productivity

**JEL Classification Code:** D22, D24, D25

## 1. Introduction

Enterprises play an increasingly important role in the economic development of each country. The business has the potential to provide jobs, improve productivity, and ultimately contribute to taxes and spur economic growth. It can be said that businesses play an important role as the backbone of economic life in most countries (Pham, 2022; Lai, 2022).

Small and medium enterprises account for over 98% of enterprises in Vietnam and are similar to developing countries. According to Pham (2022), SMEs often do not have enough resources in both finance and management skills; at the same time, the ability to withstand shocks is limited, so it is more vulnerable than large enterprises. According to statistics, the SME sector currently accounts for about 98% of the total number of enterprises operating in Vietnam, contributes up to 45% of GDP, 31% to the total budget revenue, and attracts more than 5 million employees, but the size of enterprises is limited. Small and micro-enterprises account for a very large proportion; the number of medium-sized enterprises accounts for only 1.6% of the total number of SMEs.

In the current fiercely competitive market, to survive and develop, businesses need to actively find ways to increase profits reasonably. To do so, first of all, business owners need to have a basic awareness of the factors affecting the operational performance of their businesses. Specifically, profitability is a ratio to measure a business's performance, which is a key aspect of a business's financial statements (Thủy et al., 2020). The profitability of a business shows the ability of the business to generate income over a certain period of time. Profitability is a decisive factor in helping managers develop an effective, profitable strategy for businesses.

Research on factors affecting business performance for enterprises in general and SME enterprises, in particular,

[1]First Author and Corresponding Author. Department of Business Administration, Academy of Finance, Hanoi, Vietnam [Postal Address: Le Van Hien Street, Hanoi, 100000, Vietnam]
Email: vovankhanh@hvtc.edu.vn

has been carried out in a number of recent studies such as Minh (2017), Le and Phan (2017), Abdullah and Tursoy (2021), Ankamah-Yeboah et al. (2021), and Nguyen et al. (2021). The studies all confirmed the factors that can have an impact on business performance, such as capital structure, age of the enterprise, size of the enterprise, growth of the enterprise, and productivity in the enterprise. However, in-depth research in Vietnam has not attracted the attention of scholars, especially in small and medium enterprises. SMEs have slightly different operating characteristics than large enterprises due to their greater vulnerability and weaker competition. In this study, the author evaluates the factors affecting business performance in SMEs as evidence to evaluate business performance in the SME business community.

## 2. Literature Review

Business efficiency is measured by the ability to reflect the way the business uses human resources. To achieve the highest efficiency, the goals and business plans are determined. Research by Minh (2017) suggested that business efficiency is a comparative quantity: comparison between inputs and outputs, comparison between business expenses spent, and business results obtained. Improving business efficiency is understood as making the business efficiency measurement indicators of enterprises increase regularly and the degree of achievement of qualitative goals in a positive direction. Improving business efficiency is an important issue that many businesses are concerned about, especially in the current international economic integration context.

Le and Phan (2017) used unbalanced panel data for the period 2007–2012 to analyze non-financial enterprises listed on the Stock Exchange. Research shows that debt ratio has a negative impact on business performance, that is, increasing debt in enterprises will reduce business performance, and especially enterprises are likely to fall into financial distress. The author believes that, in developing countries, enterprises often manage debt inefficiently and worse than in developed countries. The author also believes that the ineffective monitoring of loans due to asymmetric information in transactions and an underdeveloped financial system is the reason for the lack of effective use of debt in business activities.

Abdullah and Tursoy (2021) studied non-financial companies listed on the German stock exchange during the period 1993 to the end of 2016. Like European companies, German companies present As a result, about 60% of the capital comes from debt; the author believes that capital structure has a relationship with business performance and is reflected in the positive impact of debt on business performance. Thereby showing that businesses in Germany have taken advantage of the tax shield, and at the same time, the cost of debt mobilization is also cheaper than the cost of equity, and enterprises have used debt effectively and efficiently to increase business efficiency.

Heredia et al. (2022) found that the digital economy era is likely to bring many benefits and challenges to businesses; typically, businesses have the ability to increase operational efficiency. Due to the ability to absorb technology. They conducted a study on 999 businesses in 27 countries. They found that in less developed countries, businesses have a higher ability to absorb digital technology than in highly developed countries. Because developing countries have a low development foundation, when absorbing technology, they can provide businesses in these countries with greater economic benefits. Similarly, the study of Siriram (2022) also emphasized the role of technology in companies, especially the ability to create new products and technology platforms that can improve business efficiency.

