



Financial Inclusion in the Last Decade: A Systematic Literature **Review**

Bukunmi Agboola

Lagos Business School, Pan-Atlantic University, Lagos State, Nigeria

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ABSTRACT

Over the past decade, financial inclusion, focused on providing access to finance for the unbanked, has gained increased attention. This systematic review of 169 papers from 2015 to 2023 underscores its growing significance, particularly in the aftermath of the COVID-19 pandemic. The analysis considers demographic factors, regulatory policies, technological advancements, and global economic shifts, emphasising the pandemic's influence on financial inclusion strategies. However, the findings reveal a gap in the literature regarding the extent to which the COVID-19 pandemic has impacted financial inclusion directly, highlighting the need for more nuanced research on this aspect to better understand recent developments in the discourse.

Keywords: Financial inclusion, financial literacy, systematic review

INTRODUCTION

Financial inclusion is recognized as a crucial catalyst for sustainable development, impacting micro and macro scales. It is deemed essential for fostering economic growth, reducing income inequality, and addressing global economic crises. The benefits extend to social development, including poverty alleviation, women's empowerment, financial stability, human development, gender equality, and environmental sustainability. As an integral part of the United Nations' 2030 Sustainable Development Goals (SDG) agenda, financial inclusion is positioned to contribute significantly to global well-being. The evolution of financial services, particularly after the 2008 financial crisis, underscored the vulnerability of consumers and emphasized the importance of financial literacy.

In the last decade, financial inclusion has emerged as an extensively studied aspect of universal development within literature (Adedokun & Aga, 2021). The vitality of a nation's economy is markedly shaped by its financial services sector, with the extent of its citizens' inclusion in the financial mainstream playing a pivotal role in this regard (Hogarth, 2006). The financial services landscape has experienced rapid transformations (Sukumaran, 2020), and the 2008 financial crisis significantly impacted the financial world, exposing the vulnerability of consumers (Björklund & Sandahl, 2020). This crisis underscored the significance of financial education and awareness for individuals (Atkinson & Messy, 2012). Consequently, the process of imparting knowledge about financial products, risks, suitability, and general financial concepts is termed financial literacy. It involves a blend of financial awareness, knowledge, skills, attitude, and behavior essential for making informed financial decisions.

Financial inclusion levels vary globally, with wider gaps in developing countries, such as those in Africa. Barriers on both demand and supply sides, including gender, age, literacy, income, and operational aspects of financial institutions, influence financial inclusion. The introduction of digital finance has expanded services but brought challenges, especially in terms of access disparities. Existing literature often focuses on specific dimensions of financial inclusion, such as microfinance or digital finance, leading to potential gaps and uncertainties. This study aims to address these gaps by conducting a systematic review, providing a nuanced exploration of financial inclusion dynamics, comparing levels across countries, and assessing the impact of the COVID-19 pandemic. The comprehensive analysis aims to inform policies and practices for promoting universal financial inclusion.





Theoretical Background

The literature on financial inclusion reveals a gap, as studies lack a unified theory, creating a disconnect between academic and policy perspectives. While policy literature offers practical approaches, academic studies focus on the financial inclusion-poverty relationship without cohesive integration. Duvendank and Mader (2020) note a lack of consensus on a preferred theory of change due to diverse intervention methods. A theoretical framework for financial inclusion should be rooted in the policy rationale, emphasizing that engagement with financial services enhances the well-being of low or modest-income individuals. This framework highlights the multifaceted impact of financial inclusion across economic, social, gender, behavioral, and macro-structural domains, addressing poverty, improving social dynamics, empowering women, and fostering macroeconomic development. Ozilli (2020) contributes by identifying overlooked potential beneficiaries and outlining four theories explaining their inclusion.

Vulnerable Group Theory of Financial Inclusion

The vulnerable group theory of financial inclusion suggests that financial inclusion programs should prioritize targeting vulnerable members of society, such as the poor, young people, women, and elderly people. By providing government-to-person social cash transfers, the theory aims to encourage other vulnerable individuals to join the formal financial sector and address income inequality. However, it may neglect non-vulnerable individuals, assume women are solely vulnerable, and potentially exacerbate social and income inequality.

