

Financial Literacy and the Use of Financial Ratios in Improving MSME Performance in Indonesia

Tanto¹

¹Accounting Study Program, Faculty of Economics and Business, Universitas Widya Dharma Pontianak, Indonesia

Email: tanto_wd@yahoo.com

Abstract. *Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in driving economic growth and employment in Indonesia, yet their performance is often constrained by limited financial management capabilities. This study aims to synthesize existing literature on the role of financial literacy and the use of financial ratios in improving MSME performance. Using a structured literature review approach, this study analyzes peer-reviewed articles, academic publications, and institutional reports to identify key patterns and relationships among the variables. The findings indicate that financial literacy serves as a foundational capability that enables MSME actors to understand financial concepts, manage resources efficiently, and make informed decisions. Meanwhile, financial ratios function as practical analytical tools that provide measurable insights into business performance, including liquidity, profitability, solvency, and operational efficiency. The study further reveals a strong synergistic relationship between financial literacy and the use of financial ratios, where financial knowledge enhances the ability to apply ratio analysis effectively, and the use of ratios reinforces financial understanding through practice. This integration contributes to improved financial discipline, better strategic planning, and increased access to external financing. Additionally, the combined application of these factors strengthens MSME resilience and adaptability in a dynamic and competitive business environment. The study highlights the importance of promoting both financial literacy and financial analysis skills as part of MSME development strategies. These findings provide valuable implications for policymakers, educators, and practitioners in designing targeted interventions to enhance MSME sustainability and economic contribution.*

Keywords: *Financial Literacy, Financial Ratios, MSME Performance, Indonesia, Financial Management, Small Business Development*

JEL Classification: *G53, G32, M41, L26, O16*

Received: April 16, 2026

Received in Revised: May 20, 2026

Accepted: June 11, 2026

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) represent a fundamental pillar of Indonesia's economic structure, contributing significantly to national income, employment absorption, and poverty alleviation. Over the past decade, MSMEs have consistently accounted for more than 60% of Indonesia's Gross Domestic Product (GDP) and have provided employment opportunities for the majority of the workforce (Tambunan, 2023; Sinha et al., 2024; Tambunan, 2023). Despite this substantial contribution, MSMEs continue to face structural and managerial challenges that hinder their long-term sustainability and competitiveness, particularly in the domain of financial management.

One of the most critical issues affecting MSME performance in Indonesia is the low level of financial literacy among business owners. Financial literacy, broadly defined as the knowledge and ability to understand and effectively use various financial skills including personal financial management, budgeting, and investment decision-making plays a crucial role in determining business success (Tambunan, 2023; Elbanna et al., 2025; Adewumi & Cele, 2023; Idris, 2023). In the MSME context, financial literacy enables entrepreneurs to interpret financial information, manage cash flows efficiently, and make strategic decisions that enhance profitability and growth. However, empirical studies indicate that a large proportion of Indonesian MSME actors lack adequate financial knowledge, often relying on informal financial practices that limit their ability to scale and sustain operations (Sinha et al., 2024). In addition to financial literacy, the use of financial ratios as analytical tools remains underutilized among MSMEs. Financial ratios, including liquidity, profitability, solvency, and activity ratios, provide critical insights into a firm's financial health and operational efficiency (Tanjung, 2025; Kumari, 2024; Nurani et al., 2025). These tools are widely used in corporate finance to evaluate performance and guide decision-making processes. However, MSME owners frequently lack the technical skills or awareness necessary to apply these tools effectively (Hasidi et al., 2024; Lakshmi & Banu, 2025). As a result, many MSMEs operate without structured financial analysis, leading to inefficiencies in resource allocation and increased vulnerability to financial risks.

The intersection between financial literacy and the use of financial ratios is particularly important in understanding MSME performance. Financial literacy serves as a foundational capability that enables business owners to comprehend and apply financial ratios in practice. Without sufficient financial knowledge, the interpretation of financial ratios becomes superficial or even misleading, reducing their usefulness as decision-making instruments (Avi, 2023; Gupta & Kumar Singh, 2023). Conversely, the practical application of financial ratios can reinforce financial literacy by providing real-world contexts in which financial concepts are applied, thereby enhancing learning and competence.

