Advanced International Journal of Business, Entrepreneurship and SME's
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 1796-1813




**ADVANCED INTERNATIONAL JOURNAL OF BUSINESS, ENTREPRENEURSHIP AND SMES (AIJBES)**
www.gaexcellence.com/aijbes

# UNPACKING FINANCIAL INNOVATION FOR INCLUSIVE GROWTH: A NARRATIVE REVIEW OF EVIDENCE AND FUTURE DIRECTIONS

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**Article Info:**

**Article history:**
Received date: 27.07.2026
Revised date: 24.08.2026
Accepted date: 09.09.2026
Published date: 24.09.2026

**To cite this document:**

Ismail, S., Sidek, N. Z. M., Laidin, J., & Ismail, N. A. (2026). Unpacking Financial Innovation for Inclusive Growth: A Narrative Review of Evidence and Future Directions. *Advanced International Journal of*

**Abstract:**

Financial innovations have transformed classic economic architectures and provided alternative avenues to make capital more democratic, inclusive growth more inclusive. To reconcile theoretical frictions within the fragmented literature, this narrative review systematically screened 1,826 records from the Scopus database, synthesizing a final sample of 33 peer-reviewed studies. The central theoretical contribution of this review is the establishment of an explicit conceptual mechanism: financial innovation drives structural financial inclusion and equitable socio-economic development only when strictly mediated by robust digital capability and proactive governance. Structured across four core themes, the synthesis evaluates technological drivers, macroeconomic impacts, ecosystem constraints, and institutional governance. Key insights reveal that uncritical technological deployment risks exacerbating disparities, translating traditional financial exclusion into digital exclusion driven by deficits in digital literacy, device affordability, broadband infrastructure, systemic trust, and equitable access. Ultimately, this review asserts that long-term developmental outcomes are not guaranteed by technology alone, providing an

Advanced International Journal of Business, Entrepreneurship and SME's
AIJBES
EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 1796-1813

*Business Entrepreneurship and SMEs, 8* (29), 1796-1813.

evidence-based roadmap that advocates for adaptive policy frameworks and frugal innovation to embed ethical inclusion into future financial ecosystems.

**DOI:** 10.35631/AIJBES.829103

**Keyword:**

Digital Divide, Financial Inclusion, Financial Innovation, Fintech, Inclusive Growth, Narrative Review, Regulatory Governance.

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## Introduction

Financial innovation has become a potential key to inclusive economic growth. It could also change the way historically disenfranchised groups gain access to financial services. However, mobile money, crowdfunding, artificial intelligence (AI) credit scoring, and blockchain technologies can help lower traditional barriers to entry (Kabir, 2020; Rybakovas & Zigiene, 2022). For decades, billions of people and micro, small and medium-sized enterprises (MSMEs) have been left out of the formal financial system. This exclusion might have limited economic mobility and helped to increase income inequality (Corrado & Corrado, 2017). Empirical evidence was gathered recently and indicates a change. The strategic application of financial technology (FinTech) can help to enhance financial inclusion, especially in developing markets in South Asia and Sub-Saharan Africa. However, in such contexts, agent networks and digital banking can offer means to help foster poverty alleviation and sustainable entrepreneurship (Kabir, 2022; Otekunrin, Chinoda, & Matowanyika, 2021). Financial innovation can increase access to capital, which can provide vulnerable households with the means to engage in economic opportunity, and may be linked to the broader economic development (Guo et al., 2024; Monga & Sharma, 2026).

However, the fast-changing FinTech landscape brings great regulatory and structural challenges. The profound change in the traditional banking model by agile digital platforms also underscores the importance of implementing flexible policy frameworks that can accommodate technological advancements while maintaining consumer protection, digital literacy and financial stability (Mehrotra, 2019; Salampasis & Mention, 2018). Moreover, the notion that technology can always lead to inclusive economic growth has become increasingly questioned. If the digital financial services continue to grow without proper and effective regulation, it could further exacerbate the digital gap, potentially excluding the most vulnerable

groups (Liu, Dong, & Peng, 2025; Mehrotra, 2023). Therefore, policy actions that focus on ensuring access to the financial innovations at an affordable price and also implementing robust data privacy measures may be necessary to ensure equitable and sustainable socioeconomic development (Khatoon et al., 2026; Satpathy et al., 2024).

