The Role Of Ambidextrous Leadership Moderates The Effect Of Supply Chain Network Risk Drivers On Financial Performance

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ABSTRACT

This study aims to examine the influence of supply chain network risk drivers on supply chain exploration and exploitation practices and their implications for financial performance. This research uses a quantitative approach with descriptive and verification methods. The observational units consisted of 92 executives from manufacturing companies listed on the Indonesia Stock Exchange. The findings reveal that supply chain network risk negatively impacts exploration and exploitation practices, with implications for company financial performance. Exploitation has a positive and significant impact on financial performance, whereas exploration does not exhibit a significant effect. Although the direct effect of network risk on financial performance is insignificant, ambidextrous leadership has been shown to positively and significantly moderate this relationship. The managerial implication of this study is that strengthening exploitation practices is key to maintaining financial performance when facing supply chain risks. Ambidextrous leadership plays a crucial role in transforming the impact of risks into opportunities by emphasizing the need for adaptive leadership in uncertain situations. This research is original in its study of the moderating role of ambidextrous leadership in the risk-performance relationship, a study that is still limited in operations management and supply chain studies.

***Keywords**: Supply Chain Network Risk Drivers, Supply Chain Exploration & Exploitation practices, Ambidextrous Leadership and Firm Financial Performance.*

ABSTRAK

Studi ini bertujuan untuk menguji pengaruh supply chain network risk drivers terhadap praktik eksplorasi dan eksploitasi rantai pasok serta implikasinya terhadap kinerja keuangan. Penelitian ini menggunakan pendekatan kuantittaif metode deskriptif dan verifikatif. Unit observasi adalah 92 para eksekutif perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. Temuan penelitian ini mengungkapkan bahwa risiko jaringan rantai pasok berpengaruh negatif terhadap praktik eksplorasi dan eksploitasi serta berimplikasi pada kinerja keuangan perusahaan. Eksploitasi berpengaruh positif dan signifikan terhadap kinerja keuangan, sedangkan eksplorasi tidak menunjukkan pengaruh yang signifikan. Meskipun pengaruh langsung risiko jaringan terhadap kinerja keuangan tidak signifikan, kepemimpinan ambidextrous terbukti memoderasi hubungan tersebut secara positif dan signifikan. Implikasi manajerial pada studi ini bahwa penguatan praktik eksploitasi menjadi kunci dalam menjaga kinerja keuangan saat menghadapi risiko rantai pasok. Kepemimpinan ambidextrous berperan penting dalam mengubah dampak risiko menjadi peluang

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dengan menekankan perlunya kepemimpinan adaptif dalam situasi penuh ketidakpastian. Penelitian ini memiliki orisinalitas pada peran moderasi ambidextrous leadership dalam hubungan risiko dan kinerja, yang masih terbatas dalam kajian manajemen operasi dan rantai pasok.

***Kata kunci**: Supply Chain Network Risk Drivers, Supply Chain Exploration & Exploitation practices, Ambidextrous Leadership, dan Firm Financial Performance.*

INTRODUCTION

Increasing global uncertainty makes risk management within supply chain networks crucial for maintaining corporate continuity and financial performance (Tang, 2006; Wieland & Marcus Wallenburg, 2012). Furthermore, (Christopher & Peck, 2004; Jüttner et al., 2003), revealed that various risk factors, such as supply disruptions, demand fluctuations, dependence on strategic partners, and geopolitical dynamics, can impact a company's operational stability and profitability. Therefore, understanding risk within supply chain networks and its implications for managerial practices and financial performance is crucial (Tang, 2006). Furthermore, in a global context characterized by geopolitical uncertainty and supply chain disruptions, ambidexterity is crucial for creating organizational resilience while maintaining competitiveness and financial performance (Wilden et al., 2018). This aligns with the opinion (Junni et al., 2013; Raisch et al., 2009), which states that ambidexterity capabilities encourage companies to adapt to the rapid pace of environmental change and maintain operational efficiency. Therefore, (Benner & Tushman, 2003; O'Reilly & Tushman, 2013) emphasize that companies must have the ability to balance exploration and exploitation to be more resilient to the risk of disruption and respond strategically to external uncertainty.

