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Empowering Women-Led Micro-Enterprises: The Strategic Role of Sharia-Based Risk Literacy

Wanda Putri Ramadhani[1]*, Lianmao Miao[2].
[1]Jenderal Soedirman University, Purwokerto, Indonesia
[2]Peking University, Beijing China
*Email corresponding author: wandarmd@gmail.com
mao.lian@dicp.ac.cn

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Abstract

Sharia-based risk management extends beyond conventional risk management by emphasizing alignment with Islamic principles and ethical values. This approach involves identifying, evaluating, and mitigating risks while ensuring compliance with sharia law. This study aims to examine the impact of integrating these principles into micro-enterprise management, involving at least 40 women entrepreneurs in the city of Semarang. The research adopts a qualitative approach, with data collected through observations and in-depth interviews. The population consists of women-owned juice businesses in Semarang, with sampling conducted using an area sampling technique. The findings reveal at least five key risks faced by these enterprises. The results indicate that sharia-based risk literacy plays a significant role in empowering women-led micro-enterprises. A strong understanding of sharia principles emerges as a crucial factor in enhancing business success and resilience. With adequate risk literacy, women micro-entrepreneurs are better equipped to manage risks effectively, make more informed decisions, and develop their businesses in a sustainable manner while adhering to sharia principles.
Keywords: Juice Business, Risk, Risk Literacy, Sharia-Based Risk Management, Women Micro-Entrepreneurs.

INTRODUCTION

Women-owned microenterprises play a crucial role in driving economic growth and reducing poverty in many developing countries, including Indonesia. However, these enterprises often face multiple challenges, such as limited access to financial resources, limited market opportunities, and inadequate capacity to manage risks effectively. Sharia-based risk literacy can play an important role in empowering women to overcome these challenges and ultimately build sustainable businesses.

In general, microenterprises represent the largest yet most vulnerable segment of businesses worldwide. At the same time, they serve as a critical engine for economic growth, including in Indonesia (Limanseto, 2022). Micro businesses, as part of Micro, Small, and Medium Enterprises (MSMEs), contribute significantly to Indonesia's economy, accounting for approximately 99% of total business units, contributing around 60.5% to Gross Domestic Product (GDP), and absorbing about 96.9% of the national workforce (BPS-Statistics Indonesia, 2022a).

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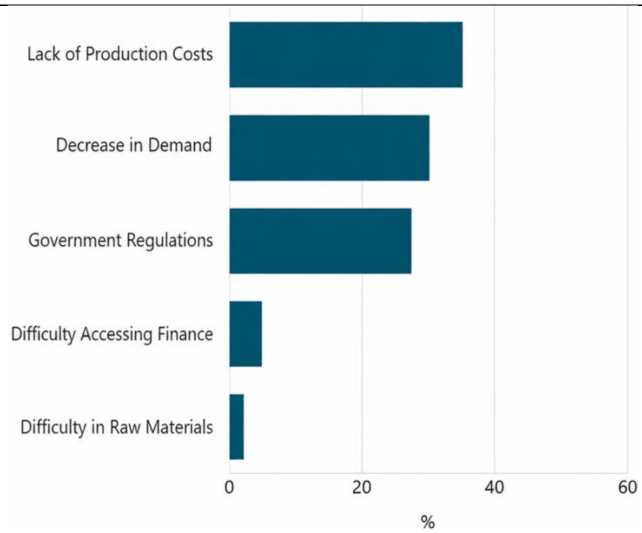

Figure 1. Various Reasons MSMEs Permanently Close Their Businesses
(Source: Katadata, 2025)

There are many alternative approaches that can reduce the vulnerability of such businesses. One relevant perspective is how risk understanding can help minimize the vulnerability of microenterprises. However, risk management needs to be simplified in order to be effectively and efficiently adopted by micro-entrepreneurs who often face various limitations. Previous studies have identified that simplified processes can support risk management practices in micro businesses and improve financial literacy. This is reasonable, as one of the main causes of micro business failure in Indonesia is low financial literacy, followed by weak operational control, as illustrated in Figure 1.

Data show that 53.76% of MSMEs are owned by women, with approximately 97% of their workforce also consisting of women (BPS-Statistics Indonesia, 2022b). This indicates that women play a highly significant role in economic development. However, Indonesian women continue to face structural barriers due to persistent discriminatory gender norms (UN Women, 2023). These challenges are often linked to traditional expectations that place domestic responsibilities—such as household management and childcare—on women, even when they are actively running businesses. Additional barriers include limited access to entrepreneurship training, low levels of digital literacy, and difficulties in obtaining financing from formal institutions, including limited risk literacy.