There is a significant amount of recent academic research on the relationship between financial technology and economic development; however, the existing literature seems to be fragmented. In particular, there is a key gap in research that needs to be addressed, namely the lack of a financial innovation, digital capability, and institutional governance integration in inclusive development. These dimensions are usually studied in isolation from one another in previous studies. Research on technology adoption often centers on a particular technology, for example the adoption of big data (Xie, 2021) or blockchain (Xie, 2021); research on the economy often assesses macroeconomic impacts without taking into account the potential moderating influences of user's digitalisation skills and regulatory adaptation and responsiveness. Moreover, the non-standard and/or interchangeable usages of some of the terms used in the studies (e.g., “digital finance” and “inclusive innovation”) could restrict the comparability of data across studies (Wong, Badeeb, & Philip, 2023). The absence of conceptual integration can have a negative effect on the building of a unified academic concept of how these three interrelated mechanisms relate in different geographical settings to poverty alleviation.

The current evidence base will need to be synthesized to inform the next round of empirical research and policy development, given these gaps in academics and ongoing technological progress. This fragmented evidence can contribute to a broader comprehension of the design of financial systems that could serve society in addition to institutional efficiency. Accordingly, the purpose of this paper is to examine a sample of 33 papers selected from a total of 1,826 papers identified in the initial search that investigates the link between financial innovation and inclusive growth, considers the mechanisms through which financial innovation can affect inclusive growth, summarizes the findings of current regulatory issues, and draws policy implications for future research from the reviewed papers. To accomplish this goal, the rest of this paper is organized in the following way: Section 2 summarizes the mechanisms and pathways by which financial innovation can help realize financial inclusion; Section 3 critically reviews the macroeconomic implications for poverty reduction and inclusive growth as reported; and Section 4 outlines critical regulatory challenges and policy gaps; and Section 5 concludes by outlining directions for future research and practical implementation.

## Review Approach

This article uses a narrative review approach that seeks to critically synthesise and interpret the literature, rather than the systematic review or meta-analysis approach that involves exhaustive search of literature and quantification (Baumeister & Leary, 1997). A narrative approach can capture the conceptual integration of multiple theoretical approaches and empirical studies from different socio-economic contexts and can be used to explore a field of study that is changing as is the case with financial innovation (Snyder, 2023). A literature search was conducted to identify, screen and select literature using a transparent and structured bibliographic search strategy, which was done to increase transparency and minimize the risk of selection bias (Green, Johnson, & Adams, 2006).

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Scopus was the only database used for literature search to identify non-retrieval of peer-reviewed research. The choice of Scopus was made because it is a multidisciplinary abstract and citation database covering a wide range of academic journal articles, including economic and technological journals. The publications covered a time span of ten years, from 2010 to August 2026, which was supposed to capture a period where a lot had been happening in the world of FinTech and digital finance in addition to the regulatory discourse. During the identification phase, a Boolean search string was created to identify key domains: financial innovation, outcomes of inclusion or growth, financial mechanisms, business development, and policy context. Search terms used were financial innovation; fintech; financial technology; digital finance; inclusive growth; economic inclusion; equitable growth; microfinance; crowdfunding; peer-to-peer lending; social impact investing; entrepreneurship; startups; small business; business development; policy; regulation; framework; strategy.

After the identification, the final literature corpus was obtained through a two-stage screening process. In the first phase, titles and abstracts were evaluated for relevance to the financial innovation–financial inclusion–inclusive economic growth nexus. In the second stage, articles in full-text form were evaluated with a set of predetermined inclusion and exclusion criteria (Green, Johnson, & Adams, 2006). Articles accepted when they: included empirical evidence, offered theoretical modelling or policy analysis of the links between digital financial tools and marginalised populations or small businesses. On the other hand, grey literature, non-English publications, papers dealing with only the technical aspect of computer science and papers based on the traditional banking system were omitted from the study.

We used a search strategy involving Boolean operators and keyword clusters to locate literature relating financial development and economic growth, and this search strategy is reported in Table 1.

**Table 1: Summary of Search Strategy and Selection Parameters**

| Parameter | Details |
|---|---|
| **Database** | Scopus (exclusive source) |
| **Search String** | (“financial innovation" OR "fintech" OR "financial technology" OR "digital finance") AND ("inclusive growth" OR "economic inclusion" OR "equitable growth" OR "access to finance") AND ("microfinance" OR "crowdfunding" OR "peer-to-peer lending" OR "social impact investing") AND ("entrepreneurship" OR "startups" OR "small business" OR "business development") AND ("policy" OR "regulation" OR "framework" OR "strategy”) |
| **Time frame** | 2010 – August 2026 |
| **Inclusion Criteria** | Peer-reviewed journal articles and comprehensive conference proceedings; published in English; direct focus on the intersection of digital financial innovation and inclusive economic growth; includes clear empirical, theoretical, or policy-based evidence. |