Dissatisfaction Theory of Financial Inclusion

The dissatisfaction theory of financial inclusion proposes that financial inclusion programs should focus on individuals who have left the formal financial sector due to dissatisfaction. These individuals are more likely to rejoin if the issues that caused their dissatisfaction have been resolved. The theory prioritizes targeting previously banked adults who can be easily persuaded to return without requiring public funding. However, the theory excludes those who have never been part of the formal financial sector and assumes that dissatisfaction is the main cause of financial exclusion, which may not always be accurate. Additionally, societal culture may force individuals to remain in the formal financial sector for a comfortable life.

Public Good Theory of Financial Inclusion

The public good theory of financial inclusion asserts that formal financial services should be considered a public good, accessible to all individuals. It suggests that providing financial services to one person does not diminish availability for others, enabling the entire population to benefit from participating in the formal financial sector. This theory advocates for unrestricted access to finance, with financial service providers bearing the cost as an integral part of their operations. Governments can offer subsidies to offset the expenses incurred by financial institutions in providing free services. The theory highlights three advantages: universal benefits for all individuals, government support through subsidies, and an opportunity for governments to promote financial inclusion. However, the theory also has three limitations: it does not address the underlying causes of financial exclusion, reliance on government subsidies may strain public funds and impact other projects, and the assumption that public goods are provided at minimal or no cost may lead to an unsustainable level of financial inclusion if the value of service costs is underestimated.

Systems Theory of Financial Inclusion

The systems theory of financial inclusion suggests that the existing sub-systems, such as the economic, financial, and social systems, are the primary beneficiaries of financial inclusion. The theory states that the success or failure of a national financial inclusion agenda is determined by the efficiency and effectiveness of these sub-systems. However, the theory does not consider external factors that could impact financial inclusion outcomes and assumes a direct relationship between the sub-systems and financial inclusion.





METHOD

Research Questions

Based on the issues identified and the objectives defined, this paper will conduct a systematic literature review to provide answers for the following research questions:

- What are the key factors that have influenced the impacts of financial inclusion as documented in existing literature across various countries in the last decade?
- How do the findings in existing literature on financial inclusion differ when comparing the pre-COVID-19 and post-COVID-19 periods, and what can be learned from these variations?
- What potential gap(s) in the literature become evident when considering the growth of financial inclusion, and what areas warrant further research to address these gaps effectively?

Inclusion Criteria

Types of Studies

The review aims to incorporate studies of adequate quality from reliable sources, ScienceDirect and EBSCO, that examine the effects of financial inclusion and cover the various issues like age factor, gender, and other key demographic factors, outcomes of financial inclusion interventions, and cross-country disparities on financial inclusion.

Types of Participants

The review will incorporate a wide range of scopes to cover the different issues of financial inclusion, the interventions, and the outcomes as it varies across different fields of study and draw a point of consensus from the literature. Therefore, the population of participants that would be included in the review are individuals or households in various countries, considering diverse demographic factors. This is to ensure that the review captures financial inclusion from a microeconomic perspective and covers a wide range of discussions in the literature.

Types of Intervention

In this systematic review, the studies reviewed have interventions that are tailored towards financial education programs for distinct age brackets, adult-specific financial inclusion initiatives, gender-sensitive financial products designed to empower women economically, and other factors that have influenced the impacts of financial inclusion and using cross-country comparative analyses to understand variations in financial inclusion interventions across diverse nations, as well as financial inclusion initiatives, policies, and practices implemented in response to or independently of the COVID-19 pandemic. This comprehensive approach aims to dissect the effectiveness of specific interventions within the context of demographic diversity, providing insights into nuanced aspects of financial inclusion across various groups and geographical locations.

Types of Comparison

Comparisons will be made on studies carried out across countries to assess variations in financial inclusion initiatives and policies. Additionally, temporal comparisons can be employed to evaluate the impact of the pandemic on financial inclusion before and during the COVID-19 period.

Types of Outcomes

In this systematic review, the studies to be included will cover impacts of financial inclusion on demographic factors like age, gender, culture, etc. and how these and others factors also influence the extent of its impacts. These studies must measure outcomes related to identifying and comparing financial inclusion challenges,



successes, and changes across countries. Furthermore, it will explore the effects of the COVID-19 pandemic on financial inclusion, including disruptions to existing initiatives, alterations in access to financial services, and shifts in financial behaviors.

