

SUSTAINABLE FINANCIAL INCLUSION IMPACT ON SMES' PERFORMANCE: SYSTEMATIC LITERATURE REVIEW

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Abstract

Small and Medium enterprises have been widely acknowledged as the prime agents of economic progress; however, they are most often confronted with various barriers to access to financial services. The main objective of this systematic literature review is to examine the evolving relationship between sustainable financial inclusion and performance of small and medium enterprises (SMEs), emphasizing its critical involvement in economic development, innovation, and resilience, particularly in developing economies. Twenty-nine rigorous studies conducted between 2011 and 2025 and retrieved from the Scopus database in line with PRISMA guidelines were selected and reviewed systematically to present empirically synthesized findings on financial inclusion that enhances SME performance. The result shows that four major drivers of sustainable financial inclusion impact SME performance, i.e., digital financial technologies, financial literacy, enabling regulatory environments, and the adoption of Environmental, Social, and Governance (ESG) principles. The potential of FinTech is moderated by financial literacy, which is further enhanced by the increasing integration of ESG criteria into financial products, and these collectively influence SME growth, operational efficiency, and resilience. Notwithstanding notable advancements, ongoing challenges, in particular regulatory fragmentation, inadequate infrastructures, and low levels of financial literacy have impeded improvement. Therefore, the review calls for an integrated policy approach and intensive action involving all stakeholders to scale up access to inclusive and sustainable financial services for SME growth. Future research should further explore causal relationships and regional disparities in sustainable financial access and SMEs' performance.

Keywords: sustainable financial inclusion, SMEs, FinTech, financial literacy, ESG principles

JEL: G19, G20, G28, G53

Introduction

Financial inclusion refers to ensuring people and companies gain access to and making active use of a variety of affordable financial services and payments delivered by a responsible as well as sustainable provider (World Bank, 2025). It is an important input into sustainable economic development, with significant contributions to poverty reduction and equity (Omar & Inaba, 2020). It enhances the delivery of essential financial services and is mainly considered a leading cause of economic growth (World Bank, 2018). Encouraging it is vital for fostering global economic progress, given that small enterprises are central to innovation, job creation, and overall economic contribution. As these businesses take on a more prominent role in economic advancement, ensuring their approach to financial services becomes increasingly crucial. However, small enterprises encounter specific obstacles that may hinder their growth and long-term viability, such as financial access is regarded as a significant barrier to their development (Mahmood et al., 2024). Researchers suggest that financial inclusion positively influences small firm growth (George et al., 2017). On the other hand, some argue that financial inclusion by itself is not enough to enhance small business performance; instead, coordinated efforts from multiple stakeholders are necessary (Matama, 2016).

Financial institutions, policymakers, and international organizations increasingly recognize that sustainable finance can drive social progress by supporting small businesses, fostering job creation, and ensuring financial literacy for marginalized groups. Studies have proved that there is a need for innovative financing models, blended finance, and social impact bonds to close financial gaps and make the economy resilient (Abankina, 2016). Governments play a crucial role in sustainable financial inclusion by establishing regulatory frameworks that promote responsible lending, investment transparency, and financial stability. These policies ensure financial institutions adopt Environmental, Social, and Governance (ESG) principles to align with sustainable development goals. Research highlights that financial regulations impact local economic sustainability by influencing income structures and investment potential, particularly in rural and developing areas (Kozera, 2017).

Furthermore, sustainable financial inclusion also promotes environmental responsibility by offering green financing options, such as renewable energy loans and impact investments, which help green loans and energy-efficient investments reduce carbon footprints and attract environmentally conscious investors and customers (Bocken et al., 2014). Financial inclusion approaches, such as micro-savings and digital banking, enhance financial stability, improve cash flow management, and mitigate risks, as evidenced by studies on Kenyan SMEs (Njagi & Mutwiri, 2024). Similarly, Kato et al., (2024) report that sustainable finance solutions aligned with ESG principles drive long-term growth by incentivizing environmentally responsible behavior and increasing ESG-sensitive investments. These findings underscore the role of sustainable financial products in supporting small business resilience and adaptability, particularly in developing economies.