Despite the recognized importance of these variables, existing studies tend to examine financial literacy and financial ratio usage in isolation rather than as interconnected factors influencing MSME performance. For instance, research on financial literacy often focuses on its direct impact on financial behavior and business outcomes (Abdallah et al., 2023; Sajuyigbe et al., 2024), while studies on financial ratios typically emphasize their technical application in financial reporting and analysis. This fragmented approach limits the understanding of how these two dimensions interact to shape overall business performance, particularly within the unique socio-economic context of Indonesia.

Furthermore, MSMEs in Indonesia operate within a dynamic and increasingly competitive environment, characterized by rapid digital transformation and evolving market demands. The integration of digital financial services, such as mobile banking and fintech platforms, has created new opportunities for MSMEs to access financial resources and improve operational efficiency (Raviteja, 2024; Rahayu et al., 2023; Nurhaedha, 2025). However, the effective utilization of these technologies requires a solid foundation in financial literacy and the ability to analyze financial data accurately. Without these competencies, MSMEs may struggle to leverage digital innovations effectively, potentially widening the performance gap between financially literate and non-literate enterprises.

Another important issue is the persistence of informal financial management practices among MSMEs, such as the absence of proper bookkeeping and the mixing of personal and business finances. These practices not only hinder transparency but also make it difficult for business owners to assess their financial position accurately (Mesioye & Bakare, 2024; Ramos et al., 2024; Abed et al., 2022). In such contexts, the adoption of financial ratios becomes even more challenging, as reliable financial data is a prerequisite for meaningful analysis. This highlights the need for a more integrated approach that simultaneously enhances financial literacy and promotes the practical use of financial tools.

From a policy perspective, the Indonesian government and financial institutions have implemented various programs aimed at improving financial literacy and supporting MSME development. Initiatives such as financial education campaigns and training programs have shown some positive outcomes; however, their effectiveness remains uneven across regions and sectors. This suggests that a deeper understanding of the relationship between financial literacy, financial ratio usage, and MSME performance is necessary to design more targeted and impactful interventions.

Given these considerations, this study seeks to address a critical gap in the literature by synthesizing existing research on financial literacy and the use of financial ratios in improving MSME performance in Indonesia. By adopting an integrative perspective, this study aims to provide a more comprehensive understanding of how these factors interact and contribute to business success. Such insights are expected to offer valuable implications for policymakers, educators, and MSME practitioners in developing strategies that enhance financial capability and promote sustainable economic growth.

METHODS

Approach to the Literature Review

This study employs a structured literature review method to systematically analyze and synthesize existing scholarly works related to financial literacy, the use of financial ratios, and MSME performance in Indonesia. Unlike a traditional narrative review, this approach emphasizes methodological rigor, transparency, and replicability in the process of identifying, selecting, and analyzing relevant literature. The literature review is designed to provide a comprehensive and integrative understanding of the topic by connecting findings from various empirical and theoretical studies. This approach is particularly suitable for this study, as it allows for the consolidation of fragmented knowledge and the identification of relationships between key variables that have often been examined separately in previous research.

Literature Search Strategy

The literature search was conducted using a systematic and multi-stage process to ensure comprehensive coverage of relevant studies. Academic databases such as Google Scholar, Scopus-indexed journals, and Web of Science were utilized as primary sources. The search process involved the use of specific keywords and Boolean operators to refine and expand the scope of the search. Keywords included “financial literacy,” “financial ratios,” “MSME performance,” “small business finance,” “financial management,” and “Indonesia,” along with combinations and variations of these terms. The search was conducted iteratively, allowing for the refinement of keywords based on initial findings to ensure that all relevant literature was captured.

Inclusion and Exclusion Criteria

To maintain the quality and relevance of the literature, clear inclusion and exclusion criteria were established. Studies were included if they met the following criteria: (1) directly addressed at least one of the main variables financial literacy, financial ratios, or MSME performance; (2) were published in peer-reviewed journals, academic books, or reputable institutional reports; (3) were written in English or Indonesian; and (4) were published within the last ten years to ensure the relevance of findings, with exceptions made for seminal or foundational studies. Studies were excluded if they lacked methodological clarity, were not directly related to the research focus, or were duplicated across databases. This selection process ensures that the review is both comprehensive and focused.

