Tuijin Jishu/Journal of Propulsion Technology
ISSN: 1001-4055
Vol. 46 No. 1 (2025)

Supply Chain Management Practices and Performance of F&B Smes in Indonesia: Exploring the Role of Firm Supply Performance and Market Orientation Interventions

Addin Jauharudin[1*], Armanu Armanu[2], Djumilah Hadiwidjojo[2], Rofiaty Rofiaty[2]

[1]*Doctoral Program of Management Science, Faculty of Economics and Business, Brawijaya University, Malang, Indonesia*

[2] *Faculty of Economics and Business, Brawijaya University, Malang, Indonesia*

Abstract: **-** This study develops an empirical model exploring the influence of supply chain performance and market orientation in mediating the relationship between supply chain management practices and business performance, with a focus on small businesses in developing countries, particularly within the underrepresented food and beverage sector. Drawing from the Resource-Based View (RBV) theory, which emphasizes resources that are valuable, rare, inimitable, and non-substitutable (VRIN), the research seeks to guide businesses in leveraging these resources to enhance supply chain practices and achieve improved performance through effective market orientation and supply chain outcomes. Using smartPLS software, the study analyzed data from a sample of 350 small and medium-sized enterprises (SMEs) operating in the food and beverage industry on Java Island, Indonesia. The results demonstrate that market orientation serves as a full mediator between supply chain management practices and business performance. Additionally, the findings highlight the role of supply chain management practices in influencing supply chain performance and market orientation, offering empirical evidence on the factors that shape business performance, including supply chain practices, market orientation, and the involvement of government. However, the study could not validate the moderating effect of government involvement on the link between supply chain management practices and business performance. These findings underscore the importance of market orientation as a pivotal mediator, providing actionable insights for policymakers and stakeholders to develop strategies that strengthen supply chain practices and foster superior business outcomes.

Keywords*:* Supply chain management practices; market orientation; firm supply performance; business performance; food and beverage; Indonesia.

1. Introduction

The COVID-19 pandemic had a profound impact on company performance worldwide. As noted by Golubeva (2021), Haque et al. (2022), and Zhang et al. (2022), businesses of all sizes—large, medium, and small—in both developed and developing economies experienced a decline in performance during the pandemic. Stringent pandemic-related restrictions disrupted business operations, leading to declines in investments, liquidity, sales, employment, and even food stock levels (Baig et al., 2021; Blustein et al., 2020; Kozicki & Gornikiewicz, 2020; Workie et al., 2020a). Among the hardest hit were small and medium-sized enterprises (SMEs), which are critical for job creation (Ababulgu et al., 2022; Foris et al., 2022). The food sector, despite its essential role in foreign exchange generation and the global food supply chain, was particularly vulnerable to lockdown measures (Lugo-Morin, 2020; Workie et al., 2020b). SMEs also play a pivotal role in bolstering foreign exchange earnings and improving a nation's trade balance (Kula, 2005). As such, investigating strategies to improve company performance has become increasingly vital (Huang & Farboudi Jahromi, 2021; Ivanov, 2020; Sarkis, 2020),

especially to help businesses navigate uncertainties and enhance outcomes amidst disruptions in critical supply chain operations (Mankar et al., 2023; Maguni et al., 2023).

The importance of effective supply chain management (SCM) in achieving optimal company performance is emphasized in the quantitative study by Johnson and Templar (2011), which analyzed annual reports from 1995 to 2004 in the UK. Their findings highlight that SCM not only sustains competitiveness but also enhances overall business performance (Jones & Riley, 1985; S. Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006a). In the digital economy, SCM has become an essential tool for fostering collaboration between producers and consumers, enabling businesses to respond effectively to market dynamics (Bruce et al., 2004; Sharma et al., 2022; Wong et al., 2005). By integrating customers, companies, and suppliers, SCM contributes to improved customer satisfaction, sustained business performance, and a stronger competitive edge (S. Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006b). Similarly, Tracey et al. (2005) found in their study of 474 U.S. manufacturing firms that effective SCM significantly enhances company performance. The insights and knowledge derived from SCM empower entrepreneurs to achieve superior results (Hult et al., 2007; Lim et al., 2017). Research on small businesses in Turkey further underscores the positive impact of SCM practices on business performance by improving operational efficiency (Koh et al., 2007). These findings indicate that SCM is not limited to large corporations but is equally beneficial for small businesses. The Resource-Based View (RBV) offers a valuable lens to understand how firms, including SMEs, can optimize their limited resources, a challenge frequently faced by SMEs (Bresser & Powalla, 2012; Freiling & Baron, 2017; Intyas et al., 2022; Peteraf, 1993; Putritamara et al., 2023; Terziovski, 2010). This framework reinforces the critical role of SCM in driving business performance across diverse organizational scales.

Prior studies have consistently demonstrated a strong correlation between supply chain management (SCM) practices and supply chain performance. For example, Qrunfleh and Tarafdar (2014a) conducted an empirical study with 3,129 executives from manufacturing firms in the United States, revealing that supply chain performance is a pivotal indicator of the efficiency of internal business supply chains. This efficiency, in turn, supports companies in attaining their desired corporate performance goals. Supply chain performance encompasses key dimensions such as cost management, flexibility, stakeholder relationships, and responsiveness. In a related study, Qrunfleh and Tarafdar (2014b) identified several factors contributing to improved supply chain performance, including lower product costs, agile decision-making processes, network development with external stakeholders like customers and suppliers, and overall accountability in supply chain operations. Additional evidence from Sukati et al. (2012a) highlights the positive influence of SCM practices on supply chain performance within Malaysia's manufacturing sector. Similarly, Chavez et al. (2012) found a robust impact of SCM practices on supply chain performance among manufacturing firms in Ireland, underscoring the global applicability of effective SCM practices in achieving operational success across various industries.

The connection between SCM practices and market orientation has also been widely explored in the literature. For instance, Martin and Grbac (2009) demonstrated that SCM practices have a positive effect on market orientation in large-scale industries. This finding is consistent with insights from Chuang (2018) and Matanda and Ndubisi (2009), who emphasized the importance of value co-creation and understanding shifts in customer behavior as crucial factors for sustaining a competitive edge. Market orientation facilitates a customer-centric approach, enabling businesses to adapt quickly to evolving consumer demands, as highlighted by Panayides and Song (2008). These studies collectively underline the critical role of SCM practices in enhancing both supply chain performance and market orientation, thereby driving overall business success.

Extensive research has highlighted the relationship between market orientation and firm performance across various industries. For instance, Tseng and Liao (2015) demonstrated this link in Taiwanese shipping companies, while Kumar et al. (1998) found similar results in the retail, distribution, and manufacturing sectors. Green et al. (2006a) also confirmed the positive association between market orientation and performance within U.S. manufacturing firms. Moreover, supply chain performance has been identified as a key mediator in this relationship. Qrunfleh and Tarafdar (2014c) explained that supply chain performance mediates the impact of supply chain information systems on firm performance, while Liu et al. (2013) highlighted market orientation's role in moderating the integration of the supply chain with market outcomes. Similarly, Gómez-Cedeño et al.

(2015) demonstrated that customer satisfaction mediates the indirect relationship between SCM practices and firm performance. Tjahjadi et al. (2022) further established that market orientation mediates the relationship between green human capital readiness and firm performance, underscoring the need to explore the mediating role of market orientation in achieving superior firm performance.

Government intervention also plays a moderating role in the relationship between supply chain performance and company performance. For example, Zhu and Sarkis (2007) illustrated how government involvement moderates the effectiveness of SCM practices in the manufacturing sector. While these studies have primarily focused on developed countries and sectors like manufacturing and transportation services, they emphasize the influence of SCM on company performance, the impact of SCM practices on supply chain performance, and the mediating roles of supply chain performance and market orientation (S. Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006b; Ou et al., 2010; Qrunfleh & Tarafdar, 2014a; Vanichchinchai & Igel, 2011; Zhu & Sarkis, 2007).

However, a critical research gap exists in examining market orientation as a mediator between SCM practices and company performance, particularly in the food and beverage SME sector in developing countries. To date, no study has comprehensively addressed the roles of supply chain performance and market orientation in mediating the effects of SCM practices on firm performance in this context. This gap presents a valuable opportunity for future research to explore these dynamics further.

