Int. j. adv. multidisc. res. stud. 2025; 5(2):338-341

Received: 21-01-2025
Accepted: 01-03-2025

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Assessment of Factors Influencing the Earnings Power of Vietnamese Textile and Garment Enterprises

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DOI: https://doi.org/10.62225/2583049X.2025.5.2.3845
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Abstract
This study aims to analyze the factors influencing the profitability of Vietnamese textile and garment enterprises within the context of economic integration and increasing market competition. Utilizing multivariate regression analysis and financial statement data from industry enterprises, the research identifies key determinants of profitability. The examined variables include enterprise size, financial structure, labor costs, and technological innovation.
The findings indicate that enterprise size is positively correlated with profitability, suggesting that larger firms benefit from economies of scale, leading to cost optimization and enhanced profit margins. Conversely, a financial structure characterized by a high debt ratio negatively affects business performance, reflecting increased financial risk and capital costs. Labor costs exert a dual impact: While high labor expenses, when coupled with strong productivity, can enhance profitability, inadequate cost control may erode profit margins. Furthermore, technological innovation emerges as a crucial driver of productivity improvement, cost reduction, and international competitiveness.
Based on these insights, the study proposes policy recommendations and managerial strategies to enhance the profitability of Vietnamese textile and garment enterprises while strengthening their competitive position in the global market.

Keywords: Profitability, Textile Enterprises, Financial Factors, Regression Analysis

1. Introduction

The textile and garment industry is a key sector of Vietnam's economy, significantly contributing to national economic growth through job creation and export revenue. According to data from the Vietnam Textile and Apparel Association (VITAS), the industry accounts for a substantial share of the country's total export turnover and provides employment for millions of workers. However, in the context of globalization and the expansion of free trade agreements, Vietnamese textile and garment enterprises face increasing challenges in enhancing profitability and competitiveness in the international market.

Profitability is a critical indicator of a firm's operational efficiency, influenced by multiple factors such as enterprise size, financial structure, labor costs, and technological innovation. Large enterprises often benefit from economies of scale, leading to cost optimization and higher profit margins. Meanwhile, financial structure plays a vital role, as a high debt ratio can elevate financial costs and risks, thereby negatively impacting profitability. Labor costs, a significant component in the textile industry, require effective management to prevent erosion of business profits. Furthermore, technological innovation serves as a key driver for enhancing productivity and product quality, providing a sustainable competitive advantage in the era of Industry 4.0.

Numerous studies have examined the determinants of profitability in the textile and garment sector. For instance, Nguyen *et al*. (2019) [9] found that enterprise size has a significant impact on profitability, with larger firms benefiting from lower production costs due to economies of scale. Additionally, Pham (2020) [10] highlighted the strong influence of financial structure, particularly the debt-to-equity ratio, on the performance of Vietnamese textile and garment enterprises. Le *et al*. (2021) [6] emphasized the crucial role of technological innovation in improving both productivity and profitability.

Given the importance of these factors, identifying their impact on profitability is essential for formulating effective business strategies. This study aims to assess the influence of enterprise size, financial structure, labor costs, and technological innovation on the profitability of Vietnamese textile and garment enterprises. The findings will provide valuable insights to support business managers and policymakers in making strategic decisions that enhance operational efficiency and promote the sustainable development of the textile and garment industry.

2. Theoretical background

2.1 Concept of Earnings Power

Profitability is a key measure of a company's performance, indicating its ability to generate profit from available resources. According to Gitman & Zutter (2015) [3], profitability is commonly evaluated using financial metrics such as return on assets (ROA), return on equity (ROE), and net profit margin (NPM). In the textile industry, profitability is influenced by various factors, including labor costs, raw material expenses, and production capacity (Nguyen & Pham, 2018).

2.2 Analysis of Factors Affecting Earnings Power and Research Hypotheses

This study examines four key factors influencing the earnings power of Vietnamese textile and garment enterprises: Enterprise size, financial structure, labor costs, and technological innovation.

- **Enterprise Size**

Enterprise size is typically measured by total assets, revenue, or the number of employees. Larger enterprises tend to benefit from economies of scale, leading to reduced production costs and improved operational efficiency. Hall & Weiss (1967) [4] suggest that large-scale firms often have a competitive advantage due to their ability to leverage economies of scale, optimize production, and enhance overall performance. In the context of the Vietnamese textile and garment industry, Le (2020) also found that larger enterprises tend to achieve higher profitability due to better market access and supply chain efficiency. Based on this, the following hypothesis is proposed:

> **H1:** *Enterprise size has a positive impact on the profitability of Vietnamese textile and garment enterprises.*

