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The Differential Effects of Government Support, Inter-Firm Collaboration, and Firm Financial Resources on SME Performance in Vietnam

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Abstract: Small and medium-sized enterprises (SMEs) are crucial for the economic development of nations, and governments in both emerging and developed economies pay close attention to them. Small and medium-sized enterprises (SMEs) play a crucial role in job creation, enhancing business competitiveness, fostering innovation, and contributing to economic development. To address this, we investigated the moderating effect of government support on the relationship between firm financial resources, inter-firm collaboration, and SME performance. This research collects data from Vietnamese SMEs via questionnaires to test the hypotheses. PLS-SEM is the chosen method for analyzing the collected data in this investigation. Both firm financial resources and inter-firm collaboration positively influence SME performance, consistent with the institutional theory and resource-based view's emphasis on the significance of resources for firm success. In addition, the study demonstrates that government support moderates these relationships significantly. Vietnam's policymakers should prioritize and act to support small and medium-sized enterprises better. By providing financial resources, developing collaborative platforms, and streamlining regulations, policymakers can foster an environment that maximizes the positive effect of firm financial resources and inter-firm collaboration on the performance of SMEs. By highlighting the moderating effect of government support, the study emphasizes the significance of a supportive policy environment in maximizing the benefits of these relationships. Policymakers, SMEs, and relevant parties in Vietnam can use these findings to influence their efforts to promote the growth and success of SMEs.

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1. Introduction

(Chien, Kamran, et al., 2022) Small and medium-sized enterprises (SMEs) are crucial to the economic development of nations, attracting significant attention from governments in both emerging and developed economies. While SMEs account for 60% of businesses in developed nations, they account for 99% in emergent nations such as Vietnam (Bai et al., 2022; Muriithi, 2017; Poole, 2018; Ratten, 2014). These enterprises play a vital role in job creation, enhancing business competitiveness, fostering innovation, and contributing to economic growth. However, existing research highlights the obstacles SMEs face in developing nations, which inhibit their development and performance potential (Paul, Parthasarathy, & Gupta, 2017; Ramukumba, 2014). SMEs struggle to access external resources and capabilities due to their inherent limitations in size and newness (Amornkitvikai & Harvie, 2018). Consequently, resource constraints stand out as a significant barrier.

Scholars have proposed government support (GS), firm financial resources (FFRs), and inter-firm collaboration (IFC) as potential remedies for SMEs with resource and capability constraints (Kang & Park, 2012; Songling, Ishtiaq, Anwar, & Ahmed, 2018) in response to these challenges. Nonetheless, the impact of GS, FFRs, and IFC on SME performance has yet to be conclusively demonstrated in the existing literature. Some studies report positive effects (e.g., Doh and Kim (2014); Wang, Dou, Zhu, and Zhou (2015)), while others report negative effects (e.g., Bouncken and Kraus (2013); Tang (2011)), and others find no significant effect (e.g., Guan and Yam (2015); Tang (2011)). In addition, the mechanisms by which GS, FFRs, and IFC influence SME performance have not been exhaustively studied, particularly in Vietnam. Therefore, concerns remain unanswered regarding the impact of GS as a moderator between the performance of FFRs, IFC, and SMEs, as well as the underlying mechanisms involved.

By investigating the performance outcomes of GS, FFRs, and IFC, this study seeks to fill this gap in the literature. Based on institutional theory, we hypothesize that GS directly improves SME performance. In addition, we contend, based on the firm's resource-based view (RBV), that FFRs and IFC contribute to enhanced SME performance. We also investigate how GS moderates the relationships between FFRs, IFC, and the performance of SMEs. To empirically investigate these relationships, we collect and analyze data from small and medium-sized enterprises (SMEs) in Vietnam, a developing economy, using structural equation modeling.

This research contributes to the literature on small business strategy in three significant ways. First, it illuminates the significance of GS, IFC, and FFRs in determining SME performance. Second, it examines the moderating effect of GS on the relationships between IFC, FFRs, and SME performance in Vietnam. This research expands our understanding of these relationships beyond the direct effects suggested by prior research. Due to its abundant business opportunities, Vietnam has garnered the devotion of academics, policymakers, and business professionals. However, it remains an under-researched environment, and more information is required regarding the factors influencing the performance of SMEs (George, 2011). Therefore, we present an exciting opportunity to advance current small business strategic theories and evaluate their applicability in a context other than the typically studied developed economies. The following

sections discuss literature, methods, analysis and results, conclusions, and implications.

2. Literature Review and Hypotheses

2.1 Firm Financial Resources and SMEs Performance

In strategic management research, the impact of firm resources on performance has been a central topic. (Acikdilli, Mintu-Wimsatt, Kara, & Spillan, 2022; Knight, Megicks, Agarwal, & Leenders, 2019); Özbuğday, Findik, Özcan, and Başçı (2020) have examined the relationship between various categories of resources, such as tangible assets, intangible capabilities, and human capital, and their impact on firm financial performance. Extensive empirical research indicates that firms with abundant and distinctive resources, such as physical assets, technological capabilities, brand equity, and a skilled workforce, tend to outperform their resource-constrained counterparts in terms of financial performance (Ardito, Raby, Albino, & Bertoldi, 2021; Eikelenboom & de Jong, 2019). These findings underscore the centrality of resource-based perspectives in understanding the determinants of firm performance (Chien, 2023; Zaridis, Vlachos, & Bourlakis, 2021).

The RBV provides a theoretical framework to support the connection between FFRs and SME performance (Mirza, Abbas, & Nawaz, 2020; Vu et al., 2023). According to the RBV, a company's resources and capabilities are crucial factors in determining its competitive advantage and overall performance (Valaei, Rezaei, Bressolles, & Dent, 2022). FFRs serve a crucial role in determining the performance outcomes of SMEs. Financial resources, including access to capital, liquidity, and financial stability (Chien, Hsu, Zhang, Vu, & Nawaz, 2022; Chien et al., 2021), enable SMEs to invest in crucial areas such as research and development, marketing, and human capital (Chumphong, Srimai, & Potipiroon, 2020). These expenditures improve operational effectiveness, product quality, market presence, and competitiveness. By effectively leveraging their financial resources, SMEs can distinguish themselves from competitors, seize growth opportunities, and attain sustainable performance (Dionysus & Arifin, 2020). The RBV perspective emphasizes the strategic significance of FFRs as a valuable asset that can positively impact the performance of SMEs and contribute to their long-term success (Duong & Hai Thi Thanh, 2022; Safari & Saleh, 2020). Thus, we hypothesize: H₁: Firm financial resources positively affect SMEs performance.