In developing countries like Indonesia, SMEs are vital in driving business recovery during the pandemic and adapting to market changes. As noted by Tambunan (2009), Indonesian SMEs have the potential to serve as key agents in export activities, leveraging their extensive networks to support government efforts in boosting GDP. Data from the Ministry of Industry of the Republic of Indonesia indicates that in the first quarter of 2022, the food industry contributed 37.77% to the GDP of the non-oil and gas processing sector. Furthermore, the export value of the food industry experienced significant growth, reaching 3.92 billion USD, reflecting its alignment with the priorities outlined in Indonesia's Industry 4.0 roadmap (https://kemenperin.go.id/artikel/23393/Kontribusi-Industri-Makanan-dan-Minuman-Tembus-37,77-Persen).

This study makes significant contributions in four key areas. First, it advances the academic discourse by enriching the fields of strategic management (grand theory), resource-based view (middle theory), and operational management (applied theory). Second, it offers practical recommendations for businesses in the food and beverage sector, enabling them to adopt supply chain management practices that improve overall performance. Third, it serves as a resource for the public sector, providing insights to guide the development of policies aimed at mitigating supply chain disruptions. Finally, the study presents actionable strategies for stakeholders to rebuild and fortify the food and beverage supply chain by utilizing government intervention and market-oriented mediation, particularly in developing nations susceptible to economic and social.

2. Theoritical Framefork

2.1 The link between Supply Chain Management Practices and Company Performance

Research has consistently shown that supply chain management (SCM) practices do not directly impact supply chain performance but rather operate through mediating factors like competitive advantages in cost, quality, flexibility, and responsiveness (S. Li, Ragu-Nathan, Ragu-Nathan, & Subba Rao, 2006). Tan (2002), in his analysis of SCM practices within agricultural, plantation, and manufacturing sectors, established a positive association between these practices and company performance. Similarly, Lenny Koh et al. (2007) found that SCM practices significantly enhance company performance, as evidenced by their study of 203 manufacturing SMEs in Turkey.

Wook Kim (2006) provided further empirical support through his study of 590 large manufacturing firms in Korea, which demonstrated the positive influence of SCM practices on company performance. This relationship is largely driven by the critical role of supply chain integration in enabling firms to execute competitive strategies, including cost efficiency, value creation, and enhanced adaptability to dynamic business environments (Bowersox & Daugherty, 1995). These strategies, supported by robust SCM practices, contribute significantly to improved overall business outcomes.

H1: Supply chain management practices have a significant impact on company performance.

2.2. The Link between Supply Chain Management Practices and Supply Chain Performance

Extensive international research has examined the connection between supply chain management (SCM) practices and supply chain performance. For instance, Sukati et al. (2012a) demonstrated that SCM strategies positively impact supply chain performance within Malaysia's manufacturing sector. Similarly, Fawcett et al. (2007) emphasized the importance of information sharing in enhancing supply chain performance. A study by Won Lee et al. (2007), involving 122 executives in the United States, further highlighted the significant role of supplier integration and other external activities in improving business performance within supply chains.

Business integration and information flow have been consistently identified as essential components of SCM practices. For example, Dainty et al. (2001) emphasized the importance of these elements, while Chavez et al. (2012) confirmed the positive influence of SCM practices on supply chain performance across 2,500 manufacturing firms in Ireland. Their findings underscore that effective SCM practices foster seamless integration among supply chain members, enabling smooth information flow. Fugate et al. (2010) further noted that this improved information flow enhances employee satisfaction and overall performance. Logistic effectiveness also contributes significantly to supply chain performance, as efficient execution of logistics functions has been shown to yield substantial performance improvements (Chapman et al., 2003; McGinnis & Kohn, 2002).

However, despite these extensive insights, the relationship between SCM practices and supply chain performance remains unexplored within the context of the food and beverage SME sector in the UK. This represents a critical gap in the literature, offering an opportunity for future research to address this specific area.

H2: The Practice of Supply Chain Management Influences Supply Chain Performance

2.3. The Link between Supply Chain Management Practices and Market Orientation

Market orientation (MO) holds a central position in management and marketing strategies, focusing on delivering superior customer value while ensuring profitability, particularly within the framework of supply chain management (SCM) practices. Numerous studies have explored the interplay between SCM practices and MO. For instance, Min et al. (2007) identified a strong link between effective SCM practices and market orientation, suggesting that organizations with well-implemented SCM practices are more likely to adopt market-oriented strategies. Similarly, Martin and Grbac (2009) demonstrated that SCM practices act as a facilitator, enhancing a company's market orientation by improving its responsiveness to customer needs. Green et al. (2006b) also underscored that effective SCM practices enable firms to collect critical market insights and identify untapped market segments, further strengthening the connection between SCM and MO. These findings collectively suggest that SCM practices have a positive and significant impact on a company’s market orientation, forming the basis for hypothesizing this relationship.

H3: Supply chain management practices have a positive and significant impact on market orientation."

2.4. The Relationship between Supply Chain Performance and Firm Performance

Empirical evidence from international studies underscores the relationship between supply chain performance and firm performance. For instance, Green et al. (2008), through interviews with 142 planning and operational managers, identified that supply chain performance, shaped by supply chain management strategies, indirectly impacts financial performance. This relationship is attributed to the role of supply chain performance as a critical benchmark for evaluating a company's operational effectiveness within the broader supply chain framework (Stewart, 1995).

Similarly, Qrunfleh and Tarafdar (2014c) examined 205 companies and confirmed that supply chain performance positively influences firm performance, primarily through effective integration of information and resources. High-performing supply chains are marked by seamless operations and efficient resource utilization, enabling firms to achieve enhanced business outcomes (Wu et al., 2014). These findings highlight the essential role of supply chain performance in driving overall firm success.

H4: Supply Chain Performance Influences Firm Performance

2.5. The link between Market Orientation and Firm Performance

Market orientation (MO) is defined as a company's ability to deliver customer value by utilizing insights about customers and competitors (Kajalo & Lindblom, 2015; O'Cass & Ngo, 2012). Research consistently identifies MO as a key driver of improved business performance. For instance, Bhuian et al. (2005) found that competencies, marketing capabilities, and capacities—core components of MO—significantly contribute to achieving superior performance. Similarly, Dawes (2000) established a positive relationship between MO and increased profitability. As a cornerstone of a company's marketing strategy, MO enhances performance by facilitating the creation and execution of effective marketing strategies informed by market-oriented data (Kirca et al., 2005). Companies that embrace MO are better equipped to secure competitive advantages and attain higher levels of business performance (Gruber-Muecke & Hofer, 2015). Julian et al. (2014) further validated the strong positive correlation between MO and firm performance, underscoring the critical role of MO in fostering business success.

H5: Market orientation has a positive and significant impact on firm performance.

2.6. The Role of Supply Chain Performance in Mediating the Relationship between Supply Chain Management Practices and Firm Performance

Koh et al. (2007) present empirical evidence supporting a framework that classifies supply chain management (SCM) practices into two categories and explores their impact on operational and organizational performance, specifically within manufacturing SMEs. Similarly, Wook Kim (2006) highlights that effective SCM requires a holistic approach that enhances all supply chain functions within a company. Rather than being fragmented and function-specific, SCM practices should adopt a general and integrative focus. This involves assessing each SCM practice's performance based on its role in promoting the seamless integration of the overall supply chain process.

The successful integration of supply chains is achieved through the systematic implementation of diverse SCM practices (Gunasekaran & Ngai, 2004; Lambert & Cooper, 2000; Power, 2005). This highlights the essential role of supply chain performance in facilitating the effective execution of SCM practices, which in turn drives improved business outcomes. Research has consistently shown that well-integrated supply chain processes enhance operational efficiency and lead to superior organizational performance.

H6: Supply chain performance mediates the influence of supply chain management practices on firm performance.

