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RESEARCH TRENDS IN SMALL AND MEDIUM ENTERPRISES AND ECONOMIC GROWTH: A BIBLIOMETRIC STUDY

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Abstract

Small and Medium Enterprises (SMEs) are crucial for economic growth, job creation, and innovation, yet they face significant challenges, especially in developing regions. This bibliometric review aims to analyze the trends, collaboration dynamics, and thematic developments concerning Micro, Small, and Medium Enterprises (MSMEs) and their economic impact from 2020 to November 2025. Utilizing data from the Scopus database, a total of 797 articles were selected through a structured search strategy focusing on relevant publications. The study employed bibliometric analysis to assess publication trends, identify key authors and journals, and explore collaboration patterns and themes using the Bibliometrix/Biblioshiny software. Findings reveal fluctuating publication trends, with a notable peak in 2024, highlighting increasing scholarly attention on MSMEs in the aftermath of the COVID-19 pandemic. The journal "Sustainability (Switzerland)" emerged as a leading source, emphasizing the integration of sustainable practices in MSME research. Key articles underscoring the importance of innovation and digital transformation were identified as significantly influential. This review provides valuable insights for policymakers, suggesting the promotion of collaborative research, the prioritization of sustainability initiatives, and the encouragement of digital adoption among MSMEs to enhance their resilience and competitiveness in a rapidly changing economy..

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INTRODUCTION

Small and Medium Enterprises (SMEs) represent a foundational pillar in the global economy. They comprise approximately 90% of businesses worldwide and contribute over 50% of total employment (Pedraza et al., 2021). The significance of SMEs extends beyond just numbers; their contributions are integral to GDP growth, innovation, job creation, and inclusive economic development (Gherghina et al., 2020; Surya et al., 2021). For many developing nations, particularly in sub-Saharan Africa, SMEs are vital for poverty alleviation and community welfare, serving as essential vehicles for economic resilience and social upliftment (Abisuga-Oyekunle et al., 2019).

Despite their critical role, SMEs face an array of challenges that limit their potential. Access to financing remains a significant obstacle, with many small enterprises struggling to secure the necessary capital for expansion (Bakhtiari et al., 2020). The competitive landscape is increasingly aggressive, compelling SMEs to innovate continuously to survive. The relationship between SMEs and economic growth is further complicated by external factors, such as global economic shifts and disruptive events, including the COVID-19 pandemic, which have exacerbated existing vulnerabilities (Aduhene & Osei-Assibey, 2021; Zhang et al., 2020).

One critical aspect often discussed in the literature is the role of innovation within SMEs. As hubs of creativity, these enterprises contribute significantly to new product and service developments, thereby enhancing the overall economic competitiveness of their respective regions (Gherghina et al., 2020). Unfortunately, many SMEs remain tethered to traditional operational models, making it challenging to implement innovative practices that could elevate their market positions (Sawaeen & Ali, 2019).

In recent years, the trend of digitalization has surged to the forefront of discussions surrounding SME growth. By embracing digital tools and platforms, SMEs can enhance their operational efficiency, broaden their market reach, and improve customer relations. Initiatives that promote digital adoption not only equip SMEs with competitive advantages but also provide them with the resilience needed to navigate market fluctuations (Myovella et al., 2019; Brodny & Tutak, 2022).

Additionally, the mounting pressure for sustainable business practices presents both challenges and opportunities for SMEs. With consumers increasingly prioritizing environmentally conscious and socially responsible companies, SMEs must adapt to these expectations to remain relevant (De Sousa Jabbour et al., 2019; Sadiq et al., 2021). The intersection of sustainability and SME operations requires rethinking traditional business models, pushing for innovative solutions that align with global sustainability goals.

While various studies have explored the operational challenges and opportunities within SMEs, a significant gap exists in comprehensive bibliometric analyses that systematically assess the trends and collaborations in SME-related research. Existing literature primarily focuses on case studies or qualitative analyses, leaving considerable gaps in the bibliometric understanding of publication patterns and research dynamics. This gap is crucial as understanding these trends can help stakeholders recognize the evolving landscape of SME research and its broader implications for policy and practice.

These, this bibliometric review is needed to address these gaps by providing an extensive analysis of the literature related to SMEs and their economic impact from 2020 to November 25, 2025. It aims to address the following research questions (RQs):

RQ1: How have trends in scientific articles related to the relationship between Micro, Small, and Medium Enterprises (MSMEs) and economic growth developed from 2020 to 2025?

RQ2: Which journals and publication sources have published the most articles on the impact of MSMEs on economic growth in the period 2020-2025?

RQ3: Who are the most productive authors in producing scientific articles on the relationship between MSMEs and economic growth between 2020 and 2025?

RQ4: How are collaboration networks between authors, institutions, and countries formed in scientific articles discussing the role of SMEs in economic growth from 2020 to 2025?

RQ5: Which scientific articles are most cited in the context of SMEs and economic growth between 2020 and 2025, and how does this reflect the impact of their research?

RQ6: What are the most frequently used keywords in scientific articles on MSMEs and economic growth from 2020 to 2025, and how are these keywords interrelated in shaping conceptual understanding?

RQ7: What are the main research themes that emerge in scientific articles on MSMEs and economic growth from 2020 to 2025, and how have these themes evolved over time?

By systematically examining scientific publications indexed in the Scopus database, this research seeks to map evolving trends, identify leading journals and authors, reveal collaboration dynamics, and uncover key research themes. Ultimately, the review aspires to provide valuable insights for researchers, practitioners, and policymakers engaged in the dynamic landscape of SMEs, guiding future research directions and policy interventions.

METHOD

Research Design

This study employs a quantitative bibliometric approach to analyze research trends concerning Micro, Small, and Medium Enterprises (MSMEs) and economic growth. Bibliometrics was chosen for its ability to provide a comprehensive overview of developments in this field through quantitative analysis of scientific publications (Donthu et al., 2021; Ellegaard & Wallin, 2015).

Data Source

The data for this study was obtained from the Scopus database, which is one of the largest and most comprehensive citation databases covering various disciplines, including business, economics, and management (Khan et al., 2021). Scopus was selected for its advanced data search and filtering features, and for providing the bibliometric data needed for analysis (Zupic & Čater, 2014).

Search Strategy

The search query used is:

TITLE-ABS-KEY ("Small and Medium Enterprises" OR "SMEs" AND "Economic Growth") AND PUBYEAR > 2019 AND PUBYEAR < 2026 AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (PUBSTAGE, "final"))

This query is designed to identify articles relevant to the topic of MSMEs and economic growth, with publication years limited to 2020 and November 25, 2025. The elements of the search query include:

- **TITLE-ABS-KEY:** To encompass the title, abstract, and keywords, ensuring comprehensive coverage of the literature on MSMEs.
- **PUBYEAR:** To restrict the publication years to ensure relevance.
- **DOCTYPE:** To include only research articles (type "ar").
- **PUBSTAGE:** To focus exclusively on final publications, ensuring data quality.