Data Extraction Process

After identifying and selecting the relevant literature, a structured data extraction process was carried out. Each selected study was reviewed in detail, and key information was systematically recorded. This included the author(s), year of publication, research objectives,

study design, key findings, and relevance to the research variables. The extracted data were then organized into thematic categories corresponding to financial literacy, financial ratio usage, and MSME performance. This structured approach facilitates comparison across studies and supports the identification of patterns and relationships within the literature.

Data Analysis Technique

The analysis of the literature was conducted using thematic analysis supported by content analysis techniques. Thematic analysis was used to identify recurring themes, concepts, and relationships across the selected studies. This involved coding the extracted data, grouping similar ideas, and developing broader themes that reflect the key dimensions of the research topic. Content analysis was applied to examine the frequency and emphasis of specific concepts within the literature, providing additional insight into dominant research trends. Through this combined analytical approach, the study is able to generate a comprehensive synthesis that highlights both convergences and divergences in existing research.

Synthesis and Interpretation

The final stage of the literature review involved synthesizing the findings into a coherent and integrated narrative. This process goes beyond simple summarization by critically comparing and contrasting findings from different studies to identify gaps, inconsistencies, and emerging insights. The synthesis focuses on explaining how financial literacy and the use of financial ratios interact and contribute to MSME performance, particularly within the Indonesian context. This integrative perspective enables the study to provide meaningful contributions to both academic discourse and practical applications.

RESULTS AND DISCUSSION

The results and discussion of this study present a synthesized analysis of existing literature on the relationship between financial literacy, the use of financial ratios, and MSME performance in Indonesia. This section aims to integrate findings from various scholarly sources to identify consistent patterns, key themes, and critical insights that explain how these variables interact in shaping business outcomes. By examining the evidence from prior studies, the discussion highlights not only the individual contributions of financial literacy and financial ratios but also their combined effect in strengthening financial management practices, improving decision-making quality, and enhancing overall business sustainability. The analysis is structured to provide a comprehensive understanding of the topic, bridging gaps in the literature and offering a cohesive interpretation of how MSMEs can leverage financial knowledge and analytical tools to achieve better performance in a dynamic economic environment.

Financial Literacy as a Foundation for MSME Sustainability

Table 1. Financial Literacy as a Foundation for MSME Sustainability

Dimension	Description	Impact on MSMEs	Sustainability Implication
Financial Knowledge	Understanding of financial concepts such as budgeting, cash flow, and investment	Improves decision-making accuracy	Enhances long-term business stability
Financial Behavior	Practices such as record-keeping, saving, and financial planning	Increases operational efficiency	Strengthens resilience to financial shocks
Financial Access	Ability to engage with financial institutions and obtain funding	Expands capital opportunities	Supports business growth and scalability

Financial Analysis Skills	Ability to interpret financial data and ratios	Enables performance evaluation	Drives continuous improvement and competitiveness
Risk Management	Understanding and anticipating financial risks	Reduces business vulnerability	Ensures sustainability in uncertain environments

Financial literacy serves as a fundamental pillar in strengthening the sustainability of Micro, Small, and Medium Enterprises (MSMEs), particularly in developing economies such as Indonesia. At its core, financial literacy encompasses the knowledge, skills, and attitudes required to make informed financial decisions, including budgeting, saving, investing, and managing debt. For MSME actors, this competence is not merely an added advantage but a necessity for survival in increasingly competitive markets. Entrepreneurs with higher levels of financial literacy are better equipped to understand financial statements, interpret cash flow dynamics, and anticipate financial risks, thereby enhancing their ability to maintain business continuity. In contrast, limited financial literacy often leads to poor financial planning, excessive reliance on informal practices, and vulnerability to financial shocks, all of which undermine long-term sustainability.