Studies also underscore the importance of integrating sustainability practices, such as green finance and ESG-aligned strategies, to enhance the long-term viability and competitiveness of small businesses (Riswandi et al., 2024). Therefore, given these considerations, there is a strong need to review the evolution of different research perspectives to understand how sustainable financial inclusion has developed over time and its importance for small businesses and the broader economy. This review aims to fill the literature gap and explore the unique barriers small businesses face in accessing financial services, along with the opportunities and risks associated with digital and alternative financing solutions. The following two research questions guide this systematic literature review to accomplish its goal: RQ1: How does financial inclusion influence small and medium enterprises' performance? and RQ2: What is the relationship between sustainable financial inclusion and SMEs' performance?

Therefore, the synthesis of these findings highlights the need for targeted policies, technological innovations, and stakeholder collaboration to scale sustainable financial inclusion initiatives effectively for SMEs' performance.

Materials and Methods

A systematic literature review on the impact of financial inclusion on the performance of small and medium enterprises was conducted to identify how scholars in this field have conducted and reported research in the area. It was conducted by following the reporting checklist of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Page et al., 2020). A protocol was developed in advance to document the analysis method and inclusion criteria. We utilized the Scopus database to search for articles published in different journals containing the term “sustainable and/or financial inclusion impact on small or medium enterprise performance” in their

titles, abstracts, and/or keywords. Indeed, due to the lack of a detailed checklist (such as PRISMA) for conducting systematic reviews in the social sciences, even authors who intend to perform a systematic review must refer to existing narrative guidelines and may selectively and arbitrarily perform and report the steps. The last search was run on the 20th of January 2025.

The titles, abstracts, keywords, author details, journal names, and publication years of the identified studies were exported to an Excel spreadsheet. Full texts were then independently screened for eligibility. We included review papers that clearly outlined transparent and reproducible methods for the selection of literature, without pre-judging the relevance of included studies (Booth, 2016; Pickering & Byrne, 2014).

Search Delimiting Criteria

PRISMA approach's inclusion and exclusion criteria were applied as shown in Figure 1. We started with record identification through database search. Based on the identification of accessible research using specified keywords, we conducted a review of the literature on the effect of financial inclusion on SME performance research streams. The query was done in the Scopus Database using the operator "TITLE-ABS-KEY," which performs full-text searches on titles, abstracts, and authors' keywords. On the 20th of January 2025, we started our search query in broader terms by using the syntaxes "Sustain*" AND "finan*" AND "inclusion" AND "Small" OR "Medium" AND "Enterprise", which yielded 102 documents ranging from 2011 to 2025 and we applied several filters to refine our database. We first limit the subject area to Economics, Econometrics and Finance, Business Management and Accounting, Environmental Science, Computer Science, Energy, Engineering, and Social Sciences. Only English-language articles, conference presentations, book chapters, books, reviews, conference reviews, and conference papers were considered for further analysis. This filtering process refined the data to 29 documents. The inclusion and exclusion criteria are used since any form of research that investigates the characteristics of a certain subset of a population must define inclusion and exclusion criteria. This aids in the constant, trustworthy, and impartial identification of the study population by researchers. The selected sample in the study is therefore more likely to possess the qualities necessary to address the research issue adequately. Finally, out of the 102 publications found in the databases, the researcher chose 29 articles for review. These criteria collectively guide the selection and evaluation of materials, ensuring the study's precision and relevance. The following query was developed:

$$(sustain* AND finan* AND inclusion AND small OR medium AND enterprises) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "ch") OR LIMIT-TO (DOCTYPE, "re") OR LIMIT-TO (DOCTYPE, "cp") OR LIMIT-TO (DOCTYPE, "bk")) AND (LIMIT-TO (LANGUAGE, "English")) \quad (1)$$

Eligibility

Eligible studies met the defined inclusion and exclusion criteria and employed qualitative, quantitative, or mixed-method approaches; studies using other methods were excluded. Only peer-reviewed articles published in reputable journals were considered. As shown in the PRISMA flow chart, 29 studies met these criteria and were included in the review. This process ensured a systematic, transparent, and replicable approach to article selection.