Sharia-based risk literacy encompasses a comprehensive understanding of Islamic financial principles and risk management practices. By integrating these principles into business strategies, women entrepreneurs can make informed decisions that align with their religious beliefs and ethical values. This not only fosters a sense of empowerment and autonomy but also enables access to a wider range of financial services that comply with Islamic law. Furthermore, Sharia-based risk literacy equips women with the skills to assess, mitigate, and manage risks effectively, thereby enhancing business resilience. This includes understanding halal processes and ethical investment practices. By adhering to these principles, women can build sustainable businesses (Lusardi et al., 2022; Hasan & Asutay, 2023).

Microenterprises are highly vulnerable to various forms of risk, which can significantly affect their operations and overall success. Exploring the different types of risks faced by micro businesses provides a deeper understanding of the complexity of their business environment (Block et al., 2022). From financial and market risks to operational and strategic risks, each type presents unique challenges that require careful consideration and proactive management (Kaur & Sood, 2023; Nguyen et al., 2024).

It is important to examine the specific factors that contribute to risks in microenterprises. These factors may include economic conditions, industry trends, regulatory changes, and internal constraints such as limited resources and decision-making capabilities. By analyzing these influences, a more comprehensive understanding can be developed regarding how risks manifest within micro business contexts (Baporikar & Akino, 2022).

Sharia-based risk literacy can enhance women's inclusion in the formal economy. This not only has the potential to improve economic outcomes but also contributes to the broader development of communities of women micro-entrepreneurs. Sharia-based risk literacy plays a crucial role in empowering women-owned microenterprises by equipping them with the knowledge, skills, and ethical framework needed to navigate challenges, make sound financial decisions, and build business resilience.

As efforts to promote and strengthen this form of literacy continue to grow, the potential for women to thrive as entrepreneurs and contributors to sustainable economic development will also increase (Setiawati et al., 2025). By further exploring risk literacy in microenterprises, analyzing the factors that influence it, and examining effective risk management strategies, it is expected that a deeper theoretical understanding of risk in the microenterprise context can be achieved—particularly regarding the critical role of Sharia-based risk literacy as a key driver of business growth, especially for women entrepreneurs.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Sharia Risk Management in Microenterprises

In general, there is no significant difference between conventional risk management and Sharia-based risk management. However, Sharia risk management incorporates the alignment of Islamic principles (Sharia law) into the approach to managing risk (Hassan & Aliyu, 2022; Ahmed & Khan, 2023). In Islam, the concept of risk can be reflected in Qur'an, particularly in Surah Ar-Ra'd verse 11, which implies that risk is an inherent part of human existence (Rahman, 2023). It is understood that all human actions involve some degree of risk and uncertainty, while ultimate success or failure is determined by Allah SWT. Islam encourages taking calculated risks as long as they align with core values such as justice, honesty, and fairness (Ismail & Hassan, 2022; Farooq, 2024).

In facing an increasingly uncertain business environment (Rahman, 2025), Sharia risk management provides a strong foundation for microenterprises to sustain and grow. Therefore, a deep understanding of Sharia risk management principles, along with consistent implementation, is essential to ensure that microenterprises operate in accordance with Islamic values while protecting themselves from potential risks. The application of Sharia risk management principles in microenterprises can reduce the likelihood of risks that may threaten business continuity. In this context, risk management extends beyond financial aspects to include social and ethical dimensions in line with Sharia principles (Hidayat et al., 2022).

Effective risk management is crucial for the sustainability of microenterprises. It involves not only identifying and assessing risks but also implementing strategies to mitigate their impact. These strategies may include financial planning, income diversification, contingency planning, and the utilization of insurance or takaful products. By exploring these strategies further, best practices and innovative approaches can be identified to help microenterprises navigate and mitigate risks more effectively (Demirgüç-Kunt et al., 2022; OECD, 2023; Priola & Chaudhry, 2025).

RESEARCH METHOD

This study employs a qualitative approach, as risk research requires in-depth analysis through the perspectives of participants, thereby focusing on meanings, experiences, and viewpoints of individuals who are part of the research population (Creswell & Poth, 2022). The research was conducted in the city of Semarang, involving women-owned microenterprises, specifically juice businesses. Since there is no exact data on the number of micro juice businesses in Semarang, the sample size was determined to be 40 respondents. The sampling technique used was area sampling to ensure regional representation across the city, with two samples selected from each district (Etikan & Bala, 2023).

Data collection began with participatory observation to establish and document the standard production process. Subsequently, data were collected through interviews (Kvale & Brinkmann, 2023). Data analysis was conducted through processes of identifying, analyzing, and reporting themes found within the data (Braun & Clarke, 2022). Interview results were further processed using data reduction and triangulation techniques to obtain key findings from the research problem while ensuring data validity.