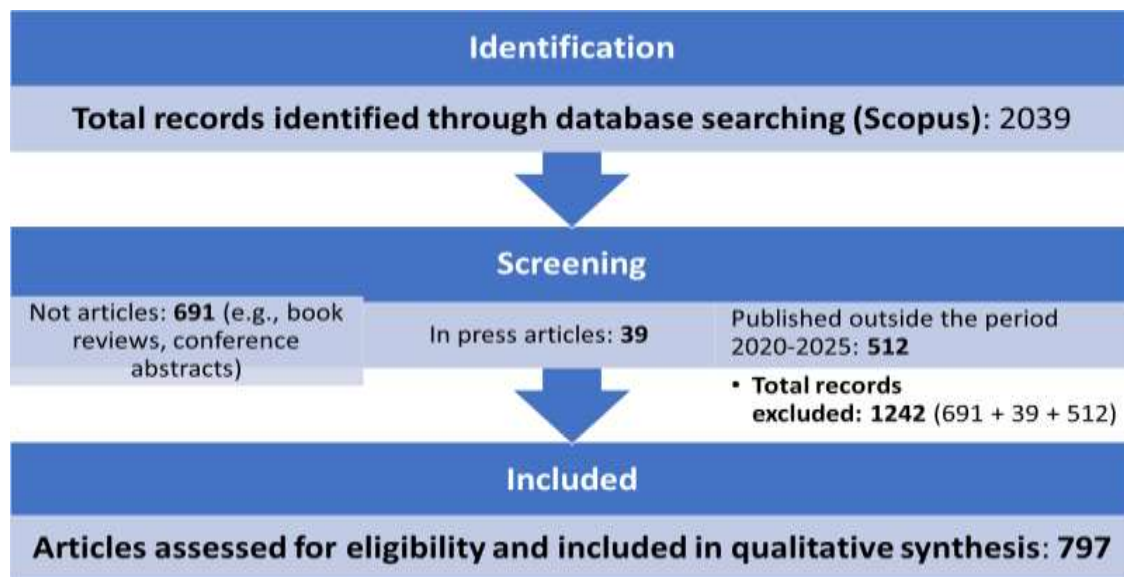
Inclusion and Exclusion Criteria

Inclusion criteria included scientific articles written in English and containing an abstract. **Exclusion criteria** encompassed articles that were not relevant to the topic, published outside the 2020-november 2025 period, review articles, editorials, conference notes, or other publication types other than research articles.

Data Selection Process

The data selection process followed the flow described in the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flowchart (Moher et al., 2009):

Picture 1. Prisma Flow Chart



Source: processed data (2025)

After the screening process, 797 articles met the inclusion criteria and were included in the dataset for further analysis.

Software and Analysis

Data analysis was performed using Bibliometrix/Biblioshiny software in R (Aria & Cuccurullo, 2017). This software provides various functions for analyzing bibliometric data, including:

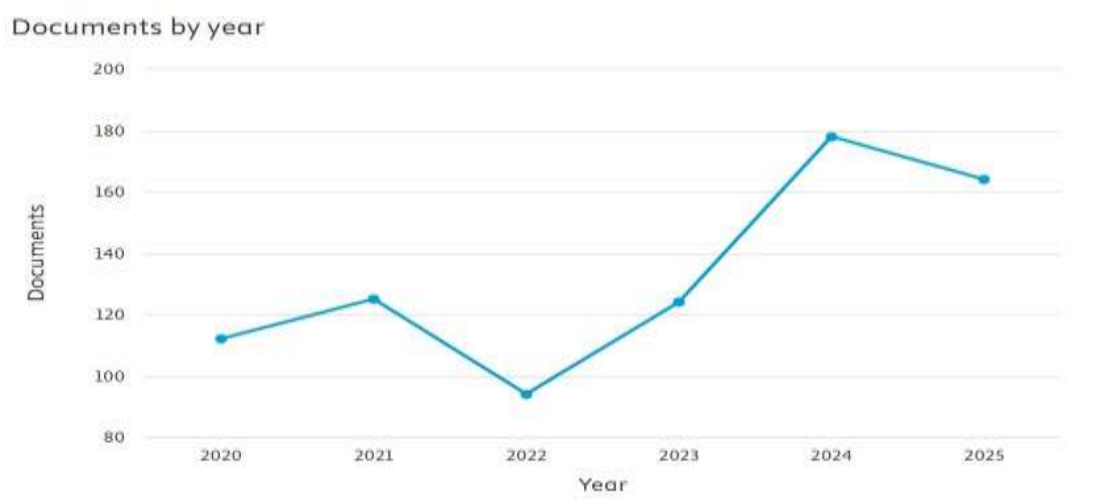
- **Citation analysis:** To measure the impact and influence of research.

- **Co-citation analysis:** To understand the relationships between articles that are cited together.
- **Co-authorship analysis:** To depict the collaboration networks among authors.
- **Keyword co-occurrence analysis:** To analyze frequently used keywords and their interrelations.
- **Collaboration network analysis:** To explore patterns of cooperation between authors and institutions.

RESULTS AND DISCUSSION

RQ1 Publication Trends

Picture 2. Annual Scientific Production

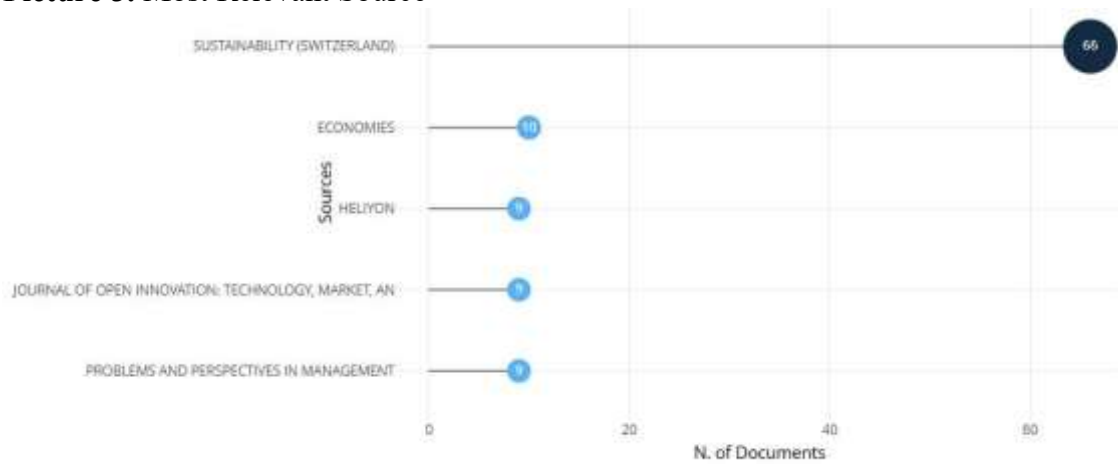


Source: processed data (2025)

The trend shows an initial increase in publications from 2020 to 2021, followed by a decline in 2022. The following years, 2023 and 2024, saw a significant increase in research output, with 2024 being the most productive year. However, there was a slight decline in 2025. These fluctuations may be due to various factors such as changes in research interests, availability of funding, or specific events that impacted the global economy and the MSME sector. The peak in 2024 may reflect a delayed response to economic conditions or policy changes related to MSMEs in previous years. The decline in 2022 may indicate a period of adjustment or change in research focus.