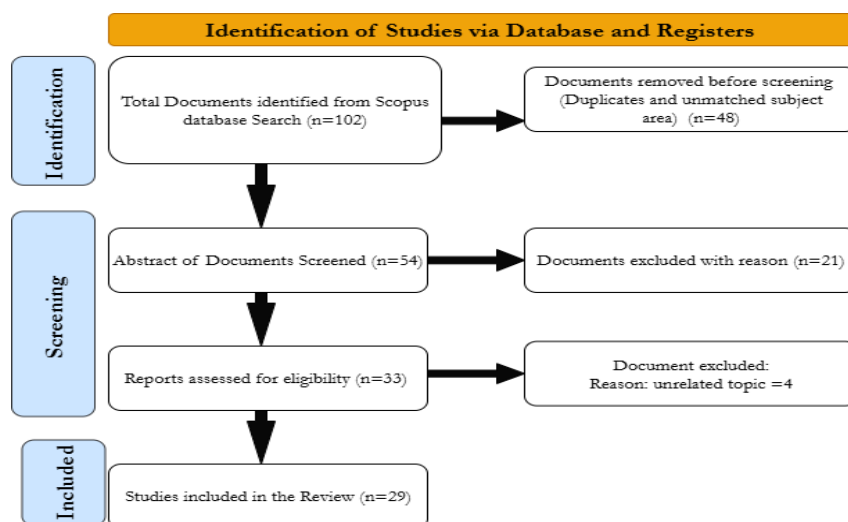


Figure 1: The PRISMA flow diagram explaining steps in the identification and screening of data.

Figure 1 provides an overview of the database search resulting in outcomes and insights into article inclusion and exclusion decision-making. This is where the database search is critically analyzed to show the outcomes and insights into decision-making regarding article inclusion and exclusion. From the database, a total of 102 articles were found. The research team then critically assessed the dataset, whereby some reports were eliminated during the initial screening. Of these more rigorous screenings, 73 reports were found not to meet the predefined criteria for selection and, therefore, were ineligible. Only 29 reports were found suitable for inclusion in the final review after going through this meticulous evaluation. This refined selection forms the core body of literature for subsequent steps in the systematic literature review.

Results

This study utilized PRISMA to conduct a review of the literature concerning specific research and descriptive content analyses, as well as the review questions that guided the process. Descriptive content analysis included categories in the data extraction form. We tabulated the research characteristics results for easier discussion in Excel. The first part of the output in Table 1 provides a broad overview of the reviewed literature, organized under six main headings: author/s, article titles, objectives, journal names, methods, and significant findings of the studies reviewed. These headings highlight the diverse strands of research exploration that contribute to knowledge in the field.

Characteristics of Reviewed Articles

Aiming to provide readers with a brief introduction regarding the reviewed articles, the study used points such as keyword distribution and keyword cloud map characteristics as follows.

Figure 2 presents the 10 major Author Keywords, sustainable financial inclusion, and its impact on small and medium enterprises' performance. It illustrates the top ten author keywords appearing