2.7. The Role of Market Orientation in Mediating the Relationship between Supply Chain Management Practices and Firm Performance

Kazemian et al. (2022) demonstrated through their empirical study that market orientation serves as a mediator by enhancing entrepreneurs' ability to cultivate strong customer relationships, ultimately supporting companies in achieving better performance. Similarly, Tjahjadi et al. (2022) identified market orientation as a mediator between green human capital readiness and firm performance, emphasizing the need for further investigation into its role in enhancing organizational outcomes. In addition, Idar et al. (2012), in their research on SMEs in Malaysia, found that market orientation mediates the relationship between strategic planning and performance. Strategic planning plays a crucial role in enabling entrepreneurs to improve competitiveness, which subsequently drives better company performance (Andersen, 2004). Together, these findings underscore the significant role of market orientation as a mediator in fostering superior business performance.

H7: Market orientation mediates the influence of supply chain management practices on firm performance.

2.8 The Role of Government in Moderating Supply Chain Performance and Company Performance

Previous research has highlighted the relationship between the government's role in moderating supply chain performance and company performance. For instance, Zhu and Sarkis (2007) conducted a study on manufacturing companies, demonstrating that government involvement acts as a moderator between supply chain management (SCM) practices and company performance. Their findings indicate that the government's role enhances the effectiveness of SCM practices by providing regulatory and policy support, thereby strengthening the connection

between SCM practices and organizational outcomes. This emphasizes the importance of government intervention in fostering improved business performance.

H8: Government intervention positively moderates the relationship between supply chain management practices and company performance.

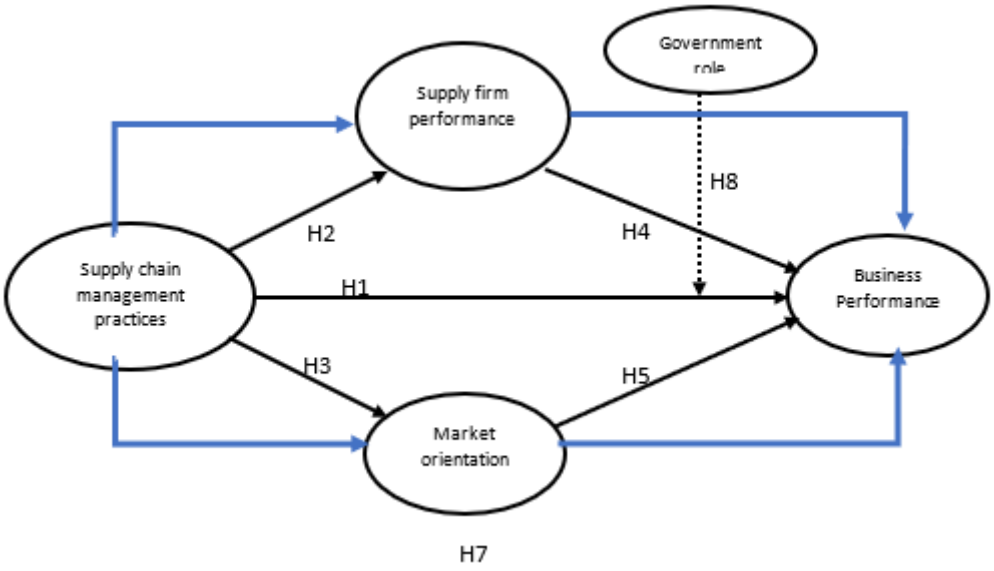

Figure 1. Empirical Model Specifications of Small and Medium-sized Enterprises (SMEs) in the Food and Beverage Industry: Examining the Role of Supply Firm Performance and Market Orientation as Mediators of Supply Chain Management Practices

Source: Prepared by the authors (2023)

3. Methods

3.1 Measurement of Research Variables

The latent variables examined in this study include Supply Chain Management Practices (SCMP), Supply Firm Performance (SFP), Market Orientation (MO), and Business Performance (BP), along with a moderating variable, Government Role (GR). SCMP is structured around three dimensions: Strategic Supplier Partnership, Information Sharing, and Customer Relationship, as outlined by S. Li, Ragu-Nathan, Ragu-Nathan, and Subba Rao (2006). Supply Firm Performance incorporates three dimensions—Supplier Relationship, Logistic Effectiveness, and Competitive Advantage—adopted from Tripathy et al. (2016). Market Orientation is defined by two dimensions, Customer Orientation and Competitor Orientation, based on the works of Swee Lin Tan et al. (2014) and Lam et al. (2012).

Business Performance is evaluated using five dimensions—Perceived Organizational Performance, Employee Involvement, Market Performance, Financial Performance, and Customer Satisfaction—drawn from the studies of Kim (2006) and Kitchot et al. (2021). All indicators in this research are measured using a Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). A detailed overview of the latent variables and their corresponding indicators is provided in the subsequent table.

Table 1. Research Variables and it's indicators

Variables	*Indicators*
Praktek supply chain management (X))	(S. Li, Ragu-Nathan, Ragu-Nathan, & Subba Rao, 2006)

Strategic supplier partnership	In operating our food and beverage business, we consistently collaborate with suppliers to discuss and align on the goals of our enterprise
	we actively support our suppliers in enhancing the quality of our food and beverage products.
Information sharing	Our business partners consistently provide detailed and relevant information about issues that could affect our operations.
Customer relationship	To maintain the sustainability of our food and beverage business, we frequently assess and monitor customer satisfaction levels.
	We are committed to fostering effective communication and information sharing with both suppliers and customers, promoting collaborative exchanges of valuable insights.
Supply chain Performa (Y1) (Tripathy et al., 2016)	
Supplier relationship	Suppliers actively engage in developing new food and beverage products.
	Suppliers are involved in planning and setting the objectives of our business.
	Suppliers participate in determining the quality standards of the food and beverage products we strive for.
	Suppliers often assist in improving the quality of our food and beverage products.
	Issues are resolved through collaboration with suppliers.
	We collaborate with suppliers in estimating market demand for our food and beverage products.
	Strategic business planning is conducted together with suppliers.
Logistic effectiveness	The warehouse capacity can be quickly adjusted to follow changes in demand for our food and beverage products.
	The transportation system in our business can be quickly adapted to accommodate changes in demand for our food and beverage products.
	We collaborate with various parties in the supply chain related to transportation and distribution.
	We are able to deliver food and beverage products quickly and efficiently."
competitive advantage	We always offer high-quality products to our customers.
	We always deliver products faster than competitors.
	We always provide food/drink products tailored to customer needs.
	Our products have a higher customer satisfaction rate than competitors.
	Our products receive higher customer satisfaction compared to competitors.
Market orientation (Y2) (Lam et al., 2012)	

Customer Orientation	All of our business actors understand how the entire business can contribute to creating customer value.
	Our business frequently evaluates the strengths and weaknesses of the enterprise.
	The market strategy in our business is supported by an understanding of how to create value for customers.
	Our business's competitive advantage strategy is based on our deep understanding of our customers' needs.
Competitor Orientation	All of our business participants collaborate to serve our target market.
	Our competitive advantage is based on an understanding of customer needs.
	Our company frequently measures customer satisfaction.
	Our business activities always prioritize excellent after-sales service.
Firm performance (Z) (Kitchot et al., 2021; Kim, 2006)	
Perceived organizational performance	Our SME (Small and Medium Enterprise) has a better sales growth rate or revenue compared to other SMEs.
	Our SME has a better product and service performance rate compared to other SMEs.
	The workforce in our SME has better productivity compared to other SMEs.
	Our SME has a better delivery performance rate compared to other SMEs.
	Our SME has better product prices compared to other SMEs.
Market Performance	Development of demand and supply for food and beverage products
	My company has higher market sales compared to other companies.
Financial performance	Cost reduction
Consumer satisfaction	Product stability and consistency
	Speed in serving customers
Governments' role (a) (H. Li & Atuahene-Gima, 2001; Shu et al., 2019)	
	The government provides information as well as technological support to enhance the availability of information.
	The government supports the availability of financial capital from both formal and informal financial institutions.
	The government offers tax reductions and subsidies.
	The government implements policies and projects that are beneficial for small and medium-sized enterprises (SMEs).

Source: Prepared by the authors (2023)

3.2 Questionnaire Development

We established the research objectives to develop a questionnaire based on the literature. Subsequently, the constructs were grouped according to the research objectives, including: 1) exploring the direct influence of Supply Chain Management Practices (SCMP) on Business Performance (BP), 2) investigating the indirect influence of SCMP on BP through Supplier Flexibility (SFP) and Manufacturing Operations (MO) as mediators, and 3) examining the role of the government in moderating SCMP's impact on BP. We then conducted an outer model assessment using validity and reliability tests, followed by an inner model examination to test the relationships among the constructs using Structural Equation Modeling (SEM) with smartPLS 3.0 software. Data collection took place from June to September 2023, with a total of 350 Food and Beverage business entrepreneurs participating as respondents.

