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AN ANALYSIS OF INVESTMENT DEMAND AND THE DEVELOPMENT TREND OF NON-STATE ENTERPRISES IN VIETNAM

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ABSTRACT

This paper studies the investment situation, investment demand, and identification of development trends of non-state enterprises in Hanoi, Vietnam, using the partially adjusted demand model and enterprise identification theory as research approaches. The results show that business efficiency, enterprise growth, and enterprise size are the main factors affecting the choice of capital structure for Hanoi non-state enterprises. Due to capital constraints, most of the machinery and equipment of non-state enterprises in Hanoi, Vietnam, have a long usage age. The investment demand of non-state enterprises depends more on revenue growth than on the investment scale of previous years. The long-term and short-term investment elasticity are 2.55 and 2.18, respectively, corresponding to the adjustment coefficient δ= 0.8584. Finally, the research results show that the non-state enterprises in Hanoi, Vietnam, have shown slight signs of development or growth. The main factor contributing to the growth of non-state enterprises is the scale of employment rather than investment accumulation. Through the analysis, the paper comes to the following important conclusions: The factors, total assets, total number of employees, labour qualifications, input supply, business sector, level of competition in the market, and level of risk are factors affecting the business results in terms of revenue and profit of non-state enterprises in Hanoi, Vietnam.

Keywords: business efficiency, Development trend, enterprise growth, enterprise size, Investment demand, Non-stated Enterprises, Vietnam

JEL Classification: B22, G32, G38, E50

INTRODUCTION

Modern financial theory considers investment decisions to be important in corporate finance because the investment decision will lead to other important decisions, such as financing decisions or distribution decisions (Ross et al., 2008). Investment is a decisive activity for the growth and development of a business. Investment refers to the fact that a business spends a certain amount of capital to form and supplement necessary assets to help the business achieve its future business goals. It can be seen that investment is closely related to operating efficiency because, without new investment projects, businesses cannot survive and develop in today's fiercely competitive environment. Based on the asset structure, business investment focuses on the following three groups: (1) investment in current assets (short-term investment to ensure the production and business activities of the enterprise), (2) investment in fixed assets (long-term investment for construction and purchase of machinery and equipment), and (3) investment in financial assets (financial investment through the purchase of stocks, bonds, and joint ventures with other enterprises) (Brigham & Ehrhardt, 2009). Business investment can be moderate investment, underinvestment, and overinvestment. Moderate investment within financial and control capabilities increases the efficiency of business operations, but overinvestment beyond capabilities will reduce the efficiency of business operations (Richardson, 2006). This point of view was also previously mentioned by Jensen (1986). Therefore, studying factors affecting investment in non-state enterprises is a necessary task to enhance the efficiency of business operations.

Many domestic and foreign studies on non-state enterprises in Vietnam show that the contribution of these economic sectors to the current economy is very large. Non-state

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enterprises contribute to increasing the efficiency and competitiveness of the economy. With many enterprises operating in the same industry, the enterprises are forced to accept competition in order to survive and develop. Many non-state enterprises also play the role of satellites for large corporations; state enterprises promote the process of specialization and division of labour in production, increasing the efficiency of non-state enterprises themselves as well as of cooperative enterprises. However, there are still many challenges for this economic sector to integrate more deeply and the ability to integrate successfully.

For Hanoi, issues related to development potential, development status, and development orientations for the non-state economic sector have not been studied much. According to the report of the Hanoi Department of Planning and Investment, non-state enterprises in the capital are still facing many difficulties in terms of capital, production and business premises, limited management skills, slow innovation in production technology, etc.

According to data from the Hanoi Statistics Office in 2023, non-state enterprises account for over 97% of the total number of enterprises, generating nearly 75% of revenue and solving more than 76% of jobs for workers (Figures 1,2).

In Figure 1, the percentage of existing companies as of December 31 in a period of 2019-2023, by type of company, reveals that the majority of companies registered to operate in Hanoi are non-state enterprises. On December 31, 2023, the number of actual companies which gained revenue was 150,509, increasing by 0.8% compared to that in 2022. Of which, the state-owned sector possessed 355 companies, accounting for 0.2%, and dropped by 11%; the non-state sector reached 146,295 companies, accounting for 97.2%, and grew by 1%; the FDI sector had 3,859 companies, making up 2.6%, and dropped by 5%.

In Figure 1, state-owned enterprises are enterprises in which the state invests 100% of capital or limited liability companies, joint stock companies with 50% of Figurer capital held by the state.