In the context of supply chain risk, the implementation of exploration and exploitation strategies within supply chain networks has been identified as an ambidextrous approach capable of enhancing an organization's adaptive capabilities and resilience in the face of uncertainty. An exploration strategy focuses on seeking new knowledge, innovation, and developing new relationships within the supply chain network, while exploitation emphasizes the efficient utilization of existing capabilities to maintain operational stability (H. L. Chen, 2018; March, 1991).

The challenge of balancing exploitation and exploration in manufacturing companies, resulting from resource constraints, has been discussed in several literatures on organizational ambidexterity, particularly in relation to pressures for operational efficiency and limited resource allocation, which hinder innovation capacity (Gupta et al., 2006; Lavie et al., 2010). To overcome these limitations, manufacturing companies integrate exploration and exploitation into their supply chain practices. Exploration is realized through the search for new partners, supply diversification, and technology adoption, while exploitation focuses on process optimization and operational efficiency (Li et al., 2006). Furthermore, companies develop ambidextrous leadership capabilities to manage the tension between exploration and exploitation, adjust resource allocation, and foster an adaptive culture that supports both innovation and efficiency (Rosing et al., 2011).

The ambidexterity approach in the supply chain domain is becoming an increasingly relevant strategic solution. Supply chain ambidexterity not only enables companies to maintain operational efficiency through exploitation but also creates competitive advantage through innovative supply network exploration (Kristal et al., 2010a). This approach has not only been proven to increase supply chain resilience in crises such as the COVID-19 pandemic, but also forms the foundation for long-term sustainability and financial performance (Chowdhury et al., 2019; Herold et al., 2025). A study (Annamalah et al., 2023) emphasizes the importance of further developing the concept of supply chain ambidexterity, particularly exploration and exploitation within the context of supply chain networks.

A study (Pham et al., 2023) states that the influence of supply chain network risk on financial performance is an area of research that requires a deeper and more conclusive understanding. This is further emphasized by (Sachin & Rajesh, 2022), who note that there is no clear consensus regarding the direction and strength of this influence because the results are highly dependent on internal organizational factors, such as risk mitigation strategies and supply chain capabilities. The study (Alikhani et al., 2019) focuses more on mediators and moderators of this relationship, so general conclusions cannot be drawn.

This study offers a novel contribution by empirically validating the moderating role of ambidextrous leadership in the relationship between supply chain network risk drivers and firm financial performance — a linkage that remains largely unexplored in the existing operations and supply chain management literature. While previous studies have primarily focused on risk mitigation strategies or dynamic capabilities as mediators, this research uniquely integrates the ambidexterity perspective into the supply chain risk-performance nexus. By combining the concepts of exploration–exploitation balance and adaptive leadership within the dynamic capabilities framework, this study provides a new understanding of how ambidextrous leadership transforms risk exposure into strategic resilience and sustainable financial outcomes, particularly in the context of emerging economies such as Indonesia. This integration advances both theoretical development and practical insights into managing uncertainty and achieving financial stability in high-risk supply chain environments.h