Table 1: Summarized review of financial inclusion impact on SMEs performance

Author's name	Title	Journal Name	Major objective	Method	Major Findings
(Oshora et al., 2021)	Determinants of Financial Inclusion in Small and Medium Enterprises: Evidence from Ethiopia	Journal of Risk and Financial Management	This study aims to examine the determinants of financial inclusion among small and medium enterprises (SMEs) in Ethiopia.	Quantitative and Qualitative	The finding of the study reveals that supply-side factors, demand-side factors, market opportunity, and collateral requirements have a positive effect on the firm's access to finance. On the other hand, institutional framework factors and the costs of borrowing negatively affect the firm's access to finance.
(Saifurrahman & Kasim, 2024)	Regulatory issues inhibiting the financial inclusion: a case study among Islamic banks and MSMEs in Indonesia	Qualitative Research in Financial Markets	This study aims to intensively explore the environment of Indonesian regulations and laws related to the Islamic banking system and micro-, small- and medium-sized enterprises (MSME).	Qualitative	The study's findings indicate that regulatory imbalances and restrictions may demotivate and hinder Islamic banks' efforts to provide access to finance for the MSME segment, thereby hindering the achievement of the financial inclusion agenda within the Islamic banking industry.
(Endris & Kassegn, 2023)	Analysis of growth and constraints of agricultural micro- and small-scale enterprises in North Wollo Zone, Amhara Regional State, Ethiopia	Cogent Social Sciences	The primary objective of this study is to analyze the growth of agricultural micro- and small-scale enterprises in North Wollo Zone, Amhara Regional State, Ethiopia.	Quantitative	The result showed that financial constraints are the main obstacle to the growth of agricultural MSEs in the study area. In addition, shortage of working capital, insufficient loans, increased input prices, lack of adequate and reliable input supply, and absence of sustainable government support are perceived as the significant challenges of MSEs in the study area.
(Jin & Pan, 2023)	Government Attention, Market Competition and Firm Digital Transformation	Sustainability (Switzerland)	This study is aimed at exploring the effect digital economy on the digital transformation of small scale.	Quantitative	The positive impact of market competition on enterprise digital transformation is significant for small-scale firms.
(Ticona Machaca et al., 2024)	Peru's National Policy on Financial Inclusion and Its Alignment with Sustainable Development Goal I	Sustainability (Switzerland)	The research is to analyze the implementation of the National Financial Inclusion Strategy (NFIS) and its alignment with Sustainable Development Goal (SDG) I	Quantitative and qualitative	The findings indicated that the progress of initiatives under the NFIS was evaluated, identifying limitations such as the digital divide in rural areas, limited financing for Micro and Small Enterprises, gaps in financial education, and growing exposure to digital fraud. Although the NFIS promotes greater access to financial services, it does not explicitly focus on the poorest and most excluded populations.
(Almu-raqab et al., 2024)	How critical is SME financial literacy and digital financial access for financial and economic development in the expanded BRICS block?	Frontiers in Big Data	The purpose of this study is assessing how financial literacy and digital financial access influence SME sustainability and economic progress, particularly in light of ongoing efforts to bridge the digital divide.	Quantitative	The finding indicates that both financial literacy and digitalization play pivotal roles in driving sustainable economic development, with significant implications for policy interventions aimed at supporting SME growth in emerging economies.

Author's name	Title	Journal Name	Major objective	Method	Major Findings
(Atiase et al., 2019)	FNGOs and financial inclusion: Investigating the impact of microcredit on employment growth in Ghana	International Journal of Entrepreneurship and Innovation	This study aimed to investigating the impact of microcredit provided by FNGOs on employment growth among MSEs in Ghana.	Quantitative and qualitative	Microcredit, which is flexible in repayment mode, accessible and adequate has a positive impact on employment generation among MSEs in Ghana.
(Garba et al., 2022)	insurance literacy, risk knowledge management, risk-taking propensity and economic sustainability among SMES: the moderating effect of financial inclusion	Journal of Social Economics Research	This study aimed to examines the moderating effect of financial inclusion on the relationship between insurance literacy, risk knowledge management, risk-taking propensity and economic sustainability of Nigerian SMEs.	Quantitative	The study found that transformational leadership is effective in creating positive affective commitment and positive organizational citizenship behavior.
(Yang & Zhang, 2020)	Digital financial inclusion and sustainable growth of small and micro enterprises-evidence based on China's new third board market listed companies	Sustainability (Switzerland)	This study aimed to examines the impact and mechanism of the digital financial inclusion on the sustainable growth of small and micro enterprises in China.	Quantitative	The results show that the development of digital financial inclusion helps promote the sustainable growth of small and micro businesses, particularly in private, high-tech industries, and competitive markets.
(Li et al., 2022)	How Can the Financing Constraints of SMEs Be Eased in China?-Effect Analysis, Heterogeneity Test and Mechanism Identification Based on Digital Inclusive Finance	Frontiers in Environmental Science	The main purpose of the study is to assess the impact of leadership behavior on the organizational change management process in selected public Universities in Ethiopia.	Quantitative	The findings revealed that digital inclusive finance can effectively alleviate financing constraints of SMEs, and this phenomenon is particularly significant in private enterprises and family enterprises. Further research also finds that commercial credit seems to be an effective channel for digital financial inclusion to alleviate financing constraints of SMEs, but corporate leverage also plays an important role in this process, playing a negative moderating role.
(Anthanasius Fomum & Opperman, 2023)	Financial inclusion and performance of MSMEs in Eswatini	International Journal of Social Economics	The purpose of this study was to examine the enabling effect of financial inclusion on MSMEs using the FinScope MSME 2017 survey for the Kingdom of Eswatini.	Quantitative and qualitative	The study showed that financial inclusion reduces the likelihood of enterprises being classified as least developed and increases the chances of microenterprises falling into emerging and developed business categories.