For risk analysis, the study applied the House of Risk (HOR) model, which is used to analyze and mitigate risks within business supply chains. This model helps identify the most critical risk agents and design appropriate mitigation strategies (Pujawan & Geraldin, 2022). Each identified risk was then further analyzed using Fuzzy Logic to address the complexity inherent in microenterprises, including risk analysis and mitigation within the production process (Zadeh-inspired applications; Nguyen et al., 2023).

RESULT AND DISCUSSION

Juice businesses, like other types of enterprises, face various risks that can affect their operations, productivity, and profitability. These risks may arise from multiple sources, including labor, machinery, vendors, product distribution processes, and other factors (Pujawan & Geraldin, 2022). Therefore, effective risk management is essential for businesses to minimize these risks and maintain their reputation as well as financial stability (Hopkin, 2023).

In the juice business model, risk management plays a crucial role in ensuring business success and sustainability. The development of juice businesses involves significant expenditures and requires managing moderate levels of risk, particularly in areas such as product spoilage, financial resources, brand differentiation, workplace environment, and customer loyalty. To effectively address these challenges, it is important to focus on quality management, budget constraints, and brand positioning to enhance customer loyalty and profitability. Additionally, the workplace environment and staff motivation are key factors influencing production quality and customer satisfaction, highlighting the importance of investing in employee performance and loyalty.

Before conducting the risk identification process, it is necessary to understand the juice production process, which is illustrated in the flowchart in Figure 2. This flowchart provides a simplified overview of how a juice business operates. Each stage in the process is then identified as a risk event. Every risk event contains risk data that arise as consequences of the process. The risk identification process applies the principle of learning from past experiences encountered by business owners, which aligns with the teachings of Qur'an, particularly Surah Al-Hashr verse 2 (Rahman & Syarbaini, 2022).

The results of the risk identification process form a risk profile. Based on Figure 2, five key components of the risk profile were identified.

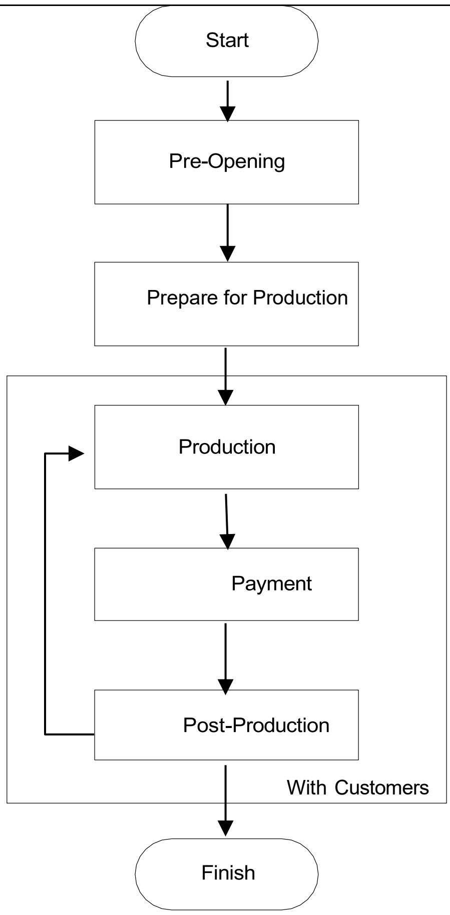

Figure 2. Juice Production Process Flowchart
(Source: Processed Data, 2024)

To assess how well risk literacy functions, it is necessary to have a clear understanding of the justification process for risk mitigation within the management of juice businesses. Therefore, a risk assessment process is conducted to map the risk profile into a risk matrix, allowing the level of importance of each risk to be identified. The results are then confirmed with business owners to determine whether their risk management practices align with the identified risk levels. This serves as the basis for determining the level of risk management literacy.By adopting the sequence of risk assessment processes proposed in recent studies (Rahman & Syarbaini, 2023), the following presents the critical risk matrix for juice businesses:

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		Impact / Severity				
		1	2	3	4	5
Possibility	5				5.2	
	4			1.3, 3.1	3.4	
	3				3.3	
	2					
	1					

Figure 3 Risk Matrix
(Source: Processed Data, 2024)

Based on Figure 3, at least four major risk profiles were identified, aggregated across the 40 samples. These risks include fruit waste (5.2), order preparation errors (3.4), being overwhelmed in managing orders (3.3), damage to production equipment (3.1), and rotten fruit purchased from suppliers (1.1). The matrix results reflect that juice businesses tend to manage risks in a generic manner, primarily based on past experiences. Business limitations are a key reason why these risks persist. For example, risks such as order errors and being overwhelmed in handling orders occur because many businesses operate individually or lack sufficient labor. As a result, when customer demand is high and continuous, these risks remain unavoidable.

