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# GOVERNMENT SUPPORT AND FINANCIAL PERFORMANCE POST-COVID-19: EVIDENCE FROM SMALL AND MEDIUM ENTERPRISES

## ABSTRACT

Small and medium enterprises (SMEs) are vulnerable during the Covid-19 pandemic because they have limited resources. To prevent SMEs from going bankrupt after the Covid-19 pandemic, the government needs reasonable support policies for SMEs. This paper examines the impact of government support, including interest rate, tax, training, and consulting support, on the performance of SMEs post-COVID-19. We use Return on Assets (ROA), Return on Sales (ROS) and profit to represent the performance of SMEs. We have reviewed previous studies to propose a research model and questionnaire. Based on the questionnaire, we collected data from 355 SMEs in Vietnam by surveying in 2022. The OLS regression model was used to test the hypotheses in the research model. The results show that government support positively affects ROA, ROS and profit. Besides, SMEs that invest in new technologies, equipment or software have higher ROA and ROS and SMEs that obtain quality management system certificates such as ISO 9001 have better profits. Based on the research results, we have proposed solutions to support SMEs in overcoming crises like COVID-19. This result is crucial for policy-makers who want to allocate the government's limited budget to stimulate economic development.

**Keywords:** government support, performance, SMEs, post-covid-19, economic recession, economic recovery, Vietnam

**JEL Classification:** G18, G30, G38, H51

## INTRODUCTION

Since its start in late 2019, the COVID-19 pandemic has negatively impacted the global economy and caused core businesses to close suddenly, causing an economic recession and global changes in geopolitical and socio-economic norms. Many countries are frantically responding with economic recovery initiatives and reckless and dangerous financial stimulus solutions (D.Q. Vang & N.Q. Khanh, 2022). The measures used to mitigate the transmission of the virus, such as social distancing and quarantines, have disrupted the supply and demand of goods and services. The COVID-19 pandemic has had widespread effects on several economic sectors and organisations, particularly small and medium enterprises (Hasanat et al., 2020). According to Omar et al. (2020), SMEs face many challenges and difficulties due to the COVID-19 epidemic. Government implementation of closure and movement restriction rules in several countries has significantly impacted SMEs, suspending their activities, declining their financial stability, and increasing vulnerability to financial risks. The sales of SMEs have been adversely impacted by disruptions in supply chains, resulting in a scarcity of labour and production inputs (Fairlie & Fossen, 2021). This issue has occurred simultaneously with decreased consumer expenditure due to a fall in consumers' income and accompanying feelings of uncertainty. Consequently, several SMEs discovered they needed help to handle the situation (Ozili, 2020).

SMEs are universally known as the pillar of modern economies due to their significant contributions to global economic development through creating jobs, reducing poverty, and accumulating wealth. The increased attention and education on creating and operating SMEs results from recognising SMEs' vital roles. Bubou et al. (2014) emphasised that any attempt to promote economic growth without appropriate government support

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for the growth of small and medium-sized enterprises makes it difficult to provide positive results in the long run. Many governments have provided various forms of support to SMEs to protect this vital sector from collapse due to the COVID-19 crisis. Government support programmes encourage the growth and development of small and medium-sized firms by providing favourable conditions for producing goods and services. Governments have adopted several policies to mitigate this crisis's adverse effects (Ahmad et al., 2020).

Many studies evaluate the impact of the COVID-19 pandemic on the performance of SMEs during the pandemic (Gerald et al., 2020; Shen et al., 2020; Hu & Zhang, 2021; Adam & Alarifi, 2021). For example, Hu and Zhang (2021) found that the COVID-19 epidemic has led to a decline in business performance. The negative impacts of COVID-19 on company performance are less significant in nations with superior healthcare systems, more sophisticated financial systems, and stronger institutions. Because SMEs were affected by the COVID-19 epidemic, governments provided indirect and direct support to help SMEs survive and recover after the epidemic. However, there is little research about government support's impact on SMEs' performance after the Covid pandemic. This study aims to analyse government support's impact on SMEs' performance in Vietnam. Government support includes interest rates, tax, training, and consulting support. In addition to analysing government support, we also analyse the impact of Innovation and Certificates in quality management systems on the performance of SMEs.

To analyse government support's impact on SMEs' performance, we surveyed 355 SMEs in Ho Chi Minh City. SMEs are businesses with fewer than 300 employees. The performance of SMEs is represented by ROA, ROS and profit in 2022. A linear regression model was used to analyse the surveyed data. Research results show that government support positively impacts SMEs' performance in the post-Covid-19 period. This article contributes to developing research on SMEs' practises and external support during COVID-19. It offers more understanding for SME managers and policymakers on the significance of external support in enhancing the beneficial effects of external support on the performance of SMEs. The following section is the literature review, which presents the research model and previous studies on the relationship between independent and dependent variables. We will then present the Methodology section, which has detailed data, regression model, and variables used in the model. Next, the article presents the results and discussion of the research model. The final section is the conclusion and recommendation.