Author's name	Title	Journal Name	Major objective	Method	Major Findings
(Louman et al., 2022)	Access to Landscape Finance for Small-Scale Producers and Local Communities: A Literature Review	Land	The objective of this research was to identify the factors that contribute to or hinder inclusive financing for micro/small/medium-sized enterprises and projects across sectors in ways that collectively contribute to more sustainable landscapes in the tropics	Review	The finding shows that key factors in the design of inclusive landscape finance are landscape governance, the financial literacy of local stakeholders, access to finance technology and services, and inclusive finance facilities and associated mechanisms for integrated (i.e., multi-project, multi-sector, spatially coordinated) landscape finance.
(Becha et al., 2025)	Digital financial inclusion, environmental sustainability and regional economic growth in China: insights from a panel threshold model		The objective of this research was to identify how digital financial inclusion affects regional economic growth (GRP) in China's provinces	Quantitative	The finding shows that empirical evidence of the transformative role of digital finance in both regional development and environmental sustainability, underscoring the need for policy interventions that enhance financial inclusion to drive economic growth
(Bhat et al., 2024)	Investigating the critical drivers of Fintech adoption to promote business sustainability of SMEs	Global Knowledge, Memory and Communication	The purpose of this study is to examine the impact of drivers (perceived risks and benefits) on FinTech adoption (FA) and business sustainability (BS) of SMEs in Oman, under the integrated perspective of the Net Valence Framework (NVF) and Theory of Reasoned Action (TRA)	Quantitative	The results indicate that PBs (economic, convenience, transaction efficiency) positively impact FA, while PRs (financial, legal, security, operational) act as deterrents toward FA. Both the benefits and risks significantly influence BS. FA itself fosters sustainability, and PBs directly enhance it through ease of use, cost reduction and knowledge acquisition.
(Lakuma et al., 2019)	Financial inclusion and micro, small, and medium enterprises (MSMEs) growth in Uganda	Journal of Innovation and Entrepreneurship	The purpose of this study is to assess the effects of the business environment, with particular interest on the impact of finance on firm growth by focusing on differences across firm size.	Quantitative	The results reveal that micro, small, and medium enterprises (MSMEs) in Uganda benefit more from financial access than large firms. These effects are stronger and more sustained among medium-sized firms.
(Okello Candiya Bongomin et al., 2025)	Toward increasing financial inclusion and sustainability of indigenous microenterprises in Africa in the presence of financial literacy	Journal of Business and Socio-economic Development	The main objective of this paper is to explore the link between financial inclusion and the sustainability of indigenous micro, small and medium-sized enterprises (MSMEs) in Africa in the presence of financial literacy.		The results reveal a positive link between financial inclusion and the sustainability of indigenous MSMEs in Africa in the presence of financial literacy, grounded in consumer socialization and social learning theories.