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| Parameter | Details |
|---|---|
| **Exclusion Criteria** | Grey literature (e.g., white papers, non-peer-reviewed reports); non-English publications; studies focused purely on algorithmic/computational development without economic application; literature strictly limited to traditional banking mechanisms. |
| **Selection Approach** | Two-stage screening: (1) Title and abstract review for thematic relevance; (2) Full-text critical appraisal to ensure alignment with the narrative review's scope and quality thresholds. |

The first round of Scopus searching with the reported Boolean search string returned 1,826 results. In the first screening stage, titles and abstracts were evaluated for thematic consistency with the themes of digital finance and inclusive economic growth and records that were not related to these themes were removed. In the second stage full-text articles were reviewed using the inclusion and exclusion criteria. Grey literature and non-English publications as well as purely technical computer science papers not applied to macroeconomics were not considered. After this two-stage screening, 33 peer-reviewed studies were found that met the requirements and were synthesized in this review.

## Conceptual Background

### *Definitions*

In order to systematically explore the connection between technological progress and economic growth, this review defines the key concepts of technological progress (financial innovation) and economic growth (financial inclusion and inclusive growth). In today's literature, financial innovation is not just about the development of new financial products, it also refers to the implementation of disrupting technologies like mobile banking, artificial intelligence (AI), blockchain and decentralised peer-to-peer lending platforms, which could change the way financial services are accessed and utilized (Das et al., 2025; Wang & Yu, 2025). This includes digital finance models that could be used to overcome infrastructure challenges that have been linked to branch-based banking (Chu, 2018; Kabir, 2022).

Expanding fair and affordable access to and usage of formal financial products, such as credit, savings, insurance, and payment systems, among marginalized, unbanked, and underbanked people is known as financial inclusion (Jain et al., 2026; Slade, 2024). Inclusive growth can relate to financial innovation via financial inclusion. El Haddad et al. (2024) and Wong et al. (2023) describe inclusive growth as a more equitable sharing of economic growth across society and the inclusion of more economic opportunities, which leads to a lower poverty rate and less income inequality. In this context, inclusive growth could be facilitated using financial instruments which are accessible to marginalised households and micro-enterprises, enabling them to develop resilience, increase their asset base and integrate into the mainstream economy (Mbayo & Rajula, 2025).

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### *Key Theories or Frameworks*

The empirical literature on the topic of financial innovation and inclusive growth is grounded in various theories. The finance–growth nexus is a salient point of view, which suggests that there is a long-term positive relationship between the development of the financial sector and economic growth (Bara et al., 2016; Qamruzzaman & Jianguo, 2017). Recent studies have shown that financial innovation can stimulate the growth of underdeveloped areas like parts of Africa and South Asia in this perspective (Kabir, 2022; Otekunrin et al., 2021).

Moreover, frugal innovation is a lens to analyse inclusive digital finance in emerging markets. The idea behind frugal innovations is to design products using limited resources and affordable technology for resource-poor and underserved populations, including mobile money systems leveraging basic mobile technology (Chu, 2018; Slade, 2024). Frugal technological applications can be an instrument to involve historically excluded groups in formal finance systems, by cutting down infrastructure-related costs. The use of frugal technologies can be used to connect historically excluded groups to formal financial systems by reducing infrastructure costs.

The contextual success or failure of financial innovation is also explained by institutional and regulatory viewpoints. These viewpoints suggest that a nation's economic independence and the strength of its regulatory framework may have an impact on the uptake and outcomes of financial innovation (Su & Si, 2015). Scholars highlight the need for regulatory frameworks to be flexible and adaptive when dealing with technologies like AI and blockchain, as they can have both positive and negative impacts that need to be managed (Evangeline, 2025; Ganesan Alias et al., 2025; Serwanga, 2024). Without appropriate institutional protection, financial innovation can deepen the digital divide, rather than create inclusive growth (Wang & Yu, 2025).

Based on these theoretical views, this review is advanced a conceptual mechanism proposed for solving the voids in the literature. It is suggested in the review that the linkage between financial innovation and sustainable growth might be a sequential process. In particular, financial innovation can fail to have a direct or automatic correlation to economic growth. The impact of technological advancement on inclusive outcomes is more likely when combined with users' digital capacities, and supportive institutional governance. These can have an impact on the role of financial innovation in financial inclusion. Financial inclusion, in turn, can help to promote equitable and broad-based socioeconomic development.