Search Strategy

This review will employ a targeted search strategy focused explicitly on the period of the COVID-19 pandemic to enable precise comparative analysis of the literature before and after the onset of the pandemic. The primary search will be conducted in Scopus, Web of Science, and EBSCOhost databases using a Boolean query that combines keywords related to financial inclusion and COVID-19: "(financial inclusion" OR "financial access" OR "digital financial service" OR fintech OR "mobile money") AND ("COVID-19" OR coronavirus). The search will be restricted to studies published between January 2015 and 2024. This focused approach ensures the systematic capture of literature directly addressing the pandemic's impact. The findings from this post-2020 corpus will then be analytically contrasted with the well-established understanding of financial inclusion drivers and impacts from the pre-pandemic era (2015-2019), which will be synthesised from foundational reviews and key seminal works. This comparative design will allow for a clear identification of how the pandemic altered scholarly understanding and will directly facilitate the identification of emergent themes and subsequent research gaps.

Search Results

From the PRISMA flow chart in Figure 1, the search strategy reviewed 630 identified journals, from the bibliographic databases, ScienceDirect and EBSCO host. The data from the two databases were combined, duplicates were removed, and there 413 records were left. A further review of the titles, abstracts, and findings to include only studies that had pro-developmental initiatives, as it cuts across various fields of study, was conducted, and this reduced the records to 169.

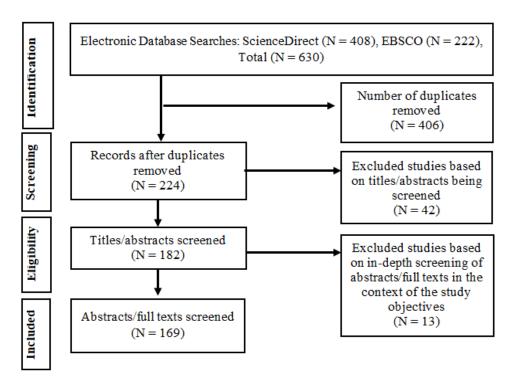


Figure 1: Prisma Flow Diagram

The included records were thereafter grouped into different categories to capture studies that included distinct age brackets, adult-specific financial inclusion initiatives, gender-sensitive financial products designed to empower women economically and cross-country comparative analyses to understand variations in financial inclusion interventions across diverse nations, as well as financial inclusion initiatives, policies, and practices implemented in response to or independently of the COVID-19 pandemic.



RESULTS AND DISCUSSION

Results

This section provides an overview of the results from the studies review and gives a descriptive analysis of the studies in the last decade. From the number of publications per year, the publication counts across different journals, issues that have been addressed in the literature in line with the objectives of the study, and the scopes of the studies that have been reviewed, which uncovers the multidisciplinary nature of the concept of financial inclusion.

Figure 2 displays the yearly count of journal publications spanning the last ten years, encompassing the period from 2015 to 2024. Notably, there is a discernible uptick in the recognition of the concept of financial inclusion, particularly following the onset of the COVID-19 pandemic in 2019. The trend exhibits a significant upswing, peaking in 2023. Consequently, it can be inferred that the concept is poised to attract heightened attention in the forthcoming years, indicating emerging issues within the literature.

While the literature may downplay the direct impacts of COVID-19 on the level of financial inclusion, its relevance over the last decade becomes apparent due to the increased financial inclusion of the populace during this period. The necessity to conduct transactions remotely, without the need for in-person interactions due to the fear of infection, is intrinsic to this observation. This trend is reflected in the literature, where studies on financial inclusion have surged, albeit not all directly addressing the impacts of the COVID-19 pandemic. Nonetheless, the consistent increase in publications on the subject strongly suggests a connection to this unprecedented global event.

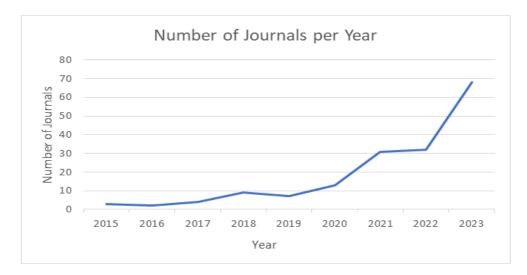


Figure 2: Number of Journals by Year of Publication

Figure 3 depicts the quantity of journal publications addressing issues related to financial inclusion as identified in the literature over the past decade—an area of focus for this study. The presented table offers an overview of factors influencing financial inclusion across countries in the literature. Our investigation revealed four primary factors shaping financial inclusion: regulatory policies, demographic factors, technology, and environmental factors.