Ankamah-Yeboah et al. (2021) studied the relationship between capital structure and business performance in Croatia, Italy, Spain, France, and Greece, and the results show that technical efficiency is increasingly improving in companies. According to agency theory, there is a difference in interests between agents and owners, so the study suggests that there exists an inverse U relationship between capital structure and business performance. That is, in one situation, capital structure has a positive effect on business performance, and in other cases, a negative relationship exists. That shows that there is always a debt threshold and this threshold changes the impact of capital structure on business performance. In addition, in a study by Nguyen et al. (2021) on food companies listed on the Hanoi Stock Exchange from 2015 to 2019, the author argued that capital structure has different effects on business performance in enterprises, and the impact can be positive or negative and depends on the specific case. The growth of the company has a positive impact on the profit of the business, thereby confirming that the growth companies often have many advantages in production and business and the profit will be improved better than other companies. In the context that the economy maintains high growth, it can lead to an increase in food demand and thereby create more benefits for businesses in the food industry to exploit the market and develop.

Here, we have the following hypotheses:

***H1:*** *Firm size significantly and positively impacts its firm performance.*

***H2:*** *Firm age significantly and positively impacts its firm performance.*

***H3:*** *Firm growth significantly and positively affects its profitability.*

***H4:*** *Firm value significantly and positively affects its profitability.*

***H5:*** *A company's productivity positively affects its firm performance.*

## 3. Methodology

### 3.1. Research Data

To estimate the factors affecting the operational performance of small and medium-sized enterprises (SMEs), the study uses secondary data taken by convenience sampling technique from 2010 to 2020 financial statements of 210 SMEs in Hanoi, Vietnam. Therefore, we can collect 2310 observations for 210 companies over 11 years. We also corrected the missings and errors in this data.

### 3.2. Research Methodology

Based on performance theory and literature reviews, as well as previous views according to Ankamah-Yeboah et al. (2021), Nguyen et al. (2021), Abdullah and Tursoy (2021), and Minh (2017), the authors, propose a general research model as follows (Table 1):

$$E(Y_t) = \beta_0 + \beta_1 X_1 t + \beta_2 X_2 t + \beta_3 X_3 t + \beta_4 X_4 t + \beta_5 X_5 t + u_t$$

where: The dependent variable $E(Y_t)$ is the return on total assets (ROA). The independent variables ($X_{it}$), are firm size ($X_1$), firm age ($X_2$), firm growth ($X_3$), firm value ($X_4$), and HC (Human capital) ($X_5$).

## 3. Results

To check the possibility of multicollinearity, first of all, the study performs correlation analysis between the variables used in the model, the analysis results are as follows:

Correlation analysis aims to eliminate the possibility of multicollinearity of the variables that may occur. The results in Table 2 show that the largest correlation coefficient for the independent variables is only 0.6753, confirming the unlikely possibility of multicollinearity.

The results of the study of the factors affecting the profitability of small and medium enterprises are shown through the regression results according to Table 3.

Research results in Table 3 show that company size and human capital have no impact on business performance in Hanoi. Meanwhile, firm age, company growth, and firm value have a positive effect on business performance. The coefficient of determination $R^2$ of 67.4% is quite reasonable, showing that the general fluctuations of the influencing factors explain about 67.4% of the SME performance. The part of the regression model that cannot be measured here is about 32.6%, which is mainly due to the impact of other important factors on the performance of enterprises.

***For Firm Age***

With an estimate of β1 of 0.3216 (sig. 0.001), firm age shows that when firm size increases by 1%, firm performance will decrease to 0.3216%. It shows that a larger form will have a lower firm performance. That means that smaller

**Table 1:** Expected Signs of Variables in the Model

| Variables | Variable Name | Variable Measurement | Expected |
|---|---|---|---|
| $X_1$ | Firm size | Log (Total Assets) | + |
| $X_2$ | Firm age | Log (Number of years of operation) | + |
| $X_3$ | Firm growth | (This year's revenue – Last year's revenue)/Last year's revenue | + |
| $X_4$ | Firm value | Log (Total equity) | + |
| $X_5$ | HC | Log (added value/number of employees) | + |

