6th CoMBInES
Volume 6 No 1 (2026)

Accepted : July 11th, 2026
Published : September 30th, 2026
DOI : 10.37253/combines.v6i1.12743

Conference on Management, Business, Innovation, Education and Social Science
https://journal.uib.ac.id/index.php/combines

DETERMINANTS OF INVESTMENT EFFICIENCY OF VIETNAMESE LISTED FIRMS: DO FINANCIAL CONSTRAINTS AND RESEARCH AND DEVELOPMENT EXPENDITURE HAVE IMPACTS?

***Hien Luong - Kim*[1]**
lgkimhien128@gmail.com[1]

[1]Faculty of Finance and Banking, Ton Duc Thang University, Ho Chi Minh City, Viet Nam

Abstract

This study investigates the effects of financing constraints and R&D expenditure on the investment efficiency of Vietnamese listed firms. The study employs a panel dataset of non-financial firms listed on Ho Chi Minh Stock Exchange (HOSE) during the period 2010-2023. Investment efficiency plays a crucial role in optimizing resource allocation, enhancing firm value, and sustaining long-term growth. In emerging economies such as Vietnam, where firms still face significant dependence on external financing and imperfect capital markets, financing constraints may limit firms' ability to undertake efficient investment activities. At the same time, R&D expenditure is considered an important driver of innovation, competitiveness, and sustainable development, but it also requires substantial financial resources and involves high uncertainty. Therefore, this study focuses on examining how financing constraints and R&D expenditure influence the investment efficiency of Vietnamese listed firms.

The study employs panel data from 354 non-financial firms listed on the Ho Chi Minh City Stock Exchange during the period 2010–2023, collected from audited financial statements and annual reports, yielding 4,529 firm-year observations. To examine the relationship between financing constraints, R&D expenditure, and investment efficiency, the study applies panel data econometric techniques. Specifically, Pooled Ordinary Least Squares (Pooled OLS), Fixed Effects Model (FEM), and Random Effects Model (REM) are initially estimated. The F-test, Breusch-Pagan Lagrange Multiplier (LM) test, and Hausman test are then employed to determine the most appropriate specification. The test results indicate that the Fixed Effects Model is preferred. However, the Modified Wald test reveals the presence of heteroskedasticity; therefore, the Feasible Generalized Least Squares (FGLS) estimator is ultimately employed to correct for this issue and provide robust and reliable estimates.

The empirical results of the study provide several important findings. Firstly, R&D expenditure is found to have a significant negative relationship with investment inefficiency,indicating that higher levels of R&D spending are associated with more efficient investment. This finding supports the hypothesis that innovation plays a critical role in improving investment decisions. Firms that invest in R&D are better able to enhance their technological capabilities, improve product quality, and streamline production processes.

Regarding financial constraints, the study supports the view that financial constraints can act as a disciplinary mechanism, forcing businesses to carefully consider investment project choices and prioritize high-value projects. In the context of Vietnam, where corporate governance mechanisms may not always be fully effective, financial constraints can serve as an external control mechanism that mitigates agency problems and improves investment outcomes.

In addition to the main variables, the study identifies several control variables that significantly influence investment efficiency. Firm size is positively associated with investment inefficiency, indicating that larger firms tend to make less efficient investment decisions. This may be attributed to the complexity of organizational structures, slower decision-making processes, and increased agency problems in larger firms. Similarly, leverage is positively associated with investment inefficiency, suggesting that highly leveraged firms may prioritize short-term financial obligations over long-term value creation, leading to suboptimal investment decisions. In contrast, the market-to-book ratio is negatively related to investment inefficiency, implying that firms with higher market valuations and growth prospects tend to allocate resources more efficiently. Operating cash flow also shows a negative relationship with investment inefficiency, indicating that firms with stronger internal cash generation are better positioned to invest efficiently without relying heavily on external financing.

Based on the research findings, this study proposes several important management and policy implications. For corporate managers, it is crucial to prioritize investment in R&D as a long-term strategy to enhance competitiveness and improve investment efficiency. Firms should develop long-term R&D strategies that align with their overall business objectives and allocate sufficient resources to innovation activities. In addition, companies should establish investment evaluation processes, implement effective corporate governance practices, and carefully manage their capital structure to minimize inefficiencies. Regarding financial constraints, instead of viewing them as barriers, businesses can leverage them as tools to improve investment discipline. For policymakers, the findings highlight the need to support research and development through targeted policies such as tax incentives, subsidies, and innovation ecosystem development. Enhancing the transparency and efficiency of capital markets is also crucial to mitigating information asymmetry and improving businesses' access to financing. By creating a more supportive institutional environment, policymakers can

help businesses achieve higher investment returns and contribute to sustainable economic growth.

While this study offers meaningful contributions, several limitations should be acknowledged, each of which points to promising directions for future research. First, the sample is restricted to non-financial firms listed on HOSE, which may not fully capture the diversity of the Vietnamese corporate sector. Future studies could broaden the scope by including firms from HNX and UPCoM, or by extending the analysis to other emerging economies in Southeast Asia to strengthen the generalizability of the findings. Second, the linear framework employed in this study may not fully reflect the true complexity of the relationship between financing constraints and investment efficiency. Future studies could adopt nonlinear models or threshold analysis to identify the point at which financing constraints shift from being a beneficial disciplinary force to becoming a barrier to valuable investment opportunities.

Keywords:
Investment efficiency; Financing constraints; Research and Development expenditures.