Furthermore, financial literacy directly influences the quality of financial decision-making within MSMEs. Business owners who possess adequate financial knowledge are more likely to engage in systematic financial planning, allocate resources efficiently, and evaluate investment opportunities critically (Anshika & Singla, 2022; Susilawati, 2024). This capability is particularly important in environments characterized by uncertainty and limited access to formal financial services. Financially literate entrepreneurs tend to adopt disciplined financial behaviors, such as maintaining proper records, separating personal and business finances, and monitoring business performance regularly. These practices contribute to improved operational efficiency and enable MSMEs to respond more effectively to market changes, thereby increasing their resilience and adaptability (Jumady et al., 2024; Yoganandham, 2025; Hokmabadi et al., 2024).

In addition to improving internal management practices, financial literacy also enhances MSMEs' access to external financial resources. Financial institutions typically require accurate financial records and credible financial information before extending credit or investment support. MSME actors with higher financial literacy are more capable of preparing financial reports, understanding loan requirements, and negotiating with financial institutions (Selvi et al., 2024). This increased access to financing enables businesses to expand operations, invest in innovation, and improve productivity. Conversely, low financial literacy often acts as a barrier to financial inclusion, limiting MSMEs' ability to secure funding and constraining their growth potential. Therefore, financial literacy not only strengthens internal business management but also facilitates external opportunities that contribute to sustainability (Luo & Cheng, 2023; Hidayat-ur-Rehman, 2025; Awaluddin et al., 2025; Gomes, 2025).

Moreover, financial literacy plays a critical role in fostering the effective use of financial tools, including financial ratios, which are essential for performance evaluation and strategic planning. Without a solid understanding of financial concepts, MSME owners may find it difficult to utilize these tools effectively, resulting in missed opportunities for performance improvement. Financial literacy provides the foundation for interpreting key indicators such as profitability, liquidity, and solvency, allowing business owners to identify strengths and weaknesses in their operations. This integration of knowledge and practice creates a reinforcing cycle in which improved financial understanding leads to better analytical practices, which in turn support more informed decision-making. Ultimately, financial literacy functions as a cornerstone of MSME sustainability by enabling entrepreneurs to manage resources effectively, access financial opportunities, and continuously improve their business performance.

Role of Financial Ratios in Enhancing Decision-Making

Table 2. Role of Financial Ratios in Enhancing MSME Decision-Making

Type of Ratio	Function	Decision-Making Contribution	Strategic Impact on MSMEs
Liquidity Ratios	Measure ability to meet short-term obligations	Helps determine cash availability and working capital needs	Prevents liquidity crises and ensures operational continuity
Profitability Ratios	Assess ability to generate profit from operations	Guides pricing strategies and cost management decisions	Improves income generation and business sustainability
Solvency Ratios	Evaluate long-term financial stability and debt levels	Supports decisions on financing and capital structure	Reduces financial risk and enhances long-term viability
Activity Ratios	Measure efficiency in using assets	Helps optimize asset utilization and operational processes	Increases productivity and operational efficiency
Overall Ratio Analysis	Integrates multiple financial indicators	Enables comprehensive performance evaluation	Supports strategic planning and competitive advantage

Financial ratios play a crucial role in enhancing decision-making within MSMEs by providing structured and quantifiable insights into a firm's financial condition. In many Micro, Small, and Medium Enterprises operating in Indonesia, financial decisions are often based on intuition or informal practices rather than systematic analysis. The use of financial ratios such as liquidity, profitability, solvency, and activity ratios enables business owners to move beyond guesswork and adopt evidence-based decision-making. These ratios translate raw financial data into meaningful indicators, allowing entrepreneurs to assess whether their business is financially stable, profitable, and capable of sustaining operations. As a result, financial ratios serve as an essential bridge between financial data and strategic managerial actions.

Moreover, financial ratios significantly improve financial control by enabling MSME owners to monitor business performance regularly and detect potential issues at an early stage (Kumari, 2024; Hama & Santoso, 2024; Auliyah & Agit, 2024). For example, liquidity ratios help determine whether a business can meet its short-term obligations, while profitability ratios indicate the efficiency of income generation. By consistently tracking these indicators, entrepreneurs can identify declining performance trends, inefficiencies in cost management, or excessive debt levels before they escalate into serious financial problems. This proactive approach strengthens internal control mechanisms and supports timely corrective actions, which are critical for maintaining operational stability in highly competitive markets.