Author's name	Title	Journal Name	Major objective	Method	Major Findings
(Sahela et al., 2021)	The Influence of Government Dimension on Financial Education and Empowerment of Micro-, Small and Medium-Sized Enterprises in Indonesia	Journal of Asian Finance, Economics and Business	The study examines the influence of the five pillars of inclusive financing on the empowerment of micro-, small and medium-sized enterprises (MSMEs) and the influence of institutional conditions on the empowerment of MSMEs.	Quantitative	The results show that financial knowledge, financial inclusion plays an important role in the sustainability of MSMEs in Indonesia.
(Li et al., 2025)	Impact Of Digital Financial Inclusion On Agricultural Enterprise Innovation.	Transformations in Business and Economics	This study aims to reveal whether agricultural enterprises can enjoy the digital financial inclusion dividend and play a role in promoting innovation.	Quantitative	The results show that digital financial inclusion significantly boosts innovation in agricultural enterprises, especially through usage depth, by easing financing constraints, with a stronger impact observed in state-owned and large-sized firms.
(Naveen et al., 2024)	Digital Transformation Impact on Financial Performance Through Social Media Marketing in India's SMEs	Studies in Systems, Decision and Control	The main objective of this research was to investigate the role of effective digital marketing in promoting SME development and sustainability under volatile market conditions	Quantitative	The results indicate that technological, organizational, environmental factors, and individual preference significantly influence social media marketing adoption, which in turn has a significant positive impact on the financial inclusion of SME businesses.
(Soliman et al., 2022)	Impact of financial inclusion on sustainability of enterprises in Saudi	International Journal of Electrical and Computer Engineering	The main objective this study was to measures the relationship between financial inclusion and the sustainability of financing small and medium enterprises in the Kingdom of Saudi Arabia	Quantitative	This research showed that there are positive results for the financial inclusion of credit available to listed small and medium companies, and that promoting financial inclusion helps in the survival and sustainability of small and medium companies in the Kingdom of Saudi Arabia.
(Babajide et al., 2020)	Financial technology, financial inclusion and MSMEs financing in the south-west of Nigeria	Academy of Entrepreneurship Journal	The main purpose of this study was to examine developments, innovations and new financing windows available to MSMEs viz-a-viz Financial Technology that is capable of enhancing the goal of financial inclusion as a strategic tool of achieving sustainable development in the MSMEs sector in Nigeria.		The result shows that identify that financial institutions need to collaborate and capitalize on the Financial Technology ecosystems by leveraging on artificial intelligence, big data, data analytics and MSMEs friendly applications in effectively lending to MSMEs sector.

Author's name	Title	Journal Name	Major objective	Method	Major Findings
(Dou et al., 2024)	Digital financial inclusion and SME market dynamics: an empirical analysis based on big data of business registrations in China	Applied Economics	This study analyzes the impact of digital financial inclusion on SME market dynamics, using big data of business registrations and digital financial inclusion data of 268 cities in China from 2011 to 2017.	Mixed approach	The findings reveal that digital financial inclusion significantly supports SME market entry and lowers exit risk, with internet development moderating this impact, enhancing entry in high-coverage regions and reducing exit more effectively in low-coverage areas.
(Du et al., 2024)	Research on the Impact of Digital Inclusive Finance on Green Innovation of SMEs	Sustainability (Switzerland)	The main objective of this study was to investigate the impact of digital financial inclusion on the green innovation of small and medium-sized enterprises (SMEs).	Quantitative	The major finding of this study is that digital inclusive finance is effective in promoting the green innovation of SMEs and alleviates their financing constraints.
(Widiyatmoko et al., 2024)	The Role of Financial Literacy and Fintech in Promoting Financial Inclusion	Proceedings - 2024 2nd International Conference on Technology Innovation	This study explores the impact of financial technology (Fintech) on the sustainable performance of Micro and Small Enterprises (MSEs) within a university ecosystem, focusing on the mediating roles of financial literacy and financial inclusion.	Quantitative	Findings indicate that Fintech enhances MSE performance, with financial literacy significantly amplifying this effect.
(Tang, 2022)	New Schemes for Investment in of Small and Medium-Sized Enterprises of China: Role of Access to Finance, Innovation, and Sustainability	Frontiers in Psychology	This study investigated how financial literacy, innovativeness, and environmental sustainability influence the sustainability of small and medium-sized enterprises (SMEs).	Quantitative	The results revealed that financial literacy and innovativeness significantly influence small firms' sustainability. Additionally, social inclusion significantly affects small firms' sustainability and sequentially has a significant effect on their performance.
(Aldaarmi, 2025)	Digital transformation in SME financing in Saudi Arabia: Leveraging digital financial intermediation to overcome challenges, maximize benefits, and foster sectoral growth	International Journal of Innovative Research and Scientific Studies	This study examines the impact of digital financial intermediation on the performance of small and medium-sized enterprises (SMEs) in Saudi Arabia, focusing on blockchain technology, artificial intelligence (AI), and digital platforms.	Quantitative and qualitative	The results show that digital technologies significantly boost organizational capabilities and financial performance, with digital readiness mediating operational efficiency, while sectoral analysis highlights varying benefits, most notably in tech and gaming, alongside blockchain's role in financial transparency and AI's in operational efficiency.