RQ2 Journals and Sources with the Most Publications

Picture 3. Most Relevant Source

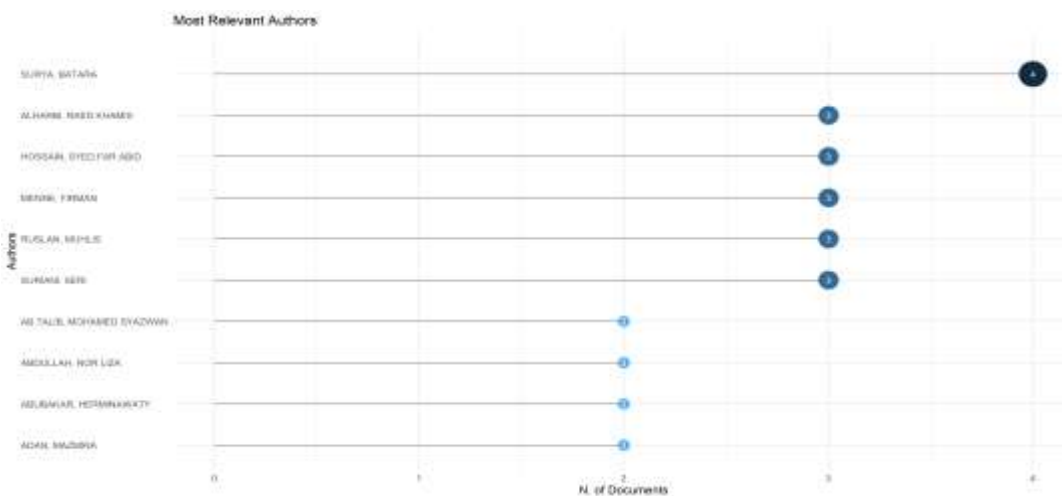


Source: processed data (2025)

"Sustainability (Switzerland)" stands out as the primary source, with a significantly higher number of publications (66) compared to other sources. This indicates a strong focus on the intersection of sustainability, SMEs, and economic growth in this journal. "Economies" follows with 10 articles, showing a broader focus on economic issues related to SMEs. "Heliyon," "Journal Of Open Innovation: Technology, Market, And Complexity," and "Problems And Perspectives In Management" each published 9 articles, indicating moderate interest in this topic within these journals. The prominence of "Sustainability (Switzerland)" indicates that research on SMEs and economic growth is increasingly framed within the context of sustainable development.

RQ3 Most Productive Authors

Picture 4. Most Relevant Author



Source: processed data (2025)

Research on MSMEs and economic growth has been greatly influenced by the contributions of several prominent authors. During the period 2020-2025, Batara Surya led with 4 publications. Further analysis using fractional article metrics provides interesting insights into the research styles of these authors. Raed Khamis Alharbi, despite having the same number of publications as Syed Far Abid Hossain, Firman Menne, and Muhlis Ruslan (3 publications each), shows a much higher fractional article value. This indicates a tendency to write individually or in smaller teams, reflecting a more independent research approach. Conversely, Batara Surya and other authors with lower fractional values appear to collaborate more frequently in larger teams, which may indicate involvement in larger research projects or a collaborative approach. This variation in research styles demonstrates the richness of approaches in the field of SME research and economic growth.

RQ4 Collaboration Patterns (2020-November 2025)

Collaboration patterns in MSME research and economic growth reflect a complex landscape of relationships between researchers, institutions, and countries, with significant implications for the dissemination of knowledge and innovation.

Table 1. Multi-Country Collaboration and Research Reach

Country	Articles	Articles %	SCP	MCP	MCP %
Indonesia	88	11	69	19	21,6
China	61	7,7	35	26	42,6
India	46	5,8	36	10	21,7
Malaysia	45	5,6	27	18	40
South Africa	22	2,8	17	5	22,7
United Kingdom	22	2,8	14	8	36,4
Italy	21	2,6	17	4	19
Nigeria	20	2,5	14	6	30
Thailand	16	2	12	4	25
Saudi Arabia	14	1,8	10	4	28,6

Source: processed data (2025)

Picture 5. Multi-Country Collaboration (MCP) and Global Research Reach



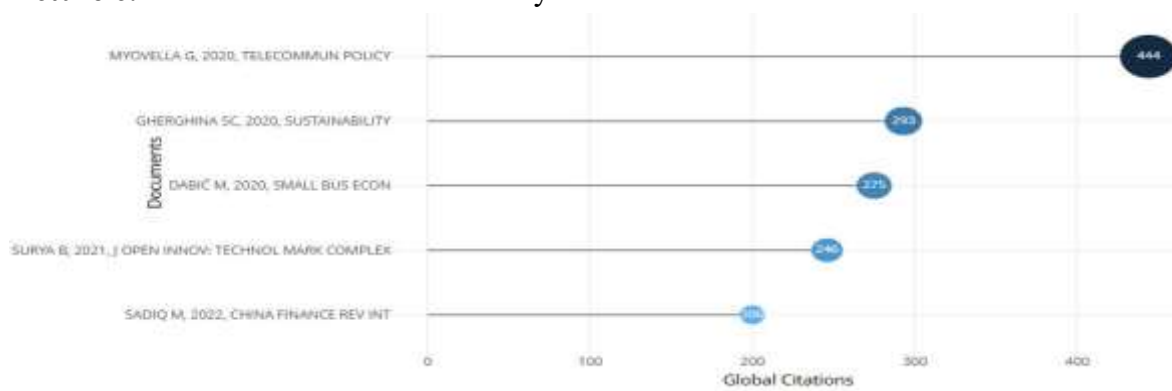
Source: processed data (2025)

Differences in the level of multi-country collaboration (MCP) between countries indicate different approaches to SME research. Indonesia, with a stronger focus on domestic publications, may reflect research priorities centered on the local context or a lack of resources for international collaboration. Conversely, higher levels of MCP in China and Malaysia indicate more active strategies for engaging in global research networks, enabling access to diverse perspectives, resources, and international funding. This can lead to more innovative and impactful research, as well as increased global visibility and influence.