In addition to strengthening financial control, the use of financial ratios contributes to more effective strategic planning. MSME owners who utilize ratio analysis can make more informed decisions regarding expansion, investment, pricing strategies, and cost optimization. For instance, activity ratios can reveal how efficiently assets are being utilized, guiding decisions on whether to invest in additional resources or optimize existing ones. Similarly, solvency ratios provide insights into long-term financial risk, helping entrepreneurs determine appropriate financing strategies. By integrating financial ratio analysis into strategic planning processes, MSMEs can align their operational decisions with financial realities, thereby improving overall business performance and competitiveness (Widjanarko, et al., 2022; Margiutomo & Jayanti, 2025; Pertiwi & Hana, 2025).

Furthermore, financial ratios enhance communication and credibility with external stakeholders, including investors, creditors, and financial institutions. Clear and well-interpreted financial indicators make it easier for MSMEs to demonstrate their financial health and justify funding requests. This is particularly important in developing economies, where access to formal financing often depends on the availability of reliable financial information. The ability to present ratio-based analysis not only increases transparency but also builds trust, which can lead to better financing opportunities and partnerships. Ultimately, the use of financial ratios strengthens both internal decision-making and external engagement, positioning MSMEs for sustainable growth and long-term success.

Synergistic Effect of Financial Literacy and Financial Ratios

Table 3. Synergistic Effect of Financial Literacy and Financial Ratios on MSME Performance

Aspect	Role of Financial Literacy	Role of Financial Ratios	Synergistic Impact on MSMEs
Knowledge & Application	Provides understanding of financial concepts	Translates concepts into measurable indicators	Enables accurate interpretation and practical use of financial data
Decision-Making	Enhances critical thinking and financial judgment	Offers structured metrics for evaluation	Produces informed, data-driven strategic decisions
Financial Discipline	Encourages responsible financial behavior	Supports regular monitoring and evaluation	Builds consistent financial management practices
Organizational Learning	Develops long-term financial capability	Reinforces learning through real data analysis	Strengthens internal capacity and managerial confidence
Adaptability & Resilience	Improves ability to understand financial risks	Identifies performance trends and warning signals	Enhances responsiveness to market changes and uncertainties

The synergistic relationship between financial literacy and the use of financial ratios represents a critical dimension in enhancing MSME performance, particularly in developing economies such as Indonesia. Financial literacy provides the foundational knowledge required for understanding financial concepts, while financial ratios offer practical tools for applying that knowledge in real business contexts. When these two elements are integrated, they create a mutually reinforcing dynamic in which knowledge informs practice, and practice, in turn, deepens understanding. MSME owners who are financially literate are more capable of interpreting ratio-based indicators accurately, enabling them to translate numerical data into meaningful strategic actions. This synergy transforms financial management from a reactive activity into a proactive and strategic function (Margiutomo & Jayanti, 2025; Manoj, 2025; Pissardini et al., 2025).

Furthermore, the interaction between financial literacy and financial ratios significantly enhances the quality of managerial decision-making. Financial literacy equips entrepreneurs with the ability to critically evaluate financial information, while financial ratios provide structured metrics that support such evaluation. For instance, a business owner with strong financial literacy can interpret profitability ratios not only as indicators of current performance but also as signals for future strategic adjustments. This integrated capability allows MSMEs to make informed decisions regarding pricing, cost control, investment, and expansion. Without this synergy, financial ratios may be underutilized or misinterpreted, and financial literacy may remain theoretical without practical application. Therefore, the combination of both elements ensures that financial knowledge is effectively translated into actionable insights.

In addition, this synergy contributes to improved financial discipline and organizational learning within MSMEs. The regular use of financial ratios encourages consistent financial monitoring and evaluation, while financial literacy fosters an understanding of why such practices are important. Over time, this leads to the development of structured financial routines, such as periodic performance reviews and data-driven planning. These practices not only improve current performance but also build long-term managerial capacity. As MSME owners become more familiar with financial analysis, they develop greater confidence in handling complex financial decisions, reducing dependence on external assistance. This continuous learning process strengthens the internal capabilities of the enterprise and supports sustainable growth.