2.2 Inter-firm Collaboration and SMEs Performance

The academic literature on IFC emphasizes the significance of collaborative initiatives among firms, including competitors, to leverage shared resources and capabilities to pursue collective and individual objectives (Kang & Park, 2012). Collaborative endeavors are predicated on mutually shared and individual objectives that pertain to specific outcomes desired by each firm, such as enhanced market position and financial performance (Gnyawali & Park, 2009; Hsu, Chau, & Chien, 2023). Extensive research indicates that firms participating in IFC can enjoy a variety of benefits, including the sharing of costs and risks, access to diverse skill sets, knowledge, resources, and capabilities across various value chain activities, all of which contribute to improved overall performance (Bouncken & Kraus, 2013; Wang et al., 2015). Even though the literature emphasizes the potential benefits of IFC for SMEs, there is

a counterargument suggesting that such collaborations may threaten these companies' survival. [Gnyawali and Park \(2009\)](#) argue that collaboration facilitates economies of scale, reduces market uncertainty and risk, and accelerates the introduction of new products. It also exposes SMEs to the risk of technology theft, difficulties related to divergent management styles, and the potential loss of control over core business operations when cooperating with competitors. [Colombo, Laursen, Magnusson, and Rossi-Lamastra \(2012\)](#) further emphasize that collaboration with other firms can present organizational and managerial challenges for SMEs, such as the diversion of scarce resources and management focus away from their primary business focus.

Despite the ambiguity surrounding the influence of IFC on the performance of SMEs, we conclude from the RBV that IFC is a direct determinant of SME financial performance. According to the RBV theory, relationships with other firms are a unique, scarce, and difficult-to-imitate resource, and firms that engage in collaborative efforts are more likely to achieve sustainable competitive advantages and outperform competitors that engage in limited collaboration ([J. B. Barney, 2001](#)). Given the inherent resource constraints confronted by SMEs, SMEs can gain access to immobile or not easily tradable resources in factor markets through collaboration with other firms, thereby achieving superior financial performance ([Nawaz, Hussain, & Hussain, 2021](#); [Zhao et al., 2022](#)). Thus, it is constructed that:

H₂: Inter-firm collaboration has a positive effect on SMEs performance.

2.3 Government Support as Moderator

This study incorporates insights from institutional theory and the resource-based view (RBV) to comprehend the determinants of SME performance outcomes comprehensively. According to the institutional theory, a company's economic activities are influenced by the norms and regulations of the institutional environment in which it operates ([Bruton, Ahlstrom, & Li, 2010](#); [Moslehpour et al., 2022](#); [Scott, 2013](#)). These institutional arrangements can

produce obstacles or provide opportunities for firms, influencing their behavior and performance. Consequently, differences in performance across contexts can be attributed to the influence of particular institutional arrangements ([Peng & Ruban, 2003](#); [Y. Zhang, Li, Sadiq, & Chien, 2023](#)). Using this theoretical framework as a foundation, we examine how the GS influences the activities and performance of SMEs.

In contrast, the RBV of the firm emphasizes the significance of a firm's resources and capabilities as sources of competitive advantage and enhanced financial performance ([J. Barney, 1991](#); [Nguyen, Ngo, Pham, Nguyen, & Huynh, 2021](#)). [Wade and Hulland \(2004\)](#) define resources as the tangible and ethereal assets and competencies that enable a company to identify and respond to market opportunities and challenges. The RBV provides valuable insight into the determinants of firm performance based on the configuration of its resources and capabilities ([J. Barney, 1991](#)).

The role of GS as a moderator in the relationships between FFRs, IFC, and SME performance has received considerable attention in the context of SMEs in developing economies ([Kang & Park, 2012](#); [Manolova, Manev, & Gyoshev, 2010](#); [Phuoc, Thuan, Vu, & Tuyen, 2022](#)). However, the complex relationship between GS, FFRs, IFC, and SME performance in developing economies requires further investigation. In light of the existing literature on small business strategy and the theoretical foundations of institutional and resource-based perspectives, our conceptual model (illustrated in [Figure 1](#)) proposes direct and indirect influences of FFRs and IFC on the performance of SMEs moderated by the role of GS. We formulate the following hypotheses based on this model.

H₃: Government support has a positive effect on SMEs performance.

H₄: Government supports significantly moderates between firm financial resources and SMEs performance.

H₅: Government supports significantly moderates between inter-firm collaboration and SMEs performance.

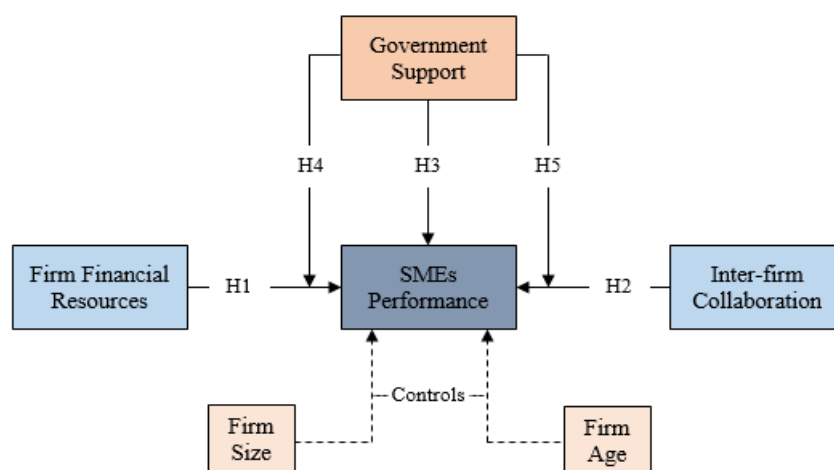


Figure 1: Conceptual Framework

3. Methodology

3.1 Sample and Data

Emerging small and medium-sized enterprises (SMEs) may struggle to survive and expand due to a dearth of resources and skills. Recognizing this challenge, our study concentrates on small and medium-sized

enterprises (SMEs) in Vietnam's emerging market to determine how government support as a moderator contributes to their survival and growth in a turbulent business environment. To collect accurate data, a structured questionnaire was administered to owners and senior management personnel accountable for strategic planning and organizational performance ([Sadiq et al., 2023](#); [Songling et al., 2018](#)).

500 questionnaires were disseminated to businesses in Vietnam's five largest cities to gain a comprehensive understanding of the Vietnamese SME landscape. 387 of the distributed questionnaires were returned. However, it is essential to note that some of these questionnaires needed to be properly filled out or required specific information. Ultimately, only 341 viable responses were included in our research's analysis. This resulted in a response rate of 68.2%, indicating the participation and engagement of the SME community in our study. By employing these rigorous research methodologies, we intended to shed light on the challenges faced by small and medium-sized enterprises (SMEs) in Vietnam and investigate the role of government support in boosting SME performance. Through a comprehensive analysis of the collected data, we aim to provide policymakers, entrepreneurs, and other stakeholders involved in fostering the growth and sustainability of SMEs in the dynamic Vietnamese market with valuable insights and recommendations.