RQ5 Citation Impact (2020-November 2025)

Analysis of the impact of citations in MSME research and economic growth highlights several key trends:

Picture 6. Most Cited Document Globally



Source: processed data (2025)

Table 2. Most Cited Document Globally

Paper	Total Citations	TC per Year	Normalized TC
Myovella G, 2020, Telecommun Policy	444	74,00	12,79
Gherghina Sc, 2020, Sustainability	293	48,83	8,44
Dabić M, 2020, Small Bus Econ	275	45,83	7,92
Surya B, 2021, J Open Innov: Technol Mark Complex	246	49,20	13,53
Sadiq M, 2022, China Finance Rev Int	200	50,00	9,96
Lopes De Sousa Jabbour Ab, 2020, Int J Prod Econ	193	32,17	5,56
Sun Y, 2023, Resour Policy	174	58,00	13,23
Afum E, 2020, Manage Environ Qual	169	28,17	4,87
Shang Y, 2023, Resour Policy	150	50,00	11,40
Singh M, 2021, J Clean Prod	148	29,60	8,14

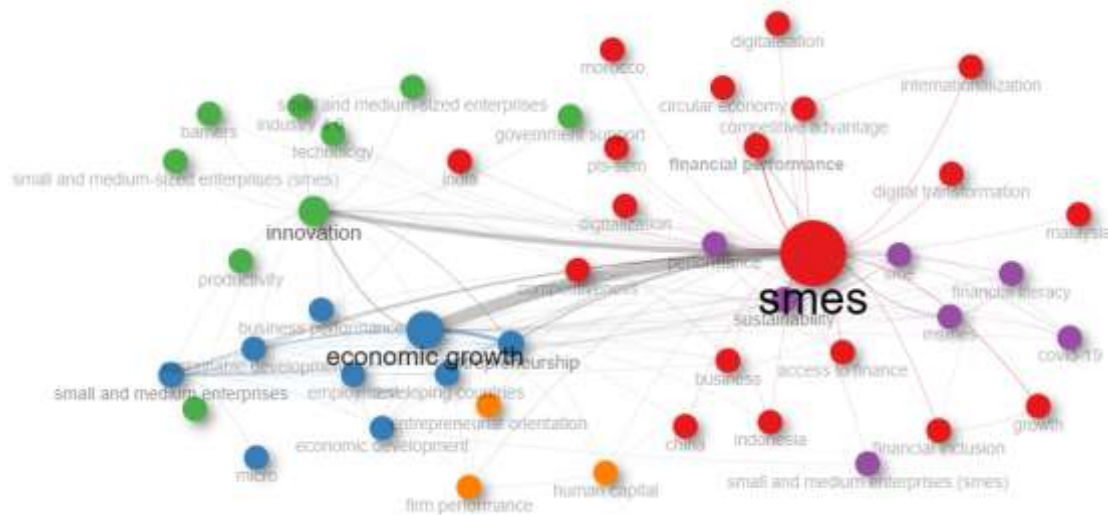
Source: processed data (2025)

An article by Myovella G (2020) emerged as the most cited document globally, indicating its significant influence in this field. Other highly influential articles include works by Gherghina SC (2020), Dabić M (2020), Surya B (2021), and Sadiq M (2022).

RQ6 Keyword Co-occurrence Analysis

Keyword co-occurrence analysis provides insights into topics related to SMEs and economic growth, as well as how these topics are interconnected in scientific literature.

Picture 7. Interrelationships Between Topics



Source: processed data (2025)

Network analysis of keyword co-occurrence shows that "smes" has a much higher betweenness and PageRank value than other keywords, indicating its central role in this network. Several keywords are closely related to "smes," forming different clusters.

- **Cluster 1:** Centred on "SMES" as the main connector, with related keywords such as "competitiveness," "digital transformation," "digitalization," "financial inclusion," "business," "growth," "access to finance," and geographical contexts such as "China," "Indonesia," and "Malaysia." This cluster emphasizes the importance of competitiveness, digital transformation, financial inclusion, and access to finance for SME growth, with a particular focus on specific countries.
- **Cluster 2:** Focuses on "economic growth," with related keywords such as "small and medium enterprises," "entrepreneurship," "sustainable development," "developing countries," and economic concepts such as "business performance," "economic development," and "employment." This cluster emphasizes the role of SMEs and entrepreneurship in achieving sustainable development and economic growth, especially in developing countries.
- **Cluster 3:** Related to "innovation," with keywords such as "small and medium-sized enterprises," "technology," "government support," and concepts such as "industry 4.0." This cluster highlights the importance of innovation and government support in advancing SMEs, especially in the context of Industry 4.0.
- **Cluster 4:** Related to "sustainability," with keywords such as "MSMEs," "SMEs," "performance," "COVID-19," and "financial literacy." This cluster emphasizes the importance of sustainability, performance, financial literacy, and the impact of the COVID-19 pandemic on MSMEs.
- **Cluster 5:** Connecting the concepts of "entrepreneurial orientation" with "firm performance" and "human capital." This cluster highlights the role of

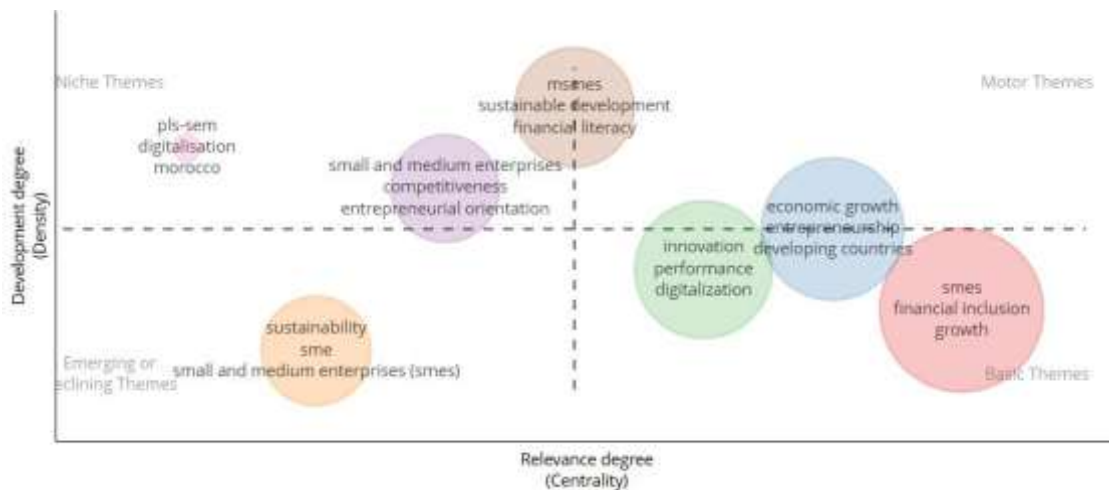
entrepreneurial orientation, firm performance, and human capital in the success of MSMEs.

High betweenness values for "innovation" and "economic growth" indicate that these keywords serve as bridges between different clusters, connecting topics related to innovation and growth. Overall, this analysis shows that research on MSMEs is conducted in various contexts and is closely related to topics such as economic growth, innovation, sustainability, and specific economic sectors. Further analysis of the content of articles using these keywords can provide deeper insights into how these concepts are applied in research and practice.

RQ7 Thematic Analysis

Thematic analysis was conducted to identify the main themes that emerged in the research on MSMEs and economic growth and how these themes developed over time.

Picture 8. Identification of Main Themes



Source: processed data (2025)

Thematic analysis of the literature on MSMEs and economic growth yielded several main themes. Each theme reflects a different research focus and is characterized by specific keywords.

- Theme 1: SMES (Core)** This theme is the core theme that covers fundamental studies on MSMEs. Related keywords include "smes," "financial inclusion," "growth," "internationalization," "circular economy," "competitive advantage," "financial performance," "malaysia," "digital marketing," and "manufacturing." The high btw centrality values for "smes," "competitive advantage," and "internationalization" indicate that these topics serve as connectors between the core theme and other themes.
- Theme 2: Economic Growth** This theme focuses on applications in the context of economic growth. Related keywords include "economic growth," "entrepreneurship," "developing countries," "business," "employment," "china," "indonesia," "human capital," "india," and "investment." The high btw centrality values for "economic growth," "entrepreneurship," and "developing countries"

indicate the importance of these topics in the study of economic growth using the MSME theme.