## LITERATURE REVIEW

### *Performance, government support and SME performance*

According to Cochran & Wood (1984), enterprise performance is expressed through three factors. The first is financial performance expressed through profit, return on assets, or return on investment. The second is product market performance, expressed through sales revenue and business market share. The third is shareholder returns, represented by total shareholder returns, or the company's added value. In particular, the enterprise performance is best evaluated through financial performance. Because this indicator shows the effective use of enterprise resources. Also, according to Cochran & Wood (1984), measuring financial performance is based on two perspectives: the investor returns and the accounting returns perspective (in Table 1).

**Table 1. Methods of measuring financial performance.** (Source: authors compiled from previous studies).

Investor returns perspective	Accounting returns perspective
<ul style="list-style-type: none"> <li>▪ Profit margin per share;</li> <li>▪ Changes in price per share;</li> <li>▪ Dividend income;</li> <li>▪ Covariance of the expected return.</li> </ul>	<ul style="list-style-type: none"> <li>▪ ROA (Return on Assets);</li> <li>▪ ROE (Return on Equity);</li> <li>▪ ROS (Return on Sales);</li> <li>▪ ROCE (Return on Capital Employed);</li> <li>▪ EPS (Earnings Per Share);</li> <li>▪ P/E (Price to Earnings) ratio.</li> </ul>

In general, each measure has its advantages and limitations and is used appropriately depending on the research context (Vang D Q & Na L, 2024). In previous studies, financial performance based on three coefficients: ROA, ROE, and ROS are most commonly used to measure the financial performance of businesses (Adegbite & et al.; Elouidani & Zoubir; Nyeadi & et al; Torugsa & et al). Therefore, in the framework of this study, the authors inherit previous research and use financial performance measures (ROA, ROS, profit) to measure the performance of SMEs.

Governments, agencies, and institutions provide external support to small and medium-sized enterprises (SMEs) to help them survive, accelerate their growth, foster innovation, and improve their abilities. This result is achieved by enhancing SMEs' managerial capabilities and refining their marketing skills, ultimately leading to a more significant economic contribution to the national economy (Mason & Brown, 2013). On the other hand, governments encourage SMEs to seek outside assistance to utilise their business capacity better, enhance their performance, raise their competitiveness, and contribute to the expansion and growth of their businesses. (Storey et al., 2010).

Government support for SMEs can be either direct or indirect assistance. Direct support often refers to financial assistance provided specifically for acquiring assets, purchasing technologies, or plans to address financing shortages. It is often offered by specific government rules or financial intermediary requirements (Nishimura & Okamuro, 2011). Indirect external support usually involves consultancies, ideas, and advice provided by experts, advisory offices, and educational institutions to help eliminate the lack of knowledge and increase the available information (Freitas & Von Tunzelmann, 2008).

Numerous researchers have examined the linkage between government support and SMEs' performance. For example, Peter et al. (2018) conclude that government support is essential because it helps start new businesses and gives them many opportunities to expand, hire local workers, and pay income taxes to all three levels of government. Adequate financial support, including loans and investments, is crucial for SMEs' success. Pu et al. (2021) propose that the government's financial and policy support throughout the epidemic motivates people to believe they will resolve this unforeseen problem soon. Innovative finance and technology adaptability boost SMEs' performance, and government support plays a mediation role in this relationship. Du et al. (2023) demonstrate that COVID-19 affects SMEs' profitability, operations, economics, and finance. Outside financial support has helped SMEs survive and succeed. Thus, we hypothesise the following:

***H1: Government support affects SMEs' performance.***

### ***Innovation and SME performance***

The Resource Base View (RBV), introduced by Barney et al. (2021), provides evidence for the relationship between innovation and performance. RBV argues that a company's competitive edge derives from its limited, typical, unique, valuable, and non-sustainable resources but needs effective management. Organisations can utilise the RBV to attain competitive parity by analysing the factors that contribute to the performance of top-performing enterprises and then replicating their resources and skills. According to Aksoy (2017), pressures towards innovation are relevant to both large and small organisations. Several studies have noted that the productivity of SMEs and their comparative advantages compared to large corporations in terms of innovation might turn SMEs into more competitive entities than large firms (Pürhani et al., 2023). According to the findings of Prasetyo et al. (2022), certain small businesses in Java communities were communicating with each other, which was helpful to the community of enterprises, supported the growth of innovation, boosted people's income, and contributed to the increase in regional revenue. Issau et al. (2022) found that when businesses made an effort to enhance their marketing management, it led to the development of new market innovations and product and process innovations required for businesses to remain competitive.