3.2 Measures

SMEs Performance (PER): Due to the limited availability of financial data, assessing the performance of small and medium-sized enterprises (SMEs) can be challenging (Zamberi Ahmad & Xavier, 2012). In contrast, large firms frequently disseminate such information in annual reports, stock exchanges, and financial institutions. Because small and medium-sized enterprises (SMEs) typically do not disclose their financial data publicly, alternative methods are required to evaluate their performance. As emphasized in previous studies (Lechner & Gudmundsson, 2014; Zamberi Ahmad & Xavier, 2012), researchers have advocated for a self-reported approach to evaluate the performance of SMEs to address this issue (Lechner & Gudmundsson, 2014; Zamberi Ahmad & Xavier, 2012). Following this perspective, our study employed six performance-related measures adapted from Yang et al.'s (2018) research. These items were designed to capture the SME's self-assessment of performance over the past three years concerning indicators such as return on equity, return on assets, and market growth relative to their primary competitors.

Firm financial resources (FFRs): FFRs in SMEs include a variety of tangible and intangible assets, funds, and capital that are essential to their business operations (Cohn & Deryugina, 2018). These resources include cash reserves, working capital, retained earnings, credit lines, loans, and other forms of financial assistance. In addition to monetary reserves, FFRs can generate revenue, secure investment, and access external financing (Arzubiaga, De Massis, Maseda, & Iturralde, 2023). These resources play a crucial role in the day-to-day operations of SMEs by allowing them to meet their financial obligations, invest in growth opportunities, facilitate research and development initiatives, acquire necessary assets, and maintain their overall business operations. Effective management and strategic utilization of firm financial resources are of the utmost importance for small and medium-sized enterprises (SMEs) because they serve as critical factors in maintaining liquidity, increasing profitability, and ensuring long-term viability in a dynamic and fiercely competitive business environment (Arzubiaga et al., 2023). This study's measurement of IFC was based on five measures adapted from Arzubiaga et al. (2023).

Inter-firm collaboration (IFC): IFC incorporates strategic alliances, partnerships, and cooperative endeavors between two or more SMEs (Mokhtarzadeh & Faghei, 2019). The primary objective is to accomplish mutually beneficial goals. This collaborative strategy entails merging

resources, expertise, and capabilities and facilitating the exchange of information, technology, and market insights. By participating in IFC, SMEs can leverage their complementary strengths, mitigate individual limitations, enhance their competitive advantage, and capitalize on development opportunities in today's interconnected and intensely competitive business environment (Mokhtarzadeh & Faghei, 2019). In this study, IFC was measured using a set of five items adopted by B. Zhang and Wang (2014). These products were meticulously chosen to capture the essence of IFC in SME development.

Government support (GS): (Brandao-Marques, Correa, & Sapriza, 2020) The government provides a variety of initiatives, policies, and resources to promote the growth and development of small and medium-sized enterprises (SMEs). It includes financial assistance, business development services, and regulatory simplification, all designed to enable SMEs to overcome obstacles, gain access to vital resources, boost their competitiveness, and drive economic growth while creating employment opportunities (Brandao-Marques et al., 2020). The GS measurements utilized in this study were derived from the seminal work of Zamberi Ahmad and Xavier (2012), which served as the basis for our investigation. However, modest modifications were made to align the six items with the specific objectives of our study. These modifications ensured that the measures conveyed the nuances and complexities of government support in the context of SMEs in Vietnam, thereby enhancing the applicability and relevance of our findings.

In addition, each variable was measured with a 5-point Likert scale. In addition, we incorporated control variables such as firm size (FSZ) and firm age (FAG) to mitigate potential spuriousness in the results, following Shirokova, Bogatyreva, Beliaeva, and Puffer (2016)'s suggested framework. By incorporating these control variables, we intended to account for their potential influence and reduce confounding effects on the observed relationships between the study variables.

3.3 Demographic Specifics

The demographic information (presented in Table 1) collected in the study provides insights into the characteristics of the participating SMEs.

Table 1: Demographic Information

Demographics	Particulars	Frequency	%age
Firm Size (Employees)	10-49	59	17.30
	50-99	52	15.25
	100-149	63	18.48
	150-199	89	26.10
	200-250	78	22.87
Firm Age (Years)	1-10	91	26.69
	11-20	131	38.42
	More than 20	119	34.90
Industry	Services	73	21.41
	Trading	117	34.31
	Manufacturing	151	44.28

4. Data Analysis and Results

In this study, descriptive statistics were computed with SPSS to analyze and summarize the study variables' characteristics. In addition, inferential statistics were computed utilizing "Structural Equation Modeling (SEM)" with "Partial Least Squares (PLS)" as the data analysis technique, as recommended by Sarstedt, Ringle, and Hair (2017). This statistical technique allowed us to examine

the relationships and test the proposed hypotheses between the investigated variables, thereby shedding light on the study's underlying theoretical framework.

4.1 Descriptive Statistics

Table 2 of the current study provides descriptive statistics, including the "mean, standard deviation, and assessment of normality" for the respondent data. All of the primary variables' mean and standard deviation values fell within the acceptable range, indicating consistent response patterns. To assess the normality of the data, "skewness and kurtosis" measures were employed, with all values lying below the threshold proposed by George (2011). This indicates that the data distribution conforms to the normality assumption, bolstering the validity and dependability of the study's conclusions.

Table 2: Descriptive Statistics

Variables	Mean	Std. Dev.	Skewness	Kurtosis
PER	3.738	0.167	-0.067	1.066
GS	3.901	0.288	1.341	0.392
FFR	3.566	0.216	-0.519	1.222
IFC	3.808	0.270	-0.263	1.747

4.2 Common Method Bias (CMB)

In this research, data were collected exclusively from Vietnamese SMEs, which may suggest the possibility of CMB. To mitigate this potential bias, a "Hamon's single-factor method" analysis was conducted to detect and evaluate any data bias. According to Podsakoff, MacKenzie, and Podsakoff (2012), the absence of substantial CMB is indicated when a single factor accounts for less than fifty percent of the total variance. This study's findings indicate that the identified single factor through "Hamon's single-factor test" accounts for 31.16 percent of the total variance, indicating the absence of a substantial CMB. This meticulous analysis improves the validity and dependability of the study's findings by minimizing the potential biases associated with data from a single source.

4.3 Assessment of Measurement Model

We utilized a measurement paradigm to conduct a "confirmatory factor analysis (CFA)" and assess the internal consistency of the primary constructs. The purpose of the measurement model was to evaluate the dependability and

validity of the items comprising these constructs. Consideration was given to key indicators such as Cronbach's alpha (α), composite reliability (CR), peripheral loading, and average variance extracted (AVE). Consistent with the recommendations of J. F. Hair Jr, Sarstedt, Ringle, and Gudergan (2017), the peripheral loading of each construct is generally expected to exceed 0.70, while the AVE value for each construct should exceed 0.50. All of the constructs in our study have peripheral loadings greater than 0.70, indicating that convergent validity is acceptable (J. F. Hair Jr et al., 2017). In addition, the CR values for each construct correspond to those proposed by previous researchers, confirming the data's internal consistency and reliability. The discriminant validity was evaluated by calculating the "square root of AVE," the results indicate that all constructs have values greater than 0.70, confirming satisfactory discriminant validity. The results are shown in Table 3.

