Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.17, No.4, 2026

Determinants Influencing the Operating Performance of Listed Military Enterprises in Vietnam

DucThinh Nguyen
Financial Faculty, Military Logistics Academy, Hanoi, Vietnam
E-mail: thinh88hvhc@gmail.com

Abstract

This paper is conducted for examining the framework for impact of factors affecting the operating performance in financial aspects of listed military enterprises in Vietnam. Research design, data and methodology: This paper uses model factors affecting the operating performance in financial aspects of listed military enterprises in Vietnam. The survey subjects include managers, finance department heads, and finance department staff. The tool that helps to collect data in quantitative research is a questionnaire. The collected data, after going through the steps of coding, matrixing, and cleaning, is used to assess the reliability of the scale using Cronbach's Alpha coefficient, exploratory factor analysis (EFA), and regression model testing. Quality of information measured on a five-level Likert scale: Completely disagree, Disagree; Neutral; Agree; Completely agree. Results: Research results show that Macroeconomic conditions, Legal environment, Risk management, Financial resources and Quality of human resources have a positive impact on the operating performance in financial aspects of military enterprises in Vietnam. Conclusions: Based on the research results, the author has proposed recommendations to improve the operating performance of military enterprises in Vietnam

Key words: Operating performance, Listed military enterprises, Financial aspects

DOI: 10.7176/RJFA/17-4-03
Publication date: October 30th 2026

1. Introduction

With its special position and important role in maintaining stability and developing the country's economy, politics and society. Listed military enterprises are under the management of many different agencies including: Ministry of National Defense, Ministry of Finance ... These special enterprises need to comply with many policies and regulations of the superior agencies or the coordination between enterprises and superior agencies in the process of receiving, managing, using, preserving and developing capital; implementing investment projects of the owner; investing capital outside the enterprise; investing capital abroad ... Moreover, in the fields of operation of these enterprises, there are quite a few risks that can appear and affect the achievement of the set goals. Therefore, factors related to the legal environment or risk management have a great impact on the business performance of enterprises.

State-owned enterprises in general and military enterprises in particular must constantly be reorganized, innovated, and improve the quality and efficiency of their operations, serving as an important material tool for the state to orient and regulate the macro-economy, as a core force, contributing mainly to the state economy's leading role in the socialist-oriented market economy, as the main force in international economic integration, while contributing to consolidating and enhancing the potential of national defense and security. Implementing that policy, over the past 20 years, the work of reorganizing, innovating, developing and improving the efficiency of military enterprises has been thoroughly grasped and implemented by management agencies at all levels in a fairly synchronous and extensive manner, achieving important results.

2. Literature review

Factors affecting the operating performance in financial aspects of firms

Previous studies have identified some of the common and important factors that influence the operating performance in financial aspects of firms as follows:

Risk management

According to Hasan Makkawi (2021), the risk management impacts, in a positive way, the quality of a business that is embodied in improving the financial status of the company, increasing the profits, as well as decreasing the costs. Some recommendations are made for decision makers in the insurance business sector, who

are required to be fully aware of the influence that risk management has on helping their business flourish. Company decision makers are required to work continuously to develop risk management to increase profits, reduce costs, and improve the financial situation, and thus improve business performance. Business risk is the uncertainty about the future return on assets. Companies have high business risk because the decisions they make will reduce their value in the eyes of investors if there is a risk of bankruptcy. Therefore, it is better to sell the assets owned by the company to pay off large debts in order to return the value of the shares that investors have invested.

Financial resources

Firstly, an important option for finding capital is through internal finance. Pretorius and Shaw (2004) identified two basic financial concepts of businesses, namely internal finance and external finance. This is a factor that has an important impact on the business performance of businesses. Business finance can come from internal or external sources. However, many profitable businesses use financial institutions, private investors, venture capital and crowdfunding as external sources of finance and subsequently create fewer successful companies. According to Fischer and Reuber (2003), external resource providers are central to rapid growth. Carpenter and Petersen (2002) found that firms use more internal finance and this limits their performance. Steel, et al. (1997) argue that informal finance is all financial transactions that take place outside the scope of banking and other financial laws of many countries, including many different financial activities whose scope of operation may vary from country to country.