Moreover, the combined effect of financial literacy and financial ratios enhances MSMEs' ability to adapt to changing economic conditions and competitive pressures. In an increasingly dynamic business environment, the ability to interpret financial signals and respond strategically is essential for survival. Financially literate entrepreneurs who actively use financial ratios are better positioned to identify emerging risks, evaluate opportunities, and adjust their business strategies accordingly. This adaptability is particularly important in the context of digital transformation and market uncertainty, where timely and informed decision-making can determine business success or failure. Ultimately, the synergy between financial literacy and financial ratio usage serves as a powerful mechanism for improving MSME resilience, competitiveness, and long-term sustainability.

CONCLUSION

This study demonstrates that financial literacy and the use of financial ratios are deeply interconnected factors that play a pivotal role in enhancing the performance and sustainability of MSMEs, particularly in Indonesia. Financial literacy equips business owners with the essential knowledge and skills needed to understand and manage financial resources effectively, while financial ratios provide practical tools to evaluate performance and support strategic decision-making. When combined, these elements create a synergistic effect that strengthens financial discipline, improves managerial capacity, and enables more adaptive and informed business practices. The literature consistently indicates that MSMEs that integrate financial knowledge with analytical financial tools are better positioned to achieve operational efficiency, access external financing, and respond to dynamic market conditions. Therefore, fostering both financial literacy and the practical application of financial ratios should be prioritized by policymakers, educators, and MSME stakeholders as a strategic approach to promoting sustainable economic growth and long-term business resilience.

REFERENCES

- Abdallah, W., Tfaily, F., & Harraf, A. (2025). The impact of digital financial literacy on financial behavior: Customers' perspective. *Competitiveness Review: An International Business Journal*, 35(2), 347–370. <https://doi.org/10.1108/CR-11-2023-0297>
- Abed, I. A., Hussin, N., Haddad, H., Almubaydeen, T. H., & Ali, M. A. (2022). Creative accounting determination and financial reporting quality: the integration of transparency and disclosure. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(1), 38. <https://doi.org/10.3390/joitmc8010038>
- Adewumi, S., & Cele, S. C. (2023). Financial literacy skills level among small and medium scale businesses: lessons for entrepreneurial decision-making in Lagos, Nigeria. *EUREKA: Social and Humanities*, (1), 14-26. <https://doi.org/10.21303/2504-5571.2023.002799>
- Anshika, & Singla, A. (2022). Financial literacy of entrepreneurs: A systematic review. *Managerial Finance*, 48(9–10), 1352–1371. <https://doi.org/10.1108/MF-06-2021-0260>