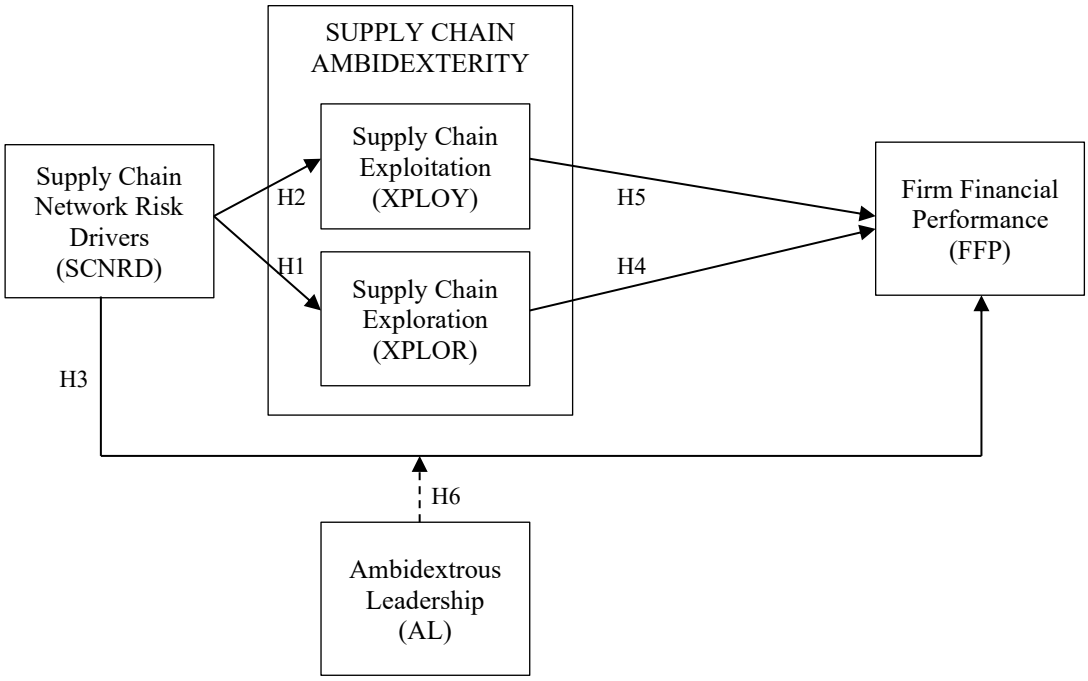
LITERATURE REVIEW

Supply chain network risk drivers, developed by (Chopra & Sodhi, 2014), explain that disruptions in an organization's supply chain network tend to have a ripple effect or domino effect throughout the organization. This view is supported by (L. M. Chen et al., 2015; Lockamy, 2014; MacKenzie et al., 2013), who argue that disruptions pose a significant threat to organizations within the supply chain network, necessitating a 4

strategy for managing these risks. This was further developed by (Annamalah et al., 2023) in the form of the concept of ambidexterity in the supply chain, emphasizing the importance of balancing exploitation (utilizing existing resources) and exploration (seeking new opportunities). (Amini & Rahmani, 2023) further emphasizes that exploitation in the supply chain refers to the efficient and optimal utilization of existing resources, capabilities, and opportunities. A study by (Zhao et al., 2023) defines supply chain exploration as the process of proactively seeking new possibilities, innovations, and methods.

The practices of supply chain exploration (Kristal et al., 2010; Lee & Rha, 2016; Lennerts et al., 2020) and supply chain exploitation (Gualandris et al., 2018; Koufteros et al., 2014) provide solutions to risks arising in supply chain networks. This involves understanding the risks and complexities of the supply chain to improve company performance, thereby ensuring operational continuity and customer satisfaction (Kim et al., 2019; MacKenzie et al., 2013).

Theoretically, (Jurksiene & Pundziene, 2016) emphasize that dynamic capability measurement is a strategic process involving exploiting new opportunities and reconfiguring existing knowledge, competencies, and resources (Teece, 2007). Exploitation refers to the use of existing resources, knowledge, and competencies. It is also explained that exploration encompasses steps such as recognizing opportunities, managing uncertainty, optimizing organizational processes, evaluating risks, and acquiring resources, including knowledge absorption and learning. Meanwhile, exploitation is simpler and typically lower-risk, focusing on utilizing existing capacity and resources, and making minor improvements to existing processes. A study (Annamalah et al., 2023) focused on ambidextrous supply chains, both exploration and exploitation, and their relationship to both non-financial and financial company performance, which has been validated and confirmed (Singh & Hong, 2020). Based on the conceptual explanation above, the research model can be formulated in Figure 1.