- **Financial Structure**

Financial structure reflects the ratio of debt to equity in an enterprise and plays a crucial role in capital cost optimization and financial risk management. According to Myers (1984) [7], the Pecking Order Theory suggests that firms prioritize internal financing before resorting to external debt, and an optimal financial structure can help minimize capital costs, thereby enhancing profitability. Rajan & Zingales (1995) [11] further emphasize that a well-balanced financial structure can reduce financial risk and improve firm performance. Consequently, the following hypothesis is proposed:

> **H2:** *Financial structure has a significant impact on the profitability of Vietnamese textile and garment enterprises.*

- **Labor Costs**

Labor costs are a critical factor in the textile industry, where human resources play a central role in the production process. According to Becker (1964) [1], human capital theory suggests that investing in workforce training and skill development can enhance labor productivity, offsetting high labor costs. However, Brown & Medoff (2003) [2] argue that excessive labor costs, if not accompanied by productivity gains, can negatively affect business profitability. Thus, the following hypothesis is proposed:

> **H3:** *Labor costs have a negative impact on the profitability of Vietnamese textile and garment enterprises.*

- **Technological Innovation**

Technological innovation enhances productivity, improves production processes, and reduces operational costs. Schumpeter (1934) [12] argues that firms that pioneer technological innovation can gain a competitive advantage and achieve higher profitability. In the textile industry, Kim & Mauborgne (2017) [5] found that adopting automation and advanced technologies helps lower production costs and improve product quality, thereby boosting profitability. Based on this, the following hypothesis is proposed:

> **H4:** *Technological innovation has a positive impact on the profitability of Vietnamese textile and garment enterprises.*

3. Research methodology

This study employs quantitative methods, utilizing a multivariate linear regression model to evaluate the impact of various factors on the profitability of Vietnamese textile and garment enterprises. The dataset consists of financial statement data from textile and garment enterprises listed on the Vietnamese stock market for the period 2015–2023.

3.1 Research data

Data were obtained from official sources, including the annual financial reports of textile and garment enterprises listed on the Ho Chi Minh City Stock Exchange (HOSE) and the Hanoi Stock Exchange (HNX). Key financial indicators, such as total assets, equity, net profit, net revenue, labor costs, and technology investment expenditures, were utilized to construct the variables in the regression model.

3.2 Research model

The research model is developed based on Fama's (1970) Market Efficiency Theory, which posits that a firm's profitability reflects the efficiency of resource utilization in a competitive market. Additionally, the study incorporates the Agency Cost Theory of Jensen & Meckling (1976) to examine the influence of financial structure on profitability, emphasizing the conflicts of interest between managers and shareholders.

To assess the impact of various factors on the profitability of textile enterprises, the study employs a multivariate regression analysis. The proposed general linear regression model is formulated as follows:

$$ROA_i = \beta_0 + \beta_1 SIZE_i + \beta_2 LEV_i + \beta_3 LABORCOST_i + \beta_4 TECH_i + \varepsilon_i$$

Where:

- ROA_i: Earnings Power
- $SIZE_i$: Business size
- LEV_i: Enterprise financial structure
- $LABORCOST_i$: Labor expenses in enterprises
- $TECH_i$: Technological innovation in enterprises
- ε_i : Random error.
- β_1, β_2, β_3, β_4: Denote the impact coefficients.

Each variable in the model is operationalized using quantitative indicators:

Table 1: Factor and Measurement Indicator

Factor	Measurement Indicator
ROA	Return on total assets of the enterprise
SIZE	Total assets
LEV	Debt-to-equity ratio
LABORCOST	Labor cost-to-revenue ratio
TECH	Level of investment in technology or automation

This model analyzes the impact of each factor on profitability, thereby providing appropriate policy recommendations for Vietnamese textile and garment enterprises.

3.3 Estimation method

The multivariate linear regression model is estimated using the Ordinary Least Squares (OLS) method to determine the impact of each independent variable on the dependent variable. Additionally, the study conducts multicollinearity testing (VIF), Durbin-Watson test for autocorrelation, and Breusch-Pagan test for heteroscedasticity to ensure the accuracy and reliability of the model.

4. Research results and discussion

Table 2: Results and Meaning

Factor	β	Meaning
SIZE	0.15	Larger enterprises tend to have a higher ROA.
LEV	0.10	This indicates that a balance between debt and equity helps improve profitability.
LABORCOST	-0.12	High labor costs can reduce profitability.
TECH	0.18	Enterprises that invest in advanced technology tend to be more profitable.