Legal environment

The paper was designed with the purpose of discovering the relationships among legal environment, corporate social responsibility (CSR) practices and business success (Khuong, 2021). Data collection from 869 companies was processed with quantitative methodology; all of the respondents were identified to be working at the managerial level in Ho Chi Minh City and Binh Duong Province, Vietnam. The results indicated that legal environment significantly affects business success directly and indirectly. This study contributes to the local business's further growth for better business performances as well as for the overall benefit of the society.

Macroeconomic conditions

Understanding the macroeconomic factors is essential for all firms operating in the economy. Investment decisions, financing decisions, and risk management of firms are influenced by the existing macroeconomic conditions, thereby impacting their performance. This paper examines the effect of macroeconomic factors on the performance of Indian manufacturing firms (Gaurav Mitra, Vandana Gupta & Gaurav Gupta, 2023). The study further extends to examine the moderating effect of financing constraints (measured by firm size and age) on macroeconomic factors and firm performance. The results show that the effect is more pronounced on small and young firms as compared to large and mature firms.

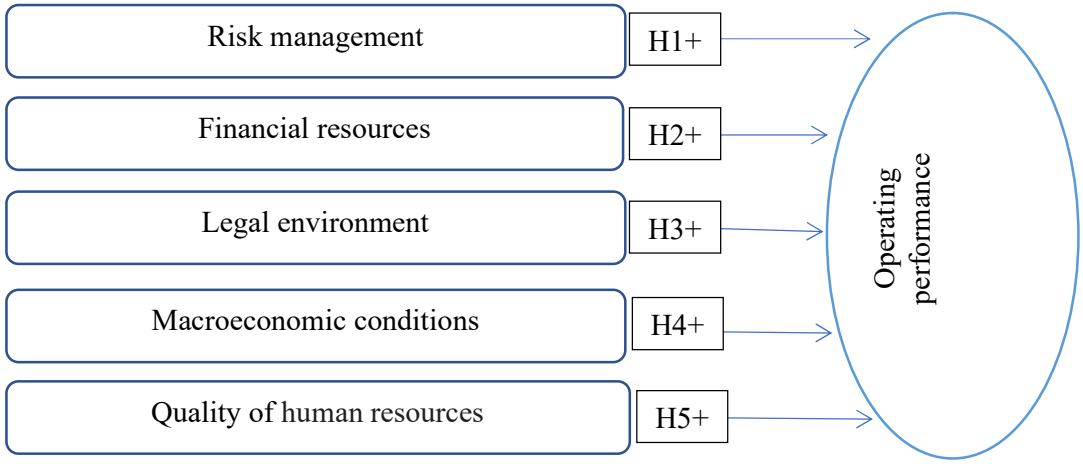
Quality of human resources

Quality of human resources is considered one of the most important and sensitive organizational functions of the company.. This is the most valuable resource needed by managers in all areas and phases of work. Moreover, anyone who is concerned about the success of business organizations discovers that success does not depend on the use of advanced technologies and not in diversifying the sources of their financing. Business organizations are not just a set of facilities or policies and laws, but a group of people who have common relationships and interact with each other to perform basic tasks, and functions help them to achieve the goals and objectives of the organization (Shehadeh & Mansour, 2019).

Research Model and Hypothesis

Research Model:

Figure 1. Proposed research model



(Source: Author's recommendation)

Research hypotheses:

- H1: There is a positive impact of risk management on the operating performance of firms.
- H2: There is a positive impact of financial resources on the operating performance of firms.
- H3: There is a positive impact of legal environment on the operating performance of firms.
- H4: There is a positive impact of macroeconomic conditions on the operating performance of firms.
- H5: There is a positive impact of quality of human resources on the operating performance of firms.