Firm Financial Performance, Network Risk Drives, Supply Chain Exploration, and Exploitation

Supply chain network risks require collaborative strategies by building mutually supportive business relationships, such as alliances, partnerships, integration, joint ventures, supplier-manufacturer/buyer relationships, and networks (de Leeuw & Fransoo, 2009; Scholten & Schilder, 2015; Soosay & Hyland, 2015; Zhang & Cao, 2018). This is emphasized by (Huang et al., 2020) With greater emphasis on the supply chain network, which is the most complex and interconnected supply chain. Disruptions to the supply chain (such as supplier failures, poor quality practices, and inefficient delivery mechanisms) can result in increased uncertainty in managerial decision-making (Gold & Schleper, 2017). In the context of low supplier quality (Choi & Krause, 2006) explains that it can exacerbate risks in the supply network. This contrasts with the opinion of (Liao et al., 2010) who place greater emphasis on the number of suppliers. Reducing the number of suppliers can increase risk if the remaining suppliers are unable to meet demand or adapt to environmental changes.

A study (Iftikhar et al., 2024) explains that when companies face complex supply chain network risks, they need to exploit existing resources to identify and mitigate potential disruptions. Meanwhile, Annamalah et al. (2023) argue that exploration is an approach used to manage complex risks in supply chain networks. (MacKenzie et al., 2013) reveal that understanding the relationship between supply chain network risks and supply chain exploitation practices is necessary. If mitigation strategies are not implemented, according to Yoon et al. (2018), risks in the supply chain can disrupt supply chain operations, causing delivery delays, poor quality, and even supply disruptions, ultimately resulting in greater losses. A study (Craighead et al., 2007) confirmed that supplier failure is a supply chain network risk driver that tends to disrupt the normal flow of goods and services in the supply chain, causing a decrease in service quality, incurring additional costs, and delaying delivery times (Pfohl et al., 2010), thus negatively impacting a company's financial performance (Zsidisin et al., 2016). A study (Singh & Hong, 2020) stated clearly that supply chain network risk negatively affects exploitation and exploration practices in the supply chain, as well as financial performance. Based on the explanation above, the hypothesis in this study is as follows:

H1: Supply Chain Network Risk Drivers negatively impact Supply Chain Exploration Practices.

H2: Supply Chain Network Risk Drivers negatively impact Supply Chain Exploitation Practices.

H3: Supply Chain Network Risk Drivers negatively impact Firm Financial Performance.

Firm Financial Performance, Network Risk Drives, and Ambidextrous Leadership

(Craighead et al., 2007) stated that supplier failure is a supply chain network risk driver that tends to disrupt the normal flow of goods and services in the supply chain. This can increase quality defects, incur additional costs, and delay delivery times (Pfohl et al., 2010). This ultimately negatively impacts a company's financial performance (Zsidisin et al., 2016). A study (Sturm et al., 2022) also explained that supply chain network risk negatively impacts a company's financial performance if not managed properly. Effective supply chain risk management can help companies be more prepared and responsive to unexpected disruptions. By integrating suppliers and adopting proactive risk management practices, companies can improve their resilience and financial performance in uncertain market conditions. This is also clearly stated by (Singh & Hong, 2020), who stated that supply chain network risk drivers negatively impact a company's financial performance.

A study (Ojha et al., 2018) shows that transformational leadership significantly encourages organizational learning and subsequently enhances ambidexterity in the supply chain. Ambidextrous leadership, in the face of external risks, acts as a moderator, strengthening the positive influence of internal mechanisms on performance. (Lee & Rha, 2016) classifies the ambidextrous supply chain as a dynamic capability that helps companies develop operational resilience and mitigate the negative impact of supply chain disruptions. In this context, ambidextrous leadership is a key trigger for activating this capability, strengthening organizational resilience, and ultimately improving financial performance even under high-risk conditions. Theoretically, an ambidextrous leadership style allows leaders to flexibly shift between exploration and exploitation orientations, balancing innovation and efficiency within the organization (Rosing et al., 2011). This capability is particularly relevant in uncertain environments, as it can strengthen internal capabilities in responding to risk and maintaining a company's financial performance (FFP). Therefore, the hypotheses in this study are as follows:

H4: Supply Chain Exploration has a positive effect on Firm Financial Performance

H5: Supply Chain Exploitation has a positive effect on Firm Financial Performance

H6: The Role of Ambidextrous Leadership Moderates the Effect of Supply Chain Network Risk Drivers on Firm Financial Performance.