3.3 Sampling

This study employs a cross-sectional data approach through quantitative methods to investigate supply chain cases in Small and Medium Enterprises (SMEs) in the Food and Beverage (FnB) sector in three provinces on the Java Island, namely DKI Jakarta, Central Java, and East Java. Nayati Utami et al., (2019) pointed out that 60% of SME businesses in Indonesia are concentrated on Java Island, 15% in Sumatra, 10% in Sulawesi and Borneo, and the remaining 15% are scattered across other islands. The focus of this research is on the FnB sector, including processed products from livestock such as beef, chicken, eggs, agricultural products like vegetables, fruits, legumes, and processed products from the fisheries sector. FnB in these sectors is considered to have significant potential in both local and international markets (Frąckiewicz, 2018; Sovacool et al., 2021). The respondents in this observation are limited to farms with a 10-year history. According to Sterman (2000), business dynamics can be observed within the first ten years. Therefore, a total of 350 respondents were obtained as the sample size. The research method involves surveys and structured interviews using a questionnaire instrument outlined in Table 1.

4. Results and Discussion

4.1 Empirical Results

The research results empirically prove that 350 respondents, who are Small and Medium-sized Enterprises (SMEs) owners in the Food and Beverage (FnB) sector in three provinces selected purposively as the center of SMEs development in Indonesia, qualify with a business experience of 10 years. The profile of the respondents is as follows:

Table 2. Respondent Profile

Description	Respondent Profile	
	Number	Percentage
Age		
20-35	127	
36-51	162	
52-67	61	
Gender		
Male	238	
Female	112	
Education		
No education	7	
Primary education	12	

Junior education	38
Senior education	173
Graduate	110
Postgraduate	10
Institutional	
Family business	129
Non-Family business	221
Income Condition during Pandemics	
Stable	37
Increase	10
Decrease	303

Source: Prepared by the authors (2023)

4.1 Analysis of Validity and Reliability

To ensure the validity of data in the analysis of Structural Equation Modeling (SEM) using Partial Least Squares, we conducted tests on the outer and inner models. For the outer model, we examined convergent validity by assessing the construct validity in measuring elements of the independent variables, including risk perception, adaptation assessment, adaptation confidence, disincentives, incentives, subjective norms, and maladaptation. The main requirement was that the Average Variance Extracted (AVE) values should be above 0.4. Subsequently, we assessed reliability using Cronbach's Alpha (CA) with a minimum threshold of 0.5. Additionally, the Composite Reliability (CR) values needed to be above the minimum threshold of 0.7. Furthermore, the requirement for loading factors across all constructs was that they should be higher than 0.4. The following table presents the results of the outer model testing.

Table 3. Validity test

Variables	*Construct*	*Item*	*Loading (>0,5)*	*CA (>0,7)*	*CR (>0,7)*	*AVE (>0,5)*
Supply Chain Management Practices	*Formative*			*0,798*	*0,832*	*0,605*
Strategic supplier partnership		*X1.1*	*0,905*			
Information sharing		*X1.2*	*0,775*			
Customer relationship		*X1.3*	*0,776*			
Supply Firm Performance	*Formative*			*0,812*	*0,867*	*0,611*
Supplier relationship		*Y1.1*	*0,879*			
Logistic effectiveness		*Y1.2*	*0,874*			
competitive advantage		*Y1.3*	*0,660*			
Market Orientation	*Formative*					

Customer Orientation		*Y2.1*	*0,632*	*0,742*	*0,798*	*0,595*
Competitor Orientation		*Y2.2*	*0,936*			
Business Performance	*Reflective*					
Perceived organizational performance		*Z1*	*0,605*	*0,839*	*0,888*	*0,616*
Employee involvement		*Z2*	*0,753*			
Market Performance		*Z3*	*0,854*			
Financial performance		*Z4*	*0,869*			
Costumer satisfaction		*Z5*	*0,814*			

Source: Prepared by the authors (2023)

4.2 Structural Measurement Model

The testing results for the model yielded a model fit value of 0.095. The formed model is deemed appropriate as the fit index value is below 0.10, as suggested by Hair Jr et al. (2014). Furthermore, the Normed Fit Index (NFI) value approaches 1 with a value of 0.773. Kline (2015) asserts that the ideal NFI value falls between 0 and 1. Path testing results indicate that SFP can be explained by SCMP to the extent of 72.70%, while MO can be explained by SCMP to the extent of 62.71%. Additionally, BP can be explained by SFP and MO to the extent of 89.10%. For a comprehensive overview of the inner model testing results, please refer to the hypothesis testing as presented below.

Table 4. Hypothesis testing

Hypothesis	Relationship	Std.Beta	Std.Error	t-value	p-values	Result
Direct effect						
H1	SCMP>>BP	0,130	0,056	2,327	0,020	Yes
H2	SCMP>>SFP	0,572	0,040	14,124	0,000	Yes
H3	SCMP>>MO	0,521	0,047	11.081	0,000	Yes
H4	SPF>>BP	0,045	0,052	0,867	0,386	No
H5	MO>>BP	0,288	0,049	5,842	0,000	Yes
Indirect effect						
H6	SCMP>>SFP>>BP	0,176	0,046	3,864	0,000	Yes
H7	SCMP>>MO>>BP	0,165	0,043	3,798	0,000	Yes
H8	a(GR)_SCMP>>BP	0,040	0,042	0,949	0,343	No

Note: * $p < 0.05$

Source: Prepared by the authors (2023)

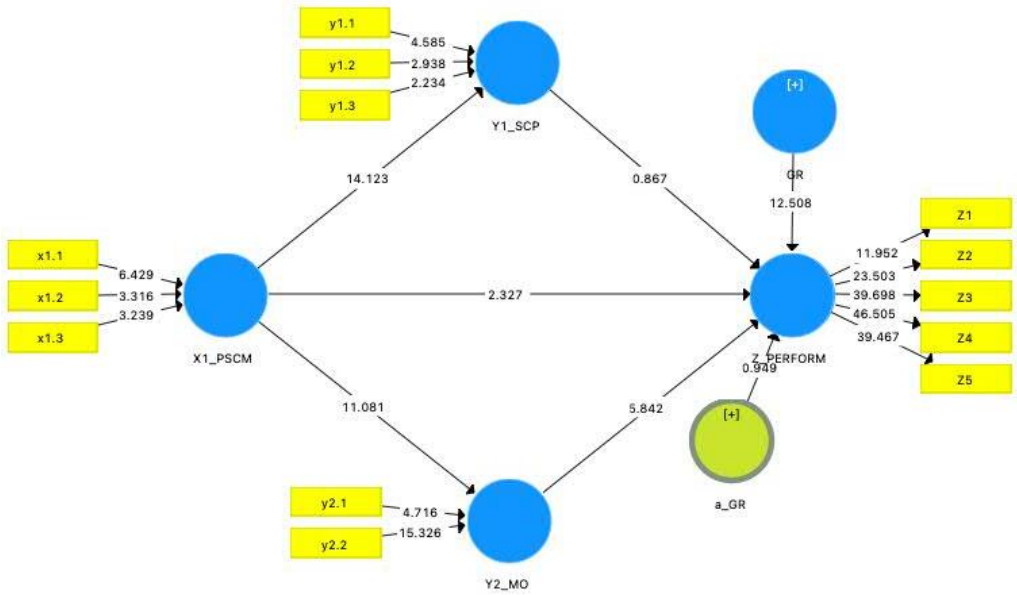

Figure 2. Empirical Model of Business Performance in Small and Medium-sized Food and Beverage Enterprises (FnB) through the Role of Supply Firm Performance and Market Orientation as Mediators of Supply Chain Management Practices

Source: Prepared by the authors (2023)

The second diagram represents a structural model derived from empirical observations explaining the direct influence of predictors and latent constructs predicted through previous hypotheses. This study reveals that SFP and MO are capable of mediating SCMP and BP. Furthermore, the analysis results indicate a full mediation of SFP on SMP and BP. On the other hand, this observation also demonstrates a positive influence of SCMP on BP, thereby supporting hypothesis (H1). Additionally, this empirical study confirms the positive impact of SCMP on SFP, validating hypothesis (H2). Similarly, SCMP's positive influence on MO supports hypothesis (H3), as does the positive relationship between MO and BP, supporting hypothesis (H5). Unfortunately, this study fails to prove a direct influence between SPF and BP, leading to the rejection of hypothesis (H4). Moreover, the study has not established the role of the government in moderating SCMP and BP, resulting in the rejection of hypothesis (H8).