4.4 Assessment of Structural Model

The hypotheses formulated in this study were empirically tested using the PLS-SEM technique. The model fit assessment was based on the values of predictive relevance, specifically the "cross-validated redundancy (Q^2) values", which evaluate the predictive accuracy of the model (Joe F Hair Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014). Q^2 values greater than 0 indicate good model accuracy, and in our study, the blindfolding method was employed to calculate Q^2 values, all exceeding 0, indicating satisfactory model accuracy. Regarding the "coefficient of determination (R^2)" for the structural equation, our study yielded a value of 0.601, slightly surpassing the threshold for moderate effect size. In social science research, an R^2 value of 0.10 or higher is generally acceptable (Falk & Miller, 1992). To assess multicollinearity, the "variance inflation factor (VIF)" scores were examined, with a threshold of 3.3 or below indicating the absence of multicollinearity (Kock, 2015). In our investigation, all VIF values reported in Table 3 (column 8) were below 3.3, indicating no significant multicollinearity in the obtained results.

Additionally, the structural model employed in this study is visually depicted in Figure 2, illustrating the interrelationships between the constructs and their corresponding paths.

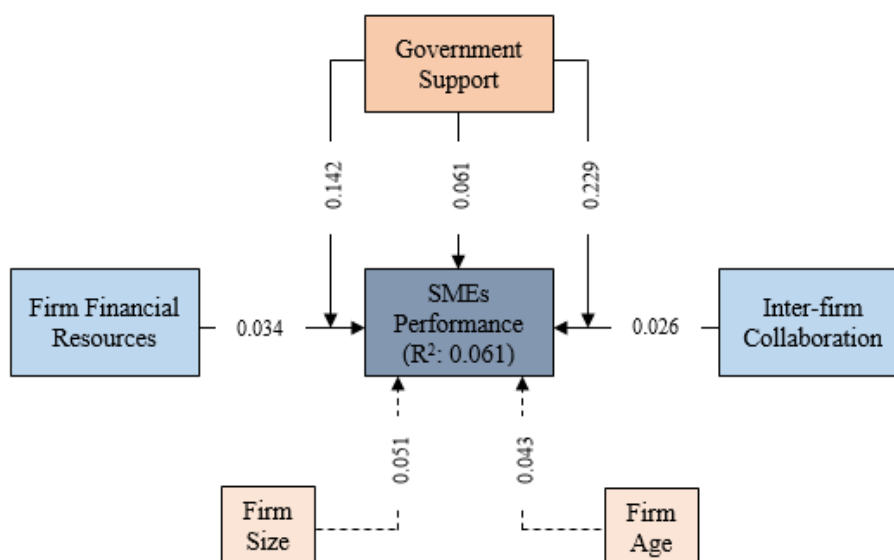


Figure 2: Structural Model

Table 3: Measurement Model Assessment (Validity and Reliability)

Constructs	Items	Loadings	α	CR	AVE	$\sqrt{\text{AVE}}$	VIF
Performance	PER1	0.831	0.743	0.851	0.666	0.816	1.637
	PER2	0.788					0.192
	PER3	0.739					1.281
	PER4	0.822					2.037
	PER5	0.713					1.200
	PER6	0.809					0.485
Firm Financial Resources	FFR1	0.769	0.802	0.906	0.592	0.769	0.859
	FFR2	0.754					0.738
	FFR3	0.861					1.337
	FFR4	0.790					1.461
	FFR5	0.744					1.297
Inter-firm Collaboration	IFC1	0.807	0.819	0.881	0.563	0.750	0.374
	IFC2	0.753					1.270
	IFC3	0.719					2.626
	IFC4	0.709					0.818
	IFC5	0.818					2.281
Government Support	GS1	0.763	0.782	0.726	0.654	0.809	1.632
	GS2	0.771					1.599
	GS3	0.856					0.920
	GS4	0.821					0.831
	GS5	0.705					1.221
	GS6	0.783					2.008

Note: "CR: composite reliability, AVE: average variance extracted, $\sqrt{\text{AVE}}$: square root of AVE, α : Cronbach's alpha, VIF: variance inflation factor."

As shown in Table 4, the hypotheses in this study were subjected to rigorous analysis by investigating path coefficient values, Std. Error, p-values, and t-statistics. Using path coefficients, J. F. Hair Jr et al. (2017) determined the strength of relationships between variables, with values approaching +1 indicating robust

associations. The approval or rejection of hypotheses was based on a thorough evaluation of p-values and t-statistics. This study's conceptual framework included five hypotheses, each exploring a different relationship. Table 4 demonstrates compelling evidence supporting all hypotheses.

Table 4: Hypotheses Testing

Path	Coefficient	Std. Error	T-Value	P-Value	Decision
<i>Direct Effects</i>					
FFR → PER	0.034	0.010	3.431	0.000***	H ₁ : Supported
IFC → PER	0.026	0.007	3.918	0.000***	H ₂ : Supported
GS → PER	0.061	0.015	4.092	0.000***	H ₃ : Supported
<i>Moderating Effects</i>					
FFR × GS → PER	0.142	0.040	3.579	0.000***	H ₄ : Supported
IFC × GS → PER	0.229	0.049	4.667	0.000***	H ₅ : Supported
<i>Control Effects</i>					
FSZ → PER	0.051	0.013	3.969	0.000***	---
FAG → PER	0.043	0.008	5.262	0.000***	---

***: $p \leq 0.01$; FFR: firm financial resources, IFC: inter-firm collaboration, GS: government support, PER: performance, FSZ: firm size, FAG: firm age."

H1, which proposed that FFR positively affects PER, was strongly supported ($\beta = 0.034$, $t = 3.431$). It indicates that adequate financial resources enable SMEs to manage daily operations, meet financial obligations, and invest in growth opportunities. With adequate funds, SMEs can allocate resources to research and development, acquire essential assets and technologies, and expand their market presence (Zulu-Chisanga, Chabala, & Mandawa-Bray, 2021). Additionally, financial resources provide a buffer during economic downturns, enabling SMEs to overcome obstacles and maintain stability. In addition, the availability of financial resources improves the capacity of SMEs to attract investors, secure loans, and form strategic alliances. By effectively leveraging financial resources, SMEs can improve their profitability, competitiveness, and overall performance, achieving sustainable growth and long-term success in a dynamic and competitive business environment (Zulu-Chisanga et al., 2021).