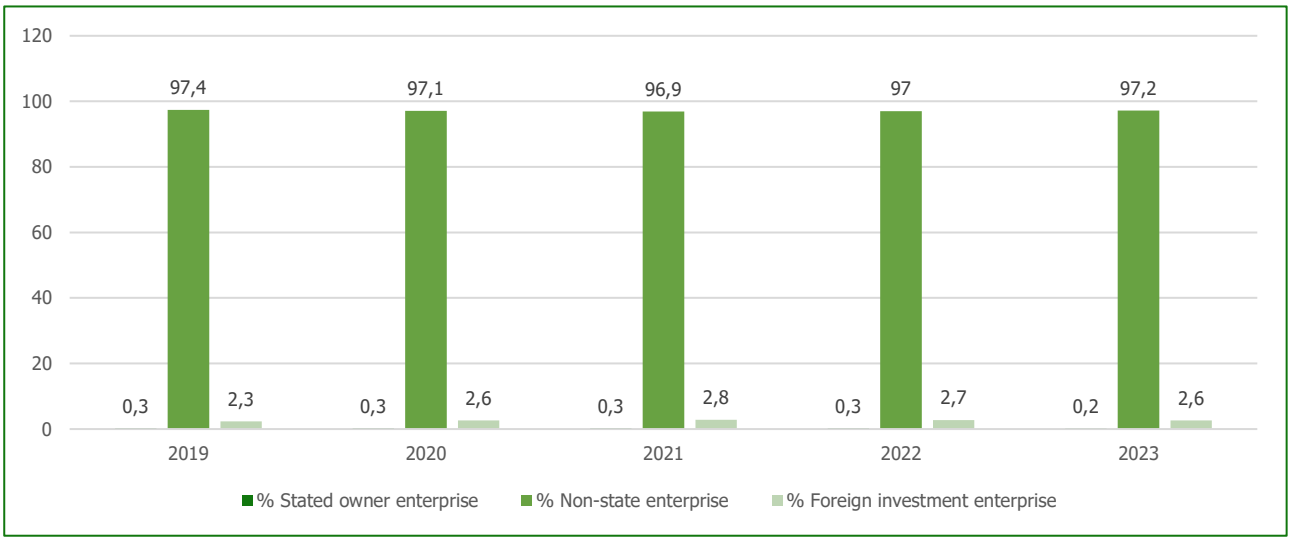

Figure 1. Percentage of type of enterprises operating in Hanoi, Vietnam. *(Source: Hanoi Statistical Yearbook 2023)*

The non-state enterprise sector includes enterprises in which the state holds no more than 50% of the Figurer capital or enterprises invested by individuals or organizations other than the state.

Foreign investment enterprises mean enterprises with capital directly invested by foreigners, irrespective of the proportion of foreign capital.

In Figure 2, there is the percentage of employees in existing enterprises at December 31 from 2019 to 2023, by the type of enterprises.

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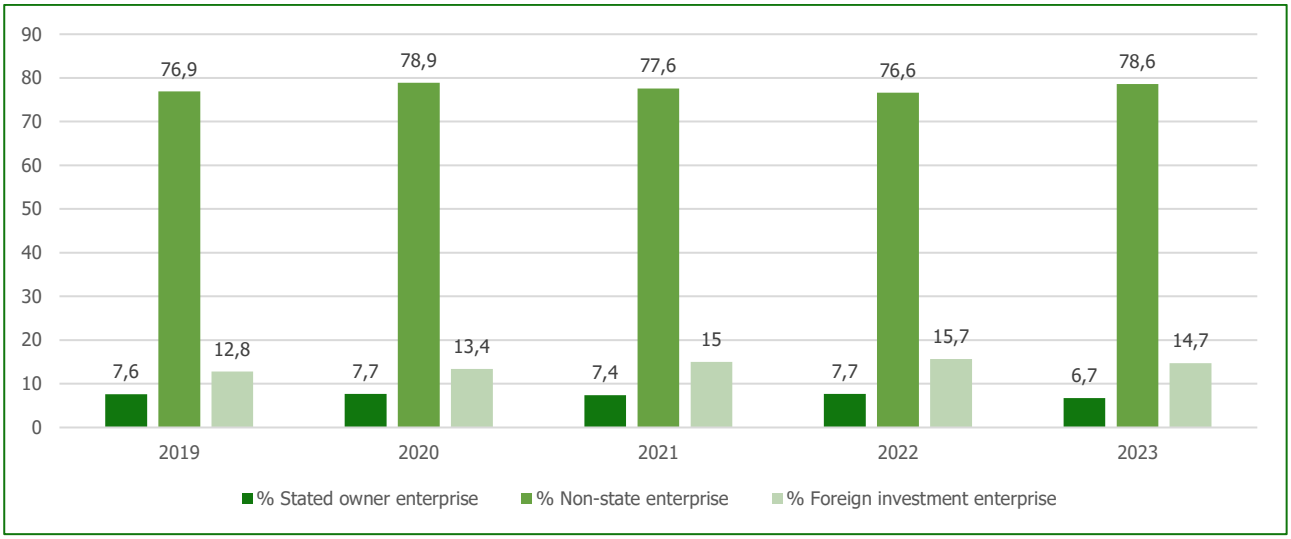

Figure 2. Percentage of employees in enterprises in 2019-2023. *(Source: Hanoi Statistical Yearbook 2023)*

In Figure 2, The number of employees working in enterprises as of December 31, 2023, was 2,324.5 thousand, an increase of 6.4% over the same period last year. Of which, the non-state sector attracted the most employees with 1,827.8 thousand, accounting for 78.6% and an increase of 9.2%, followed by the foreign-invested enterprise sector with 341.1 thousand employees, accounting for 14.7% and a decrease of 0.8%; State-owned enterprises had 155.6 thousand employees, accounting for 6.7% and a decrease of 6.6%.

The above data shows the important role of non-state enterprises in Hanoi's socio-economic life. This shows that studying the investment status and investment demand of non-state enterprises in Hanoi is necessary. In addition, identifying the development trends and factors affecting the development trends of the non-state economic sector will contribute to finding policies and solutions to promote the development of non-state enterprises in Hanoi.

LITERATURE REVIEW

Investment of enterprises often focuses on three main forms as follows: (1) investment in current assets (short-term investment to ensure the production and business activities of the enterprise), (2) investment in fixed assets (long-term investment for construction and purchase of machinery and equipment), and (3) investment in financial assets (financial investment through the purchase of stocks, bonds, and joint ventures with other enterprises) (Yeo, 2018; Jorgenson, 1963).