METHODS

This study employed a quantitative approach with a survey method. The sampling technique used was purposive sampling (Sekaran & Bougie, 2016), with 92 executives from manufacturing companies listed on the Indonesia Stock Exchange (IDX) as respondents. Primary data was collected through an online questionnaire using Google Forms. Measurements of the constructs of network risk drivers, supply chain exploration and exploitation, and firm financial performance were based on (Iftikhar et al., 2024; Kristal et al., 2010b; Partanen et al., 2020; Singh & Hong, 2020). Meanwhile, ambidextrous leadership was measured using (Oluwafemi et al., 2019; Rosing et al., 2011). All items were measured using a 5-point Likert scale (Krosnick & Presser, 2010).

Data analysis was conducted using PLS-SEM using SmartPLS 4 in two stages: outer model testing (validity and reliability) and inner model testing (hypotheses H1–H6). The outer model results showed that almost all loading values were >0.708 and significant at $p < 0.01$ (Hair et al., 2020). Three indicators, namely the ability to think and act independently, employee work routines, and uniform task achievement, each with loadings <0.708 (0.683; 0.694; 0.600), were still accepted because they were significant and met the minimum threshold (Sarstedt et al., 2021). All constructs had ρA values between 0.7 and 0.95, indicating high reliability (Manley et al., 2021). An AVE value >0.5 confirmed convergent validity. Discriminant validity was also confirmed by an HTMT value <0.90 (Hair et al., 2022). Thus, all constructs were declared reliable and valid for further analysis.

Primary data were collected through an online questionnaire distributed via Google Forms between **July and October 2024**. The respondents consisted of 92 executives from manufacturing firms listed on the Indonesia Stock Exchange (IDX). The sampling technique used was purposive sampling, targeting managers and general managers who directly oversee supply chain and operational functions. Of the 150 questionnaires distributed, 92 were returned and deemed valid, resulting in a response rate of **61.3%**.

To ensure data accuracy and minimize bias, respondents were assured of anonymity, and the questionnaire items were carefully randomized to reduce the possibility of common method variance. Potential bias due to the single-source, self-reported nature of the data was examined using several approaches. First, **Harman's Single Factor Test** indicated that no single factor accounted for more than **42.6%** of the total variance, which is below the 50% threshold (Podsakoff et al., 2003 . Second, the **full collinearity variance inflation factor (VIF)** was calculated using SmartPLS 4; all VIF values were below **3.3**, confirming that **common method bias was not a concern** (Kock, 2015). These results collectively indicate that the data are free from substantial CMB problems, ensuring the validity of the structural model results.

Beyond testing significance, the effect sizes (f^2) and predictive relevance (Q^2) were evaluated to assess the strength and predictive capability of the model.

- The **effect size (f^2)** for the relationships between SCNRD → XPLOY (0.206) and SCNRD → XPLOR (0.115) indicated **medium and small-to-moderate effects**, respectively (Cohen, 1988).
- The **f^2 values** for XPLOY → FFP (0.062) and AL × SCNRD → FFP (0.084) showed **small yet meaningful impacts**, suggesting practical significance even with moderate coefficients.
- The **Stone–Geisser's Q^2 value**, obtained via blindfolding procedure (omission distance = 7), was **0.412** for firm financial performance, which exceeds 0, indicating **strong predictive relevance** of the model (Hair et al., 2020).

These metrics confirm that the proposed model possesses both explanatory and predictive power, supporting the robustness of the PLS-SEM results.

RESULTS

This study analyzes data from 92 executive respondents of manufacturing companies listed on the Indonesia Stock Exchange (IDX) to examine the influence of supply chain network risk drivers (SCNRD) on supply chain exploration (XPLOR) and supply chain exploitation (XPLOY) practices, as well as their impact on firm financial performance (FFP). The moderating role of ambidextrous leadership (AL) on the relationship between SCNRD and FFP was also tested using SmartPLS 4 with significance criteria of $t > 1.96$ and $p < 0.05$. The results show that SCNRD significantly influences exploration and exploitation, which then affects financial performance, while AL strengthens the influence of SCNRD on FFP. These findings emphasize the importance of managing supply chain risks through exploration and exploitation strategies supported by ambidextrous leadership to improve operational resilience and sustainable financial performance in manufacturing companies listed on the IDX.