These factors were thematically categorized to elucidate their impact on financial inclusion. Regulatory policies, encompassing fiscal policies, financial regulations governing banking systems and services, governance, and institutional qualities, along with policies for Small and Medium Enterprises, financial service accessibility, Islamic banking, and low or no-interest loans, represent the supply-side perspective of financial inclusion.

On the demand side, demographic factors include considerations such as age, gender, educational background, religion, and culture. Technology, identified as a significant driver of financial inclusion, especially in the context of the COVID-19 pandemic, incorporates elements like ICT tools, digital technology, and mobile money.



Environmental factors, often overlooked by developing and less developed nations, contribute subtly to financial inclusion. These encompass climate change policies, population density, energy consumption and regulation, as well as carbon emissions.

Additional determinants of financial inclusion identified in the literature over the last decade involve foreign earnings, such as international remittances, the impact of the COVID-19 pandemic, and human capital development. The latter pertains to an in-depth understanding of financial services and their operational mechanisms.

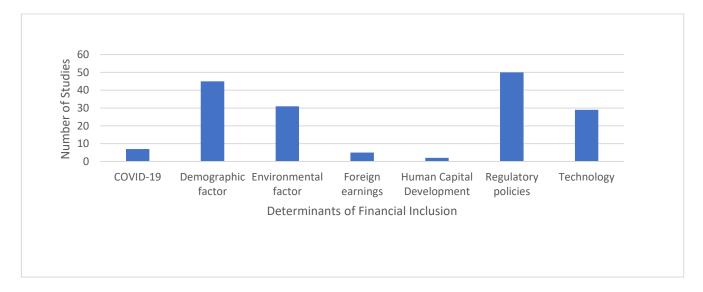


Figure 3: Number of Studies covering the determinants of financial inclusion

However, Figure 4 brings to light a crucial insight: financial inclusion and its repercussions extend beyond isolated realms. Instead, it emerges as a complex, multidisciplinary, and multidimensional issue. This multidisciplinary nature becomes apparent through diverse studies delving into the various dimensions and impacts of financial inclusion. Upon thorough examination of the literature over the last decade, it becomes evident that the interventions and outcomes associated with financial inclusion schemes and initiatives are inherently multidisciplinary.

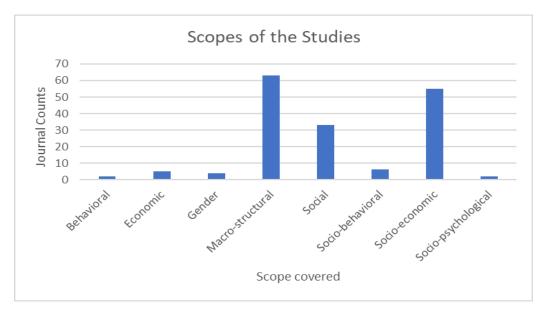


Figure 4: Number of Articles per Scope of the Study Covered.

The journal encompasses studies with scopes largely falling into categories such as economic, social, behavioral, and macro-structural. This aligns with the theoretical framework of financial inclusion, emphasizing its intricate impact across these domains, including economic, social, gender, behavioural, and macro-structural dimensions.





Financial inclusion is multifaceted, involving economic, social, technological, and policy dimensions. It addresses issues related to banking services, access to credit, insurance, financial literacy, and more. Various disciplines, including economics, sociology, technology, law, and public policy, contribute to understanding financial inclusion, each offering unique insights into associated barriers and opportunities. Recognizing the complexity of financial inclusion, the finding suggests that interventions should not be uni-dimensional. Instead, a holistic approach considering various dimensions simultaneously is recommended. Interventions may span policy changes, technological innovations, educational programs, and community engagement efforts. A comprehensive strategy that accounts for these diverse aspects is more likely to effectively promote financial inclusion.