First, investment in current assets is a form of investment in a for-profit enterprise and is related to the purchase and sale of goods and services with the expectation of creating short-term cash flow for the enterprise, such as investment in storing goods in the form of finished goods and raw materials, and investment in short-term profitable items.

Second, investment in fixed assets includes tangible and intangible fixed assets, including investment in research and development (R&D) to learn how to develop and improve products, services, technologies, or processes. Along with creating new products or improving old products, R&D investment also helps to link the strategies and business plans of the enterprise. The benefits of R&D investment come from the ability to increase productivity and create new product lines. Investors are often interested in businesses that increase R&D investment.

Third, financial investment through buying stocks and bonds, investing in subsidiaries, in joint ventures, and contributing capital to joint ventures with other businesses. Financial investment is an asset that a business puts money into with the hope that it will increase in value over time and create a larger amount of money. The business can sell it at a higher price or make money from the assets it owns in the future. Some notes on financial investment include that the longer a business holds assets, the higher the risk. However, high risk comes with the expectation of higher returns.

In addition to the above definition, financial investment in the economic aspect is considered to be the business's investment in products, equipment, factories, employees, and inventories (Hutchinson & Gul, 2004).

Thus, based on these three different forms of investment, the definition of financial investment in the economic aspect is used in the study because most of them aim to diversify investment and business to make profits, invest in other industries,

invest in industries where the business does not have an advantage, creating the ability to overinvest while cash flow is high. The remaining investments include investments in current assets and investments in fixed assets, which are investments in the main industry, whether in the form of expansion or replacement investment (Jangili & Kumar, 2010).

Arora and Chakraborty (2012) in a research of Singapore private enterprises shows that another major obstacle for private sectors is improving access to credit. The research results show that the smaller the scale of the enterprise and the more backwards the production technology, the more difficult it is to access credit. With the current economic structure of Singapore, it is very difficult for the private sector to have greater access to credit.

The research conducted by Gaver & Gaver (1993) discusses investment and corporate financing, dividend, and compensation policies. The research results show that in order for SMEs to participate more in international trade activities, an important factor for an open economy, the reform process needs to be carried out first in investment policy. The authors found additional evidence of the association between the investment opportunity set and corporate financing, dividend, and compensation policies.

Rokhmawati (2019) investigates the effect of firm cash flow on investment decisions moderated by financial constraints and mispricing. He found that net income and cash flow positively affect investment demand. This shows that the private economic sector still has small-scale activities, although the shift in the scale of enterprises has increased gradually over the years. Among the support policies for the private economy, support policies to help enterprises effectively use internal and external resources, such as land policies and human resource training policies, have shown positive results, while tax or interest rate support policies still have many shortcomings.

The research conducted by Brealey and Franks (2009) investigated the relationship between Indexation, investment, and utility prices. The authors recommend some solutions. On the government side, it is necessary to reform the tax system and financial incentive institutions for R&D activities, reform the management policy institutions in this economic sector, create a close connection between enterprises and domestic research institutes, and enhance labour skills for this economic sector. The authors propose that there is a need for a new strategy at the national level to develop SMEs.

According to some empirical studies such as Chi & Choi (2017), Yeo (2018), and Xu & Xu (2019) for internal cash flows, financing policy (increasing debt) and dividend policy (increasing dividend payments) both help limit free cash flow and enhance the ability to monitor from stakeholders in the market. Biddle et al. (2009) and Jiang & Yang (2019) argue that borrowing can lead to financial distress or bankruptcy of the enterprise, but the enterprise is also subject to stricter debt terms. If the administrator continues to invest in unprofitable projects, he will lose his privileges. From there, the administrator will limit his overinvestment behaviour. Finally, Bokpin & Onumah (2009) and Lian et al. (2017) demonstrate that limiting overinvestment can help the enterprise operate more efficiently.

Nair (2011) conducted an overview of financial liberalization and determinants of investment: a study of Indian manufacturing firms. The author identified the characteristics of the private economy, its role in the multi-sector economy in India, and its international economic integration factors. The private economy develops objectively and naturally. The market mechanism is the natural form of regulation of the activities of the private economic sector. The author points out that the private economic sector has the following basic characteristics: (1) spontaneous and strong vitality, (2) the ability to choose the appropriate scale and organize optimal production, and (3) diversity in scale (however, most are still small and medium scale).

Licandro and Puch (2004) and Odit and Chittoo (2008) point out the barriers that hinder the development of the private economic sector in Mauritian firms and Spanish firms. Lack of capital and weak access to capital markets, low labour quality, low level of application of technical advances, low business efficiency, and lack of support from the state are the main limitations for the development of the private economic sector. In particular, the author also presents some basic solutions to develop the private economic sector. According to this author, innovation in management mechanisms and policies is an important premise for the development of the private sector.

Ozdagli (2012); Pruitt & Gitman (1991); Titman et al. (2004) conducted a study on Capital investments and stock returns. The results showed that revenue possitively affect capital investment expecially in the private economic sector, it is greater than that in the state economy. The impact of state policies on the development of the private economic sector is confirmed.

Ari Kokko et al. (2004) conducted a study on the development and trend of international economic integration of small and medium enterprises in Vietnam. By using microdata from three surveys on small and medium enterprises in Vietnam in 1990, 1996, and 2002, the research results showed that very few small and medium enterprises successfully integrated internationally, although the development of this economic sector is an important driving force contributing to economic

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growth. Only 3% of small and medium enterprises surveyed in 2002/2003 participated in international trade activities. Meanwhile, Vietnam is becoming an export-based economy. Exports are becoming an important driving force for the development of the Vietnamese economy. The research results suggest that the challenges ahead are enormous. To maintain the high growth rate of recent years in the context of international economic integration as today, SMEs need to do more to enhance their capabilities. This is not only about investing in more machinery and equipment but also focusing on investing in human capital and management skills.