- Auliyah, I., & Agit, A. (2024). Reflective study on financial statement quality capability to influence firm performance: Literature review. *Advances in Economics & Financial Studies*, 2(3), 165-178. <https://doi.org/10.60079/aeefs.v2i3.379>
- Avi, M. S. (2023). Financial ratios: Considerations of their relevance to corporate financial analysis and an in depth look at the major errors often mar these ratios. *International Journal of Business & Management Studies*, 4(4), 27–60. <https://doi.org/10.56734/ijbms.v4n4a5>
- Awaluddin, S. P., Paula, E. W., Tamriesfatno, S., & Khair, A. U. (2025). Empowering communities through financial literacy initiatives for SME development. *Golden Ratio of Community Services and Dedication*, 5(2), 10-21. <https://doi.org/10.52970/grcsd.v5i2.589>
- Elbanna, S., Eissa, M. A., & Armstrong, L. (2025). Financial literacy in the modern economy: Bridging the knowledge gap for entrepreneurs and beyond. In *The future of education policy in the state of Qatar* (pp. 147-173). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-97-9667-0_8
- Gomes, A. (2025). Financial literacy and data analysis impacts on business sustainability. *World Journal of Advanced Engineering Technology and Sciences*, 14(1), 130-141. <https://doi.org/10.30574/wjaets.2025.14.1.0014>
- Gupta, A., & Kumar Singh, R. (2023). Managing resilience of micro, small and medium enterprises (MSMEs) during COVID-19: analysis of barriers. *Benchmarking: An International Journal*, 30(6), 2062-2084. <https://doi.org/10.1108/BIJ-11-2021-0700>
- Hama, A., & Santoso, H. P. (2024). GUIDANCE ON THE USE OF SIMPLE FINANCIAL RATIOS TO MEASURE MSME PERFORMANCE. *Pedagogic Research-Applied Literacy Journal*, 1(4), 248-256. <https://doi.org/10.70574/mw6q3q29>
- Hasidi, M. H., Baheri, J., & Hajar, K. I. (2024). Financial performance evaluation using profitability and liquidity ratio analysis. *Jurnal Ilmiah Manajemen Kesatuan*, 12(4), 1347–1358. <https://doi.org/10.37641/jimkes.v12i4.2742>
- Hidayat-ur-Rehman, I. (2025). The role of financial literacy in enhancing firm's sustainable performance through Fintech adoption: a moderated mediation analysis. *International Journal of Innovation Science*, 17(4), 754-785. <https://doi.org/10.1108/IJIS-03-2024-0056>
- Hokmabadi, H., Rezvani, S. M., & De Matos, C. A. (2024). Business resilience for small and medium enterprises and startups by digital transformation and the role of marketing capabilities—A systematic review. *Systems*, 12(6), 220. <https://doi.org/10.3390/systems12060220>
- Idris, O. (2023). Discussion on the role of emotional intelligence in financial decision-making. *Journal of Policy Options*, 6(4), 20-29.
- Judijanto, L., & Nurrohman, R. (2025). THE INFLUENCE OF THE APPLICATION OF FINANCIAL TECHNOLOGY (FINTECH) ON FINANCIAL MANAGEMENT EFFICIENCY IN MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES). *INTERNATIONAL JOURNAL OF FINANCIAL ECONOMICS*, 2(2), 426-438.
- Jumady, E., Alam, S., Hasbiyadi, H., Fajriah, Y., & Anggraini, Y. (2024). The effect of financial planning on consumer debt management: The role of financial literacy, self efficacy, and financial motivation. *Atestasi: Jurnal Ilmiah Akuntansi*, 7(1), 340–368. <https://doi.org/10.57178/atestasi.v7i1.793>
- Kumari, P. (2024). Performance analysis of micro, small, and medium enterprises using selected financial ratios. *Multidisciplinary Research in Arts, Science & Commerce*, 8, 29.