Table 1. Demographic Respondents

Characteristics	Category	Frequency	Percentage
Gender	Male	77	83,70%
	Female	15	16,30%
Age	25 - 35 Tahun	3	3,26%
	36 - 45 Tahun	10	10,87%
	46 - 55 Tahun	76	82,61%
	> 55 Tahun	3	3,26%
Education	Diploma	2	2,17%

	Bachelor	77	83,70%
	Master	12	13,04%
	Doctoral	1	1,09%
Job Title	Manager	87	94,57%
	General Manager	5	5,43%
	Director	0	0,00%
Industrial Sector	Basic Industry and Chemical Sector	39	42,39%
	Miscellaneous Industry Sector	22	23,91%
	Consumer Goods Sector	31	33,70%

The demographic characteristics of respondents in Table 1 show a male predominance (83.7%), with the majority aged 46-55 years (82.6%) and holding a bachelor's degree (83.7%). Most respondents held managerial positions (94.6%) and came from the Basic and Chemical Industries (42.4%), Consumer Goods (33.7%), and Diverse Industries (23.9%) sectors. Multi-Group Analysis (MGA) revealed that the influence of supply chain exploration and exploitation on financial performance was most significant in the Basic and Chemical Industries and Consumer Goods sectors, with significant differences in effects between sectors. Meanwhile, the influence of supply chain network risk on financial performance was consistent across sectors without significant differences. The interaction between ambidextrous leadership and supply chain network risk showed the strongest moderating effect in the Basic and Chemical Industries and Consumer Goods sectors. This finding confirms that the influence of variables in the model varies based on the characteristics of the industrial sector.

Table 2. Hypothesis Testing

Hypothesis	**Path**	**B**	**t-statistik**	**p-value**	**Result**
H1	SCNRD -> XPLOR	-0.321	2.825	0.005	Accepted
H2	SCNRD -> XPLOY	-0.425	2.844	0.004	Accepted
H3	SCNRD -> FFP	-0.166	1.702	0.089	Rejected
H4	XPLOR -> FFP	0.167	1.239	0.216	Rejected
H5	XPLOY -> FFP	0.256	2.230	0.026	Accepted
H6	AL x SCNRD -> FFP	0.331	2.197	0.028	Accepted

The results of the hypothesis testing in Table 2 indicate that supply chain network risk has a significant effect on supply chain exploration (H1, $t > 1.96$, $p < 0.05$, $f^2 = 0.115$) and exploitation (H2, $t > 1.96$, $p < 0.05$, $f^2 = 0.206$), with a moderate effect on exploitation. Supply chain exploration and exploitation also have a significant effect on company financial performance (H5 and H6, $t > 1.96$, $p < 0.05$, $f^2 < 0.1$), although the effects are relatively small. The direct effect of supply chain network risk on financial performance (H3) and the effect of exploration on financial performance (H4) are not significant. This model is overall strong and efficient, with variables explaining 71.3% of the variance in financial performance ($R^2 = 0.713$; Adj $R^2 = 0.696$). The model also demonstrated good fit with an SRMR value of $0.074 < 0.08$. This finding confirms that supply chain network risk drives financial performance through supply chain exploration and exploitation mechanisms in manufacturing companies listed on the IDX.

Supply chain network risk drives increased supply chain exploration and exploitation, but the direct effect of risk on financial performance is insignificant. Supply chain exploitation has a positive impact on financial performance, while exploration has no significant direct impact. Ambidextrous leadership plays a role in strengthening the influence of network risk on financial performance, highlighting the importance of leadership in managing risk for better financial outcomes.

The model explains 71.3% of the variance in firm financial performance ($R^2 = 0.713$; Adj $R^2 = 0.696$), with an SRMR value of 0.074 (<0.08) indicating good model fit.