4.2. Discussion

The findings of this study aim to unveil the roles of Supplier Flexibility (SFP) and Market Orientation (MO) in mediating between Supply Chain Management Practices (SCMP) and Business Performance (BP) in the context of Food and Beverage Small and Medium Enterprises (FnB SMEs) in the developing country of Indonesia. The results demonstrate that SFP and MO are capable of intervening by virtue of their mediating abilities. SFP proves to be a fully mediating factor between SCMP and BP, whereas MO partially mediates the relationship between SCMP and BP. The intervention capability of SFP appears robust, even though SFP does not directly influence BP. Therefore, for businesses aspiring to achieve better performance, improvements in SCMP are advised, enabling efficient practices that assist businesses in maintaining a robust supply performance, consequently leading to enhanced profits (Bichou & Gray, 2004; Subramanian & Gunasekaran, 2015; Younis et al., 2016; Zhu & Sarkis, 2004).

Efficient practices encompass the ability of businesses to build relationships with external partners and maintain effective logistics systems (Hsu et al., 2009; Lau, 2007; Min et al., 2005; Qi et al., 2017). For example, manufacturers should ensure product delivery processes align with customer expectations and remain aware of strategic steps and capabilities undertaken by competitors, thereby enhancing product competitiveness through customer satisfaction (Habib et al., 2020; S. Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006c; Walker et al., 2008).

Additionally, this study confirms that MO partially mediates the relationship between SCMP and BP. It provides an alternative perspective on SCMP, suggesting that businesses can achieve good performance through MO. Thus, entrepreneurs need to consider two crucial aspects of MO: customer orientation and competitor orientation. This is essential due to shifts in customer behavior, prompting businesses to promptly adjust products desired by contemporary customers, even engaging in co-creation (Jaworski & Kohli, 2014; Romero & Molina, 2011; Torjusen et al., 2001; Zwass, 2010). In line with the viewpoint of Priem et al. (2018), emphasizing the pivotal role of customers in determining business success in the digital era, early establishment of customer relationships is crucial for recognizing market trends. Beyond customers, businesses must also pay attention to the patterns and strategies of competitors in satisfying their customers, as customer evaluations often result from the comparison of marketing mixes between brands (Agafonova et al., 2021).

This study contributes to theoretical aspects related to Resource-Based View (RBV), suggesting that strategies maximizing minimal resources commonly found in small businesses involve building relationships with external partners to supplement limited resources (Clulow et al., 2003; Hu & Kee, 2022). Conversely, direct effects are evident in the relationship between SCMP and BP. Observations indicate that operational efficiency achievable through SCMP can aid businesses in achieving better performance. Furthermore, practices encouraging business sensitivity to market changes can facilitate innovation, assisting businesses in adapting to changes (Ngo et al., 2019; Wei & Wang, 2011). These conditions make businesses more prepared for supply chain threats, allowing them to face changes by providing detailed product stocking and planning (DiFonzo & Bordia, 1997; Sorge & Van Witteloostuijn, 2004).

Furthermore, this study also proves the positive influence of SCMP) on MO. Essentially, customer orientation and competitor orientation assist manufacturers in reducing business risks (Atuahene-Gima, 1996a; De Luca et al., 2010). For instance, the study reveals that knowledge gained through Customer Relationship Management and Customer Knowledge Management encourages businesses to enrich intangible assets (Gebert et al., 2003; Kaplan & Norton, 2004; Liew, 2008; Rowley, 2002; S.-M. Tseng, 2016). According to Xue et al. (2021), knowledge orientation tends to reduce inefficiencies in innovation in product and service development.

On the other hand, the findings in this study highlight the influence of Market Orientation on BP. It is explained that customer and competitor orientation helps businesses better understand the needs and desires of customers. Through this strategy, SMEs achieve cost efficiency in product development, even with limited capital, allowing them to diversify products (Atuahene-Gima, 1996b; Chang & Chen, 1998a). Moreover, with these orientations, businesses can provide products with consistent quality (Chang & Chen, 1998b; Hooley et al., 2000). It is through such approaches that businesses with minimal resources can endure uncertainty, such as disruptions in the supply chain during a pandemic.

The study is confined to the central business development region of SMEs on the island of Java, while other islands such as Sumatra, Borneo, Sulawesi, Bali, Nusa Tenggara, and Papua also exhibit SME proportions above 10%. Consequently, this study does not generalize the case of supply chain management practices in F&B SMEs to business performance on a national scale. Additionally, the study lacks typologies of business size and institutional form (family and non-family businesses), making it unclear how each typology precisely explains supply chain management practices' impact on business performance. Referring to the findings of a previous study (Putritamara et al., 2023), it is evident that business size and form can determine the resilience of SMEs in developing countries. Nevertheless, this empirical evidence can elucidate the crucial role of SFP and MO in mediating SCMP to achieve better business performance. Furthermore, the study substantiates the fully mediating role of SFP, providing an alternative for SMEs to enhance their business performance. The primary focus of MO is on the importance of entrepreneurs considering customer and competitor orientation. Consequently, this study holds promise for implementation in sectors beyond F&B, especially in developing countries, to realize global food security.

5. Conclusion

This research makes managerial contributions to two important aspects. First, it contributes to the existing literature on Resource-Based View (RBV) theory implemented in small businesses in developing countries,

particularly in the Food and Beverage (FnB) sector. Developing countries like Indonesia have been severely affected by supply chain disruptions due to pandemic-related restrictions, impacting business resilience. Despite the increasing demand for food, the discontinuous availability of products triggers food insecurity. Second, this study's structural model examines several applied theories, namely the roles of Supplier Flexibility Perception (SFP) and Market Orientation (MO) in mediating Supply Chain Management Practices (SCMP) and Business Performance (BP). Previous researchers have not explored the roles of MO and SFP as mediating variables between SCMP and BP, especially in the context of FnB for Small and Medium Enterprises (SMEs). Market orientation is considered a factor that can drive businesses to enhance their profitability. In terms of implications for public policy, this study contributes in two aspects. First, the research reveals that the government's role in moderating SCMP and BP has been ineffective. This ineffectiveness is attributed to the government assistance not reaching the appropriate targets due to the heterogeneous capabilities of small businesses in developing countries. There is also a lack of awareness among business operators that the main problem in supply chain disruptions is related to intangible assets, such as the limited ability to build external partnerships. Second, the study demonstrates that stakeholders need to assess the capabilities of intangible assets in providing solutions, not just focusing on tangible assets like financial resources or technological usage.