DISCUSSION

This comprehensive review synthesises a wealth of research on financial inclusion, illuminating its diverse dimensions and transformative shifts, particularly in the wake of the COVID-19 pandemic. Across regions, substantial disparities on financial inclusion persist, with many adults lacking access to formal financial services in developing countries. The literature underscores the pivotal role of financial literacy in shaping retirement preparation and wealth management, with studies spanning diverse regions evidenced even in developed countries. Gender-related insights reveal intricate behavioral biases, moderated by financial literacy. The discourse expands to encompass demographic factors, the dynamics of policy formulation, institutional and governance quality, digital financial inclusion, cultural influences, and regulatory policies, including taxation and interest rates. Additionally, it incorporates considerations of foreign earnings derived from remittances, and the transformative effects of the pandemic on financial optimism, services, green development, and poverty reduction. Collectively, these findings provide a comprehensive understanding of the multifaceted nature of financial inclusion and its evolving landscape across global economies.

Determinants of financial inclusion

Demographic Factors

Globally, around 1.7 billion adults face limited access to formal financial services, with concentrations in South Asia and Sub-Saharan Africa (Kass-Hanna et al., 2022; Demirgüç-Kunt et al., 2018). Financial literacy's significance in retirement preparation and wealth management is underscored, impacting older individuals across various nations (Bernheim, 1998; Hammond et al., 2017; Scholnick et al., 2013; Lusardi and Mitchell, 2008, 2011a, 2011b). A longitudinal study in Northeastern Illinois emphasizes the challenges of declining financial and health literacy in old age, highlighting the positive impact of efforts to mitigate this decline on decisionmaking, scam susceptibility, and psychological well-being (Yu, L. et al., 2021).

Gender-related findings reveal behavioral biases differing between genders, with financial literacy serving as a mitigating factor (Cupák and Fessler, 2021; Grohmann et al., 2021). Gender gaps in financial literacy exist globally, with men exhibiting higher levels on average (Potrich et al., 2015). Digital financial inclusion positively impacts female entrepreneurship, correlating with reduced income inequality (Yang et al., 2022; Cabeza-García et al., 2019). Despite progress, disparities persist, with male-headed households in India more likely to access formal finance (Ghosh and Vinod, 2017). Nigeria faces a persistent gender gap in financial inclusion in smallholder agriculture (Adegbite and Machethe, 2020). Financial literacy's influence on wealth varies by gender and education, with higher literacy significantly impacting women's wealth, particularly among the highly educated (Bannier and Schwarz, 2018).

Additional demographic factors include correlations between formal account use and lower costs, proximity to financial intermediaries, legal rights, and political stability (Allen et al., 2016). Financial literacy's impact on investment behavior, influenced by age, education, and income, is explored (Mouna and Anis, 2017). In China, financial literacy affects household portfolio choices differently based on age and education (Li et al., 2020). Digital financial inclusion is identified as a critical societal demand, and cultural factors, including ancestry, individualism, and ethnicity, influence household financial inclusion (Gallego-Losada et al., 2023; Rink et al., 2021; Dakhlia et al., 2021; Lu et al., 2021). Family education positively relates to bank account ownership, especially for marginalized groups (Yan and Qi, 2021). A study in Pakistan uncovers underreported usage of





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non-Islamic finance among the Muslim poor, emphasizing the importance of nuanced measurement in understanding financial attitudes and behaviors (Ahmad, 2023). Collectively, these findings underscore the multifaceted nature of demographic factors in shaping financial inclusion, emphasizing the importance of tailored interventions to address existing disparities.