The f^2 effect sizes ranged from **0.062 to 0.206**, while the **Q^2 value of 0.412** confirmed the model's predictive relevance. Furthermore, Harman's single factor test and full collinearity VIF (<3.3) suggested the absence of serious common method bias. These results collectively demonstrate that the structural relationships proposed in this study are both statistically and methodologically robust.

DISCUSSION

The results of the study indicate that Supply Chain Network Risk Drivers (SCNRD) have a significant negative effect on Supply Chain Exploration Practices (XPLOR) (β = -0.321; t = 2.825; p = 0.005) and Supply Chain Exploitation Practices (XPLOY) (β = -0.425; t = 2.844; p = 0.004), so that hypotheses H1 and H2 are accepted. This finding supports the Dynamic Capabilities Theory (Teece et al., 1997), which states that weak sensing, seizing, and transforming capabilities make it difficult for companies to respond to risks through exploration and exploitation. In a high-risk context, companies focus more on short-term resilience than on developing new capabilities. This is also in line with Resilience Theory (Christopher & Peck, 2004), which states that in disruptive conditions, organizations tend to suppress non-essential activities such as innovation and extreme efficiency to maintain operational continuity. Empirically, these results are supported by studies (Alikhani et al., 2019; Gold & Schleper, 2017; Singh & Hong, 2020; Yoon et al., 2018), which state that increased risk in supply chain networks hinders exploration and exploitation, as companies become more cautious and postpone long-term strategic initiatives. This is further reinforced by global contexts such as pandemics, geopolitical conflicts, and market volatility, which encourage companies to adopt a conservative approach.

SCNRD shows a negative relationship with Firm Financial Performance (FFP), but the results are insignificant (β = -0.166; t = 1.702; p = 0.089), thus rejecting hypothesis H3. This indicates that risk in supply chain networks does not yet have a direct and strong impact on financial performance. (Craighead et al., 2007; Pfohl et al., 2010; Zsidisin et al., 2016), which states that the negative impact of risk can be minimized through mitigation strategies, supply reserves, supplier diversification, and strengthening relationships with key partners. Therefore, risk is not always a primary determinant of financial performance, especially if an organization has an effective risk management structure.

The effect of Supply Chain Exploration Practices (XPLOR) on FFP shows a positive but insignificant relationship (β = 0.167; t = 1.239; p = 0.216), thus rejecting hypothesis H4. Although exploration is believed to be important in building competitive advantage through innovation and developing new partners, its direct contribution to financial performance has not been clearly demonstrated. (Rojo et al., 2016) explain that the benefits of exploration tend to be long-term and are more pronounced when supported by digital readiness, technological adaptation, and a stable business context. Conversely, Supply Chain Exploitation Practices (XPLOY) had a significant positive effect on FFP (β = 0.256; t = 2.230; p = 0.026), thus accepting hypothesis H5. These results confirm that operational efficiency, cost optimization, and process standardization in the supply chain are important contributors to company profitability, especially in the short term. This finding supports Resource-Based Theory (Barney, 1991), which posits that internal resource-based efficiency is a difficult-to-imitate competitive advantage. Furthermore, it aligns with the Ambidexterity Theory (Tushman & O'Reilly, 1996), which states that exploitation is essential to ensuring stability and profitability in dynamic market conditions.

Interestingly, the study found that ambidextrous leadership (AL) significantly and positively moderated the effect of SCNRD on FFP (β = 0.331; t = 2.197; p = 0.028), thus accepting hypothesis H6. This means that ambidextrous leadership, which flexibly balances exploration and exploitation, helps organizations face risks more adaptively and maintain stable financial performance despite uncertain conditions. This finding aligns

with (Rosing et al., 2011; Sturm et al., 2022), which states that ambidextrous leaders enhance an organization's ability to navigate the complexities of the business environment. Theoretically, these results reinforce the position of Dynamic Capabilities Theory, where ambidextrous leadership plays a role in effectively directing sensing and transforming capabilities through a combination of flexibility and control. Thus, although supply chain network risks have a negative impact on a company's strategic activities and can minimize financial performance if the company has effective ambidextrous leadership, this can be reversed to improve financial performance.