## Thematic Review of Literature

This section does not attempt to give a chronicle or a study-by-study summary of the existing literature; instead, it attempts to cover the literature thematically. This approach allows conceptual integration between the results of the research on “Financial Technology” and “Economic Development”. The analysis is structured around four themes that are all interrelated and that reflect the central aspects of the academic discourse. First, Technological Drivers of Financial Access and Poverty Reduction is explored, focussing on possible ways in which certain digital technologies can help to decrease the barriers faced by marginalised groups. Secondly, it examines Macroeconomic Relationships among Innovation, Inclusion and Growth, in the light of reported macroeconomic implications and structural pathways in the empirical literature. Third, Ecosystem Constraints and Digital Divides are explored, where

infrastructure-related and socioeconomic constraints could be a barrier to equitable technological deployment. Lastly, the review assesses Institutional Governance and Regulatory Frameworks, examining policy strategies designed to strike a balance between financial innovation and consumer protection and systemic stability. The review of literature in this manner helps to highlight the points both similar and different and pinpoints the research gaps and theoretical tensions that can be explored in future studies.

***Theme 1: Technological Drivers of Financial Accessibility and Poverty Alleviation***

Technological innovation can help expand access to financial services and can help reduce poverty and social empowerment. It is suggested in the literature that digital finance, particularly mobile technology and e-banking could help reduce infrastructure-related and geographic barriers that have traditionally excluded marginalised groups from accessing the formal financial system. Frugal innovations like simple mobile money systems and agent banking networks can help reach the unbanked population with formal financial services, especially in low- and middle-income countries (Chu, 2018; Jain, Kumar, & Alam, 2026; Slade, 2024). The technologies could also contribute to the ability of vulnerable households to save, make transfers and access basic credit at lower transaction costs and at a scale and resource utilization that make them efficient. This may contribute towards poverty reduction objectives (Satpathy et al., 2024; Suhrab, Pinglu, & Qian, 2024).

Yet although the general idea of the use of digital tools in this field is well understood, scientific research varies in terms of which technologies might have the highest socio-economic impact. Advanced technologies, including artificial intelligence (AI), big data, and blockchain, are another strand of research that is identified as a potential source of access; decentralised systems and algorithmic credit scoring could be used to tackle information asymmetries faced by micro-borrowers (Ganesan Alias et al., 2025; Wang & Yu, 2025). Other studies, however, indicate that among the poorest, advanced FinTech services might still be unavailable. The emphasis of the studies is that basic mobile banking and adapted microfinance services could prove to be more accessible pathways to inclusion in South Asian countries (Kabir, 2022; Qamruzzaman & Jianguo, 2017). The differences in results suggest that technological appropriateness is only context specific as far as the basic digital literacy of the target population and its existing infrastructure.

In particular, the literature often confusingly equates access to digital services with their meaningful use in relation to financial services. Technological tools can open avenues to access, but access does not necessarily result in sustained wealth creation or long-term poverty reduction (Rybakovas & Zigiene, 2022). There is a gap in measuring the transition from one to another type of potentially transformative products, such as from the basic transaction to the micro-insurance and entrepreneurial credit products, for vulnerable populations. This distinction is relevant for this narrative review, as technological deployment can foster inclusive growth without financial capability and consumer trust.

***Theme 2: The Macroeconomic Nexus of Innovation, Inclusion, and Growth***

On the macroeconomic level, the relationships between financial innovation, financial inclusion and broad-based economic development are explored in contemporary literature. Empirical research finds correlations between financial-technology development, economic growth, domestic savings mobilization, capital-allocation efficiency and income inequality.

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EISSN: 2682-8545
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Even though evidence from regional areas such as ASEAN and Southern African Development Community (SADC) countries reveals that some studies have shown positive long-term relationships between financial-sector modernisation and macroeconomic indicators (Bara, Mugano, & Le Roux, 2016; Wong, Badeeb, & Philip, 2023). Moreover, country case studies, among which one on Morocco and China, indicate a possible role of digital financial ecosystems to foster inclusive economic growth in emerging markets (El Haddad, Idrissi & Habachi, 2024; Guo et al., 2024).

However, there are varying estimates as to the route the expansion of macroeconomic activity takes. Some researchers propose a direct pathway for technological innovation to support economic growth by enabling the creation of new industries and operating efficiencies (Otekunrin, Chinoda, & Matowanyika, 2021); others propose a mediated pathway. In this way, the macroeconomic impact of financial innovation would depend on its ability to expand financial inclusion, and financial inclusion could serve as a channel to link financial technological capability with economic development (Domeher, Konadu-Yiadom, & Aawaar, 2022). Moreover, there is differential sectoral evidence across studies, with some studies showing greater links with urban macroeconomic indicators while others emphasising rural agricultural changes as being important for equitable growth (Monga & Sharma, 2026).