The multivariable regression equation showing the relationship between the variables in the proposed model is as follows:

$OP = \beta 0 + \beta 1 * RM + \beta 2 * FR + \beta 3 * LE + \beta 4 * MC + \beta 5 * QH + E$

In there:

RM: Risk management;

FR: Financial resources;

LE: Legal environment;

MC: Macroeconomic conditions;

QH: Quality of human resources;

OP: Dependent variable - Operating performance;

$\beta 0$: constant; E: residual.

3. Methodology

3.1. Qualitative research method

Conducted through expert interviews. Conducted through in-depth interviews with 13 experts to determine the suitability of the factors in the proposed research model, to discover and supplement observational variables to measure research concepts. The time for each in-depth interview lasted about 2 hours in a specific time. The content of the interview questions was developed in detail based on the objective of testing and screening variables in the research model. In addition, the questions were also open to be able to discover new observational variables or adjust the words, content descriptions, and structures. Based on the results of the interview, the structure, words, and questions were all considered to complete the research model as well as the research hypotheses, scales, and build the official questionnaire.

3.2. Quantitative research methods

Questionnaire design

The data collection tool in this study is a Questionnaire with different contents to clarify the research objectives, in which the questions are divided into 5 parts:

Part 1: Refers to personal information of the surveyed subjects;

Part 2: Refers to general information about the surveyed enterprises;

Part 3: Evaluates the the operating performance of listed military enterprises in Vietnam according to a 5-level Likert scale (from Completely disagree to Completely agree);

Part 4: Includes questions measuring factors affecting the operating performance of listed military enterprises in Vietnam according to a 5-level Likert scale.

Survey sample selection and data collection

Research sample size:

According to Hair et al. (2017) , the minimum sample size is 5 times, and can be 10 times the total number of observed variables. According to this calculation, the number of observations required in a 10:1 ratio is N = 10 x 32 = 320 observations. The author decided to take 350 votes.

Survey subjects and sampling method:

The author sent the survey questionnaire focusing on 3 subjects: Business administrators, Finance department heads, and finance department staff. These are subjects with work experience and understanding of the financial performance of enterprises. With the above survey subjects, the author used non-probability and convenience sampling methods.

Data collection method:

Research sample information was collected by direct interview techniques and via email. Survey data was entered and raw data was processed using Microsoft Excel for data entry, then raw data processing was carried out such as checking the validity of the data and checking for blank data. The collected data was analyzed using SPSS 22.0 software.

Data Processing

The responses were processed on SPSS 22.0 and analyzed through descriptive statistics, scale reliability analysis, EFA and regression testing.

4. Results and discussion

In-depth interviews with 13 experts showed that 100% of the interviewed experts agreed with the impact of 5 factors on the business performance of listed military enterprises.

Checking the scale

The Cronbach's Alpha reliability coefficient method is a statistical test of the level of rigor or explanatory ability for a research concept of a set of observed variables in the scale. This method is used to eliminate inappropriate variables and limit garbage variables in the research model. Hair et al. (1998) stated that "Cronbach Alpha from 0.8 to nearly 1 is a good measurement scale, from 0.7 to 0.8 is a usable scale, from 0.6 or more is acceptable in the case where the concept being studied is new or researched in a new context". When considering which variables to remove, researchers can base on the following two coefficients: The first is Cronbach’s Alpha If Item Deleted, which is the new Cronbach’s Alpha of the scale in case this observed variable is removed.

Table 1: Results of checking the scale

No.	*Variable name*	*Symbol*	*Cronbach's Alpha coefficient*	*Minimum total variable correlation coefficient*
1	Risk management	RM	.868	.650
2	Financial resources	FR	.850	.511
3	Legal environment	LE	.878	.668
4	Macroeconomic conditions	MC	.820	.628
5	Quality of human resources	QH	.877	.698

Source: Prepared by the authors (2026).

The results of testing the reliability of the scale by Cronbach's Alpha show that the scales have a reliability greater than 0.6 and the correlation coefficient of the total variable is greater than 0.3. All scales satisfy the conditions for EFA exploratory factor analysis.