Hue (2006) shows the great role of the small and medium-sized enterprise economic sector in Vietnam's economic growth in recent times. Small and medium-sized enterprises account for 31% of total annual industrial output and 78% of retail enterprises in commerce. Small and medium-sized enterprises contribute up to 51.7% of Vietnam's economic growth rate, 88.5% of new jobs created for the economy, contribute up to 83.2% of the dynamism and efficiency of the economy, and contribute 63.2% of the number of trained entrepreneurs in the economy. Regarding the economic efficiency of small and medium enterprises, due to low investment costs, they can easily convert production and business plans as well as business types to quickly recover capital and bring high economic efficiency.

AIMS AND OBJECTIVES

Based on the above issues, the research questions are:

1. What has the investment status of non-state enterprises in Hanoi been in the past?
2. What factors affect the investment demand of non-state enterprises in Hanoi?
3. What solutions are there to develop non-state enterprises in Hanoi in the coming time?

The general objective of this article is to analyze the factors affecting the development of non-state enterprises. Specific objectives include:

1. Assess the investment status and investment demand of non-state enterprises in Hanoi.
2. Propose solutions and policies to support the development of non-state enterprises in Hanoi.

METHODS

Research model

This paper uses two research approaches. The first is the model of investment demand of enterprises according to the Partial Adjustment Model (PAM) estimation method of Nerlove (1955), Nerlove (1958), and Nerlove (1968). The method of estimating the partial adjustment model is based on the flexible accelerator model with the assumption that there is a desired equilibrium state due to the responsiveness of technology. It is assumed that the desired level of investment of non-state enterprises (Y *) is the linear function with the net revenue variable, X_t, as follows:

$$Y^* = \beta_0 + \beta_1 * X_t + U_t \quad (1)$$

Since the desired level cannot be directly observed, Nerlove (1958) proposed a partial adjustment hypothesis written in the following equation:

$$Yt - Yt\text{-}1 = \delta(Y\,t^* - Y\,t\text{-}1) \quad (2)$$

where: δ: Adjustment coefficient ($0 < \delta \leq 1$); $Y_t - Y_{t-1}$: Actual change in investment; $Y_t^* - Y_{t-1}$: Desired change in investment

Equation (2) shows that the actual change in the investment capital of the enterprise in period t. When $\delta = 1$, the actual investment capital is balanced with the desired investment capital, or in other words, the actual investment capital is adjusted to the desired investment capital immediately. When $\delta = 0$, it implies that there is no change because the actual investment capital at time t is equal to the previous period.

Equation (2) can be written in another way as follows:

$$Y_t = \delta\, Y_t^* + (1 - \delta)\, Y_{t-1} \quad (3)$$

Equation (3) shows that at time t, the investment of the enterprise is the average of the desired investment at that time and the investment existing in the previous period. Then δ and (1-δ) are the influence indexes.

Substituting (1) into (3) we get the following model:

$$Y_t = \delta \beta_0 + \delta \beta_1 * X_t + (1 - \delta) * Y_{t-1} + \delta U \quad (4)$$

Equation (4) is a linear regression equation. People call this model PAM, which is the partial adjustment model or the short-term demand function for investment. In which: *β1: Long-term elasticity of investment demand*; *δβ1: Short-term elasticity of investment demand*

In model (4), investment at time t is the average of desired investments at that time and existing investments in the nearest past period. While δ and (1 - δ) are influence indices. Equation (4) can be transformed into a log-linear model. The model with the logarithm of the dependent regressor is a function of the logarithms of the independent regressors) as follows:

$$LnY_t = \alpha_0 + \alpha LnX_t + \beta LnY_{t-1} + eu_t \quad (5)$$

The second is the enterprise identification model, which assesses the development trend of non-state enterprises in Hanoi. According to Toan (2008), there are four steps in the enterprise identification process:

- choosing the identification parameter (ti);
- determining the measurement space (μ);
- determining the decision space (Xi), and (iv) determining the partition of the form φ(x).

The values of the enterprise identification parameters include:

- total actual profit;
- total labour resources used in the year;
- total fixed assets put into use in the year;
- total input sources of regular costs, (v) Ability to consume all products;
- ability to grasp information;
- factors opposing the enterprise.

According to Singh & Faircloth (2005), Modigliani & Miller (1958), and Gordon (1963), the development trend of enterprises has the following forms:

Development transformation form if the following system conditions are satisfied:

$a_1^{k+1} > a_1^k$ (k ≥ 5)

$$\sum_{j=2}^{7} \alpha jk \geq 1 \quad (5)$$

$\alpha_3^k = \max(\alpha_j^k)$ (j=2-7)

Growth transformation forms if the following condition is satisfied:

$$a_1^{k+1} > a_1^k \ (k \geq 3) \quad (6)$$

Decay or decline transformation form if the following system conditions are satisfied:

$a_1^{k+1} > a_1^k$ (k ≥ 3)

$$\sum_{j=2}^{7} \alpha jk \leq 1 \quad (7)$$

$\alpha_3^k = \min(\alpha_j^k)$ (j=2-7)

where a_i is the value of the identification parameters i in the partitioning of the form φ(x)

For estimation, the Cob-Douglas regression model is used. The results of the identification of the transformation in this step are the basis for concluding on the current situation and development trends of non-state enterprises in Hanoi.