Refrences

1. Ababulgu, N., Abajobir, N., & Wana, H. (2022). The embarking of COVID-19 and the perishable products' value chain in Ethiopia. Journal of Innovation and Entrepreneurship, 11(1), 1–25.
2. Agafonova, A. N., Yakhneeva, I. V, & Mukhametshina, G. R. (2021). Human-centric marketing in the digital era. Economic Systems in the New Era: Stable Systems in an Unstable World, 10–17.
3. Andersen, T. J. (2004). Integrating decentralized strategy making and strategic planning processes in dynamic environments. Journal of Management Studies, 41(8), 1271–1299.
4. Atuahene-Gima, K. (1996a). Market orientation and innovation. Journal of Business Research, 35(2), 93–103.
5. Atuahene-Gima, K. (1996b). Market orientation and innovation. Journal of Business Research, 35(2), 93–103.
6. Avkiran, N. K. (2018). Rise of the partial least squares structural equation modeling: An application in banking. Partial Least Squares Structural Equation Modeling: Recent Advances in Banking and Finance, 1–29.
7. Baig, A. S., Butt, H. A., Haroon, O., & Rizvi, S. A. R. (2021). Deaths, panic, lockdowns and US equity markets: The case of COVID-19 pandemic. Finance Research Letters, 38, 101701.
8. Bhuian, S. N., Menguc, B., & Bell, S. J. (2005). Just entrepreneurial enough: the moderating effect of entrepreneurship on the relationship between market orientation and performance. Journal of Business Research, 58(1), 9–17.
9. Bichou, K., & Gray, R. (2004). A logistics and supply chain management approach to port performance measurement. Maritime Policy & Management, 31(1), 47–67.
10. Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. Journal of Vocational Behavior, 119, 103436.
11. Bowersox, D. J., & Daugherty, P. J. (1995). Logistics paradigms: the impact of information technology. Journal of Business Logistics, 16(1), 65.
12. Bresser, R. K. F., & Powalla, C. (2012). Practical implications of the resource-based view: Assessing the predictive power of the VRIO-framework. Zeitschrift Für Betriebswirtschaft, 82, 335–359.
13. Bruce, M., Daly, L., & Towers, N. (2004). Lean or agile: a solution for supply chain management in the textiles and clothing industry? International Journal of Operations & Production Management.
14. Chang, T., & Chen, S. (1998a). Market orientation, service quality and business profitability: a conceptual model and empirical evidence. Journal of Services Marketing, 12(4), 246–264.
15. Chang, T., & Chen, S. (1998b). Market orientation, service quality and business profitability: a conceptual model and empirical evidence. Journal of Services Marketing, 12(4), 246–264.

16. Chapman, R. L., Soosay, C., & Kandampully, J. (2003). Innovation in logistic services and the new business model: a conceptual framework. International Journal of Physical Distribution & Logistics Management, 33(7), 630–650.
17. Chavez, R., Fynes, B., Gimenez, C., & Wiengarten, F. (2012). Assessing the effect of industry clockspeed on the supply chain management practice-performance relationship. Supply Chain Management: An International Journal, 17(3), 235–248. https://doi.org/10.1108/13598541211227081
18. Chuang, S.-H. (2018). Facilitating the chain of market orientation to value co-creation: The mediating role of e-marketing adoption. Journal of Destination Marketing & Management, 7, 39–49.
19. Clulow, V., Gerstman, J., & Barry, C. (2003). The resource-based view and sustainable competitive advantage: the case of a financial services firm. Journal of European Industrial Training, 27(5), 220–232.
20. Dainty, A. R. J., Millett, S. J., & Briscoe, G. H. (2001). New perspectives on construction supply chain integration. Supply Chain Management: An International Journal, 6(4), 163–173.
21. Dawes, J. (2000). Market orientation and company profitability: further evidence incorporating longitudinal data. Australian Journal of Management, 25(2), 173–199.
22. De Luca, L. M., Verona, G., & Vicari, S. (2010). Market orientation and R&D effectiveness in High-Technology firms: An empirical investigation in the biotechnology industry. Journal of Product Innovation Management, 27(3), 299–320.
23. DiFonzo, N., & Bordia, P. (1997). Rumor and prediction: Making sense (but losing dollars) in the stock market. Organizational Behavior and Human Decision Processes, 71(3), 329–353.
24. Fawcett, S. E., Osterhaus, P., Magnan, G. M., Brau, J. C., & McCarter, M. W. (2007). Information sharing and supply chain performance: The role of connectivity and willingness. Supply Chain Management, 12(5), 358–368. https://doi.org/10.1108/13598540710776935
25. Foris, T., Tecău, A. S., Dragomir, C.-C., & Foris, D. (2022). The Start-Up Manager in Times of Crisis: Challenges and Solutions for Increasing the Resilience of Companies and Sustainable Reconstruction. Sustainability, 14(15), 9140.
26. Frąckiewicz, E. (2018). Small and medium enterprises in the food and beverage sector–The potential of the European market. In The Sustainable Marketing Concept in European SMEs: Insights from the Food & Drink Industry (pp. 141–163). Emerald Publishing Limited.
27. Freiling, J., & Baron, T. (2017). A resource-based view of entrepreneurial ecosystems. Technologie, Strategie Und Organisation, 65–84.
28. Fugate, B. S., Mentzer, J. T., & Stank, T. P. (2010). Logistics performance: efficiency, effectiveness, and differentiation. Journal of Business Logistics, 31(1), 43–62.
29. Gebert, H., Geib, M., Kolbe, L., & Brenner, W. (2003). Knowledge-enabled customer relationship management: integrating customer relationship management and knowledge management concepts [1]. Journal of Knowledge Management, 7(5), 107–123.
30. Golubeva, O. (2021). Firms' performance during the COVID-19 outbreak: International evidence from 13 countries. Corporate Governance: The International Journal of Business in Society.
31. Gómez-Cedeño, M., Castán-Farrero, J. M., Guitart-Tarrés, L., & Matute-Vallejo, J. (2015). Impact of human resources on supply chain management and performance. Industrial Management and Data Systems, 115(1), 129–157. https://doi.org/10.1108/IMDS-09-2014-0246
32. Götz, O., Liehr-Gobbers, K., & Krafft, M. (2009). Evaluation of structural equation models using the partial least squares (PLS) approach. In Handbook of partial least squares: Concepts, methods and applications (pp. 691–711). Springer.
33. Green, K. W., McGaughey, R., & Casey, K. M. (2006a). Does supply chain management strategy mediate the association between market orientation and organizational performance? Supply Chain Management, 11(5), 407–414. https://doi.org/10.1108/13598540610682426
34. Green, K. W., McGaughey, R., & Casey, K. M. (2006b). Does supply chain management strategy mediate the association between market orientation and organizational performance? Supply Chain Management: An International Journal, 11(5), 407–414.

35. Green, K. W., Whitten, D., & Inman, R. A. (2008). The impact of logistics performance on organizational performance in a supply chain context. Supply Chain Management, 13(4), 317–327. https://doi.org/10.1108/13598540810882206
36. Gruber-Muecke, T., & Hofer, K. M. (2015). Market orientation, entrepreneurial orientation and performance in emerging markets. International Journal of Emerging Markets, 10(3), 560–571.
37. Gunasekaran, A., & Ngai, E. W. T. (2004). Information systems in supply chain integration and management. European Journal of Operational Research, 159(2), 269–295.
38. Habib, M. A., Bao, Y., & Ilmudeen, A. (2020). The impact of green entrepreneurial orientation, market orientation and green supply chain management practices on sustainable firm performance. Cogent Business & Management, 7(1), 1743616.
39. 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.
40. Haque, M. R., Choi, B., Lee, D., & Wright, S. (2022). Insider vs. outsider CEO and firm performance: Evidence from the Covid-19 pandemic. Finance Research Letters, 47, 102609. https://doi.org/https://doi.org/10.1016/j.frl.2021.102609
41. Hooley, G., Cox, T., Fahy, J., Shipley, D., Beracs, J., Fonfara, K., & Snoj, B. (2000). Market orientation in the transition economies of central Europe:: tests of the narver and slater market orientation scales. Journal of Business Research, 50(3), 273–285.
42. Hsu, C.-C., Tan, K.-C., Kannan, V. R., & Keong Leong, G. (2009). Supply chain management practices as a mediator of the relationship between operations capability and firm performance. International Journal of Production Research, 47(3), 835–855.
43. Hu, M. K., & Kee, D. M. H. (2022). Fostering sustainability: reinventing SME strategy in the new normal. Foresight, 24(3/4), 301–318.
44. Huang, A., & Farboudi Jahromi, M. (2021). Resilience building in service firms during and post COVID-19. The Service Industries Journal, 41(1–2), 138–167.
45. Hult, G. T. M., Ketchen, D. J., & Arrfelt, M. (2007). Strategic supply chain management: Improving performance through a culture of competitiveness and knowledge development. Strategic Management Journal, 28(10), 1035–1052.
46. Idar, R., Yusoff, Y., & Mahmood, R. (2012). The Effect of Market Orientation as Mediator to Strategic Planning Practices and Performance Relationship: Evidence from Malaysian SMEs. Procedia Economics and Finance, 4, 68–75. https://doi.org/10.1016/s2212-5671(12)00322-x
47. Intyas, C. A., Putritamara, J. A., & Haryati, N. (2022). Dinamika Agrobisnis Era VUCA: Volatility, Uncertainty, Complexity, Ambiguity. Universitas Brawijaya Press.
48. Ivanov, D. (2020). Viable supply chain model: integrating agility, resilience and sustainability perspectives—lessons from and thinking beyond the COVID-19 pandemic. Annals of Operations Research, 1–21.
49. Jaworski, B., & Kohli, A. K. (2014). Co-creating the voice of the customer. In The service-dominant logic of marketing (pp. 127–135). Routledge.
50. Johnson, M., & Templar, S. (2011). The relationships between supply chain and firm performance: The development and testing of a unified proxy. International Journal of Physical Distribution & Logistics Management.
51. Jones, T. C., & Riley, D. W. (1985). Using inventory for competitive advantage through supply chain management. International Journal of Physical Distribution & Materials Management.
52. Julian, C. C., Mohamad, O., Ahmed, Z. U., & Sefnedi, S. (2014). The market orientation–performance relationship: The empirical link in export ventures. Thunderbird International Business Review, 56(1), 97–110.
53. Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31–36.
54. Kajalo, S., & Lindblom, A. (2015). Market orientation, entrepreneurial orientation and business performance among small retailers. International Journal of Retail & Distribution Management, 43(7), 580–596. https://doi.org/10.1108/IJRDM-04-2014-0044