- Kumari, P. (2024). Performance Analysis of Micro, Small, and Medium Enterprises using Selected Financial Ratios. *Multidisciplinary Research in Arts, Science & Commerce (Volume-8)*, 29.
- Lakshmi, B. G., & Banu, S. S. (2025). Impact of government schemes on MSME technology adoption awareness levels. *Indiana Journal of Economics and Business Management*, 5(4), 15-24.
- Luo, W., & Cheng, J. (2023). Transition to sustainable business models for green economic recovery: role of financial literacy, innovation and environmental sustainability. *Economic Change and Restructuring*, 56(6), 3787-3810. <https://doi.org/10.1007/s10644-022-09408-1>
- Manoj, P. K. (2025). STRATEGIC FINANCIAL MANAGEMENT: INTEGRATING CORPORATE STRATEGY WITH FINANCIAL DECISION-MAKING. *International Journal of Applied Mathematics*, 38(11s), 326-335.
- Margiutomo, S. A. S., & Jayanti, F. D. J. (2025). Integrating Financial Planning with Business Strategy to Achieve Long-Term Competitive Advantage. *The Journal of Academic Science*, 2(5), 1411-1420. <https://doi.org/10.59613/drax1q77>
- Mesioye, O., & Bakare, I. A. (2024). Evaluating financial reporting quality: Metrics, challenges, and impact on decision making. *International Journal of Research Publication and Reviews*, 5(10), 1144-1156. <https://doi.org/10.55248/gengpi.5.1024.2735>
- Nurani, N., Permatasari, R. L. I., Khalik, A., Hamzah, M., & Nurhani, N. (2025). The Role of Accounting Literacy in Improving the Financial Performance of SMEs: A Study on Micro Entrepreneur Community in Indonesia. *Golden Ratio of Community Services and Dedication*, 5(2), 28-39. <https://doi.org/10.52970/grcsd.v5i2.1451>
- Nurhaedha, N. (2025). The Role of Digital Technology in Improving the Efficiency of Financial Management of Micro, Small and Medium Enterprises and Its Impact on Business Development. *International Journal of Economics Management and Social Science*, 8(2), 7-12.
- Pertiwi, J. P., & Hana, A. U. (2025). Data-Driven Decision Making in MSMEs: Leveraging Free Analytics Tools for Financial Planning and Efficiency. *Journal of Management and Informatics*, 4(1), 633-648. <https://doi.org/10.51903/jmi.v4i1.146>
- Pissardini, P. E., Godinho Filho, M., Callefi, M. H., & Devós Ganga, G. M. (2025). Organisational function synergy: capabilities enabled by smart industrial products. *Management Decision*, 1-37. <https://doi.org/10.1108/MD-12-2024-2887>
- Rahayu, S. K., Budiarti, I., Firdauas, D. W., & Onegina, V. (2023). Digitalization and informal MSME: Digital financial inclusion for MSME development in the formal economy. *Journal of Eastern European and Central Asian Research (JEECAR)*, 10(1), 9-19. <https://doi.org/10.15549/jeecar.v10i1.1056>
- Ramos, L. N., Gutierrez, I., Vásquez, A. V., Calderón, L., Correa, K. R., & Beleño, C. G. (2024). Family business: transparency in financial information from corporate governance practices. *Procedia Computer Science*, 231, 484-489. <https://doi.org/10.1016/j.procs.2023.12.238>
- Raviteja, N. (2024). Financial technology (FinTech) and banking industry transformation: A symbiotic evolution into the digital era. *Transactions*, 1(2), 23-29. <https://doi.org/10.59256/ijreat.20240401004>
- Sajuyigbe, A. S., Oyedele, O., Oke, O. D., Sodeinde, G. M., Ayo-Oyebiyi, G. T., & Adeyemi, M. A. (2024). Financial behavior and SMEs performance: The mediating influence of financial literacy and organizational culture. *Journal of Business and Technology*, 8(2). <https://doi.org/10.4038/jbt.v8i2.126>

- Selvi, S., Pakaya, A. R., & Nahar, F. H. (2024). Management behavior: The role of financial literacy and financial knowledge of MSME actors. *Jurnal Aplikasi Manajemen*, 22(3), 909-919. <https://doi.org/10.21776/ub.jam.2024.022.03.20>
- Sinha, K. J., Sinha, S., & Sinha, B. J. (2024). Micro, Small, and Medium-Sized Enterprises (MSMEs): The significant role and challenges in Indonesia's economy. *International Journal For Multidisciplinary Research*, 6(3), 20824. <https://doi.org/10.36948/ijfmr.2024.v06i03.20824>
- Susilawati, M. (2024). Entrepreneurial resilience: strategies for MSMEs to navigate uncertainties and challenges in contemporary markets. *International Journal of Business, Law, and Education*, 5(2), 1687-1695.
- Tambunan, T. (2023). Sustainable development goals and the role of MSMEs in Indonesia. *OIDA International Journal of Sustainable Development*, 16(01), 51-72.
- Tambunan, T. T. (2023). The potential role of MSMEs in achieving SDGs in Indonesia. In T. T. Tambunan (Ed.), *Role of micro, small and medium enterprises in achieving SDGs: Perspectives from emerging economies* (pp. 39-72). Springer Nature. https://doi.org/10.1007/978-981-19-9861-7_3
- Tanjung, M. (2025). Examining the impact of liquidity and solvency ratios on firm profitability: Insights from Indonesian tech companies. *Journal of Application Business and Management*, 11(1). <https://doi.org/10.17358/jabm.11.1.190>
- Widjanarko, W., Pramukty, R., Hadita, H., & Yulianah, Y. (2022). Strategic financial management in micro, small and medium enterprises (MSMEs). *Jurnal Ekonomi*, 11(1), 255-260.
- Yoganandham, G. (2025). Mastering economic and financial sources with reference to budgeting, savings, early investing, debt management and the power of financial planning: A comprehensive analysis. *Degrés*, 10(1).