This study makes several important theoretical contributions to the literature on operations management, dynamic capabilities, and ambidexterity. First, it extends the **Dynamic Capabilities Theory (Teece et al., 1997; Teece, 2007)** by empirically validating that supply chain exploration and exploitation act as strategic mechanisms through which firms sense, seize, and transform opportunities in response to supply chain network risks. The results confirm that exploitation practices—centered on efficiency and operational consistency—directly enhance financial performance, while exploration contributes indirectly by fostering long-term adaptability. Second, this study advances **Ambidexterity Theory (Tushman & O'Reilly, 1996; O'Reilly & Tushman, 2013)** by introducing **ambidextrous leadership** as a moderating capability that strengthens the relationship between supply chain risk and firm performance. The finding that ambidextrous leadership can turn the negative impact of network risk into financial gains reinforces the argument that leadership ambidexterity acts as a microfoundation of dynamic capabilities. Finally, this research contributes to the growing body of work on **supply chain resilience and risk management** by framing ambidexterity not only as an internal organizational competence but also as a network-level strategic capability. This integration provides a more holistic theoretical view of how firms can maintain competitiveness and financial stability amid high uncertainty.

From a managerial perspective, this study offers actionable insights for executives and supply chain leaders in manufacturing firms. First, strengthening **exploitation practices**—such as process optimization, cost control, and supplier standardization—is essential to sustain short-term financial performance during periods of high risk. Second, managers should not neglect **exploration activities**, including supplier diversification, technology adoption, and innovation partnerships, as these practices enhance adaptability and supply chain resilience in the long term. Third, firms should **develop ambidextrous leadership programs** that cultivate leaders capable of switching between efficiency-driven and innovation-driven mindsets. Such leadership flexibility enables organizations to transform risk exposure into strategic opportunity. Finally, investment in **digital technologies** and **data analytics** can support leaders in balancing exploration and exploitation by providing real-time visibility and informed decision-making across supply chain networks. These managerial implications are especially relevant for firms operating in emerging markets like Indonesia, where volatility and resource constraints require adaptive and balanced leadership approaches.

CONCLUSION

This study shows that supply chain network risk (SCNRD) has a significant negative impact on exploration (XPLOR) and exploitation (XPLOY) practices, and a negative but insignificant impact on corporate financial performance (FFP). Exploration has no significant impact on FFP, while exploitation has a significant positive impact, confirming the important role of operational efficiency in supporting short-term profitability. These findings support Dynamic Capabilities Theory and Resilience Theory, which suggest that when faced with risk, companies tend to suppress strategic activities and focus on operational sustainability. However, ambidextrous leadership has been shown to significantly and positively moderate the effect of SCNRD on FFP, indicating that leaders who balance exploration and exploitation can improve organizational adaptability and maintain financial performance under high-risk conditions.

The implications of this research are crucial for manufacturing company managers to develop an effective ambidextrous leadership style that balances supply chain exploration and exploitation practices. This leadership style enables organizations to respond adaptively to network risks, maintain operational continuity, and sustainably improve financial performance. Furthermore, investment in dynamic capabilities and digital technology is key to strengthening the ability to sense, seize, and transform in the face of global market uncertainty. However, this study used cross-sectional data, which limits the analysis of the long-term impact of exploration and exploitation practices on addressing supply chain risks. The low R^2 value in the research model suggests the presence of other unexplored variables that could potentially influence the relationships between the variables. The focus on manufacturing companies listed on the IDX also limits the generalizability of the results to other industry sectors or geographic contexts. Future studies are recommended to use a longitudinal approach to capture the long-term dynamics and consequences of supply chain risk management and the role of ambidextrous leadership. The addition of mediating or moderating variables such as technological capabilities, organizational culture, or the level of supply chain collaboration could deepen understanding. Comparative research across industry sectors and countries is also needed to test the relevance and effectiveness of risk management strategies in various business contexts.

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