Regulatory policies

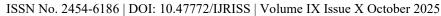
As earlier reiterated in the results of the review, regulatory policies encompass fiscal policies, financial regulations governing banking systems and services, governance, and institutional qualities, along with policies for Small and Medium Enterprises, financial service accessibility, Islamic banking, and low or no-interest loans (Arun & Kamath, 2015; Zins & Weill, 2016). This comprehensive review provides a nuanced exploration of financial inclusion and its diverse dimensions across various studies. Global and regional perspectives on financial inclusion policies and practices are highlighted, emphasizing the need for a progressive and inclusive approach (Kabakova & Plaksenkov, 2018). Specific studies delve into determinants of financial inclusion in Africa, shadow economy effects, challenges in the MENA region, and the intricate relationship between financial inclusion, income inequality, poverty, and stability (Hajilee et al., 2017; Damra et al., 2023). Other research covers ecosystem configurations, positive impacts on economic growth in OIC countries, banking system structure, financial access in Asia, and the global association between tax revenue and financial inclusion (Kim et al., 2018; Owen & Pereira, 2018; Le et al., 2019; Oz-Yalaman, 2019). The review also examines international aspects, including the role of financial inclusion in enhancing bank stability (Ahamed & Mallick, 2019). Further studies explore determinants of financial inclusion, its influence on firms' sales growth, the impact of financial regulation, and the significance of institutional quality and social trust (Lee et al., 2020; Anarfo & Abor, 2020; Nkoa, & Song, 2020; Xu, 2020). The overarching theme underscores financial inclusion's pivotal role in driving human development, supporting inclusive growth, and contributing to economic development in the Asian region (Huang, 2023; Sun & Tu, 2023).

Technology

The studies underscore the pivotal role of technological factors, including ICT tools, digital technology, and mobile money, in shaping financial inclusion. These elements contribute significantly to economic growth (Ahmad, A. et al. 2023; Hussain, et al. 2023; Shen, et al. 2021; Daud, 2023), poverty reduction (Mushtaq & Bruneau, 2019; Wellalage, et al. 2021), and environmental sustainability (Ozturk & Ullah, 2022; Ali, et al. 2023). Findings reveal the positive impact of mobile money adoption on financial inclusion in Africa (Ouma, et al. 2017; Lashitew, et al. 2019; Ahmad, A. et al. 2023; Avom, et al. 2023; Grzybowski, et al. 2023; Shaikh, et al. 2023) emphasizing the need for sustainable practices in multinational banks to enhance financial inclusion (Úbeda, et al. 2023). Additionally, the studies stress the interplay between technological innovation, economic growth, and environmental outcomes, with digitalization playing a crucial role in shaping these dynamics (Ozili, 2018; Banna, et al. 2022; Kouladoum, et al. 2022; Law, et al. 2023; Ong, et al. 2023; Saqib, et al. 2023). The comprehensive analysis suggests that inclusive and green development requires a strategic alignment of digital finance, technological innovation, and sustainable practices to achieve long-term economic and environmental objectives (Frączek & Urbanek, 2021; Lee, et al. 2023; Niankara & Islam, 2023; Telukdarie & Mungar, 2023; Sun, & Tu, 2023).

Environmental factors

The studies collectively reveal that the relationship between financial inclusion, environmental factors, and economic development is complex and multifaceted. Key findings include the existence of an inverted U-shaped relationship between financial inclusion and CO₂ emissions (Le, et al. 2020; Renzhi & Baek, 2020; Zaidi, et al. 2021; Hussain, Akbar, Gul, Shahzad, & Naifar, 2023; Hussain, Gul, Ullah, Waheed, & Naeem, 2023), the importance of aligning financial inclusion with environmental policies (Khan, et al. 2022: Fareed, et al. 2022; Ahmad & Satrovic, 2023; Barut, et al. 2023; Shah, et al. 2023; Zeraibi, et al. 2023), and the potential for financial inclusion to mitigate energy poverty (Chang, et al. 2023; Khan, Z. et al. 2023; Said & Acheampong, 2023; Sen, et al. 2023). Additionally, the studies highlight the impact of various factors such as natural resources (Bu, et al. 2023; Gao, 2023; Li & Wu, 2023; Liu, et al. 2023; Van Kien, et al. 2023) economic governance, innovation, and renewable energy on ecological outcomes (Cai & Wei, 2023; Hodžić, et al. 2023; Hussain, M. et al. 2023;





Mukalayi & Inglesi-Lotz, 2023; Singh, et al. 2023). Policymakers are urged to consider these nuanced relationships when designing strategies for sustainable development (Duan & Liu, 2023), climate change mitigation (Musah, et al. 2023, Zheng & Chen, 2023), and financial inclusion.