**Table 2:** Correlation Matrix

| Variables | Firm Size | Firm Age | Growth | Firm Value | HC |
|---|---|---|---|---|---|
| Firm size | 1.0000 | | | | |
| Firm age | 0.5778 | 1.0000 | | | |
| Growth | 0.6753 | 0.6532 | 1.0000 | | |
| Firm value | 0.2457 | 0.0986 | 0.5542 | 1.0000 | |
| HC | 0.2357 | 0.4563 | 0.1346 | –0.7789 | 1.0000 |

**Table 3:** Estimated Results

| Items | Abbre. | Unstandardized Coefficients ($\beta$) | Standardized Coefficients ($\beta$) | *P*-value | Tolerance | VIF |
|---|---|---|---|---|---|---|
| Constant | | 0.1230 | | 0.1652 | | |
| Firm size | $X_1$ | –0.1431* | –0.2132* | 0.1121 | 0.8621 | 1.1599 |
| Firm age | $X_2$ | 0.2312 | 0.3216 | 0.0625* | 0.8342 | 1.1987 |
| Growth | $X_3$ | 0.1235* | 0.4389* | 0.0233** | 0.8762 | 1.1412 |
| Firm value | $X_4$ | 0.3423* | 0.5463* | 0.0012*** | 0.9017 | 1.1090 |
| HC | $X_5$ | 0.1258 | 0.1674 | 0.3530 | 0.9896 | 1.0105 |

Note: ***, **, *indicating for the significant level of 1%, 5%, and 10%.

enterprises are more efficient because small businesses are better able to adapt to shocks in the economy and production and business. Indeed, when doing business, businesses are always greatly affected by the macroeconomic environment and the competition among businesses in the industry. If the business is better able to adapt, it will be able to easily achieve efficiency. Small businesses often do not have a business advantage, so they require high adaptability to survive and develop. In the context of Vietnam, empirical evidence also proves this characteristic, and through that, policymakers should continue to create a favorable business environment to further facilitate the development of small and medium enterprises.

The results of this study are consistent with those of Loderer and Waelchli (2010). Larger enterprises will find it difficult to effectively manage the organizational structure, by overcoming bureaucratic problems in the management structure. On the other hand, the reality shows that the smaller the size of the enterprise, the more likely it is to increase profits.

***Firm's Growth***

The growth rate of SME firms has positive effects on profitability, with the estimated value of $\beta_3$ being 0.4389 (sig0.0233). That is, when a business has grown, it increases the business efficiency of that business, and vice versa; if a business declines, the business efficiency decreases. Through the research, it is also confirmed that business growth is the second most influential factor among the surveyed factors. This is consistent with the statement from previous studies that small and medium-sized enterprises are just start-ups, so it requires businesses to have grown to be able to survive in a harsh business environment. During this stage of development, many businesses are likely to leave the market because they cannot maintain growth; on the contrary, when other businesses can maintain the growth rate, they are able to survive and develop. Ultimately increase profits for the company, shareholders, and development. In addition, SMEs also play a very important role in the economic growth and development of a country. SMEs can promote more jobs than large enterprises. SMEs have a smaller scope, so it is easier to set up and organize business activities. The more efficient SMEs are, the more likely they are to increase profits. Therefore, a firm can maintain its growth that is highly developing in the long term.

***Firm Value***

Firm value has a positive effect on current profitability with an estimation coefficient of 0.5463 (sig. 0.0012). Through the research, it is confirmed that enterprise value is the factor that has the greatest impact on business performance. The research results can explain that businesses always want to improve corporate value when higher corporate value means that the interests of shareholders also increase and shareholders also feel secure entrusting leadership. Theirs to the board of directors. When a business can improve the value of the business, it means that the business is profitable and thereby increases the financial indicators of the enterprise; ultimately, the business performance is improved. In the context of Vietnam, businesses play an increasingly important role in economic development, and the growth of enterprises is likely to contribute more to the economy through job creation, improved productivity, and international integration. From this empirical evidence, the study is also a suggestion for policymakers and shareholders who are always interested in corporate development to enhance the company's value.

## 4. Conclusion

The study evaluates the factors affecting the profitability of small and medium enterprises in Hanoi, using a study of 210 enterprises in the area. Using econometric regression analysis, the research results show that firm size and human capital have no impact on business performance. However, older firms are likely to have higher financial performance, and conversely, older firms have lower financial performance. The research also confirms that growth enterprises often have higher financial efficiency than low-growth ones, thereby showing that growth enterprises have many opportunities for development. Furthermore, high firm value is also more likely to stimulate business performance than lower enterprise value, and this effect is the largest among the analyzed factors.