EFA Analysis

To conduct exploratory factor analysis, the data collected must meet the conditions through the KMO test and Bartlett's test. Bartlett's Test is used to test the hypothesis H0 that the variables are not correlated with each other in the population, that is, the overall correlation matrix is a unit matrix, the KMO coefficient is used to check whether the sample size we have is suitable for factor analysis or not. The Sig. value of Bartlett's Test is less than 0.05, allowing the rejection of the hypothesis H0, and the value $0.5 < KMO < 1$ means that factor analysis is appropriate.

EFA Analysis for independent variables

Table 2. KMO test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin of Sampling Adequacy		.820
Bartlett's Test of Sphericity	Approx. Chi-Square	4319.940
	Df	434
	Sig.	.000

Source: Prepared by the authors (2026).

Table 2 shows that the KMO test coefficient is $0.820 > 0.5$ and the Sig of Bartlett's Test is $0.000 < 0.05$, proving that the selected observed variables are qualified for analysis.

EFA Analysis for dependent variable

The KMO value after analysis reached $0.788 > 0.5$ and the Sig of Bartlett's Test reached $0.000 < 0.05$, confirming that the 4 observed variables are correlated and suitable for analysis.

Table 3. KMO test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin of Sampling Adequacy		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	386.245
	Df	6
	Sig.	.000

Source: Prepared by the authors (2026).

Regression analysis

Autocorrelation assumption

Table 4 shows that 3 > Durbin - Watson coefficient = 1.856 > 1.0, so it can be affirmed that the residuals of the model do not have autocorrelation phenomenon, so this assumption is satisfied.

Table 4. Regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	P	VIF
	B	Std.Error			
(Constant)	(.316)	.212		.138	
RM	.174	.038	.175	.000	1.083
FR	.273	.038	.308	.000	1.106
LE	.168	.038	.191	.000	1.135
MC	.284	.044	.278	.000	1.153
QH	.216	.035	.258	.000	1.112
R Square: .736					
Adjusted R Square: .727					
P(Anova): .000					
Durbin – Watson: 1.856					

Source: Prepared by the authors (2026).

To evaluate the suitability of the regression model for the data set, we use the adjusted R2 coefficient (Adjusted R Square). The results in Table 4 show that the adjusted R2 value is 0.727, indicating that the independent variables explain 72.7% of the change in the dependent variable "Operating performance". The higher this value, the more appropriate the choice of factor analysis is, explaining more and more effectively about the factors affecting the Operating performance.