***H2: Innovation affects SMEs performance***

### ***Certificate in quality management Systems and SME performance***

Many papers confirm the effect of a Certificate in quality management systems on the firm performance (Nguyen et al. 2021). Starke and Eunni (2012) studied panel data of 528 businesses in Brazil from 1995-2006. Regression results show that ISO 9000 certification increases revenue, reduces the cost of goods sold and increases the asset turnover rate of the business. Similar to the above results, Chatzoglou et al. (2015) affirmed that ISO 9000 positively affects revenue and customer satisfaction, thereby positively influencing the company's financial indicators. The authors surveyed 168 quality department heads of companies in Egypt and then used regression methods to test related hypotheses. Chakroun et al. (2020) investigate the impact of ISO 26000 on enterprise performance and conclude that French enterprises that apply ISO 26000 principles can enhance their social, environmental, and financial performance.

Similarly, San et al. (2016) showed a link between a company's financial performance and ISO 14001 certification. Environmental certification increases a company's reputation, increasing sales and investor confidence. The authors used simple regression and ANOVA analysis with two dependent variables: ROA and ROE. Nguyen and Nguyen (2018) studied the impact of quality standard certification on the performance of small and medium-sized enterprises in Vietnam. The OLS regression method is used with data collected from two surveys of Vietnamese small and medium enterprises in 2013 and 2015 with 2097 observations. Estimated results show that international quality certification positively impacts the ROA and ROE of SMEs.

**H3: Certificate in quality management system affects SME performance**

**Characteristic of SMEs and their performance**

Enterprises with different characteristics will have different business forms and, therefore, different operating results. Several empirical studies have confirmed that business characteristics and ownership impact business performance (Xia & Walker, 2014; Sakilu & Kibred, 2015; Lin et al., 2019; Tristante et al., 2023). Xia and Walker (2015) study whether ownership type influences business performance to many other characteristics such as industry, region, firm size, and number of years of SMEs. The data was collected from manufacturing companies located in China from 1998 to 2007. The impact of ownership type has a significant impact on the SMEs' performance. Lin et al. 2019 investigated 163 automotive firms from 2011 to 2017 and confirmed that the green innovation strategy positively affected financial performance. They also concluded that the firm size moderated the negative correlation between innovation strategy and financial performance. In this article, we propose two variables, Firm Type and Firm Size, as variables representing the characteristics of the enterprises.

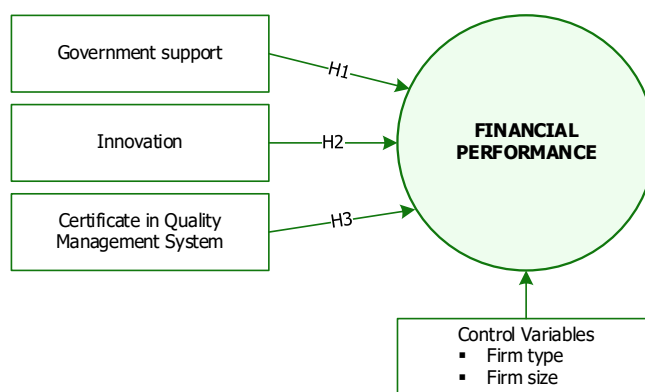


Figure 1. Research model.

**AIMS AND OBJECTIVES**

This study aims to evaluate the impact of government support post-COVID-19 on SMEs' performance in Vietnam. ROA, ROS, and profit are the metrics used to assess the performance of small and medium-sized enterprises. We suggest solutions to help small and medium-sized enterprises during crises caused by the Covid-19 pandemic. These solutions ensure that SMEs can overcome the situation and contribute to economic growth. In more detail, the first objective of this study is to test the impact of government support, including interest rate, tax, training, and consulting support, on the performance of SMEs. The second objective is to test the impact of innovation on the performance of SMEs. The last objective is to test the effects of Certificates in quality management systems on the performance of SMEs. To accomplish these objectives, we conducted a study of past research to plan a questionnaire. After that, we surveyed 355 small and medium-sized enterprises in Vietnam to gather information on independent, dependent, and control variables. Subsequently, we employ a regression model to examine the influence that the independent variables have on the dependent variables. The research findings will serve as scientific evidence for policymakers, allowing them to identify appropriate strategies for allocating limited budget resources to boost economic growth.

**METHODS**

To test the effect of government support on the SMEs' performance proposed in Figure 1, we use the OLS regression method with the dependent variable denoted as  $Y_i$ , the independent variable denoted as  $X_i$  and the error denoted as  $u_i$ ,  $\beta_1$  is a constant, and  $\beta_2$  is a vector of regression coefficients. The regression equation is expressed as follows:

$$Y_i = \beta_1 + \beta_2 * X_i + u_i$$

$Y_i$  is SMEs' performance, a vector of dependent variables, and  $X_i$  is a vector of independent variables. To analyse the impact of government support on SMEs' performance, we use two different models. In Model 1, we analyse general government support to SMEs' performance, while in Model 2, we analyse detailed government support, which includes

interest rate support, tax support, training support and consulting support. Details of variable definition are presented in Table 2.