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Data collection method

The study was conducted by sampling 30 districts, towns, and cities in Hanoi. Based on secondary data on non-state enterprises up to the time of the survey, the proportional random sampling method was used to ensure that 330 non-state enterprises were randomly selected for the survey. As a result, a random sample was selected for this study. The sample was then stratified by enterprise types, such as agriculture, industry, seafood processing, agricultural processing, mechanics, handicrafts, and construction in the fields of production, trade, and services. Next, a questionnaire for non-state enterprises was designed for direct interviews to collect information on non-state enterprises in Hanoi. Table 1 presents the distribution of the survey sample of non-state enterprises in Hanoi with 30 district-level administrative units, including 17 districts, 12 urban districts, and one town.

Table 1. Structure of surveyed enterprises.

District/ Town	Number of enterprises	Percentage
1. Ba Dinh District	12	3.6%
2. Cau Giay District	10	3%
3. Dong Da District	12	3.6%
4. Hai Ba Trung District	11	3.4%
5. Hoan Kiem District	12	3.6%
6. Thanh Xuan District	11	3.4%
7. Hoang Mai District	12	3.6%
8. Long Bien District	11	3.4%
9. Ha Dong District	11	3.4%
10. Tay Ho District	11	3.4%
11. Nam Tu Liem District	11	3.4%
12. Bac Tu Liem District	11	3.4%
13. Son Tay Town	11	3.4%
14. Thanh Tri District	10	3%
15. Ba Vi District	10	3%
16. Dan Phuong District	10	3%
17. Gia Lam District	10	3%
18. Dong Anh District	10	3%
19. Thuong Tin District	12	3.6%
20. Thanh Oai District	12	3.6%
21. Chuong My District	12	3.6%
22. Hoai Duc District	12	3.6%
23. My Duc District	10	3%
24. Phuc Tho District	10	3%
25. Thach That District	10	3%
26. Quoc Oai District	10	3%
27. Phu Xuyen District	12	3.6%
28. Ung Hoa District	12	3.6%
29. Me Linh District	12	3.6%
30. Soc Son District	12	3.6%
Total	330	100%

RESULTS AND DISCUSSION

Current status of investment in Hanoi non-state enterprises

Non-state enterprises in Hanoi play a very important role in creating jobs for workers and developing the economy of the capital, Hanoi, as shown in the following figures.

In Figure 3, an annual average capital of acting enterprises as of December 31 by type of enterprises 2019-2023 in VND billion reveals that the majority of the capital of enterprises registered to operate in Hanoi are non-state enterprises.

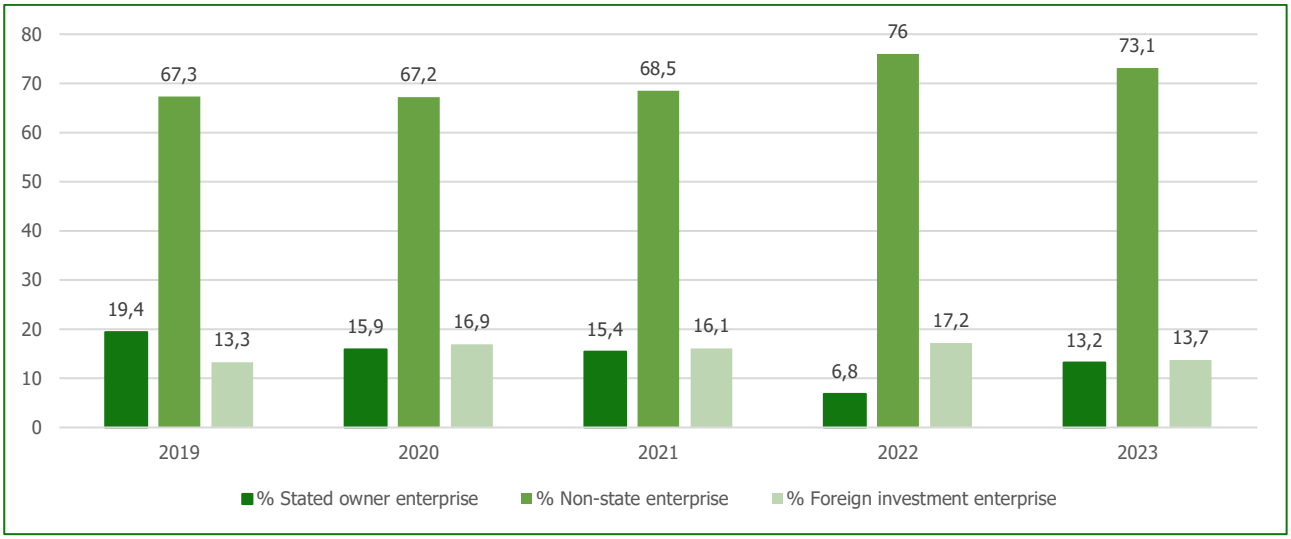

Figure 3. Annual average capital of acting enterprises in Hanoi, Vietnam. *(Source: Hanoi Statistical Yearbook 2023)*

Capital of the enterprise includes owners' equity and liabilities. In Figure 3, the annual average capital of the enterprise is the average capital of the enterprise at the beginning and at the end of the year.

Figure 3 shows that up to 73% of annual average capital of acting enterprises in Hanoi city are non-state enterprises, more than 13% are foreign-invested enterprises, and the remaining less than 19% are state-owned enterprises.

The source of capital for non-state enterprises in Hanoi, Vietnam, is mainly from equity capital, accounting for 80%; the rest is mainly borrowed capital. Table 2 presents the capital structure of non-state enterprises.