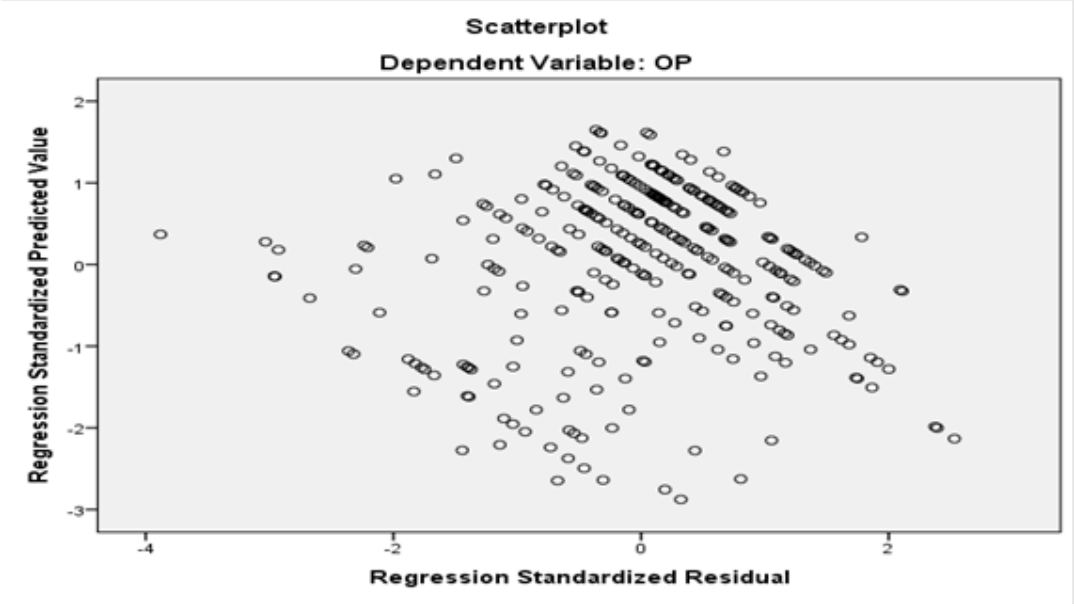
Constant variance assumption of errors

The scatter plot of the standardized predicted value (Std. predicted value) and the standardized residual (Std. residual) is often used to examine the variance constancy of errors.

The plot shows the random dispersion around the zero axis (the mean value of the residuals) of the residual

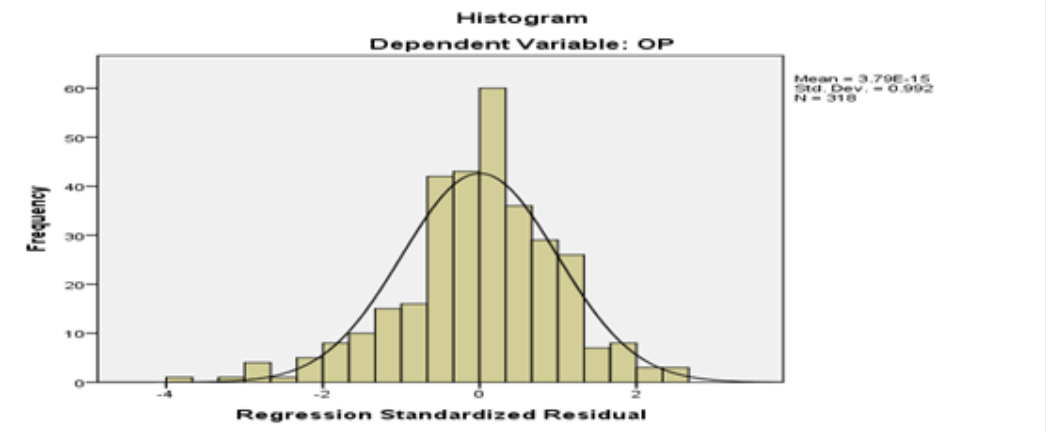
values, which means that the assumption is satisfied.

Figure 2. Scatter plot between predicted values and residuals



Source: Prepared by the authors (2026).

Figure 3. Normalized Residual Frequency Plot



Source: Prepared by the authors (2026).

Figure 3. shows that the distribution of residuals is approximately normal (Mean is 0 and standard deviation Std.Dev. = 0.992). From this it can be concluded that the assumption is satisfied.

Check for multicollinearity

Table 4 shows that the VIF of the independent variables are all < 2. Therefore, it is sufficient to confirm that there is no multicollinearity in the model.

Recent years, listed military enterprises have constantly innovated, strived to improve, promote production and business, improve productivity, quality and efficiency; both participating in the country's economic development and closely linking with the implementation of national defense tasks and increasingly affirming their role as the core force in solving difficult issues regarding national defense and socio-economics in strategic areas.

Under the leadership of the Ministry of National Defense, listed military enterprises have always been active and proactive in performing the functions of the production labor force in many creative and appropriate forms and measures, ensuring a close combination between production, economic development and national

defense and achieving important results, contributing significantly to the cause of building and defending the Fatherland.

In the implementation process, they have thoroughly grasped and creatively applied the State's viewpoint on combining economy with national defense, national defense with economy; strictly followed the State's guidelines and policies; Taking socio-economic development and maintaining political stability as the top goal of production and business activities; closely combining production and business activities with the implementation of national defense tasks; attaching importance to protecting resources and the environment, implementing sustainable development and proactively integrating into the international economy. Listed military enterprises have promoted internal strength, exploited all potentials, and increasingly deepened production and economic development activities associated with national defense.