Similarly, H2, which postulated a positive effect of IFC on PER, was supported empirically ($\beta = 0.026$, $t = 3.918$). It demonstrates that IFC plays a crucial role in improving the performance of SMEs by facilitating access to additional resources, expertise, and market opportunities that may exceed their capabilities. SMEs can investigate new markets, exchange knowledge and technology, and engage in collaborative research and development by leveraging their collective strengths and capabilities (Kang & Park, 2012). This collaboration reduces costs and increases operational efficiencies, enhancing their competitive advantage. In addition, collaboration facilitates innovation and creativity by bringing together diverse perspectives and ideas. Adopting IFC enables SMEs to achieve higher performance levels, expand their market share, and sustain long-term growth in today's highly competitive business environment (Ghauri & Elg, 2018).

H3, proposing that GS positively affects PER, received substantial empirical support ($\beta = 0.061$, $t = 4.092$). GS plays a crucial role in augmenting the performance of SMEs by providing comprehensive initiatives, policies, and resources that promote their growth and development. These measures, including financial assistance, business development services, and regulatory simplification, empower SMEs to surmount obstacles, gain access to vital resources, and strengthen their competitive edge (Alkahtani, Nordin, & Khan, 2020). Governments enable SMEs to invest in expansion, innovation, and human capital development by providing grants, financing, and tax incentives. In addition, business development services, such as mentoring, training, and networking opportunities, equip SMEs with the knowledge and skills necessary to flourish in a competitive market. In addition, regulatory simplification initiatives streamline administrative procedures, creating a more favorable business climate for SMEs (Zulu-Chisanga et al., 2021). By utilizing GS, SMEs can improve performance, increase productivity, foster innovation, and substantially contribute to the nation's economic prosperity.

The hypothesis that GS moderates the relationship between FFR and PER significantly ($\beta = 0.142$, $t = 3.579$) was supported. The moderating effect of GS is essential for fostering improved outcomes for SMEs. GS functions as a catalyst by providing SMEs with additional resources, expertise, and opportunities, thereby amplifying the performance-enhancing effects of FFRs. Governments supplement the financial capabilities of small and medium-sized enterprises (SMEs) with grants and loans, allowing them to invest in growth, innovation, and operational enhancements. In addition, GS programs provide specialized guidance, training, and networking opportunities that improve the utilization and efficacy of FFRs (Zulu-Chisanga et al., 2021). GS strengthens the impact of FFRs on the performance of SMEs by bridging gaps and addressing market constraints, resulting in increased competitiveness, market share, and sustainable growth. Ultimately, the synergistic combination of FFRs and GS enables SMEs to thrive in a dynamic business environment, unlocking their maximum potential and driving positive outcomes for SMEs and the broader economy (Park, Lee, & Kim, 2020).

Lastly, H5, which hypothesized a moderating effect of GS on the relationship between IFC and PER, was unequivocally supported by the empirical findings ($\beta = 0.229$, $t = 4.667$). The positive moderating effect of GS indicates that government initiatives foster a hospitable ecosystem that encourages and facilitates SME collaboration. By providing financial assistance, policy incentives, and networking platforms, governments enable SMEs to engage in meaningful and mutually advantageous collaborations with other businesses (Peter et al., 2018). By granting access to resources, expertise, and new markets, this support bolsters the efficacy and influence of the IFC. In addition, government programs promote knowledge sharing, innovation, and collaborative research and development, thereby amplifying the benefits of collaborative efforts (Hoque, 2018). The merger of IFC and GS contributes synergistically to improved SME performance, including increased competitiveness, expanded market presence, and sustained growth. This moderating effect highlights the essential role of GS in fostering a collaborative environment that propels SMEs to success and bolsters economic growth as a whole (Park et al., 2020).

In addition, FSZ ($\beta = 0.051$, $t = 3.969$) and FAG ($\beta = 0.043$, $t = 5.262$) have a significant impact on the performance of

SMEs. These factors play a crucial role in fostering and raising the PER of SMEs, as evidenced by their observable positive effects.

5. Conclusion and Implications

5.1 Conclusion

Using institutional theory and RBV as a theoretical framework, this study investigates the moderating effect of GS on the relationships between FFRs, IFC, and SMEs' performance in Vietnam. The findings demonstrated that both FFRs and IFC positively impact the performance of SMEs, which is consistent with the RBV's emphasis on the significance of resources for business success. FFRs allow small and medium-sized enterprises to invest in growth and innovation, while IFC provides additional resources and market opportunities. In addition, the study demonstrates that GS moderates these relationships significantly. GS programs make FFRs and IFC more effective, including financial assistance, networking platforms, and business development services. Policymakers should prioritize and bolster these initiatives to better support Vietnam's SMEs. By providing financial resources, developing collaborative platforms, and streamlining regulations, policymakers can foster an environment that maximizes the positive effect of FFRs and IFC on the performance of SMEs. SMBS needs to recognize the value of both FFRs and IFC. Small- and medium-sized enterprises should actively pursue opportunities for collaboration, leveraging their financial resources and participating in government support programs. Strategic alliances and partnerships with other SMEs can unleash additional resources, knowledge, and market access to improve their performance and competitiveness. Thus, this research contributes to understanding the intricate relationships between the performance of FFRs, IFC, GS, and SMEs. By emphasizing the moderating function of GS, it emphasizes the significance of a policy environment conducive to maximizing the benefits derived from these relationships. Policymakers, SMEs, and relevant parties in Vietnam can use these findings to influence their efforts to promote the growth and success of SMEs.

5.2 Policy Implications

Policymakers should prioritize implementing measures that enhance the access of small and medium-sized enterprises (SMEs) to financial resources. This can be accomplished by streamlining loan processes, providing financial literacy programs to improve financial management skills, and incentivizing financial institutions to support SMEs. Promoting financial reporting transparency and encouraging sensible financial management practices are also crucial policy factors. Moreover, creating a business environment that encourages entrepreneurship and innovation can attract investments and promote the expansion of SMEs. By emphasizing these policy actions, governments can enable SMEs to leverage their financial resources effectively, resulting in enhanced performance, economic expansion, and job creation.

The IFC's positive impact necessitates policy implications that promote and facilitate collaborative endeavors. Policymakers should prioritize establishing platforms, networks, and incentives to motivate SMEs to engage in partnerships and alliances. This can be accomplished by establishing business clusters, industry-specific associations, and cooperative research and development programs. In addition, policies should emphasize the improvement of knowledge-sharing mechanisms, the

promotion of a collaborative culture, and the provision of financial support for collaborative initiatives. By fostering an environment that encourages and facilitates IFC, policymakers can unlock the potential benefits of shared resources, expertise, and market opportunities, resulting in enhanced SME performance, competitiveness, and sustainable growth.