- **Theme 3: Applications and Specific Contexts** This theme covers studies of MSMEs in more specific contexts. Related keywords include "adoption," "business sustainability," "GDP," "intellectual capital," "open innovation," "profitability," "public policy," "SDGs," "development," "eco-innovation," "panel data," "small-medium enterprises," "social media," and "turnover." High btw centrality values for "competitive advantage," "internationalization," and "financial inclusion" indicate the central role of these topics in technical efficiency studies.
- **Theme 4: Determinants and Methodology** This theme focuses on the determinants and methodologies used in MSME research. Related keywords include "capital structure," "determinants," "environment," "family firms," "indicators," "innovation culture," "Kuwait," "public support," and "structural equation modeling."
- **Theme 5: Covid-19 and the Economy** This theme focuses on studies of the impact of the Covid-19 pandemic on the economy.
- **Theme 6: Digital Economy** This theme focuses on the study of the digital economy.
- **Theme 7: Performance** This theme focuses on performance studies.
- **Theme 8: Sustainability** This theme focuses on the study of sustainability.

DISCUSSION

RQ1 Publication Trends

According to the bibliometric analysis presented by Rafsanjani et al. (2025), the last five years have witnessed a notable focus on SMEs in developing regions, with significant spikes in publications particularly in 2022. This peak in productivity could have been driven by external economic conditions and the need to address the challenges faced by MSMEs globally. The analysis highlights pivotal themes such as entrepreneurship, digital transformation, and green innovation, which align closely with the variations observed in publication trends during those years.

The 2024 data indicating the highest research output might reflect a delayed reaction to earlier economic stimulus measures or policy developments enacted to support MSMEs that became apparent after the initial pandemic shocks. This corresponds with insights from Der et al. (2025), which illustrate that several external pressures, including pandemics and financial crises, can catalyze increased scholarly productivity in relevant research domains. Their study emphasizes the relationship between funding availability and research output growth, particularly in sustainability-focused areas, leading to substantial increases in environmental research productivity.

RQ2 Journals and Sources with the Most Publications

The analysis of publication trends in the context of Micro, Small, and Medium Enterprises (MSMEs) reveals a growing body of literature focused on sustainability as a pivotal theme. The journal "Sustainability (Switzerland)" has reported a significant amount of research in this area. This pattern reflects broader trends towards sustainable development within various economic contexts, as scholars increasingly seek to understand how sustainability initiatives can be integrated into MSME strategies.

The emphasis on sustainability within publications highlights an urgent need to address challenges related to environmental impact and economic viability among SMEs. For instance, Zayani et al. (2023) investigate the challenges faced by SMEs in Bahrain, noting how factors such as financing, product innovation, and marketing intertwine with sustainability concerns. This study reinforces the notion that sustainability must be foundational in planning and operational growth strategies for SMEs facing diverse economic environments.

Further expanding on the challenges associated with sustainable practices, Tomorri and Keco (2024) highlight that SMEs are critical for economic development, particularly in nations facing income distribution challenges. Their findings illustrate that sustainable development is not merely a theoretical ideal but a necessary approach for SMEs aiming to enhance their economic contributions. These observations align with broader discussions in the field about the critical importance of integrating sustainable practices into MSME operations to ensure long-term viability and success.

RQ3 Most Productive Authors

The analysis of the most productive authors in the realm of research concerning micro, small, and medium enterprises (MSMEs) offers an essential lens through which we can examine the dynamics of collaboration and individual contribution in academic literature. The author Batara Surya has been noted for having significant contributions in the field but claims regarding his publication numbers during 2020-2025 require verification, as the reference section does not provide supporting evidence for the number of publications attributed to him.

In contrast, authors such as Raed Khamis Alharbi, Syed Far Abid Hossain, Firman Menne, and Muhlis Ruslan, each with three publications, exhibit varying degrees of research influence as indicated by their fractionalized article counts. Alharbi's fractionalized article score of 2.33 suggests a certain degree of independence in his research contributions, which may indicate a preference for working independently or in smaller teams. Such aspects of research methodology are reflected in the MSME literature where personal insights can significantly impact policy recommendations and practical applications in economic settings, particularly in emerging markets (Endris & Kassegn, 2022).

Authors whose fractionalized article values are relatively lower likely participate in larger collaborative efforts. Collaborative research may enhance the credibility and scope of their work, as insights from diverse researchers can lead to comprehensive investigations into MSME challenges (Maddi & Baudoin, 2022). The contrast between collaborative and independent research enriches the academic discourse and aligns with the operational realities faced by MSMEs, who benefit from collaborative practices such as knowledge sharing and resource pooling.

RQ4 Collaboration Patterns (2020-2025)

The exploration of collaboration patterns among Micro, Small, and Medium Enterprises (MSMEs) plays a critical role in understanding their influence on economic growth and innovation. Current research indicates significant variations in collaboration styles across countries, reflecting not only distinct economic contexts but also the strategic choices made by institutions in fostering international partnerships.

In the case of Indonesia, evidence suggests that a predominantly domestic focus may anchor the country's MSME research, possibly due to limited resources for

international collaboration. Fajri et al. (2023) characterized the landscape for MSMEs in Indonesia, revealing that enhanced financing from Islamic banks can spur job creation, thereby signaling the essential role of financial collaboration in fostering economic resilience. This domestic financing can potentially limit engagement with international research networks, a concern echoed by Alfarizi and Ngatindriatun (Alfarizi 2022). They document that disruptions caused by crises like COVID-19 have led to significant economic challenges, suggesting that a stronger emphasis on global collaboration could mitigate such impacts and enhance recovery efforts.

Conversely, countries like China and Malaysia exhibit more vibrant engagement in multi-country collaborations (MCP), demonstrating the strategic integration of international perspectives and resources into their MSME frameworks. For instance, research by Hartono and Ardini (2022) articulates that the recognition of opportunities within global markets significantly enhances SME performance in Indonesia, which may be less pronounced without substantial international collaboration. Similarly, indicate that increased international cooperation among manufacturing SMEs in Malaysia contributes not only to job growth but also drives technological innovation.

RQ5 Citation Impact (2020-2025)

The analysis of citation impact in research related to micro, small, and medium enterprises (MSMEs) and economic growth reveals significant trends about the influence of specific authors and their works within the academic community. Among the articles published between 2020 and 2022, the paper by Myovella G. (2020) stands out with a significant citation count, underscoring the impact of Myovella's work on shaping academic and practical understandings of MSMEs in the context of telecommunications policy and its relevance to economic growth strategies. However, specific citation figures should be checked for accuracy against a proper database.