Advancements in risk management within the juice business model are essential to enhance resilience and operational sustainability. One significant approach involves clearly defining roles and responsibilities for enterprise risk management at all organizational levels, emphasizing a culture of risk awareness and participation across business units. This includes introducing roles such as “risk ambassadors” within each unit to facilitate communication and the implementation of risk management practices.

At a broader scale, particularly in the juice industry, risks include supply chain disruptions, product contamination, and human error (Suryanto et al., 2024). To manage these risks, companies can adopt risk assessment tools such as the integration of the SCOR (Supply Chain Operations Reference) model with Failure Modes and Effects Analysis (FMEA), commonly referred to as the SCOR-FMEA method (Suryanto et al., 2024). This approach enables systematic analysis of risks, their potential impacts, and the development of appropriate mitigation strategies (Suryanto et al., 2024).

Many risks in the food and beverage industry are interrelated and may need to be managed collectively to mitigate their impact on microenterprises. The following summarizes several risks identified in juice businesses:

1. Supply Chain Risk: Disruptions in the supply chain can lead to shortages of raw materials, increased costs, and reduced production capacity. To mitigate this, businesses need to establish strong risk management frameworks to identify, assess, and respond to operational risks promptly (Christopher, 2022).
2. Consumer Risk: Changes in consumer preferences and trends pose real challenges for maintaining competitiveness and customer loyalty. Businesses need to invest in market research and consumer insights to guide product development, branding, and marketing strategies (Kotler et al., 2023).
3. Competitive Risk: Food and beverage businesses face intense competition, strict regulations, shifting consumer demands, and rising costs. To remain competitive, firms must continuously innovate and improve both products and operational processes (Porter & Heppelmann, 2022).
4. Regulatory Compliance Risk: The food and beverage industry is subject to strict regulations regarding food safety, product quality, and labeling. Failure to comply may result in penalties, sanctions, or legal action, which can damage reputation and financial stability (OECD, 2023).

5. Reputation Risk: Negative consumer perceptions, poor customer experiences, and loss of trust can lead to declining sales and market share. Businesses must implement mitigation strategies related to food safety, quality assurance, and ethical practices (Deloitte, 2022).
6. Operational Risk: Operational risks may arise from equipment failures, disruptions in production processes, inadequate staff training, lack of standard operating procedures, or inefficient inventory management. These risks can result in production delays, increased costs, reduced customer satisfaction, and financial strain (Fraser & Simkins, 2022).

The findings of this study indicate that a strong understanding of Sharia-based risk literacy enables women micro-entrepreneurs to manage risks more effectively, including financial, operational, and market risks (Alam et al., 2023; Hassan et al., 2024). They are also better equipped to select financial instruments that comply with Sharia principles to manage the risks they face. Through Sharia-based risk literacy, women micro-entrepreneurs can gain broader access to resources and capital necessary for business development. With deeper knowledge, they are able to design more structured and sustainable business strategies, allowing them to compete in increasingly competitive markets (Rahman et al., 2022; Yusof et al., 2023).

Furthermore, Sharia-based risk literacy can serve as a key factor in building trust among stakeholders, including investors, financial institutions, and consumers. With a strong understanding of Sharia principles, women micro-entrepreneurs can establish a positive reputation, thereby attracting greater collaboration opportunities and support. Ultimately, improving Sharia-based risk literacy not only benefits women micro-entrepreneurs directly but also contributes positively to Indonesia’s overall economic development (Nasution & Aisyah, 2022; Saputri et al., 2023).

CONCLUSION

After evaluating the role of Sharia-based risk literacy in empowering women-owned microenterprises—particularly juice entrepreneurs in Semarang—it can be concluded that a strong understanding of Sharia principles serves as a key factor in enhancing the success and resilience of women’s micro businesses. With adequate risk literacy, women micro-entrepreneurs are better equipped to manage risks effectively, make sound decisions, and develop their businesses in ways that align with Sharia principles.

Furthermore, a solid understanding of Sharia-based risk literacy enables women micro-entrepreneurs to access financial resources that comply with Islamic principles, thereby supporting sustainable business growth. In this regard, the integration of Sharia-based risk literacy contributes to the creation of a more inclusive and sustainable business environment for women micro-entrepreneurs in Indonesia.

Strengthening Sharia-based risk literacy is expected to make a significant contribution to empowering women-owned microenterprises in Indonesia, while also supporting the development of a more sustainable and financially equitable business ecosystem. Therefore, it is essential for the government, financial institutions, and non-governmental organizations to continue supporting Sharia-based risk literacy programs as part of broader strategies for women’s economic empowerment in Indonesia.

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