Other determinants of financial inclusion

The synthesis of diverse research on financial inclusion reveals multifaceted insights. In the context of international remittances, the combination of remittance inflows and financial inclusion positively impacts economic growth, with a constructed financial inclusion index enhancing the growth effect (Chuc, et al. 2022; . This sheds light on the developmental challenges faced by migrant-sending countries, emphasizing the potential of remittances and financial inclusion in fostering economic growth. Turning to aid flows, targeted financial aid significantly determines a country's financial inclusion, particularly pronounced in nations with high aid flows and low-risk uncertainty (Lee, et al. 2022). The study provides impetus for enhancing financial inclusion in aidreceiving developing countries, considering associated risk factors. In the realm of foreign direct investment (FDI) in East Asia and the Pacific, financial inclusion significantly influences FDI, urging governments to prioritize inclusive financial policies for sustainable economic growth (Chen, et al. 2023). Gender disparities in financial inclusion are addressed through remittances, notably reducing the gender gap in developing countries, particularly benefiting women (Abokyi, 2023). South Asian countries find improved financial inclusivity through conflict resolution, higher mobile subscriptions, and lower corruption (Murshed, et al. 2023). Financial literacy emerges as a pivotal factor, acting as a substitute for financial infrastructure and positively impacting inclusion across income levels and demographic subgroups (Grohmann, et al. 2018). Lastly, in Sub-Saharan Africa, education and human capital prove integral to energy substitution, emphasizing the role of growth in renewable energy consumption (Tinta, 2023). Collectively, these findings offer a comprehensive understanding of the intricate relationships shaping financial inclusion across diverse economic and social contexts.

The Impact of the COVID-19 Pandemic on Financial Inclusion

The COVID-19 pandemic acted as a critical stress test and potent accelerator for global financial inclusion, fundamentally altering its trajectory. The crisis catalysed a dramatic surge in digital financial services and payment solutions, compressing years of projected adoption into a short period. This phenomenon is powerfully explained by Diffusion of Innovation Theory, as lockdowns and health concerns drastically lowered barriers and increased the relative advantage of digital finance, pushing late adopters to overcome their resistance (Niankara and Traoret, 2023). Concurrently, the literature reveals an expanded conceptual scope for financial inclusion, demonstrating its heightened role in fostering economic resilience by mitigating the detrimental effects of inequality on poverty (Gutiérrez-Romero and Ahamed, 2021) and in promoting sustainable practices and green development within key sectors like natural resources (Chang et al., 2023; She et al., 2023).

However, this rapid acceleration proved to be a double-edged sword, simultaneously exacerbating pre-existing vulnerabilities. The pandemic-induced upheaval led to widespread financial fragility, with a notably adverse and gendered impact on financial optimism, particularly affecting women (Chhatwani and Mishra, 2021). This dynamic aligns with Social Exclusion Theory, as the very digital tools that offered a lifeline for some also accentuated persistent divides in gender, wealth, and urban-rural access, revealing that technological advancement alone cannot overcome deep-seated structural inequalities (Grohmann et al. 2021; Marcelin et al. 2022; Tay et al., 2022). In sum, the pandemic's transformative impact lies in this dual role: it firmly embedded financial inclusion within broader agendas of digitalisation and sustainability, while starkly revealing the imperative for future research and policy to ensure that post-COVID financial inclusion is both durable and equitable.

Gaps identified in the literature.

This systematic review shows substantial gaps in the existing research on elements that have become particularly apparent with the COVID-19 pandemic. To begin with, there is disconnected theoretical evidence in the literature. Although theories such as Diffusion of Innovation or Social Exclusion serve as conceptual frameworks worthy of consideration, as we have shown in this review, they are frequently referenced superficially in the literature. Evidence that utilises these theories is scarce, as is rigorous empirical research that uses these





frameworks to create hypotheses and investigate them, especially about the divergent outcomes of financial inclusion during the pandemic. As such, a deeper theoretical model that understands how financial inclusion functioned during periods of shocks like the COVID-19 pandemic has not been developed.

There is also a major absence of longitudinal and comparative analyses, and the review suggests that the literature remains siloed in pre-COVID-19 or post-COVID-19 COVID-19 analyses, without any direct realisation of its overall approach to systematically compare the two. This is problematic because it fails to be able to disentangle the temporary impact due to the crisis and behavioural transformations that endure from the pandemic, in addition to understanding ways in which the pandemic has reshaped the potential drivers of financial inclusion permanently. Moreover, the research remains demographically and geographically limited. The current evidence base is focused on specific populations and regions while ignoring the vast blind spots regarding the impact of the pandemic on the most vulnerable sub-groups (e.g., refugees, the disabled, and rural populations in fragile states) and developed economies. The current literature limits the generalisability of findings and limits the development of impactful policies towards more targeted interventions.