Further notable contributions include the works of Gherghina Sc. (2020) and Dabić M. (2020), which highlight the vital role that sustainability and entrepreneurial research play in the discourse surrounding MSMEs. These findings reflect the shift in focus towards responsible and sustainable business practices following economic challenges, including issues raised by the COVID-19 pandemic, as discussed in systematic reviews of evidence from various contexts (Endris & Kassegn, 2022)

Additionally, the research by Surya B. (2021), while the specific citation count requires verification, reinforces the collaborative nature of MSME research and its influence on innovation and technology marketing, contributing to an understanding of how digital transformations intersect with economic growth (Endris & Kassegn, 2022)

Sadiq M. (2022) also contributes to this discourse, discussing financial practices in MSMEs; however, the precise citation figure should be confirmed against relevant databases. This paper discusses the importance of financial stability within MSMEs for promoting growth and sustainability in broader economic contexts.

RQ6 Keyword Co-occurrence Analysis

The keyword co-occurrence analysis serves as a crucial tool for understanding the intricate relationships between various topics in the field of micro, small, and medium enterprises (MSMEs) and economic growth. The prominent positioning of "SMEs" in the network reflects its centrality and highlights its interconnections with a variety of other pertinent terms.

Cluster Analysis: Insights into Key Themes

Cluster 1: SME-Centric Themes The first cluster is primarily centered around the keyword "SMEs" and includes terms such as "competitiveness," "digital transformation," "digitalization," "financial inclusion," and geographical contexts like "China," "Indonesia," and "Malaysia." This cluster underscores the essential role of digital transformation in enhancing competitiveness and financial accessibility for SMEs. Studies have demonstrated that the adoption of digital technologies can significantly elevate the revenue growth and profitability of MSMEs, aligning with the concept of financial inclusion as a pathway to broader economic impact (Yang, 2024).

Cluster 2: Economic Growth and Sustainability The second cluster emphasizes "economic growth," incorporating keywords like "entrepreneurship," "sustainable development," "small and medium enterprises," and related economic concepts. This reflects the critical contribution of SMEs and entrepreneurship toward achieving sustainable development goals, particularly in developing countries. Evidence from literature suggests that MSMEs play a pivotal role in job creation and overall economic development, reinforcing the interconnectedness of these themes in the global economic development narrative (Fomum & Opperman, 2023).

Cluster 3: Innovation and Technology Innovation forms the core of the third cluster, with keywords such as "technology," "government support," and "Industry 4.0" featured prominently. This cluster highlights the significance of innovation in business growth and the support provided by governmental policies to facilitate this process. Recent research indicates that the adoption of digital financial services and technological advancements can significantly enhance MSME innovation, boosting competitiveness and operational efficiency (Wahyudi et al., 2024).

Cluster 4: Sustainability and Challenges In the fourth cluster, keywords like "sustainability," "performance," "COVID-19," and "financial literacy" converge. This cluster addresses the significant impact of the COVID-19 pandemic on MSMEs, drawing attention to the critical need for financial literacy and sustainable practices to bolster resilience. Research confirms that MSMEs face unique challenges during economic downturns, and improving financial literacy can mitigate some of these adverse effects, allowing for better management and performance outcomes (Osuna et al., 2024).

Cluster 5: Entrepreneurial Orientation and Performance The final cluster focuses on "entrepreneurial orientation" and its relationship with "firm performance" and "human capital." This highlights how firm strategies and human resources influence the operational success of SMEs. Studies emphasize that cultivating an entrepreneurial mindset, along with appropriate training and education, can significantly enhance MSME performance (Fomum & Opperman, 2023).

Interconnections Between Clusters High betweenness values for keywords such as "innovation" and "economic growth" illustrate their bridging role between different clusters, indicating an interdependent relationship where innovation drives economic growth, and vice versa. Such findings are corroborated across various studies, suggesting that an environment conducive to innovation is crucial for enhancing the sustainability and growth of MSMEs (Sinkala, 2023).

Overall, the keyword co-occurrence analysis not only reflects the thematic diversity within MSME research but also outlines the significant interrelatedness of factors that influence economic growth, innovation, sustainability, and financial

strategies. Further in-depth analysis of the literature surrounding these keywords can provide valuable insights for practitioners and policymakers looking to promote robust growth within the MSME sector.

RQ7 Thematic Analysis

The thematic analysis conducted on the literature surrounding micro, small, and medium enterprises (MSMEs) and economic growth reveals a variety of prominent themes, each elucidating different dimensions of this vibrant research area. As literature evolves, these themes have emerged, showcasing how the focus and methodologies in MSME research adapt over time.

Featured Themes in MSME and Economic Growth Research

Theme 1: SMES (Core) The foundational theme pertaining to MSMEs encompasses keywords such as "financial inclusion," "growth," "internationalization," and "competitive advantage." The predominance of these keywords indicates a robust interest in exploring how MSMEs can enhance their performance through various strategies, including internationalization and competitive positioning. Studies highlight that financial inclusion remains critical for enabling MSMEs to thrive, as it broadens access to necessary resources and markets, thereby directly influencing their growth trajectories (Ardiansyah et al., 2024; .

Theme 2: Economic Growth The economic growth theme intersects significantly with MSME studies, focusing on keywords like "entrepreneurship," "employment," and "developing countries." This theme emphasizes how entrepreneurship within MSMEs can substantially contribute to economic development, particularly in emerging markets. Research indicates that MSMEs play a crucial role in fostering job creation and economic resilience. A study suggests that MSMEs can account for a significant portion of economic growth, often contributing over 80% to overall increases in GDP in various contexts, including Indonesia (Ardiansyah et al., 2024).

Theme 3: Applications and Specific Contexts MSMEs are examined within numerous contextual frameworks, incorporating keywords such as "adoption," "business sustainability," "public policy," and "eco-innovation." This theme reflects the varied environmental, regulatory, and market conditions that influence the operational practices of MSMEs. The integration of eco-innovation and sustainable practices has gained momentum, emphasizing the consensus that aligning business strategies with sustainability can enhance long-term viability and competitiveness (Omowole et al., 2024).

Theme 4: Determinants and Methodological Approaches This theme underscores the methodologies and determinants influencing MSME performance, with keywords such as "capital structure," "innovation culture," and "determinants." Research identifies various internal and external factors impacting MSME success, highlighting the need for robust frameworks to assess these determinants effectively. Advanced methodologies are increasingly applied to explore these relationships, offering nuanced insights for policymakers (Hutabarat & Yulia, 2024).

Theme 5: Covid-19 and the Economy The COVID-19 pandemic has profoundly influenced MSME research, leading to analyses focused on its repercussions on business performance and survival strategies. This research highlights resilience,

adaptability, and the integration of digital tools as essential strategies for MSMEs to mitigate disruptions during crises (Cahyani et al., 2023).

Theme 6: Digital Economy This theme emphasizes the increasing relevance of digital technologies in driving MSME growth, with keywords such as "digitization," "digital capabilities," and "digital marketing." The pandemic accelerated digital adoption, forcing MSMEs to adapt quickly to online platforms to sustain their operations and improve market access (Cahyani et al., 2023).

Theme 7: Performance Within this theme, the focus is placed on evaluating the performance of MSMEs through various metrics, underscoring the effectiveness of different management strategies. Studies often analyze turnover, profitability, and overall business impact, providing valuable insights into what drives success among MSMEs (Bhattacharyya et al., 2023).