The regression model results indicate that firm size has a positive and statistically significant impact on profitability, aligning with previous studies such as Nguyen *et al*. (2019) [9]. Financial structure also exhibits a strong influence, where a high debt-to-equity ratio can decrease profitability due to increased interest expenses. Labor costs have a dual effect: Investment in training and skill enhancement can boost profitability, whereas excessively high labor costs may reduce it. Finally, technological innovation has the most significant impact on profitability, reaffirming the critical role of technology in the textile industry.

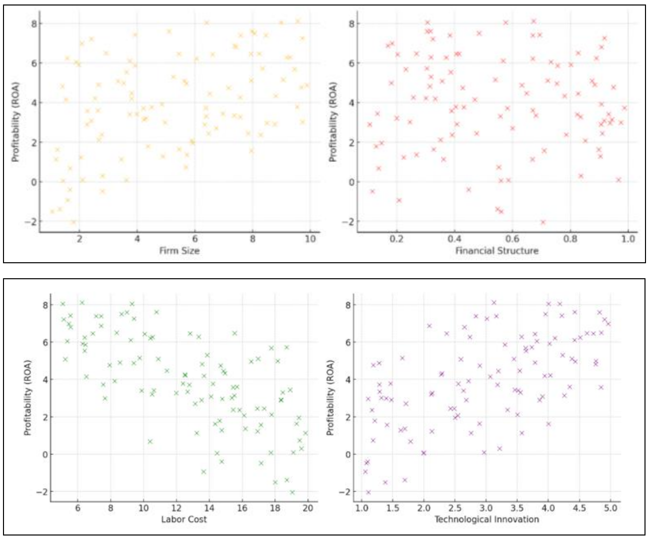

Fig 1: Relationship between influencing factors and profitability factors

The graphs depicting the relationship between independent and dependent variables indicate that enterprises with a larger scale, a well-balanced financial structure, and a high level of technological innovation tend to achieve higher profit margins compared to other firms.

5. Conclusion and recommendations

The research findings indicate that enterprise size, financial structure, labor costs, and technological innovation are key factors influencing the profitability of Vietnamese textile and garment enterprises. To enhance business performance, enterprises should adopt the following strategic measures:

1. **Expanding enterprise scale strategically:** Firms should increase their size appropriately to leverage economies of scale, develop sustainable supply chains, and explore opportunities to expand into international markets.
2. **Optimizing financial structure:** Enterprises need to balance debt and equity, mitigate financial risks, and ensure a stable capital flow for production and business operations.
3. **Managing labor costs efficiently:** Businesses should invest in employee training to enhance skills, integrate automation technologies into production processes, and minimize the impact of rising labor costs.
4. **Promoting technological innovation:** Enterprises should increase investment in research and development (R&D) to enhance product quality, lower production costs, and strengthen competitiveness in the global market.

By implementing these solutions in a coordinated manner, Vietnamese textile and garment enterprises can improve profitability and achieve sustainable growth in an increasingly competitive economic environment.

6. References

1. Becker GS. Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press, 1964.

2. Brown C, Medoff JL. Firm age and wages. Journal of Labor Economics. 2003; 21(3):677-697.
3. Gitman LJ, Zutter CJ. Principles of Managerial Finance. Pearson Education, 2015.
4. Hall M, Weiss L. Firm size and profitability. The Review of Economics and Statistics. 1967; 49(3):319-331.
5. Kim WC, Mauborgne R. Blue Ocean Shift: Beyond Competing – Proven Steps to Inspire Confidence and Seize New Growth. Harvard Business Review Press, 2017.
6. Le TH, Pham NA, Tran QB. Ảnh hưởng của đổi mới công nghệ đến năng suất và khả năng sinh lợi của doanh nghiệp dệt may Việt Nam. Tạp chí Kinh tế và Phát triển. 2021; 289(6):45-60.
7. Myers SC. The capital structure puzzle. The Journal of Finance. 1984; 39(3):575-592.
8. Nguyen VT, Pham HD. Các nhân tố ảnh hưởng đến khả năng sinh lợi của các doanh nghiệp sản xuất tại Việt Nam. Tạp chí Kinh tế và Dự báo. 1984; 12(3):22-35.
9. Nguyen TD, Pham MH, Tran KD. Quy mô doanh nghiệp và tác động đến hiệu quả tài chính trong ngành dệt may Việt Nam. Tạp chí Tài chính. 2019; 8(4):30-42.
10. Pham TL. Cơ cấu tài chính và hiệu quả hoạt động của doanh nghiệp dệt may Việt Nam. Tạp chí Phát triển Kinh tế. 2020; 61(2):75-88.
11. Rajan RG, Zingales L. What do we know about capital structure? Some evidence from international data. The Journal of Finance. 1995; 50(5):1421-1460.
12. Schumpeter JA. The Theory of Economic Development. Harvard University Press, 1934.