Table 2. Capital structure of non-state enterprises, %.

Capital	Min	Max	Medium
Owner capital	0.25	100	80.56
Stockholder capital	0.36	100	31.6
Joint venture capital	0.00	100	52.3
Loans	0.35	87	44.2
Other forms of loans	0.15	15	9.8
Other capital	0.12	20	14.5

Fixed assets and long-term investments of the enterprise are calculated as the total carrying amount of fixed assets, the value of construction cost in progress, long-term deposits and other long-term investments of the enterprise. Table 3 shows the value of fixed assets and long-term investment of enterprises by type of enterprises in VND billion.

Table 3. Value of fixed asset and long-term investment, VND billion.

Year	Stated owner enterprise		Non-state enterprise		Foreign investment enterprise		Total
	Value	%	Value	%	Value	%	
2019	787 067	24.5	1 883 366	58.9	532 795	16.6	3 203 228
2020	690 367	22.5	1 938 697	63.5	428 856	14	3 057 920
2021	694 252	23.1	1 999 451	66.5	311 640	10.4	3 005 343
2022	265 040	9	2 345 488	80.7	301 438	10.3	2 922 966
2023	611 272	17.6	2 577 178	74.3	279 982	8.1	3 468 432

Table 3 reveals that the majority of fixed assets and long-term investments in enterprises in Hanoi are in non-state enterprises. As of December 31, 2023, the percentage of fixed assets and long-term investment of non-state enterprises gained

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74,3% in total. Of these, the state-owned sector accounted for 17.6%, and the foreign investment enterprises accounted for 8.1%.

In Table 4, there is a ratio called average equipped fixed assets per employee of the enterprise. The ratio is calculated as average fixed assets divided by the average number of employees in the period. This ratio reflects how much fixed assets an employee is equipped with.

Table 4. Average fixed asset per employee, VND billion.

Year	Stated owner enterprise	Non-state enterprise	Foreign investment enterprise	Average
2019	4 399	997	1 746	1 292
2020	3 697	1 021	1 332	1 256
2021	4 309	1 185	958	1 418
2022	1 591	1 408	876	1 263
2023	4 001	1 389	763	1 477

The average fixed assets per employee of state-owned enterprises is the highest among enterprises in Hanoi (Table 4). Foreign-invested enterprises and non-state enterprises have a lower fixed assets per employee ratio.

In Table 4, the average fixed assets/workers of state-owned enterprises are the highest among enterprises in Hanoi. Accordingly, in 2023, a worker in a state-owned enterprise will operate more than VND 4 million worth of fixed assets, higher than the average of VND 1.477 million. Meanwhile, workers in non-state enterprises have a lower fixed assets/worker ratio, worth VND 1.389 million per worker, not reaching the average. Enterprises with foreign investment capital have the lowest fixed assets/worker; in 2023, this index is 0.763 million VND/worker, much lower than the average.

Description of the survey sample

Table 5 summarizes information on the nature of the survey sample of non-state enterprises in Hanoi. According to the survey sample structure, in the agricultural sector, there are 64.7% private enterprises, 29.4% limited liability companies, and 5.8% state-owned enterprises and joint-stock companies; in the industrial-construction sector, there are 58.5% private enterprises, 29.3% limited enterprises, and 7.3% joint-stock enterprises; in a trade-service sector, there are 79.4% private enterprises and 18.6% limited enterprises.

Table 5. Types of surveyed enterprises.

Type of enterprise	Agriculture, Forestry, Fishery		Industry, Construction		Trading, Service		Total	
	Number	%	Number	%	Number	%	Number	%
Joint Stock Co. having a capital of State	3	2.8	1	0.9	1	0.9	5	1.5
Private	24	22.2	28	24.8	34	31.2	86	26
Joint Stock Co. without the capital of the State	45	41.7	46	40.7	30	27.5	121	36.7
Limited Co.	33	30.5	36	31.9	41	37.6	110	33.3
Other	3	2.8	2	1.7	3	2.8	8	2.5
Total	108	100	113	100	109	100	330	100

The majority of enterprises registered to operate in Hanoi are non-state enterprises. Table 5 shows that up to 97% of enterprises operating in the city are non-state enterprises, more than 2% are foreign-invested enterprises, and the remaining less than 1% are state-owned enterprises.

In Table 6, the net revenue of the enterprise is the total income of the enterprise gained by selling its products or services to the outside after subtracting taxes and revenue reductions. Net revenue does not include income from financial gain and other losses.

Table 6. Net revenue from business of acting enterprises by type of enterprises.

Year	Stated owner enterprise		Non-state enterprise		Foreign investment enterprise		Total
	Value	%	Value	%	Value	%	
2019	663 780	17.5	2 598 732	68.4	534 716	14.1	3 797 228
2020	710 726	16	3 127 794	70.9	579 099	13.1	4 417 619
2021	614 335	13	3 483 820	74.1	605 465	12.9	4 703 620
2022	765 086	14.8	3 740 858	72.3	666 290	12.9	5 172 234
2023	863 326	14.7	4 262 418	72.5	750 031	12.8	5 875 775

If classified by net revenue, non-state enterprises account for the highest proportion among enterprise types from 2019-2023, accounting for 72% on average, followed by state-owned enterprises, accounting for 15% of the net revenue proportion, and finally, foreign-invested enterprises.

Model regression results

Assessing the factors affecting the capital structure of non-state enterprises in Hanoi, the regression analysis results in Table 6 show that the factors of business efficiency, business growth, and business size have an impact on capital structure. Meanwhile, the impact of business risk factors and asset structure is insignificant and not statistically significant.