The moderating effect of GS suggests that policymakers should prioritize creating comprehensive support programs that address the financial requirements of SMEs. This involves instituting initiatives such as easing access to loans, grants, and venture capital and providing tax incentives and subsidies. Governments can promote their growth, expansion, and innovation by ensuring SMEs have sufficient financial resources. They should prioritize nurturing a culture of collaboration among SMEs. This can be accomplished by creating networking platforms, business clusters, and industry-specific associations. Governments can promote IFC and enable SMEs to leverage additional resources, expertise, and market opportunities by creating opportunities to connect, share knowledge, and collaborate on initiatives.

In addition, policymakers should streamline regulations and reduce administrative burdens for small and medium-sized enterprises. Simplifying procedures, clarifying guidelines, and reducing bureaucratic obstacles can alleviate the regulatory obstacles faced by SMEs, allowing them to focus more on their primary business activities and collaborative endeavors. In turn, this can boost the efficiency and effectiveness of IFC and maximize their impact on the performance of SMEs. Policymakers should invest in capacity-building programs and provide SME-specific business development services. These services may include training programs, mentoring initiatives, and technology transfer support. By providing SMEs with the necessary skills, knowledge, and resources, governments can enhance their capacity to engage in effective collaborations, leverage their financial resources, and boost their overall performance.

5.3 Limitations and Future Directions

This study has some limitations and recommendations for the future. Firstly, the reliance on survey data introduces response biases and may limit the depth of understanding. Future studies could employ a combination of data acquisition techniques or alternative approaches for a more comprehensive analysis. Second, the focus on Vietnamese SMEs limits the generalizability of the results. Exploring analogous relationships in various contexts can validate and expand the findings. Incorporating multiple theoretical perspectives in addition to institutional theory and RBV can provide a more comprehensive understanding.

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References

Acikdilli, G., Mintu-Wimsatt, A., Kara, A., & Spillan, J. E. (2022). Export market orientation, marketing capabilities and export performance of SMEs in an emerging market: A resource-based approach. *Journal of Marketing Theory and Practice*, 30(4), 526-541. doi: <https://doi.org/10.1080/10696679.2020.1809461>

- Alkahtani, A., Nordin, N., & Khan, R. U. (2020). Does government support enhance the relation between networking structure and sustainable competitive performance among SMEs? *Journal of Innovation and Entrepreneurship*, 9(1), 14. doi: <https://doi.org/10.1186/s13731-020-00127-3>
- Amornkitvikai, Y., & Harvie, C. (2018). Sources of finance and export performance: Evidence from Thai manufacturing SMEs. *The Singapore Economic Review*, 63(01), 83-109. doi: <https://doi.org/10.1142/S0217590817440027>
- Ardito, L., Raby, S., Albino, V., & Bertoldi, B. (2021). The duality of digital and environmental orientations in the context of SMEs: Implications for innovation performance. *Journal of Business Research*, 123, 44-56. doi: <https://doi.org/10.1016/j.jbusres.2020.09.022>
- Arzubiaga, U., De Massis, A., Maseda, A., & Iturralde, T. (2023). The influence of family firm image on access to financial resources in family SMEs: a signaling theory perspective. *Review of Managerial Science*, 17(1), 233-258. doi: <https://doi.org/10.1007/s11846-021-00516-2>
- Bai, X., Wang, K.-T., Tran, T. K., Sadiq, M., Trung, L. M., & Khudoykulov, K. (2022). Measuring China's green economic recovery and energy environment sustainability: econometric analysis of sustainable development goals. *Economic Analysis and Policy*, 75, 768-779. doi: <https://doi.org/10.1016/j.eap.2022.07.005>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120. doi: <https://doi.org/10.1177/014920639101700108>
- Barney, J. B. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of management review*, 26(1), 41-56. doi: <https://doi.org/10.5465/amr.2001.4011938>
- Bouncken, R. B., & Kraus, S. (2013). Innovation in knowledge-intensive industries: The double-edged sword of cooperation. *Journal of Business Research*, 66(10), 2060-2070. doi: <https://doi.org/10.1016/j.jbusres.2013.02.032>
- Brandao-Marques, L., Correa, R., & Sapriza, H. (2020). Government support, regulation, and risk taking in the banking sector. *Journal of Banking & Finance*, 112, 105284. doi: <https://doi.org/10.1016/j.jbankfin.2018.01.008>
- Bruton, G. D., Ahlstrom, D., & Li, H. L. (2010). Institutional theory and entrepreneurship: where are we now and where do we need to move in the future? *Entrepreneurship theory and practice*, 34(3), 421-440. doi: <https://doi.org/10.1111/j.1540-6520.2010.00390.x>
- Chien, F. (2023). The impact of green investment, eco-innovation, and financial inclusion on sustainable development: evidence from China. *Engineering Economics*, 34(1), 17-31. doi: <https://doi.org/10.5755/j01.ee.34.1.32159>
- Chien, F., Hsu, C.-C., Zhang, Y., Vu, H. M., & Nawaz, M. A. (2022). Unlocking the role of energy poverty and its impacts on financial growth of household: is there any economic concern. *Environmental Science and Pollution Research*, 29(9), 13431-13444. doi: <https://doi.org/10.1007/s11356-021-16649-6>
- Chien, F., Kamran, H. W., Nawaz, M. A., Thach, N. N., Long, P. D., & Baloch, Z. A. (2022). Assessing the prioritization of barriers toward green innovation: small and medium enterprises Nexus. *Environment, Development and Sustainability*, 24(2), 1897-1927. doi: <https://doi.org/10.1007/s10668-021-01513-x>
- Chien, F., Pantamee, A. A., Hussain, M. S., Chupradit, S., Nawaz, M. A., & Mohsin, M. (2021). Nexus between financial innovation and bankruptcy: evidence from information, communication and technology (ict) sector. *The Singapore Economic Review*, 1-22. doi: <https://doi.org/10.1142/S0217590821500181>