**Table 2. Definition of Variables.**

Variable Name	Definition of Variables
Return On Asset	EBIT/Total Asset in 2022, unit: %
Return On Sale	EBIT/Sale in 2022, unit: %
Profit	Earning After Tax in 2022, unit: VND million
General Support	1: Enterprise receives support from the government after Covid-19 0: otherwise
Interest Rate Support	1: Enterprise receives interest rate support from the government after Covid-19 0: otherwise
Tax Support	1: Enterprise receives tax support from the government after Covid-19 0: otherwise
Training Support	1: Enterprise receives training support from the government after Covid-19 0: otherwise
Consulting Support	1: Enterprise receives consulting support from the government after Covid-19 0: otherwise
Innovation	1: In the period 2020 - 2022, the enterprise invests in new technologies, equipment or new software 0= otherwise
QMS Certificate	1: Enterprise obtained Quality Management System Certificates such as ISO 9001 0= otherwise
Service Enterprise	1: Enterprise doing business in the service sector 0= otherwise
Agricultural Enterprise	1: Enterprise doing business in the Agricultural sector 0= otherwise
Number of employees	Total number of employees at the end of 2022

In this study, we used the snowball sampling technique. The survey respondents were leaders of SMEs. First, we selected Ho Chi Minh City University of Technical Education alumni working for SMEs. Then, we sent the survey to company leaders through alumni. We prepared the survey using both Google Forms and paper. Leaders of the surveyed companies then introduced leaders of other companies as potential respondents. We surveyed over 500 SMEs in Ho Chi Minh City. Ultimately, we collected 355 valid observations. Then, we used these 355 observations for statistical hypothesis tests.

SMEs' performance is represented by ROA, ROS and profit in 2022. Government support is a dummy variable represented by General Support, Interest Rate Support, Tax Support, Training Support and Consulting Support. Innovation is a variable that receives a value of 1 if the enterprise invests in new technologies, equipment or software in 2020-2022; otherwise, it receives a value of Zero. QMS is also a dummy variable which receives a value of 1 if the enterprise obtained Quality Management System Certificates such as ISO 9001. Service Enterprise and Agriculture Enterprise variables represent Firm Type. Lastly, Firm Size is represented by the number of employees at the end of 2022.

## RESULTS

This section will present the research results, including descriptive statistics and regression results. Next, the results will be discussed to explain why the independent variables affect SMEs' performance.

### *Descriptive statistics*

Some descriptive statistical parameters are used to see the data distribution, such as mean, maximum, minimum and standard deviation. The following is Table 3 of descriptive statistics for the variables used in the model.

**Table 3. Descriptive statistics.**

Variable	Mean	Max	Min	Std.Dev
Return On Asset	0.07153	1.6744	-0.3074	0.21782
Return On Sale	0.06716	2.9713	-0.3416	0.26897
Profit	3,582.54	94,004	-14,071	11,535.4
General Support	0.51268	1	0	0.50055
Interest Rate Support	0.08451	1	0	0.27854
Tax Support	0.40282	1	0	0.49116
Training Support	0.04507	1	0	0.20775
Consulting Support	0.08732	1	0	0.28271
Innovation	0.18592	1	0	0.38959
QMS Certificate	0.34648	1	0	0.47652
Service Enterprise	0.38873	1	0	0.48815
Agricultural Enterprise	0.02817	1	0	0.16569
Number of employees	64.1916	300	3	60.1666

Table 3 of descriptive statistics shows that the average values of ROA and ROS of SMEs are 7.1% and 6.7%, respectively. These ROA and ROS values are not high, equivalent to bank deposit interest rates. SMEs have an average annual profit after tax of VND 3.7 billion. However, there are many SMEs with negative profits. In the post-COVID period, 51.3% of SMEs received general government support, of which 8.5% received interest rate support, 40.3% received tax support, 4.5% received training support, and 8.7% received consulting support. Regarding innovation, 18.6% of SMEs invested in new technologies, equipment or new software in 2020-2022. In the data sample, each SME in Ho Chi Minh City has an average of 64 employees, 34.6% of enterprises have a QMS Certificate, 38.9% of enterprises are in the service sector, and 2.8% of enterprises are in the agricultural sector. The above descriptive statistics show that the data sample with 355 observations can represent SMEs in Ho Chi Minh City.

### Regression results

To analyse the impact of government support on performance, we do regression analysis with three different dependent variables, including ROA, ROS and profit. For each dependent variable, we analyse the impact of general support on the dependent variables (model 1) and detailed support on the dependent variables (model 2). The analysis was performed using Eviews software. Table 4 presents the regression results with the dependent variable ROA. The regression results show that General support has a statistically significant effect on ROA. In more detail, Tax support, Training support and Consulting support affect ROA. In addition, the Innovation and QMS certificate variables also have a positive effect on ROA. Finally, businesses in the service sector have better ROA results than other businesses in the post-Covid period.

**Table 4. Regression result with dependent variable ROA.** Note: \*\*\*, \*\*, and \* represent significance of 1%, 5%, and 10% respectively.