Table 7. Factors affecting the capital structure of non-state enterprises. Note: * 1% significance level, ** 10% significance level.

Variables	Estimated coefficient	Statistical value t
Constant	-0.480*	-6.3284
Business performance	0.139*	2.6815
Business growth	0.004**	1.8873
Size of the enterprise	0.198*	10.6033
Business risk	0.009	1.4411
Asset structure	0.049	0.7858
Total observations		330
R2		0.198
F statistic value		25.769
Model significance level		0.000

Evaluating the factors affecting the capital structure of non-state enterprises in Hanoi, the regression analysis results in Table 7 show that the factors of business efficiency, business growth, and business size have an impact on capital structure. Meanwhile, the impact of business risk factors and asset structure is insignificant and not statistically significant.

Table 8 presents the results of the analysis of factors affecting the revenue of non-state enterprises.

Table 8. Results of the regression model by revenue. Note: * 1% significance level, ** 10% significance level.

Variables	Code	Estimated coefficient	t value	Significance level
Constant		2.355.72	0.911	0.3636
Total assets	X1	1.10***	11.218	0.0000
Number of employees in the enterprise	X2	205.80***	7.385	0.0000
High-skilled labour rate	X3	-673.55	-0.127	0.8991
Number of years of operation of the enterprise	X4	-114.1	-0.503	0.6152
Type of enterprise	X5	-2.583.01	-1.495	0.1375
Field of operation	X6	-188.38	-0.157	0.8764
State Support	X7	-758.36	-0.512	0.6090
Input source	X8	3.858.15***	3.132	0.0026
Level of competition	X9	-86.57	-0.066	0.9474
Risk Level	X10	-5.880.17***	-3.723	0.0000
Coefficient of determination R2	0.848			
F test value			101.66	0.0000

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Table 8 presents the results of the analysis of factors affecting the revenue of non-state enterprises. The analysis results show that the factors total assets, total number of employees, input supply, and risk level are factors affecting the revenue performance of non-state enterprises. Meanwhile, other factors such as labour qualifications, business operation time, business type, field of operation, state support, and level of competition in the market do not seem to affect business performance and revenue. This shows that internal factors rather than external factors of non-state enterprises are the main factors determining the business performance of enterprises. Table 8 presents the results of the analysis of factors affecting the profits of non-state enterprises in Hanoi. The analysis results show that the factors: total assets, the total number of employees, labour qualifications, input supply, business sector, level of competition in the market, and level of risk faced by the business are factors that affect the business's revenue performance. Meanwhile, other factors such as business operation time, business type, and state support do not seem to affect business performance as revenue. This also shows that internal factors rather than external factors of non-state enterprises are the main factors determining the business performance of non-state enterprises in Hanoi.

Table 9 presents the results of the analysis of factors affecting the profit of non-state enterprises.

Table 9. Results of the regression model by profit. Note: *** 1% significance level, ** 5% significance level, * 10% significance level.

Variables	Code	Estimated coefficient	T value	Significance level
Constant		-12.32	-0.048	0.9621
Total assets	X1	0.10***	10.221	0.0000
Number of employees in the enterprise	X2	7.07 **	2.551	0.0123
High-skilled labour rate	X3	885.71	1.683	0.0947
Number of years of operation of the enterprise	X4	-26.82	-1.188	0.2363
Type of enterprise	X5	-100.14	-0.583	0.5614
Field of operation	X6	249.43 **	2.086	0.0382
State Support	X7	-131.67	-0.894	0.3736
Input source	X8	411.70***	3.359	0.0011
Level of competition	X9	243.18 *	1.871	0.0633
Risk Level	X10	-368.77 **	-2.347	0.0201
Coefficient of determination R2		0.752		
F test value			55.316	

Table 9 presents the results of the analysis of factors affecting the profits of non-state enterprises in Hanoi. The analysis results show that the factors of total assets, the total number of employees, labour qualifications, business sector, input sources, level of competition in the market, and level of risk faced by the enterprise are factors affecting the profits of non-state enterprises. Meanwhile, other factors such as business operation time, business type, and state support do not seem to affect the profits of non-state enterprises. This also shows that internal factors rather than external factors of non-state enterprises are the main factors determining the operating profits of non-state enterprises.

Analysis of investment demand of non-state enterprises

The analysis results in Table 10 show that the investment demand of non-state enterprises in Hanoi depends on business results such as revenue.

Table 10. Regression results of the investment demand model. Note: ***: significance level 1%.

Variables	Estimated coefficient	T value	Significance level
Constant	-26.595***	-3.529	0.0000
Ln(revenue)	2.545***	3.026	0.0000
Ln (Investment last year)	0.165	1.208	0.2321
R2	0.246		

The analysis results in Table 10 show that business results or revenue growth are the main motivation for non-state enterprises in Hanoi to increase investment. The results also show that there is no reliable statistical evidence that the scale of investment in previous years has an impact on the investment decisions of the non-state enterprises in Hanoi. The results of the regression analysis show that investment demand is elastic according to revenue. The long-term and short-term investment elasticity are 2.55 and 2.18, respectively, with the adjustment coefficient δ= 0.8584.

Analysis of the development trend of non-state enterprise

To identify the development trend of the non-state enterprise economy in Hanoi, the identification model uses the variables described in Table 11. These variables present the factors affecting the change in profits of non-state enterprises in Hanoi.

Table 11. Interpretation of independent variables in the model.