- Chumphong, O., Srimai, S., & Potipiroon, W. (2020). The resource-based view, dynamic capabilities and SME performance for SMEs to become smart enterprises. *ABAC ODI Journal Vision. Action. Outcome*, 7(2), 129-146. Retrieved from <http://www.assumptionjournal.au.edu/index.php/odijournal/article/view/4349>
- Cohn, J., & Deryugina, T. (2018). *Firm-level financial resources and environmental spills*. National Bureau of Economic Research. Retrieved from <https://www.nber.org/papers/w24516>
- Colombo, M. G., Laursen, K., Magnusson, M., & Rossi-Lamastra, C. (2012). Introduction: Small business and networked innovation: Organizational and managerial challenges. *Journal of small business management*, 50(2), 181-190. doi: <https://doi.org/10.1111/j.1540-627X.2012.00349.x>
- Dionysus, R., & Arifin, A. Z. (2020). Strategic orientation on performance: The Resource based view theory approach. *Jurnal Akuntansi*, 24(1), 136-153. doi: <https://doi.org/10.24912/ja.v24i1.661>
- Doh, S., & Kim, B. (2014). Government support for SME innovations in the regional industries: The case of government financial support program in South Korea. *Research policy*, 43(9), 1557-1569. doi: <https://doi.org/10.1016/j.respol.2014.05.001>
- Duong, K. D., & Hai Thi Thanh, T. (2022). Association between post-covid socio-economic development and energy-growth-environment nexus from developing economy. *International Journal of Economics and Finance Studies*, 14(2), 247-270. Retrieved from <https://sobiad.org/menuscrypt/index.php/ijefs/article/view/1168>
- Eikelenboom, M., & de Jong, G. (2019). The impact of dynamic capabilities on the sustainability performance of SMEs. *Journal of Cleaner Production*, 235, 1360-1370. doi: <https://doi.org/10.1016/j.jclepro.2019.07.013>
- Falk, R. F., & Miller, N. B. (1992). *A Primer for Soft Modeling*. University of Akron Press, Akron, OH. Retrieved from <https://www.researchgate.net/publication/232590534>
- George, D. (2011). *SPSS for windows step by step: A simple study guide and reference, 17.0 update, 10/e*. Pearson Education India. Retrieved from <https://lib.ugent.be/catalog/rug01:001424067>
- Ghauri, P. N., & Elg, U. (2018). The Impact of Inter-Firm Collaborations on SME Internationalisation. In N. Dominguez & U. Mayrhofer (Eds.), *Key Success Factors of SME Internationalisation: A Cross-Country Perspective* (Vol. 34, pp. 41-62). Emerald Publishing Limited. doi: <https://doi.org/10.1108/S1876-066X20180000034003>
- Gnyawali, D. R., & Park, B. j. (2009). Co-opetition and technological innovation in small and medium-sized enterprises: A multilevel conceptual model. *Journal of small business management*, 47(3), 308-330. doi: <https://doi.org/10.1111/j.1540-627X.2009.00273.x>
- Guan, J., & Yam, R. C. (2015). Effects of government financial incentives on firms' innovation performance in China: Evidences from Beijing in the 1990s. *Research policy*, 44(1), 273-282. doi: <https://doi.org/10.1016/j.respol.2014.09.001>
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26(2), 106-121. doi: <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. SAGE Publications. Retrieved from <https://us.sagepub.com/en-us/nam/advanced-issues-in-partial-least-squares-structural-equation-modeling/book243803>
- Hoque, A. S. M. M. (2018). Does government support policy moderate the relationship between entrepreneurial orientation and Bangladeshi SME performance? A SEM approach. *International Journal of Business Economics and Management Studies*, 6(3), 37-59. Retrieved from <https://www.researchgate.net/publication/326440382>
- Hsu, C.-C., Chau, K. Y., & Chien, F. (2023). Natural resource volatility and financial development during Covid-19: Implications for economic recovery. *Resources Policy*, 81, 103343. doi: <https://doi.org/10.1016/j.resourpol.2023.103343>
- Kang, K.-N., & Park, H. (2012). Influence of government R&D support and inter-firm collaborations on innovation in Korean biotechnology SMEs. *Technovation*, 32(1), 68-78. doi: <https://doi.org/10.1016/j.technovation.2011.08.004>
- Knight, H., Megicks, P., Agarwal, S., & Leenders, M. (2019). Firm resources and the development of environmental sustainability among small and medium-sized enterprises: Evidence from the Australian wine industry. *Business Strategy and the Environment*, 28(1), 25-39. doi: <https://doi.org/10.1002/bse.2178>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1-10. doi: <https://doi.org/10.4018/ijec.2015100101>
- Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, 32(1), 36-60. doi: <https://doi.org/10.1177/0266242612455034>
- Manolova, T. S., Manev, I. M., & Gyoshev, B. S. (2010). In good company: The role of personal and inter-firm networks for new-venture internationalization in a transition economy. *Journal of World Business*, 45(3), 257-265. doi: <https://doi.org/10.1016/j.jwb.2009.09.004>
- Mirza, A., Abbas, J., & Nawaz, M. A. (2020). Which financial information leads to better market valuation and economic decision making in Malaysian main market listed firms? A value relevance perspective. *Pakistan Journal of Social Sciences*, 40(2), 995-1006. Retrieved from <http://pjss.bzu.edu.pk/index.php/pjss/article/view/905>
- Mokhtarzadeh, N. G., & Faghei, M. (2019). Technological learning in inter-firm collaborations: a review and research agenda. *International Journal of Technological Learning, Innovation and Development*, 11(1), 78-96. doi: <https://doi.org/10.1504/IJTLID.2019.097436>
- Moslehpour, M., Chau, K. Y., Tu, Y.-T., Nguyen, K.-L., Barry, M., & Reddy, K. D. (2022). Impact of corporate sustainable practices, government initiative, technology usage, and organizational culture on automobile industry sustainable performance. *Environmental Science and Pollution Research*, 29(55), 83907-83920. doi: <https://doi.org/10.1007/s11356-022-21591-2>
- Muriithi, S. M. (2017). African small and medium enterprises (SMEs) contributions, challenges and solutions. *European Journal of Research and Reflection in Management Sciences*, 1, 36-48. Retrieved from <http://repository.daystar.ac.ke/xmlui/handle/123456789/3613>
- Nawaz, M. A., Hussain, M. S., & Hussain, A. (2021). The effects of green financial development on economic growth in Pakistan. *iRASD Journal of Economics*, 3(3), 281-292. doi: <https://doi.org/10.52131/joe.2021.0303.0044>
- Nguyen, C.-H., Ngo, Q.-T., Pham, M.-D., Nguyen, A.-T., & Huynh, N.-C. (2021). Economic linkages, technology transfers, and firm heterogeneity: the case of manufacturing firms in the Southern Key Economic Zone of Vietnam. *Cuadernos de Economía*, 44(124), 1-25. Retrieved from <https://cude.es/submit-a-manuscript/index.php/CUDE/article/view/143>