Independent variables	Model 1		Model 2	
	Coefficient	T-statistic	Coefficient	T-statistic
Constant	-0.02885	-1.27664	-0.03854*	-1.74243
General Support	0.06135***	2.75239		
Interest Rate Support			-0.05524	-1.41656
Tax Support			0.08015***	3.66105
Training Support			0.12060**	2.22641
Consulting Support			0.08358**	2.19093
Innovation	0.10859***	3.38010	0.10332***	3.20861
QMS Certificate	0.08757***	3.29215	0.08685***	3.31645
Service Enterprise	0.07404***	3.11752	0.07487***	3.20090
Agricultural Enterprise	-0.04890	-0.71787	-0.04619	-0.67748
Number of employees	-0.00046	-0.94334	-0.00036	-0.75875
Observations	355		355	
R2	0.1417		0.1818	
F-statistics	8.1853		7.6463	
Prob(F-statistic)	0.0000		0.0000	

Table 5 presents the regression results with the dependent variable ROS. The regression results show that General support has a statistically significant effect on ROS. In more detail, Tax support, Training support and Consulting support also positively impact ROS. The Innovation, QMS certificate, and Service enterprise variables also positively affect ROA. These regression equations do not find the effect of Interest rate support, Agricultural Enterprise and the number of employees on ROS.

**Table 5. Regression result with dependent variable ROS.** Note: \*\*\*, \*\*, and \* represent significance of 1%, 5%, and 10% respectively. (Source: author's work)

Independent variables	Model 1		Model 2	
	Coefficient	T-statistic	Coefficient	T-statistic
Constant	-0.02437	-0.85099	-0.03386	-1.22622
General Support	0.06046**	2.14070		
Interest Rate Support			-0.07347	-1.50938
Tax Support			0.08239***	3.01533
Training Support			0.31497***	4.65848
Consulting Support			0.04952	1.03985
Innovation	0.12659***	3.10956	0.10112**	2.51614
QMS Certificate	0.08182**	2.42738	0.07494**	2.29283
Service Enterprise	0.07049**	2.34218	0.06454**	2.21064
Agricultural Enterprise	-0.01849	-0.21422	-0.05175	-0.60806
Number of employees	-0.00080	-1.30933	-0.00057	-0.96523
Observations	355		355	
R2	0.0962		0.1641	
F-statistics	5.2773		6.7543	
Prob(F-statistic)	0.0000		0.0000	

Table 6 presents the regression results with the dependent variable profit. The regression results show that General support has a statistically significant effect on the Profit of SMEs. Different from the results in Table 4 and Table 5, Interest rate support has a positive effect on Profit. The Innovation and Number of employees have a positive effect on ROA. This result means that SMEs with innovation and more employees have better profits. In these regression equations, we do not find the effect of Tax support, Training support, Consulting support, Innovation, QMS certificate, Service enterprise, and Agricultural enterprise variables on profit.

**Table 6. Regression result with dependent variable Profit.** Note: \*\*\*, \*\*, and \* represent significance of 1%, 5%, and 10% respectively. (Source: author's work)

Independent variables	Model 1		Model 2	
	Coefficient	T-statistic	Coefficient	T-statistic
Constant	-2221.48*	-1.85657	-1075.99	-0.89184
General Support	3822.69***	3.23954		
Interest Rate Support			4522.67**	2.12635
Tax Support			1018.01	0.85259
Training Support			31.62	0.01070
Consulting Support			-2066.66	-0.99321
Innovation	4984.65***	2.93074	5645.79***	3.21470
QMS Certificate	539.92	0.38339	559.23	0.39154
Service Enterprise	639.88	0.50889	872.48	0.68387
Agricultural Enterprise	-2969.40	-0.82341	-2919.54	-0.78503
Number of employees	113.42***	4.43976	110.67***	4.27386
Observations	355		355	
R2	0.1423		0.1322	
F-statistics	8.2222		5.2409	
Prob(F-statistic)	0.0000		0.0000	

The regression results in Tables 4, 5 and 6 show that the  $R^2$  value ranges from 10% to 18%. This result shows that the independent variables explain from 10% to 18% of the variation in the dependent variable. The F-test values are all smaller than 1%, showing that the regression results are significant. In all regression equations, Government support has a positive effect on the performance of SMEs.

## DISCUSSION

This result is similar to the research results of (Peter et al., 2018; Pu et al., 2021; Du et al. 2023), which support hypothesis H1. SMEs who receive government support will increase their ability to survive after Covid-19. Their performance indicators, such as ROA, ROS, and profit, are better than SMEs that do not receive government support. This result shows that the government's support policies for SMEs post-Covid period are reasonable. In addition, in all regression equations, Innovation positively affects performance. This result is similar to the study of (Prasetyo et al., 2022; Issau et al., 2022), supporting hypothesis H2. Innovation will help businesses increase their competitiveness, leading to better performance than other businesses. Finally, a QMS certificate has a positive effect on ROA and ROS. This result is similar to the study of San et al. (2016), Nguyen & Nguyen (2018), Chakroun et al. (2020), which support hypothesis H3. SMEs that obtain Quality Management System Certificates such as ISO 9001 have excellent performance in ROA and ROS.