55. Kaplan, R. S., & Norton, D. P. (2004). The strategy map: guide to aligning intangible assets. Strategy & Leadership, 32(5), 10–17.
56. Kazemian, S., Djajadikerta, H. G., Trireksani, T., Mohd-Sanusi, Z., & Alam, Md. M. (2022). Corporate governance and business performance of hotels in Western Australia: analysis of market orientation as a mediator. Business Process Management Journal, 28(3), 585–605. https://doi.org/10.1108/BPMJ-05-2021-0335
57. Kim, S. W. (2006). Effects of supply chain management practices, integration and competition capability on performance. Supply Chain Management, 11(3), 241–248. https://doi.org/10.1108/13598540610662149
58. Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. Journal of Marketing, 69(2), 24–41.
59. Kitchot, S., Siengthai, S., & Sukhotu, V. (2021). The mediating effects of HRM practices on the relationship between SCM and SMEs firm performance in Thailand. Supply Chain Management: An International Journal, 26(1), 87–101.
60. Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications.
61. Koh, S. C. L., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2007). The impact of supply chain management practices on performance of SMEs. Industrial Management and Data Systems, 107(1), 103–124. https://doi.org/10.1108/02635570710719089
62. Kozicki, B., & Gornikiewicz, M. (2020). Unemployment rate in Poland and USA during COVID-19 pandemic: a case study.
63. Kula, V. (2005). Foreign exchange exposure perception and management of Turkish SMEs. Journal of Small Business & Entrepreneurship, 18(4), 437–452.
64. Kumar, K., Subramanian, R., & Yauger, C. (1998). Examining the market orientation-performance relationship: a context-specific study. Journal of Management, 24(2), 201–233.
65. Lam, S., Lee, V., Ooi, K., & Phusavat, K. (2012). A structural equation model of TQM, market orientation and service quality: Evidence from a developing nation. Managing Service Quality: An International Journal.
66. Lambert, D. M., & Cooper, M. C. (2000). Issues in supply chain management. Industrial Marketing Management, 29(1), 65–83.
67. Lau, A. K. W. (2007). Educational supply chain management: a case study. On the Horizon, 15(1), 15–27.
68. Leguina, A. (2015). A primer on partial least squares structural equation modeling (PLS-SEM). Taylor & Francis.
69. Lenny Koh, S. C., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2007). The impact of supply chain management practices on performance of SMEs. Industrial Management & Data Systems, 107(1), 103–124.
70. Li, H., & Atuahene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. Academy of Management Journal, 44(6), 1123–1134.
71. Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Rao, S. S. (2006a). The impact of supply chain management practices on competitive advantage and organizational performance. Omega, 34(2), 107–124.
72. Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Rao, S. S. (2006b). The impact of supply chain management practices on competitive advantage and organizational performance. Omega, 34(2), 107–124.
73. Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Rao, S. S. (2006c). The impact of supply chain management practices on competitive advantage and organizational performance. Omega, 34(2), 107–124.
74. Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Subba Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. Omega, 34(2), 107–124. https://doi.org/10.1016/j.omega.2004.08.002
75. Liew, C. A. (2008). Strategic integration of knowledge management and customer relationship management. Journal of Knowledge Management, 12(4), 131–146.
76. Lim, M. K., Tseng, M.-L., Tan, K. H., & Bui, T. D. (2017). Knowledge management in sustainable supply chain management: Improving performance through an interpretive structural modelling approach. Journal of Cleaner Production, 162, 806–816.

77. Liu, H., Ke, W., Wei, K. K., & Hua, Z. (2013). Effects of supply chain integration and market orientation on firm performance: Evidence from China. International Journal of Operations and Production Management, 33(3), 322–346. https://doi.org/10.1108/01443571311300809
78. Lugo-Morin, D. R. (2020). Global food security in a pandemic: the case of the new Coronavirus (COVID-19). World, 1(2), 13.
79. Martin, J. H., & Grbac, B. (n.d.-a). Using supply chain management to leverage a firm's market orientation.
80. Martin, J. H., & Grbac, B. (n.d.-b). Using supply chain management to leverage a firm's market orientation.
81. Matanda, M. J., & Ndubisi, N. O. (2009). Market orientation, supplier perceived value and business performance of SMEs in a Sub-Saharan African nation. Journal of Enterprise Information Management.
82. McGinnis, M. A., & Kohn, J. W. (2002). Logistics strategy—revisited. Journal of Business Logistics, 23(2), 1–17.
83. Min, S., Mentzer, J. T., & Ladd, R. T. (2007). A market orientation in supply chain management. Journal of the Academy of Marketing Science, 35(4), 507–522.
84. Min, S., Roath, A. S., Daugherty, P. J., Genchev, S. E., Chen, H., Arndt, A. D., & Glenn Richey, R. (2005). Supply chain collaboration: what's happening? The International Journal of Logistics Management, 16(2), 237–256.
85. Nayati Utami, H., Siti Astuti, E., Maulani Ramadhan, H., Trialih, R., & Alief Aprilian, Y. (2019). The interests of small- and medium-sized enterprises (SMEs) actor in using mobile commerce in effort to expand business network. Journal of Science and Technology Policy Management, 10(3), 493–508. https://doi.org/10.1108/JSTPM-08-2018-0081
86. Ngo, L. V., Bucic, T., Sinha, A., & Lu, V. N. (2019). Effective sense-and-respond strategies: Mediating roles of exploratory and exploitative innovation. Journal of Business Research, 94, 154–161.
87. O'cass, A., & Ngo, L. V. (2012). Creating superior customer value for B2B firms through supplier firm capabilities. Industrial Marketing Management, 41(1), 125–135.
88. Ou, C. S., Liu, F. C., Hung, Y. C., & Yen, D. C. (2010). A structural model of supply chain management on firm performance. International Journal of Operations & Production Management, 30(5), 526–545. https://doi.org/10.1108/01443571011039614
89. Panayides, P. M., & Song, D. (2008). Evaluating the integration of seaport container terminals in supply chains. International Journal of Physical Distribution & Logistics Management.
90. Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. Strategic Management Journal, 14(3), 179–191.
91. Power, D. (2005). Supply chain management integration and implementation: a literature review. Supply Chain Management: An International Journal, 10(4), 252–263.
92. Priem, R. L., Wenzel, M., & Koch, J. (2018). Demand-side strategy and business models: Putting value creation for consumers center stage. Long Range Planning, 51(1), 22–31.
93. Putritamara, J. A., Hartono, B., Toiba, H., Utami, H. N., Rahman, M. S., & Masyithoh, D. (2023). Do Dynamic Capabilities and Digital Transformation Improve Business Resilience during the COVID-19 Pandemic? Insights from Beekeeping MSMEs in Indonesia. Sustainability, 15(3), 1760.
94. Qi, Y., Huo, B., Wang, Z., & Yeung, H. Y. J. (2017). The impact of operations and supply chain strategies on integration and performance. International Journal of Production Economics, 185, 162–174.
95. Qrunfleh, S., & Tarafdar, M. (2014a). Supply chain information systems strategy: Impacts on supply chain performance and firm performance. International Journal of Production Economics, 147, 340–350.
96. Qrunfleh, S., & Tarafdar, M. (2014b). Supply chain information systems strategy: Impacts on supply chain performance and firm performance. International Journal of Production Economics, 147(PART B), 340–350. https://doi.org/10.1016/j.ijpe.2012.09.018
97. Qrunfleh, S., & Tarafdar, M. (2014c). Supply chain information systems strategy: Impacts on supply chain performance and firm performance. International Journal of Production Economics, 147(PART B), 340–350. https://doi.org/10.1016/j.ijpe.2012.09.018