5. Conclusion and recommendations

Financial resources are the factor that has the strongest impact on the business performance of listed military enterprises. Therefore, listed military enterprises need to focus on the following contents:

- Enterprises need to develop a long-term financial plan to ensure funding for business strategies: The business strategy in the coming time of listed military enterprises is to continue to expand the market or increase market share, so enterprises need to develop a long-term financial plan to meet this business strategy. Specifically, enterprises need financial resources to continue to invest in expanding factories, machinery and equipment, storing raw materials, hiring more workers... At the same time, enterprises must also develop a plan to reduce product prices, which means sacrificing short-term profits to achieve the goal of competitive advantage over competitors, thereby increasing market share in the long term.

- Allocating financial resources appropriately

In the context of increasingly fierce competition and globalization, enterprises need to allocate an appropriate financial resource sufficient to finance the promotion of their products and services. Defense products of listed military enterprises not only meet domestic listed military needs but also need to aim for export to countries in the region and the world. To achieve that mission, listed military enterprises are required to arrange appropriate financial resources to serve the promotion and introduction programs of products through domestic and international fairs and exhibitions, as well as information media and technological support to bring Vietnamese defense products to the world market.

Macroeconomic conditions are the second most influential factor affecting the performance of listed military enterprises.

- Firstly, businesses need to enhance the role of forecasting macro fluctuations. Forecasting is considered an inseparable part of the business operation process. This is an important factor, determining the development of forecasting work, focusing on forecasting variables of inflation, interest rates, exchange rates ... to develop appropriate business strategies.

- Secondly, building a unified, accurate and regularly updated database system. In addition to building and regularly updating forecasts for periodic reporting, it is necessary to prepare data, methods, tools, and new forecasting models that can respond quickly and accurately to problems, especially when there are "sudden" factors appearing from changes in world geopolitics, or unusual fluctuations in natural disasters, epidemics affecting the economy and the implementation of goals and plans.

- Thirdly, selecting advanced forecasting methods and models, integrate quantitative forecasting results with other methods. With the continuous development of science and technology, data formats as well as methods of using data for macro management are important factors, ensuring timely forecasting requirements in the face of increasingly rapid and unpredictable changes in economic and social life.

The quality of human resources is the third factor affecting the operational efficiency of listed military enterprises. Therefore, enterprises need to improve the quality and professional capacity of their staff, to increasingly meet the requirements and tasks. Enterprise staff in each specific position must always determine a high sense of responsibility, good moral qualities associated with constantly improving professional qualifications. Fostering and developing higher professional qualifications, improving political and ideological awareness is always necessary and an important requirement in the current situation, requiring regular and effective implementation.

The legal environment is another factors affecting the operational efficiency of listed military enterprises.

Therefore, listed military enterprises need to complete the legal environment for the operation of listed military enterprises, including the early promulgation of the Law on Industrial Mobilization; legalization of specific mechanisms and policies on national defense, creating a legal corridor for enterprises to operate; ensuring the role and goals of listed military enterprises are effectively implemented. The Ministry of National Defense should soon promulgate basic standards on the operational efficiency of listed military enterprises so that enterprises have a clearer understanding of operational efficiency in different aspects and design and perfect it at enterprises. Along with that, the Ministry of National Defense should soon promulgate regulations on business performance assessment reports, thereby enhancing the role and importance of business efficiency in the eyes of enterprise managers, this report is the responsibility of the enterprise and is annually submitted to superior management agencies.