## CONCLUSIONS

This paper investigates the effects of various forms of government support, including tax support, interest rate support, training support, and consulting support, on the performance of SMEs. We surveyed 355 SMEs in Vietnam in many different sectors, such as manufacturing, agriculture and service. The results show that government support positively impacts ROA, ROS, and profit. Additionally, ROA and ROS are greater for SMEs investing in new technologies, equipment, or software, and profit is more significant for SMEs obtaining quality management system certifications such as ISO 9001. Based on the findings, the study recommends that the government should support SMEs during crises like the recent Covid-19. Tax support is an effective policy to help SMEs improve ROA and ROS results. Government support is necessary for SMEs to survive and overcome the crisis period. In addition, SME owners should also consider investing in innovation, such as new technologies, equipment or software and in quality management systems such as ISO 9001, because these can help SMEs improve financial performance.

In addition to the results achieved, our research has some limitations, such as not collecting much research data. We collected data on 355 SMEs. The number of observations is enough to test the hypothesis. However, this data is cross-sectional and does not reflect the changes in data over time. Besides, the data was collected only in Ho Chi Minh City, which did not represent all provinces and cities in Vietnam. To overcome these limitations, in the future, we plan to collect panel data in different provinces and cities in Vietnam and use panel data analysis methods such as the fixed effects model (FEM), random effects model (REM) and generalized method of moments (GMM) to test statistical hypotheses in the research model.

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## ADDITIONAL INFORMATION

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### AUTHOR CONTRIBUTIONS

**Conceptualization:** *Dang Quang Vang*

**Data curation:** *Nguyen Khac Hieu*

**Formal Analysis:** *Dang Quang Vang, Nguyen Khac Hieu*

**Methodology:** *Dang Quang Vang, Nguyen Khac Hieu*

**Software:** *Nguyen Khac Hieu*

**Supervision:** *Dang Quang Vang*

**Writing – review & editing:** *Dang Quang Vang*

**Writing – original draft:** *Nguyen Khac Hieu*

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## CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