98. Riou, J., Guyon, H., & Falissard, B. (2016). An introduction to the partial least squares approach to structural equation modelling: a method for exploratory psychiatric research. International Journal of Methods in Psychiatric Research, 25(3), 220–231.
99. Romero, D., & Molina, A. (2011). Collaborative networked organisations and customer communities: value co-creation and co-innovation in the networking era. Production Planning & Control, 22(5–6), 447–472.
100. Rowley, J. E. (2002). Reflections on customer knowledge management in e-business. Qualitative Market Research: An International Journal, 5(4), 268–280.
101. Sarkis, J. (2020). Supply chain sustainability: learning from the COVID-19 pandemic. International Journal of Operations & Production Management.
102. Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2022). Developing a framework for enhancing survivability of sustainable supply chains during and post-COVID-19 pandemic. International Journal of Logistics Research and Applications, 25(4–5), 433–453.
103. Shu, C., De Clercq, D., Zhou, Y., & Liu, C. (2019). Government institutional support, entrepreneurial orientation, strategic renewal, and firm performance in transitional China. International Journal of Entrepreneurial Behavior & Research.
104. Sorge, A., & Van Witteloostuijn, A. (2004). The (non) sense of organizational change: An essai about universal management hypes, sick consultancy metaphors, and healthy organization theories. Organization Studies, 25(7), 1205–1231.
105. Sovacool, B. K., Bazilian, M., Griffiths, S., Kim, J., Foley, A., & Rooney, D. (2021). Decarbonizing the food and beverages industry: A critical and systematic review of developments, sociotechnical systems and policy options. Renewable and Sustainable Energy Reviews, 143, 110856.
106. Sterman, J. D. (2000). Business Dynamics : Systems Thinking. In Management (Vol. 6, Issue 1). http://www.lavoisier.fr/notice/frJWOAR6SA23WLOO.html
107. Stewart, G. (1995). Supply chain performance benchmarking study reveals keys to supplychain excellence. Logistics Information Management, 8(2), 38–44.
108. Subramanian, N., & Gunasekaran, A. (2015). Cleaner supply-chain management practices for twenty-first-century organizational competitiveness: Practice-performance framework and research propositions. International Journal of Production Economics, 164, 216–233.
109. Sukati, I., Hamid, A. B., Baharun, R., & Yusoff, R. M. (2012). The Study of Supply Chain Management Strategy and Practices on Supply Chain Performance. Procedia - Social and Behavioral Sciences, 40, 225–233. https://doi.org/10.1016/j.sbspro.2012.03.185
110. Swee Lin Tan, C., Bi, R., & Smyrnios, K. X. (2014). The role of market orientation in building supply chain capabilities for fast-growth family SMEs. Small Enterprise Research, 21(1), 14–32.
111. Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. Research in Science Education, 48(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2
112. Tambunan, T. (2009). Export-oriented small and medium industry clusters in Indonesia. Journal of Enterprising Communities, 3(1), 25–58. https://doi.org/10.1108/17506200910943661
113. Tan, K. C. (2002). Supply chain management: practices, concerns, and performance issues. Journal of Supply Chain Management, 38(4), 42–53.
114. Terziovski, M. (2010). Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view. Strategic Management Journal, 31(8), 892–902.
115. Tjahjadi, B., Agastya, I. B. G. A., Soewarno, N., & Adyantari, A. (2022). Green human capital readiness and business performance: do green market orientation and green supply chain management matter? Benchmarking. https://doi.org/10.1108/BIJ-10-2021-0622
116. Torjusen, H., Lieblein, G., Wandel, M., & Francis, C. A. (2001). Food system orientation and quality perception among consumers and producers of organic food in Hedmark County, Norway. Food Quality and Preference, 12(3), 207–216.

117. Tracey, M., Lim, J., & Vonderembse, M. A. (2005). The impact of supply-chain management capabilities on business performance. Supply Chain Management: An International Journal, 10(3), 179–191. https://doi.org/10.1108/13598540510606232
118. Tripathy, S., Aich, S., Chakraborty, A., & Lee, G. M. (2016). Information technology is an enabling factor affecting supply chain performance in Indian SMEs: a structural equation modelling approach. Journal of Modelling in Management, 11(1), 269–287.
119. Tseng, P. H., & Liao, C. H. (2015). Supply chain integration, information technology, market orientation and firm performance in container shipping firms. International Journal of Logistics Management, 26(1), 82–106. https://doi.org/10.1108/IJLM-09-2012-0088
120. Tseng, S.-M. (2016). Knowledge management capability, customer relationship management, and service quality. Journal of Enterprise Information Management, 29(2), 202–221.
121. Vanichchinchai, A., & Igel, B. (2011). The impact of total quality management on supply chain management and firm's supply performance. International Journal of Production Research, 49(11), 3405–3424.
122. Walker, H., Di Sisto, L., & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. Journal of Purchasing and Supply Management, 14(1), 69–85.
123. Wei, Y. S., & Wang, Q. (2011). Making sense of a market information system for superior performance: The roles of organizational responsiveness and innovation strategy. Industrial Marketing Management, 40(2), 267–277.
124. Won Lee, C., Kwon, I. G., & Severance, D. (2007). Relationship between supply chain performance and degree of linkage among supplier, internal integration, and customer. Supply Chain Management: An International Journal, 12(6), 444–452. https://doi.org/10.1108/13598540710826371
125. Wong, C. Y., Arlbjørn, J. S., & Johansen, J. (2005). Supply chain management practices in toy supply chains. Supply Chain Management: An International Journal.
126. Wook Kim, S. (2006). Effects of supply chain management practices, integration and competition capability on performance. Supply Chain Management: An International Journal, 11(3), 241–248.
127. Workie, E., Mackolil, J., Nyika, J., & Ramadas, S. (2020a). Deciphering the impact of COVID-19 pandemic on food security, agriculture, and livelihoods: A review of the evidence from developing countries. Current Research in Environmental Sustainability, 2, 100014.
128. Workie, E., Mackolil, J., Nyika, J., & Ramadas, S. (2020b). Deciphering the impact of COVID-19 pandemic on food security, agriculture, and livelihoods: A review of the evidence from developing countries. Current Research in Environmental Sustainability, 2, 100014.
129. Wu, L., Chuang, C.-H., & Hsu, C.-H. (2014). Information sharing and collaborative behaviors in enabling supply chain performance: A social exchange perspective. International Journal of Production Economics, 148, 122–132.
130. Xue, X., Dou, J., & Shang, Y. (2021). Blockchain-driven supply chain decentralized operations–information sharing perspective. Business Process Management Journal, 27(1), 184–203.
131. Younis, H., Sundarakani, B., & Vel, P. (2016). The impact of implementing green supply chain management practices on corporate performance. Competitiveness Review, 26(3), 216–245.
132. Zhang, T., Gerlowski, D., & Acs, Z. (2022). Working from home: small business performance and the COVID-19 pandemic. Small Business Economics, 58(2), 611–636.
133. Zhu, Q., & Sarkis, J. (2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. Journal of Operations Management, 22(3), 265–289.
134. Zhu, Q., & Sarkis, J. (2007). The moderating effects of institutional pressures on emergent green supply chain practices and performance. International Journal of Production Research, 45(18–19), 4333–4355.
135. Zwass, V. (2010). Co-creation: Toward a taxonomy and an integrated research perspective. International Journal of Electronic Commerce, 15(1), 11–48.