The fifth factor affecting business performance is risk management. Listed military enterprises need to develop appropriate risk appetite, organizational structure, risk management processes and policies to effectively control arising risks. Enterprises need to continue to advise and make recommendations to the Ministry of National Defense and relevant agencies on appropriate legal institutions and mechanisms to create a favorable business environment for enterprises. Listed military enterprises, especially when the scale of production and business activities tends to increase rapidly, need to soon establish a specialized department for risk management within the enterprise. Enterprise risk management is not a simple task, it requires many different stages of analysis and assessment, requiring a certain level of dedication. Many listed military enterprises today integrate this work with other functions of departments, reducing the effectiveness of risk management. Therefore, this establishment will help members of the department focus more on their expertise. Especially in the context of many unpredictable developments in the world and in the country due to natural disasters, epidemics, trade wars, etc. affecting exchange rates and prices, making risks more and more difficult to predict. The enterprise's risk management department is responsible for updating news that may affect the enterprise's business performance such as exchange rates, securities, market prices, epidemics, legal documents, etc. to identify potential risks. From there, analyze, identify, classify risks, and report to the board of directors to have timely and effective risk management plans. Listed military enterprises, especially those of sufficient size (many departments, branches, representative offices, etc.), need to establish a risk management system throughout the enterprise, not just in certain departments. This system will help the risk management department grasp the operating situation in each department, promptly identify potential risks for analysis, reporting and handling. At the same time, it is necessary to update processes and disseminate knowledge related to risk management to all officers and employees.

REFERENCES

Bahari, N., Saufi, R. A., Zainol, N. R., Samad, N. S. A., & Yaziz, M. F. A. (2023). Entrepreneur's Personality Traits and Firm Performance of Malaysian Smes: Mediated by Market Orientation. International Journal of Professional Business Review, 8(1), e01260. https://doi.org/10.26668/businessreview/2023.v8i1.1260

Barclay, L.J. (2005). "Following in the footsteps of Mary Parker Follett: Exploring how insights from the past can advance organizational justice theory and research", Management Decision, Vol. 43 No. 5, pp. 740-760. https://doi.org/10.1108/00251740510597752

Blackburn, R.,Hart, M., & Wainwright, T. (2013). Small business performance: business, strategy and owner-manager characteristics. Journal of Small Business and Enterprise Development, 20(1), 8-27. doi:DOI 10.1108/14626001311298394

Bush, T. (2016). PESTLE Analysis: Legal Factors Affecting Business. https://pestleanalysis.com/legal-factors-affecting-business/.

Combs, J.G., Russell Crook, T. and Shook, C.L. (2005). "The Dimensionality of Organizational Performance and its Implications for Strategic Management Research", Ketchen, D.J. and Bergh, D.D. (Ed.) Research Methodology in Strategy and Management (Research Methodology in Strategy and Management, Vol. 2), Emerald Group Publishing Limited, Bingley, pp. 259-286. https://doi.org/10.1016/S1479-8387(05)02011-4

E. Fischer and A. R. Reuber (2003). Support for Rapid-Growth Firms: A Comparison of the Views of Founders, Government Policymakers, and Private Sector Resource Providers. Journal of Small Business Management, vol. 41, pp. 346–365.

Farooq, U., Tabash, M. I., Hamouri, B., Daniel, L. N., & Safi, S. K. (2023). Nexus between Macroeconomic Factors and Corporate Investment: Empirical Evidence from GCC Markets. International Journal of Financial Studies, 11(1). https://doi. org/10.3390/ijfs11010035.

Gaurav Mitra, Vandana Gupta and Gaurav Gupta (2023). Impact of macroeconomic factors on firm performance: Empirical evidence from India. Investment Management and Financial Innovations, 20(4), 1-12. doi:10.21511/imfi.20(4).2023.01.

Hackbarth, D., Miao, J., & Morellec, E. (2006). Capital structure, credit risk, and macroeconomic conditions. Journal of Financial Economics, 82(3), 519-550. https://doi. org/10.1016/j.jfineco.2005.10.003.

Hair, Jr., J. F., Matthews, L.M., Mathews, R.L., and Sarstedt, M. (2017). PLSSEM or CB-SEM: updated guidelines on which method to use. International Journal of Multivariate Data Analysis, 1(2), 107-123