## REFERENCES

- Adegbite, E., Guney, Y., Kwabi, F., & Tahir, S. (2019). Financial and corporate social performance in the UK listed firms: the relevance of non-linearity and lag effects. *Review of Quantitative Finance and Accounting*, 52(1), 105-158. <https://doi.org/10.1007/s11156-018-0705-x>
- Ahmad, N. N., Hanafi, W. N. W., Abdullah, W. M. T. W., Daud, S., & Toolib, S. N. (2020). The effectiveness of additional PRIHATIN SME economic stimulus package (PRIHATIN SME+) in Malaysia post-COVID-19 outbreak: A conceptual paper. *Global Business & Management Research*, 12(4), 754-763. <http://www.gbmjournal.com/pdf/v12n4/V12N4-73.pdf>
- Aksoy, H. (2017). How do innovation culture, marketing innovation and product innovation affect the market performance of small and medium-sized enterprises (SMEs)? *Technology in Society*, 51, 133-141. <https://doi.org/10.1016/j.techsoc.2017.08.005>
- Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of Management*, 47(7), 1936-1955. <https://doi.org/10.1177/01492063211021655>
- Bubou, G.M., Siyanbola, W.O., Ekperiware, M.C., & Gumus, S. (2014). Science and Technology Entrepreneurship for Economic Development in Africa (SEEDA). *International Journal of Scientific and Engineering Research*, 5(3), 921-927. [https://www.researchgate.net/publication/263923904\\_Science\\_and\\_technology\\_entrepreneurship\\_for\\_economic\\_development\\_in\\_Africa\\_SEEDA](https://www.researchgate.net/publication/263923904_Science_and_technology_entrepreneurship_for_economic_development_in_Africa_SEEDA)
- Chakroun, S., Salhi, B., Ben Amar, A., & Jarboui, A. (2020). The impact of ISO 26000 social responsibility standard adoption on firm financial performance: Evidence from France. *Management Research Review*, 43(5), 545-571. <https://doi.org/10.1108/MRR-02-2019-0054>
- Chatzoglou, P., Chatzoudes, D., & Kipraios, N. (2015). The impact of ISO 9000 certification on firms' financial performance. *International Journal of Operations & Production Management*, 35(1), 145-174. <https://doi.org/10.1108/IJOPM-07-2012-0387>
- Cochran, P.L., & Wood, R.A. (1984). Corporate social responsibility and financial performance. *Academy of Management Journal*, 27(1), 42-56. <https://doi.org/10.2307/255956>
- Du, L., Razzaq, A., & Waqas, M. (2023). The impact of COVID-19 on small-and medium-sized enterprises (SMEs): empirical evidence for green economic implications. *Environmental Science and Pollution Research*, 30(1), 1540-1561. <https://doi.org/10.1007/s11356-022-22221-7>
- Elouidani, A., & Zoubir, F.A. (2015). Corporate social responsibility and financial performance. *African Journal of Accounting, Auditing and Finance*, 4(1), 74-85. <https://doi.org/10.1504/AJAAF.2015.071749>
- Fairlie, R., & Fossen, F. M. (2021). The early impacts of the COVID-19 pandemic on business sales. *Small Business Economics*, 1-12. <https://doi.org/10.1007/s11187-021-00479-4>
- Freitas, I. M. B., & Von Tunzelmann, N. (2008). Mapping public support for innovation: A comparison of policy alignment in the UK and France. *Research Policy*, 37(9), 1446-1464. <https://doi.org/10.1016/j.respol.2008.05.005>
- Gerald, E., Obianuju, A., & Chukwunonso, N. (2020). Strategic agility and performance of small and medium enterprises in the phase of the Covid-19 pandemic. *International Journal of Financial, Accounting, and Management*, 2(1), 41-50. <https://doi.org/10.35912/ijfam.v2i1.163>
- Hasanat, M. W., Hoque, A., Shikha, F. A., Anwar, M., Hamid, A. B. A., & Tat, H. H. (2020). The impact of coronavirus (Covid-19) on E-business in Malaysia. *Asian Journal of Multidisciplinary Studies*, 3(1), 85-90. <https://asianjournals.org/online/index.php/ajms/article/view/219/100>
- Hu, S., & Zhang, Y. (2021). COVID-19 pandemic and firm performance: Cross-country evidence. *International review of economics & finance*, 74, 365-372. <https://doi.org/10.1016/j.iref.2021.03.016>
- Lin, W. L., Cheah, J. H., Azali, M., Ho, J. A., & Yip, N. (2019). Does firm size matter? Evidence on the impact of the green innovation strategy on corporate financial performance in the automotive sector. *Journal of Cleaner Production*, 229, 974-988. <https://doi.org/10.1016/j.jclepro.2019.04.214>
- Mason, C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, 40(2), 211-225. <https://doi.org/10.1007/s11187-011-9369-9>
- Nyeadi, J.D., Ibrahim, M., & Sare, Y. A. (2018). Corporate social responsibility and financial performance nexus: Empirical evidence from South African listed firms. *Journal of Global Responsibility*, 9(3), 301-328. <http://dx.doi.org/10.1108/JGR-01-2018-0004>
- Nguyen, K. H., & Nguyen T. A. V. (2018). Impacts of Standard Certificates on the Performance of Small and Medium Enterprises in Vietnam. *Journal of economics and development*, 25(8), 50-60.
- Nguyen, N., Nguyen, C., Nguyen, H., & Nguyen, T. A. V. (2021). The impact of quality management on business performance of manufacturing firms: The moderated effect of Industry 4.0. *Quality Innovation Prosperity*, 25(3(2021)), 120-135. <https://doi.org/10.12776/qip.v25i3.1623>