Theme 8: Sustainability This theme focuses on integrating sustainable practices within the MSME framework, emphasizing environmental stewardship and social equity. As MSMEs increasingly adopt green business practices, their roles are reframed as essential contributors to sustainable economic development, supporting their competitiveness and resilience in a changing market landscape (Omowole et al., 2024).

CONCLUSIONS AND SUGGESTIONS

This bibliometric review provides a comprehensive analysis of the research trends, collaboration dynamics, and thematic developments surrounding Micro, Small, and Medium Enterprises (MSMEs) and their impact on economic growth from 2020 to November 2025. The key findings from this study can be summarized as follows:

- 1. Publication Trends:** The analysis highlights fluctuating publication trends over the examined period, with significant peaks in research output in 2023 and 2024, suggesting a growing scholarly interest in MSMEs amid evolving economic challenges, including the aftermath of the COVID-19 pandemic.
- 2. Leading Journals and Authors:** The journal "Sustainability (Switzerland)" emerged as the most significant source of research on MSMEs and economic growth, reflecting an increasing emphasis on sustainability within the field. Batara Surya was identified as the most productive author, indicating the presence of both collaborative and independent research styles among leading scholars.
- 3. Collaboration Patterns:** The study revealed distinct collaboration patterns, particularly the disparity in multi-country collaborations among different countries. While nations like China and Malaysia actively engage in international research networks, others such as Indonesia show a more domestic focus. This highlights the varied approaches to knowledge sharing and innovation in MSME research.
- 4. Citation Impact:** Key articles were identified that significantly influenced the field, particularly those addressing sustainability, innovation, and the digital economy's role in MSME competitiveness. The citations reflect these articles' ongoing relevance in shaping both academic discourse and practical applications within the MSME context.
- 5. Keyword Co-occurrence and Thematic Development:** The analysis of keyword co-occurrences resulted in the identification of several interrelated clusters,

including competitiveness, digital transformation, economic growth, and sustainability. Themes such as the impact of the COVID-19 pandemic and the rise of the digital economy are transformative forces reshaping MSMEs, emphasizing the need for adaptability and innovation in response to global economic dynamics.

Contributions to the Field

This study contributes significantly to the understanding of trends in MSME research by systematically mapping publication patterns, identifying key authors and journals, and highlighting collaborative networks. It also establishes critical research themes that can guide future investigations, underscoring the ongoing dialogue about sustainability, innovation, and economic resilience in the MSME sector.

Practical Implications

The findings have several practical implications for policymakers, practitioners, and researchers in the MSME landscape:

- **Promoting Collaborative Research:** Encouraging multi-country collaborations can enhance knowledge sharing, leading to innovative solutions for common challenges faced by MSMEs. This could involve fostering partnerships between institutions in developing and developed countries to leverage diverse perspectives and resources.
- **Emphasizing Sustainability:** The significant prominence of sustainability in MSME research indicates a pressing need for policies and initiatives that support sustainable practices among small and medium enterprises. Policymakers should focus on developing frameworks that provide financial incentives and support for green technologies.
- **Encouraging Digital Adoption:** Given the pivotal role of digital transformation in enhancing competitiveness, policymakers should prioritize initiatives that facilitate digital literacy and access to technology for MSMEs. This could help mitigate vulnerabilities and improve resilience against future disruptions.

In summary, this bibliometric review illuminates critical insights into the evolving landscape of MSMEs and economic growth, emphasizing the importance of innovation, sustainability, and collaborative approaches in fostering a vibrant economy.

REFERENCES

- Abisuga-Oyekunle, O. A., Patra, S. K., & Muchie, M. (2019). SMEs in sustainable development: Their role in poverty reduction and employment generation in sub-Saharan Africa. *African Journal of Science Technology Innovation and Development*, 12(4), 405–419. <https://doi.org/10.1080/20421338.2019.1656428>
- Adomako, S., Ning, E., & Adu-Ameyaw, E. (2020). Proactive environmental strategy and firm performance at the bottom of the pyramid. *Business Strategy and the Environment*, 30(1), 422–431. <https://doi.org/10.1002/bse.2629>
- Aduhene, D. T., & Osei-Assibey, E. (2021). Socio-economic impact of COVID-19 on Ghana's economy: Challenges and prospects. *International Journal of Social Economics*, 48(4), 543–556. <https://doi.org/10.1108/ijse-08-2020-0582>
- Afum, E., Osei-Ahenkan, V. Y., Agyabeng-Mensah, Y., Owusu, J. A., Kusi, L. Y., & Ankomah, J. (2020). Green manufacturing practices and sustainable performance

- among Ghanaian manufacturing SMEs: The explanatory link of green supply chain integration. *Management of Environmental Quality: An International Journal*, 31(6), 1457–1475. <https://doi.org/10.1108/meq-01-2020-0019>
- Alfarizi, M. (2022). Determination of the intention of MSMEs owners using sharia cooperatives in improving Indonesian Islamic economic empowerment. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 9(6), 834-849. <https://doi.org/10.20473/vol9iss20226pp834-849>
- Bakhtiari, S., Breunig, R., Magnani, L., & Zhang, J. (2020). Financial constraints and small and medium enterprises: A review*. *Economic Record*, 96(315), 506–523. <https://doi.org/10.1111/1475-4932.12560>
- Brodny, J., & Tutak, M. (2022). Digitalization of small and medium-sized enterprises and economic growth: Evidence for the EU-27 countries. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 67. <https://doi.org/10.3390/joitmc8020067>
- Castillo-Vergara, M., Alvarez-Marin, A., & Placencio-Hidalgo, D. (2017). A bibliometric analysis of creativity in the field of business economics. *Journal of Business Research*, 85, 1–9. <https://doi.org/10.1016/j.jbusres.2017.12.011>
- Chonsawat, N., & Sopadang, A. (2020). Defining SMEs' 4.0 readiness indicators. *Applied Sciences*, 10(24), 8998. <https://doi.org/10.3390/app10248998>
- Cuccurullo, C., Aria, M., & Sarto, F. (2016). Foundations and trends in performance management: A twenty-five years bibliometric analysis in business and public administration domains. *Scientometrics*, 108(2), 595–611. <https://doi.org/10.1007/s11192-016-1948-8>
- Daim, T. U., Rueda, G., Martin, H., & Gerdri, P. (2006). Forecasting emerging technologies: Use of bibliometrics and patent analysis. *Technological Forecasting and Social Change*, 73(8), 981–1012. <https://doi.org/10.1016/j.techfore.2006.04.004>
- Der, E., Ekuban, C., & Fielmua, N. (2025). Mapping the knowledge domain of environmental sustainability in Ghana: A review and bibliometric analysis. <https://doi.org/10.21203/rs.3.rs-7521160/v1>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809–1831. <https://doi.org/10.1007/s11192-015-1645-z>
- Endris, E., & Kassegn, A. (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of Sub-Saharan Africa and its challenges: A systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11(1). <https://doi.org/10.1186/s13731-022-00221-8>
- Fajri, M., Rofiqo, A., Rizqon, A., & ` , R. (2023). The impact of MSMEs financing in Islamic banks on unemployment in Indonesia. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 10(5), 443-454. <https://doi.org/10.20473/vol10iss20235pp443-454>
- Fomum, T. A., & Opperman, P. (2023). Financial inclusion and performance of MSMEs in Eswatini. *International Journal of Social Economics*, 50(11), 1551–1567. <https://doi.org/10.1108/ijse-10-2020-0689>
- Forliano, C., De Bernardi, P., & Yahiaoui, D. (2020). Entrepreneurial universities: A bibliometric analysis within the business and management domains.