Finally, there is a significant gap between the research value and policy implementation in translation, as highlighted throughout the review. There is a clear need in the literature for more evidence-based, actionable opportunities to support regulators and practitioners. The literature suggests the necessary policies to build digital infrastructure, the need for well-contained programs to create financial literacy at the same time as technology roll-out, alongside the need for regulations to protect consumers without stifling innovation.

Addressing these gaps is crucial to developing a future-oriented, more equitable and theoretically based understanding of financial inclusion that will be resilient against future global phenomena.

LIMITATION OF THE STUDY, CONCLUSION AND POLICY RECOMMENDATIONS

Limitations of the Study

The systematic literature review was limited by the potential lack of uniformity and consistency in defining and measuring financial inclusion across studies. Variations in terminology and metrics make it challenging to compare findings directly, hindering the establishment of a standardised understanding of financial inclusion. Additionally, some studies may focus on specific dimensions or regions, limiting the generalizability of their findings to the broader context of financial inclusion. Standardising definitions and metrics, along with a more comprehensive and globally inclusive approach, could address these limitations and enhance the coherence of future research in this field.

Conclusion

In conclusion, the systematic literature review highlights the different issues scattered in the literature on financial inclusion, such as age, gender, other demographic factors, impacts of the COVID-19 pandemic and substantial gaps in the understanding of financial inclusion, necessitating urgent attention and concerted efforts for comprehensive advancements in research and policy. The absence of a robust theoretical framework, foundational guiding principles, and interdisciplinary collaboration impedes the holistic comprehension of financial inclusion's impact on development. Insufficient empirical validation and a disconnect between theoretical frameworks and evidence-based policies further hinder the practical applicability of research findings. Overlooking global perspectives, demographic intersectionality, and regional variations limits the breadth and depth of insights. Bridging these gaps is imperative to inform effective policies, guide future research, and foster a nuanced understanding of financial inclusion's multifaceted dynamics, particularly in the context of the ongoing and post-COVID-19 scenarios.

Policy Recommendations

Based on the identified gaps in the literature on financial inclusion, the following policy recommendations are proposed:





• Grounding theoretical frameworks in crisis response

Future research, rather than developing theoretical frameworks based on abstraction, should build and test theories that directly address how financial inclusion plays out during a societal shock. For instance, build upon Social Exclusion Theory to create models that tell us how pandemics and climate crises amplify vulnerabilities, or use Diffusions of Innovation Theory to understand patterns of technology adoption under duress.

• Mandating longitudinal and comparative research methodologies.

Funding entities and journals should be intentionally thinking about the implications of sponsoring research that measures outcomes of financial inclusion to make more strategic use of resources (i.e., longitudinal measures) and measuring financial inclusion simultaneously (i.e., comparative measures). Given the long-tail impact of COVID-19, studies must directly compare the financial behaviour of individuals pre- and post-pandemic in order to identify temporary disturbances versus permanent disruptions to existing financial processes.

• Direct research on underserved and intersectional populations.

There should be a direction of research resources to blind spots in population demographics identified in this review. This should include designing studies that research the financial lives of populations identified as refugees, disability, and rural and poor in both developed and developing economies. Research must go beyond demographics (e.g., women) to more intersectional factors, such as low-income, rural women, to aid in the design work of relevant interventions.

• Transform evidence into specific, testable policy trials:

Create and bridge the research-policy divide by advocating for evidence-based pilot programs. The areas for immediate policy action suggested by our review are: to develop a strong digital infrastructure in marginalised communities; co-design financial literacy programs with vulnerable groups to ensure relevance and usability, and to design regulatory sandboxes to allow safe testing of innovative products for underserved populations.

• To support policy-focused, interdisciplinary consortia.

To achieve this, there must be support for the development of research-practice partnerships that bring together economists, data scientists, sociologists, and policymakers. The consortia should design studies on financial literacy and inclusion and translate findings into regulatory practice and financial inclusion at the national level.

List Of Abbreviations

COVID-19: Coronavirus Disease in 2019

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

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