- Özbuğday, F. C., Fındık, D., Özcan, K. M., & Başçı, S. (2020). Resource efficiency investments and firm performance: Evidence from European SMEs. *Journal of Cleaner Production*, 252, 119824. doi: <https://doi.org/10.1016/j.jclepro.2019.119824>
- Park, S., Lee, I. H., & Kim, J. E. (2020). Government support and small-and medium-sized enterprise (SME) performance: The moderating effects of diagnostic and support services. *Asian Business & Management*, 19, 213-238. doi: <https://doi.org/10.1057/s41291-019-00061-7>
- Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, 52(3), 327-342. doi: <https://doi.org/10.1016/j.jwb.2017.01.003>
- Peng, M. W., & Ruban, Y. (2003). Institutional Transitions and Strategic Choices: Implications for Corporate Social Responsibility in Russia. *Academy of management review*, 43(3), 486-501.
- Peter, F., Adegbuyi, O., Olokundun, M., Peter, A. O., Amahian, A. B., & Ibidunni, A. S. (2018). Government financial support and financial performance of SMEs. *Academy of Strategic Management Journal*, 17(3), 1-10. Retrieved from <https://eprints.lmu.edu.ng/id/eprint/2288>
- Phuoc, V. H., Thuan, N. D., Vu, N. P. H., & Tuyen, L. T. (2022). The impact of corporate social and environmental responsibilities and management characteristics on SMEs performance in Vietnam. *International Journal of Economics and Finance Studies*, 14(2), 36-52. Retrieved from <https://sobiad.org/menuscript/index.php/ijefs/article/view/1104>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, 63, 539-569. doi: <https://doi.org/10.1146/annurev-psych-120710-100452>
- Poole, D. L. (2018). Entrepreneurs, entrepreneurship and SMEs in developing economies: How subverting terminology sustains flawed policy. *World Development Perspectives*, 9, 35-42. doi: <https://doi.org/10.1016/j.wdp.2018.04.003>
- Ramukumba, T. (2014). Overcoming SMEs challenges through critical success factors: A case of SMEs in the Western Cape Province, South Africa. *Economic and business review*, 16(1), 2. doi: <https://doi.org/10.15458/2335-4216.1178>
- Ratten, V. (2014). Future research directions for collective entrepreneurship in developing countries: a small and medium-sized enterprise perspective. *International Journal of Entrepreneurship and Small Business*, 22(2), 266-274. doi: <https://doi.org/10.1504/IJESB.2014.062505>
- Sadiq, M., Moslehpour, M., Qiu, R., Hieu, V. M., Duong, K. D., & Ngo, T. Q. (2023). Sharing economy benefits and sustainable development goals: Empirical evidence from the transportation industry of Vietnam. *Journal of Innovation & Knowledge*, 8(1), 100290. doi: <https://doi.org/10.1016/j.jik.2022.100290>
- Safari, A., & Saleh, A. S. (2020). Key determinants of SMEs' export performance: a resource-based view and contingency theory approach using potential mediators. *Journal of Business & Industrial Marketing*, 35(4), 635-654. doi: <https://doi.org/10.1108/JBIM-11-2018-0324>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Treating Unobserved Heterogeneity in PLS-SEM: A Multi-method Approach. In H. Latan & R. Noonan (Eds.), *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications* (pp. 197-217). Springer International Publishing. doi: https://doi.org/10.1007/978-3-319-64069-3_9
- Scott, W. R. (2013). *Institutions and Organizations: Ideas, Interests, and Identities*. Sage Publications, Thousand Oaks, CA. Retrieved from <https://us.sagepub.com/en-us/nam/institutions-and-organizations/book237665>
- Shirokova, G., Bogatyreva, K., Beliaeva, T., & Puffer, S. (2016). Entrepreneurial orientation and firm performance in different environmental settings: contingency and configurational approaches. *Journal of Small Business and Enterprise Development*, 23(3), 703-727. doi: <https://doi.org/10.1108/JSBED-09-2015-0132>
- Songling, Y., Ishtiaq, M., Anwar, M., & Ahmed, H. (2018). The role of government support in sustainable competitive position and firm performance. *Sustainability*, 10(10), 3495. doi: <https://doi.org/10.3390/su10103495>
- Tang, Y. K. (2011). The Influence of networking on the internationalization of SMEs: Evidence from internationalized Chinese firms. *International Small Business Journal*, 29(4), 374-398. doi: <https://doi.org/10.1177/0266242610369748>
- Valaei, N., Rezaei, S., Bressolles, G., & Dent, M. M. (2022). Indispensable components of creativity, innovation, and FMCG companies' competitive performance: a resource-based view (RBV) of the firm. *Asia-Pacific Journal of Business Administration*, 14(1), 1-26. doi: <https://doi.org/10.1108/APJBA-11-2020-0420>
- Vu, T. L., Paramaiah, C., Tufail, B., Nawaz, M. A., Xuyen, N. T. M., & Huy, P. Q. (2023). Effect of financial inclusion, eco-innovation, globalization, and sustainable economic growth on ecological footprint. *Engineering Economics*, 34(1), 46-60. doi: <https://doi.org/10.5755/j01.ee.34.1.32402>
- Wade, M., & Hulland, J. (2004). The resource-based view and information systems research: Review, extension, and suggestions for future research. *MIS quarterly*, 28(1), 107-142. doi: <https://doi.org/10.2307/25148626>
- Wang, G., Dou, W., Zhu, W., & Zhou, N. (2015). The effects of firm capabilities on external collaboration and performance: The moderating role of market turbulence. *Journal of Business Research*, 68(9), 1928-1936. doi: <https://doi.org/10.1016/j.jbusres.2015.01.002>
- Yang, S., Ishtiaq, M., & Anwar, M. (2018). Enterprise risk management practices and firm performance, the mediating role of competitive advantage and the moderating role of financial literacy. *Journal of Risk and Financial Management*, 11(3), 35. doi: <https://doi.org/10.3390/jrfm11030035>
- Zamberi Ahmad, S., & Xavier, S. R. (2012). Entrepreneurial environments and growth: evidence from Malaysia GEM data. *Journal of Chinese Entrepreneurship*, 4(1), 50-69. doi: <https://doi.org/10.1108/17561391211200939>
- Zaridis, A., Vlachos, I., & Bourlakis, M. (2021). SMEs strategy and scale constraints impact on agri-food supply chain collaboration and firm performance. *Production Planning & Control*, 32(14), 1165-1178. doi: <https://doi.org/10.1080/09537287.2020.1796136>
- Zhang, B., & Wang, Z. (2014). Inter-firm collaborations on carbon emission reduction within industrial chains in China: practices, drivers and effects on firms' performances. *Energy Economics*, 42, 115-131. doi: <https://doi.org/10.1016/j.eneco.2013.12.006>
- Zhang, Y., Li, L., Sadiq, M., & Chien, F. S. (2023). Impact of a sharing economy on sustainable development and energy efficiency: evidence from the top ten Asian economies. *Journal of Innovation & Knowledge*, 8(1), 100320. doi: <https://doi.org/10.1016/j.jik.2023.100320>

- Zhao, L., Chau, K. Y., Tran, T. K., Sadiq, M., Xuyen, N. T. M., & Phan, T. T. H. (2022). Enhancing green economic recovery through green bonds financing and energy efficiency investments. *Economic Analysis and Policy*, 76, 488-501. doi: <https://doi.org/10.1016/j.eap.2022.08.019>
- Zulu-Chisanga, S., Chabala, M., & Mandawa-Bray, B. (2021). The differential effects of government support, inter-firm collaboration and firm resources on SME performance in a developing economy. *Journal of Entrepreneurship in Emerging Economies*, 13(2), 175-195. doi: <https://doi.org/10.1108/JEEE-07-2019-0105>