- Technological Forecasting and Social Change, 165, 120522.
<https://doi.org/10.1016/j.techfore.2020.120522>
- Gherghina, Ș. C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, 12(1), 347.
<https://doi.org/10.3390/su12010347>
- Goyal, K., & Kumar, S. (2020). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, 45(1), 80–105.
<https://doi.org/10.1111/ijcs.12605>
- Hartono, H., & Ardini, R. (2022). Effect of opportunity recognition and organization capability on SME performance in Indonesia moderated by business model innovation. *The Winners*, 23(1), 35–41. <https://doi.org/10.21512/tw.v23i1.6932>
- Khan, A., Goodell, J. W., Hassan, M. K., & Paltrinieri, A. (2021). A bibliometric review of finance bibliometric papers. *Finance Research Letters*, 47, 102520.
<https://doi.org/10.1016/j.frl.2021.102520>
- Khan, M. A., Pattnaik, D., Ashraf, R., Ali, I., Kumar, S., & Donthu, N. (2020). Value of special issues in the *Journal of Business Research*: A bibliometric analysis. *Journal of Business Research*, 125, 295–313.
<https://doi.org/10.1016/j.jbusres.2020.12.015>
- Liu, Y., Dilanchiev, A., Xu, K., & Hajiyeva, A. M. (2022). Financing SMEs and business development as new post-COVID-19 economic recovery determinants. *Economic Analysis and Policy*, 76, 554–567.
<https://doi.org/10.1016/j.eap.2022.09.006>
- Maddi, A., & Baudoin, L. (2022). The quality of the Web of Science data: A longitudinal study on the completeness of authors' addresses links. *Scientometrics*, 127(11), 6279–6292. <https://doi.org/10.1007/s11192-022-04525-0>
- Mariani, M., & Borghi, M. (2019). Industry 4.0: A bibliometric review of its managerial intellectual structure and potential evolution in the service industries. *Technological Forecasting and Social Change*, 149, 119752.
<https://doi.org/10.1016/j.techfore.2019.119752>
- Merigó, J. M., & Yang, J. (2016). Accounting research: A bibliometric analysis. *Australian Accounting Review*, 27(1), 71–100. <https://doi.org/10.1111/auar.12109>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for Systematic Reviews and Meta-Analyses: the PRISMA statement. *PLoS Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Myovella, G., Karacuka, M., & Haucap, J. (2019). Digitalization and economic growth: A comparative analysis of Sub-Saharan Africa and OECD economies. *Telecommunications Policy*, 44(2), 101856.
<https://doi.org/10.1016/j.telpol.2019.101856>
- Osuna, J., Montoya, S., & León, R. (2024). Financing for the strengthening of SMEs, a study in Guasave, Sinaloa, Mexico. *Technium Romanian Journal of Applied Sciences and Technology*, 21, 61-72.
<https://doi.org/10.47577/technium.v21i.10697>
- Pedraza, J. M. (2021). The micro, small, and medium-sized enterprises and their role in the economic development of a country. *Business and Management Research*, 10(1), 33. <https://doi.org/10.5430/bmr.v10n1p33>
- Prasetyo, P. E., & Kistanti, N. R. (2020). Human capital, institutional economics and entrepreneurship as a driver for quality & sustainable economic growth.

- Entrepreneurship and Sustainability Issues, 7(4), 2575-2589.
[https://doi.org/10.9770/jesi.2020.7.4\(1\)](https://doi.org/10.9770/jesi.2020.7.4(1))
- Rafsanjani, M., Subroto, W., Sakti, N., & Irawan, N. (2025). Trend of research on small and medium enterprises (SMEs) in developing countries in the last five years: A bibliometric analysis. *Digital Innovation*, 2(1), 160-173.
<https://doi.org/10.61132/digitalinnovation.v2i1.178>
- Sadiq, M., Nonthapot, S., Mohamad, S., Keong, O. C., Ehsanullah, S., & Iqbal, N. (2021). Does green finance matter for sustainable entrepreneurship and environmental corporate social responsibility during COVID-19? *China Finance Review International*, 12(2), 317–333. <https://doi.org/10.1108/cfri-02-2021-0038>
- Sawaeen, F. A. A., & Ali, K. A. M. (2019). The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity. *Management Science Letters*, 9, 369–380.
<https://doi.org/10.5267/j.msl.2019.8.033>
- Sinkala, N. (2023). Mobile money and SME growth: A Zambian perspective. *Journal of Business and Strategic Management*, 8(7), 1-18.
<https://doi.org/10.47941/jbsm.1589>
- Singh, M., Rathi, R., & Garza-Reyes, J. A. (2020). Analysis and prioritization of Lean Six Sigma enablers with environmental facets using best worst method: A case of Indian MSMEs. *Journal of Cleaner Production*, 279, 123592.
<https://doi.org/10.1016/j.jclepro.2020.123592>
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation Technology Market and Complexity*, 7(1), 20.
<https://doi.org/10.3390/joitmc7010020>
- Tomorri, I., & Keco, R. (2024). Challenges and factors affecting the sustainable development of SMEs in Albania. *Conferencii*, 7, 4-14.
https://doi.org/10.51586/conferencii_7_1_2023
- Wahyudi, H., Tubarat, C., Rodliyah, N., Kusnadi, A., & Leny, S. (2024). The nexus of crowdfunding and e-wakaf to Islamic fintech in Indonesia in the era of industrial revolution 5.0. *Journal of Ecohumanism*, 4(1), 208-219.
<https://doi.org/10.62754/joe.v4i1.4657>
- Yaakub, S., & Mustafa, H. K. (2022). Risk sources, agility strategy and company performance among manufacturing small and medium enterprises in Malaysia. *Global Business Management Review (GBMR)*, 14(1), 20-37.
- Yang, T. (2024). Digital financial inclusion and enterprise technological innovation. *Advances in Economics Management and Political Sciences*, 73(1), 113-119.
<https://doi.org/10.54254/2754-1169/73/20231506>
- Zayani, M., Baher, M., Beeshi, S., Ajmi, H., & Alaghbari, M. (2023). The reality of SMEs and sustainable development from the perspective of the innovative economic vision of the Kingdom of Bahrain 2030. *International Journal of Technology Innovation and Management (IJTIM)*, 3(1), 28-33.
<https://doi.org/10.54489/ijtim.v3i1.194>
- Zhang, Y., Diao, X., Chen, K. Z., Robinson, S., & Fan, S. (2020). Impact of COVID-19 on China's macroeconomy and agri-food system – An economy-wide multiplier model analysis. *China Agricultural Economic Review*, 12(3), 387–407.
<https://doi.org/10.1108/caer-04-2020-0063>

Zupic, I., & Čater, T. (2014). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472.
<https://doi.org/10.1177/1094428114562629>