21. Nishimura, J., & Okamuro, H. (2011). Subsidy and networking: The effects of direct and indirect support programs of the cluster policy. *Research Policy*, 40(5), 714–727. <https://doi.org/10.1016/j.respol.2011.01.011>
22. Omar, A. R. C., Ishak, S., & Jusoh, M. A. (2020). The impact of COVID-19 movement control order on SMEs' businesses and survival strategies. *Geografia-Malaysian Journal of Society and Space*, 16(2), 90–103. <http://dx.doi.org/10.17576/geo-2020-1602-11>
23. Ozili, P. (2020). COVID-19 in Africa: socio-economic impact, policy response and opportunities. *International Journal of Sociology and Social Policy*, 42(3/4), 177–200. <https://doi.org/10.1108/IJSSP-05-2020-0171>
24. Peter, F., Adegbuyi, O., Olokundun, M., Peter, A. O., Amahian, A. B., & Ibdunni, A. S. (2018). Government financial support and financial performance of SMEs. *Academy of Strategic Management Journal*, 17. <https://eprints.lmu.edu.ng/id/eprint/2288>
25. Prasetyo, A., Putri Harwijayanti, B., Ikhwan, M. N., Lukluil Maknun, M., & Fahlevi, M. (2022). Interaction of internal and external organisations in encouraging community innovation. *Frontiers in Psychology*, 13, 903650. <https://doi.org/10.3389/fpsyg.2022.903650>
26. Pu, G., Qamruzzaman, M. D., Mehta, A. M., Naqvi, F. N., & Karim, S. (2021). Innovative finance, technological adaptation and SMEs sustainability: the mediating role of government support during COVID-19 pandemic. *Sustainability*, 13(16), 9218. <https://doi.org/10.3390/su13169218>
27. Pürhani, S., Huseynova, A., Hakimova, Y., Kashiyeva, F., & Guluzada, E. (2023). Features of capital investment in innovation: The case of industrial SMEs in the GUAM countries. *Journal of Eastern European and Central Asian Research*, 10(2), 281–292. <https://doi.org/10.15549/jeecar.v10i2.1266>
28. Sakilu, O. B., & Kibret, B. G. (2015). Determinants of the Financial Performances of Commercial Banks in Ethiopia: From Internal Corporate Governance Practice Perspective. *Journal of Eastern European and Central Asian Research*, 2(1). <https://doi.org/10.15549/jeecar.v2i1.82>
29. San, O. T., Boon Heng, T., Han Hwa, G., & Siew Bee, T. (2016). Iso 14001 certification and financial performance of companies. *Asia-Pacific Management Accounting Journal*, 10(2), 57–77. <https://ir.uitm.edu.my/id/eprint/16109>
30. Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020). The impact of the COVID-19 pandemic on firm performance. *Emerging Markets Finance and Trade*, 56(10), 2213–2230. <https://doi.org/10.1080/1540496X.2020.1785863>
31. Starke, F., Eunni, R. V., Manoel Martins Dias Fouto, N., & Felisoni de Angelo, C. (2012). Impact of ISO 9000 certification on firm performance: evidence from Brazil. *Management Research Review*, 35(10), 974–997. <https://doi.org/10.1108/01409171211272697>
32. Storey, D. J., Saridakis, G., Sen-Gupta, S., Edwards, P. K., & Blackburn, R. A. (2010). Linking HR formality with employee job quality: The role of firm and workplace size. *Human Resource Management*, 49(2), 305–329. <https://doi.org/10.1002/hrm.20347>
33. Torugsa, N.A., O'Donohue, W., & Hecker, R. (2012). Capabilities, proactive CSR and financial performance in SMEs: Empirical evidence from an Australian manufacturing industry sector. *Journal of Business Ethics*, 109(4), 483–500. <https://doi.org/10.1007/s10551-011-1141-1>
34. Tristanto, T. A., Nugraha, N., Waspada, I., Mayasari, M., & Kurniati, P. S. (2023). Sustainability performance impact of corporate performance in Indonesia banking. *Journal of Eastern European and Central Asian Research*, 10(4), 668–678. <https://doi.org/10.15549/jeecar.v10i4.1364>
35. Vang, D. Q., & Khanh, N. Q. (2022). Blockchain: The motivation to promote global economy post Covid-19. *Sci. Tech. Dev. J. - Eco. Law Manag.*, 6(2), 2840–2849. <https://doi.org/10.32508/stdjelm.v6i2.904>
36. Vang, D. Q., & Na, L. (2024). Studying the impact of management activities on performance: Evidence from Chemical - Pharmaceutical industry companies listed on the stock exchange in Vietnam. *Sci. Tech. Dev. J. - Eco. Law Manag.*, 8(1), 5144–5154. <https://doi.org/10.32508/stdjelm.v8iOnline%20First.134>
37. Xia, F., & Walker, G. (2015). How much does owner type matter for firm performance? Manufacturing firms in China 1998–2007. *Strategic Management Journal*, 36(4), 576–585. <https://doi.org/10.1002/smj.2233>

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## ДЕРЖАВНА ПІДТРИМКА ТА ФІНАНСОВІ ПОКАЗНИКИ МАЛИХ І СЕРЕДНІХ ПІДПРИЄМСТВ ПІСЛЯ ПАНДЕМІЇ COVID-19

Малі та середні підприємства (МСП) вразливі під час пандемії Covid-19, оскільки мають обмежені ресурси. Щоб запобігти банкрутству МСП після пандемії Covid-19, урядові потрібна розумна політика підтримки МСП. У цій статті розглянуто вплив державної підтримки, включаючи процентну, податкову, навчальну та консультативну підтримку, на результати діяльності МСП після COVID-19. Ми використовуємо рентабельність активів (ROA), рентабельність продажів (ROS) і прибуток для представлення результатів діяльності малого та середнього бізнесу. Ми переглянули попередні дослідження, щоб запропонувати модель дослідження та дизайн опитувальника. 2022 року ми зібрали дані від 355 малих та середніх підприємств у В'єтнамі шляхом опитування. Для перевірки гіпотез у дослідницькій моделі використано регресійну модель OLS. Результати показують, що державна підтримка позитивно впливає на рентабельність інвестицій у рекламу, ROS та прибуток. Крім того, малі та середні підприємства, які інвестують у

нові технології, обладнання або програмне забезпечення, мають вищий ROA та ROS, а малі та середні підприємства, які отримують сертифікати систем менеджменту якості, такі як ISO 9001, мають більші прибутки. Ґрунтуючись на результатах дослідження, ми запропонували рішення для підтримки МСП у подоланні таких криз, як COVID-19. Цей результат має вирішальне значення для політиків, які хочуть спрямувати обмежений бюджет уряду на стимулювання економічного розвитку.

**Ключові слова:** державна підтримка, ефективність, МСП, пост-COVID-19, економічна рецесія, економічне відновлення, В'єтнам

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