(Ahmad et al., 2022)	Financial Inclusion, Technological Innovations, and Environmental Quality: Analyzing the Role of Green Openness	Frontiers in Environmental Science	The main purpose of this study was to investigate the relationship between financial inclusion, technological innovation, green openness, and CO ₂ emissions in BRICS countries while controlling economic growth and energy consumption.	Quantitative	The empirical results reveal that financial inclusion contributes to environmental degradation in BRICS countries, while technological innovation and green openness help reduce emissions; additionally, these three factors Granger cause CO ₂ emissions and each other, with economic growth and energy use further exacerbating environmental harm.
(Elmi et al., 2025)	Exploring the effect of financial technology on the sustainability of small and medium enterprises in Mogadishu, Somalia	Cogent Business and Management	This study aims to explore the effect of financial technology (FinTech) on the sustainability of SMEs in Mogadishu, Somalia.	Quantitative	The study found that FinTech significantly enhances SME sustainability in Mogadishu by improving financial inclusion and literacy, which serve as positive and complementary partial mediators in this relationship.
(Zunairoh & Wijaya, 2024)	Fintech, Social Capital and Performance of Indonesian MSMEs	Millennial Asia	This research aims to determine the influence of financial technology, financial literacy and financial inclusion on the performance of micro, small and medium enterprises (MSMEs) in Indonesia mediated by social capital.	Quantitative	The research results demonstrate that financial technology, inclusion, and knowledge significantly impact MSME performance, with social capital serving as a key mediator, highlighting the need for integrated policies that combine these factors to support MSME success.

Source: Authors Own Development (2025)

In the in-depth summary of studies in Table 1, a multidimensional image of how financial inclusion and accompanying digital and institutional determinants influence SME performance emerges. Several prevalent themes are evident throughout the literature, including the pivotal roles of digital finance, financial literacy, governmental regulation, and social capital in promoting SME growth and sustainability in a variety of global contexts.

Discussion

This systematic review aimed to examine the impact of sustainable financial inclusion on the performance of small and medium-sized enterprises (SMEs). Reviewed literature published since 2011 to provide a critical discussion of how sustainable financial inclusion helps in inclusive economic growth. It brings forth robust evidence that sustainable financial inclusion has a higher effect on enhancing the growth and sustainability of small and medium enterprises (SMEs), particularly in emerging and developing economies. The reviewed studies consistently highlight that financial inclusion enables SMEs to access formal financial systems, reduce dependency on informal credit sources, and facilitate their operational expansion.

Evidence suggests that without adequate financial knowledge, the benefits of financial inclusion cannot be fully realized. Thus, several studies were undertaken to critique the role played by financial literacy in SME sustainability and economic development. Almuraqab et al. (2024) highlighted the fact that, in a changing economy, financial literacy joined with digital financial access supports sustained economic development. In the study conducted by Tang (2022) in China, it is found that financial literacy and innovativeness have a significant impact on SME sustainability and literacy complements inclusion by empowering SME owners to make informed financial decisions, manage risks, and pursue long-term sustainability. Social capital in Indonesia's economy plays a mediating role among various factors, as demonstrated by Zunairoh and Wijaya (2024), who show that Fintech, literacy, and financial inclusion have a direct impact on SMEs. Oshora et al. (2021) focused on the determinants of SME financial inclusion in Ethiopia, highlighting that supply-side and demand-side determinants, market opportunity, and collateral requirement positively affect the access of firms to finance. Institutional frameworks and borrowing costs negatively affect this access. Similarly, Endris and Kassegn (2023) aimed at agricultural small-scale enterprises in Ethiopia, and they found that financial constraints remain a fundamental growth-inhibiting factor along with other problems, such as working capital shortage and inadequate government support.

Regulatory problems have also been identified as significant inhibitors of financial inclusion, particularly within the Islamic banking industry. Saifurrahman and Kassim (2024) found that regulatory imbalances constrain the ability of Islamic banks to adequately provide services to small enterprises, thus discouraging financial inclusion and sustainable development in the industry. This concurs with findings from other regions of the globe where policy environments and institutional frameworks are core roles in deciding financial access to SMEs (Lakuma et al., 2019; Ticona Machaca et al., 2024).