The study has several recommendations for SMEs. Firstly, small and medium enterprises account for 97% of enterprises operating in Vietnam in particular and developing countries in general, showing that small and medium enterprises are the main force capable of creating job opportunities. employment, productivity improvement, and economic development. Developing SME businesses that operate effectively in a volatile business environment is imperative in most countries. To do that, the main goal of a business is to maximize profits. To further improve the efficiency of enterprises, business leaders need to focus on promoting a number of factors that positively affect and improve the factors that have negative impacts or currently have no impact on the profits of enterprises. SMEs need to apply an incentive regime to improve knowledge, professional and technical qualifications, management with bonuses according to work results, and creativity in learning of employees to encourage employees to go to school. In addition, focusing on creating a good environment at work, making employees feel rewarded, thereby becoming more loyal and devoted to the business, increasing their work productivity, and bringing higher profits for the company. Since then, businesses have increased business efficiency, and the contribution of SME enterprises to the goal of economic growth is higher.

## References

Abdullah, H., & Tursoy, T. (2021). Capital structure and firm performance: Evidence of Germany under IFRS adoption. *Review of Managerial Science, 15*(2), 379–398. https://doi.org/10.1007/s11846-019-00344-5

Ankamah-Yeboah, I., Nielsen, R., & Llorente, I. (2021). Capital structure and firm performance: Agency theory application to Mediterranean aquaculture firms. *Aquaculture Economics and Management, 25*(4), 367–387. https://doi.org/10.1080/13657305.2021.1976884

Minh, D. T. (2017). Theoretical research on business performance of enterprises. https://tapchitaichinh.vn/tai-chinh-kinh-doanh/tai-chinh-doanh-nghiep/nghien-cuu-ly-luan-ve-hieu-qua-kinh-doanh-cua-doanh-nghiep-130643.html

Heredia, J., Castillo-Vergara, M., Geldes, C., Carbajal Gamarra, F. M., Flores, A., & Heredia, W. (2022). How do digital capabilities affect firm performance? The mediating role of technological capabilities in the "new normal." *Journal of Innovation and Knowledge, 7*(2), 100171. https://doi.org/10.1016/j.jik.2022.100171

Le, T. P. V., & Phan, T. B. N. (2017). Capital structure and firm performance: Empirical evidence from a small transition country. *Research in International Business and Finance, 42*, 710–726. https://doi.org/10.1016/j.ribaf.2017.07.012

Loderer, C.F. & Waelchli, U. (2010). Firm Age and Performance. Available at SSRN: https://ssrn.com/abstract=1342248 or http://dx.doi.org/10.2139/ssrn.1342248

Nguyen, V. H., Nguyen, T. T. C., Nguyen, V. T., & Do, D. T. (2021). Internal factors affecting firm performance: A case study in Vietnam. *Journal of Asian Finance, Economics, and Business, 8*(5), 303–314. https://doi.org/10.13106/jafeb.2021.vol8.no5.0303

Lai, P. T. C. (2022). Solutions for developing small and medium-sized enterprises in Vietnam under the impact of the Covid-19 pandemic. Nguồn https://www.quanlynhanuoc.vn/2022/02/24/giai-phap-phat-trien-cac-doanh-nghiep-nho-va-vua-o-viet-nam-duoi-tac-dong-cua-dai-dich-covid-19/.

Pham, T. T. B. (2022). Determinants of financial information disclosure: An empirical study in Vietnam's stock market. *Journal of Asian Finance, Economics, and Business, 9*(4), 73–81. https://doi.org/10.13106/jafeb.2022.vol9.no4.0073

Siriram, R. (2022). Technological and non-technological innovation affects firm performance. *Journal of High Technology Management Research*, *684,* 100429. https://doi.org/10.1016/j.hitech.2022.100429

Thủy, H. X., Hiếu, Đ. L. M., Danh, D. K., Đạt, P. P. T., Ngọc, N. H., & Ngọc, P. N. (2020). The factors affect the financial performance of companies listed on the Hanoi stock exchange *Journal of Economics, Law and Management, 4*(3), 948–962. https://doi.org/10.32508/stdjelm.v4i3.663