Variables	Code	Reference
Number of employees in the enterprise	X1	Total number of workers employed during the year, including direct and indirect workers (people)
High-skilled labour rate	X2	The ratio of high-level workers (university and postgraduate degrees) to total workers (%)
Fixed assets	X3	Total value of fixed assets (VND million)
Input source	X4	A dummy variable (1: input source is guaranteed regularly, otherwise = 0)
Level of competition	X5	Dummy variable (1: high level of competition, otherwise = 0)
Using Internet	X6	A dummy variable (1: yes, using the internet, otherwise = 0)
Risk Level	X7	A dummy variable (1: high level of business risk, otherwise = 0)

Table 12 shows the regression results of the identification model for identifying the change in trend in Hanoi non-state enterprises development in the period 2021-2023.

Table 12. Regression results of the model. Note: ***: significant at 1% level, **: significant at 5% level, *: significant at 10% level.

Variables	Code	Year 2021	Year 2022	Year 2023
Constant		2.748***	3.215***	2.803***
Standard error value		0.723	0.723	0.639
Ln (Number of employees)	X1	0.368**	0.348**	0.446***
Standard error value		0.146	0.147	0.136
High-skilled labour rate	X2	0.043**	0.054***	0.063***
standard error value		0.021	0.020	0.019
Ln(Fixed assets)	X3	0.280**	0.239**	0.275***
Standard error value		0.114	0.120	0.097
Input source	X4	0.500***	0.375**	0.364**
Standard error value		0.179	0.183	0.165
Level of competition	X5	0.362**	0.422**	0.354**
Standard error value		0.179	0.184	0.166
Using Internet	X6	0.324	0.317	0.569
Standard error value		0.508	0.527	0.475
Risk Level	X7	-0.131	0.035	-0.101
Standard error value		0.213	0.218	0.197
R2		**0.599**	**0.590**	**0.700**

Based on the results of the regression analysis (Table 12) and the identification model's criteria for identifying the change in trend, the analysis shows that the non-state economic sector in Hanoi in the recent period has shown slight signs of development or growth. That is, among the important factors contributing to business performance, investment or the scale of fixed assets is not the main contributing factor. In addition, the contribution level of investment has not shown any tendency to improve over time. Meanwhile, labour size becomes the main factor contributing to business results and tends to increase over time.

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CONCLUSIONS AND RECOMMENDATIONS

Through the analysis, the article comes to the following important conclusions:

1. The factors of business efficiency, enterprise growth, and enterprise size are the main factors affecting the choice of capital structure for non-state enterprises in Hanoi.
2. The factors: total assets, the total number of employees, labour qualifications, input supply, business sector, level of competition in the market, and level of risk are factors affecting the business results in terms of revenue and profit of non-state enterprises in Hanoi.
3. The investment demand of non-state enterprises depends more on revenue growth than on the investment scale of previous years. The long-term and short-term investment elasticity are 2.55 and 2.18, respectively, corresponding to the adjustment coefficient δ= 0.8584.
4. The non-state economic sector in Hanoi has shown a slight sign of development or growth in the recent past. The scale of labour use rather than the scale of investment is the main factor contributing to the growth of non-state enterprises in Hanoi.

In order for the non-state economic sector in Hanoi to develop further, the study makes some recommendations as follows:

1. There should be policies to remove difficulties for non-state enterprises in accessing loans.
2. To develop the non-state economic sector, policies should focus on encouraging non-state enterprises to invest in modern technology and innovative machinery and equipment, tax incentives and other support policies for enterprises with an increase in investment scale rather than an increase in labour scale.

Future research can expand the survey sample to other provinces and cities in Vietnam to have better evidence.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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АНАЛІЗ ІНВЕСТИЦІЙНОГО ПОПИТУ Й ТЕНДЕНЦІЇ РОЗВИТКУ НЕДЕРЖАВНИХ ПІДПРИЄМСТВ У В'ЄТНАМІ

У роботі досліджено інвестиційну ситуацію, інвестиційний попит і виявлено тенденції розвитку недержавних підприємств у м. Ханой (В'єтнам) із використанням моделі частково скоригованого попиту й теорії ідентифікації підприємства як дослідницьких підходів. Результати показують, що ефективність бізнесу, зростання підприємства та розмір підприємства є основними факторами, які впливають на вибір структури капіталу ханойських недержавних підприємств. У зв'язку з обмеженим капіталом більшість машин та обладнання недержавних підприємств у Ханої (В'єтнам) мають тривалий термін експлуатації. Інвестиційний попит недержавних підприємств більше залежить від зростання доходів, ніж від масштабів інвестицій попередніх років. Довгострокова та короткострокова інвестиційна еластичність становлять відповідно 2,55 і 2,18, що відповідає коригувальному коефіцієнтові δ = 0,8584. Зрештою, результати дослідження показують, що недержавні підприємства в Ханої (В'єтнам) продемонстрували незначні ознаки розвитку або зростання. Основним фактором, що сприяє зростанню недержавних підприємств, є масштаби зайнятості, а не накопичення інвестицій. У результаті аналізу автори роботи приходять до таких важливих висновків: загальна сума активів, загальна кількість працівників, кваліфікація праці, пропозиція ресурсів, сектор бізнесу, рівень конкуренції на ринку та рівень ризику є факторами, що впливають на результати бізнесу з погляду доходів і прибутку недержавних підприємств у Ханої, В'єтнам.

Ключові слова: ефективність бізнесу, тенденція розвитку, зростання підприємства, розмір підприємства, інвестиційний попит, незаявлені підприємства, В'єтнам

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