The role of financial inclusion in promoting employment growth and economic sustainability was demonstrated by Atiase et al. (2019), who found that microcredit availability positively impacts employment among MSEs in Ghana. Garba et al. (2022) added that financial inclusion moderates the relationship between insurance literacy, risk management, and economic sustainability in Nigerian SMEs. In Saudi Arabia, Aldarmi (2025) noted that digital financial intermediation, including

blockchain and AI technologies, significantly enhances SMEs' organizational capabilities and financial performance, while Soliman et al. (2022) confirmed that financial inclusion supports the survival and sustainability of SMEs. Moreover, access to financial services and the reduction of financing constraints were found to promote SME growth and reduce business exit risks. Dou et al. (2024) demonstrated that digital financial inclusion facilitates market entry and lowers exit risk for SMEs in China, with internet development enhancing these effects. Likewise, Lakuma et al. (2019) reported that MSMEs in Uganda benefit more from financial access than large firms, with medium-sized firms experiencing the most sustained advantages.

The nexus between environmental sustainability and financial inclusion is a newer area of interest, gaining momentum in recent literature. The role of green finance, ESG principles, and digital platforms in enabling SMEs to transition towards sustainable practices was evident in studies from China and BRICS nations (Ahmad et al., 2022; Becha, 2025). For example, as Ahmad et al. (2022) state, financial inclusion within the BRICS countries may increase environmental degradation, but technological innovation and green openness decrease CO₂ emissions. Results found from the study of China by Becha support the above nexus between digital finance and the transformation of regional economic growth and sustainability in terms of the environment, thus calling for specific policy actions.

In summary, the reviewed studies collectively show many effects that sustainable financial inclusion has on the performance of SMEs. It brought to the forefront the value of digital finance, financial literacy, and institutional support, along with sectoral, geographic, and environmental issues. Growth of SMEs and sustainability can be achieved through improved financial inclusion, in terms of digital service delivery and education, but this is a process that needs policy agility toward the situation and strong regulatory frameworks.

Conclusion and Implications

The study has critically evaluated the current body of research on the impact of sustainable financial inclusion on the performance of small and medium-sized enterprises (SMEs). Under the PRISMA guidelines, 102 articles from the Scopus database were initially identified, following which 29 studies were finally included, applying strict inclusion and exclusion criteria. The findings confirm that sustainable financial inclusion is a significant determinant of SME growth, operational efficiency, innovation, and sustainable longevity. Access to affordable, responsible, and sustainable financial services significantly enhances the performance of SMEs, particularly when integrated with digital tools and aligned with Environmental, Social, and Governance (ESG) principles (Ahmad et al., 2022; Aldaarmi, 2025).

While the access of digital financial technologies has expanded reach and increased efficiency, their success hinges on simultaneous improvements in financial literacy, regulation, and infrastructural development. The review calls out that those outstanding challenges, like income inequality, fragmentation of regulation, and cybersecurity risks, can hamper the full potential of financial inclusion benefits (Garba et al., 2022; Saifurrahman & Kassim, 2024). In addition, the convergence of green innovation and financial inclusion highlights the need for financial ecosystems that are both socially inclusive and environmentally sensitive.

Finally, the review recommends that policymakers adopt complete financial inclusion policies that promote digital literacy, green protection, and universal access to financial services simultane-

ously. Moreover, sustainable financial inclusion is not only a financial strategy but also a development imperative, hinged on reaching the Sustainable Development Goals (SDGs) and on building inclusive, robust, and green economies. It requires collective action from governments, financial institutions, and development partners to eliminate structural barriers, improve financial literacy, and harness fintech innovations for improved SME performance. Future research on sustainable financial inclusion and SME performance should move beyond descriptive analysis to establish causal relationships using longitudinal or panel data. Most existing studies are cross-sectional, which limits understanding of how financial inclusion impacts SMEs over time. As digital financial tools become more widespread, research must also address the accompanying cybersecurity risks and digital fraud that disproportionately affect SMEs, especially in low-literate communities.

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