This theoretical mismatch suggests the need for a rethinking of the national analysis, as the information available will be aggregated and can mask economic disparities at the micro level. Researchers are likely to miss the local and heterogeneous impacts of digital finance on different subgroups of the population, e.g. rural social enterprises or female-led micro-businesses (Corrado & Corrado, 2017). Another purpose of this review is to explore how macro-level and micro-level evidence relate to one another, and to emphasize the benefit and need for future research with granular impact evaluations to determine if financial innovation expands opportunities for wealth creation or to those already well-off.

***Theme 3: Ecosystem Constraints and the Digital Divide***

The literature highlights possible benefits of FinTech, but a handful of studies focus on constraints in the FinTech ecosystem that can constrain its inclusive nature. Increasingly scholars have recorded digital divides, which occurs when the financial services industry is digitized, thereby benefiting the digitally literate urban population, while leaving vulnerable populations with less technological capability behind (Liu, Dong, & Peng, 2025; Suhrab, Pinglu, & Qian, 2024). Poor broadband infrastructure, algorithmic bias within AI-based models of credit assessment and low digital financial literacy can cause significant access constraints. Thus, if no socioeconomic measures are implemented to address these issues, the deployment of digital-finance may exacerbate the existing socioeconomic disparities to as many as include a digital-finance literacy gap, price of digital devices, broadband infrastructure, and digital trust and access inequities (Khatoon et al., 2026; Valencia et al., 2021).

Researchers have various opinions on the goals and implementation of today's financial-technology ecosystems. Market-driven innovation could help marginalised groups by enabling social enterprises and minimizing the obstacles to small business creation (Dutta, Kataria, & Dhaundiyal, 2026; Mbayo & Rajula, 2025). On the other hand, critical analyses argue that the goal of financial inclusion can be put behind the business. The current system may focus too little on the multiple and low-yield nature of poverty reduction, leading to a potentially disconnect between inclusion goals and outcomes (Mehrotra, 2019; Mehrotra, 2023).

This dichotomy highlights an empirical gap related to the unintended consequences of digital financial integration over the longer term. There is a lack of comprehensive impact studies that have investigated the socio-economic mobility of the marginalised users over a longer time period as opposed to shorter adoption cycles, in the literature. This review aims to explain financial innovation through these ecosystem constraints to place it in context, not as a panacea, but rather a tool that could be impacted by the broader ecosystem it is deployed in.

***Theme 4: Institutional Governance and Regulatory Frameworks***

The emergence of financial innovations has led to a rethinking of institutional governance and regulation. The literature also indicates that public institutions have a specific role in supporting innovation in the context of inclusive finance, with the ability to adequately safeguard consumer interests, which could influence inclusive-finance outcomes (Evangeline, 2025; Salampasis & Mention, 2018). Recent scholarship on regulation of FinTech sandboxes refers to them as regulated testing grounds where FinTech companies can test products without necessarily losing regulatory control and, ultimately, risk, while promoting innovation (e.g., Goel, 2023; Serwanga, 2024). The governance issue could be a trade-off between data privacy, algorithmic transparency and macroeconomic stability from decentralised and cross-border financial technologies (Wang & Yu, 2025).

Although there is a general consensus on the need for new governance, research varies on the extent to which the regulation should be tight. This view, from the institutional economics school of thought, contends that too much regulation and compliance can stifle flexibility, particularly in serving the poor. In this sense, deepening economic freedom and reducing regulation could lead to financial innovation (Su & Si, 2015). Other studies warn of regulatory laxity, however. They believe that marginalised consumers could be susceptible to predatory digital lending and data exploitation practices, justifying proactive regulatory regulation, especially in the ethical application of big data and AI in credit decisions (Das, Mallick, & Das, 2025; Xie, 2021).

This regulatory tension suggests a lack of information on the best possible design of adaptive, inter-jurisdictional policy models. There is a disorganized regulatory environment in the literature, where policy decisions may be responsive rather than anticipatory, and may be made based on technological advancements instead of for inclusion. These tensions in the regulatory context may have implications for future progress in relation to the overall objective of the review. The contribution of financial innovation to inclusive growth might be restricted if there are no policy approaches that are coherent and backed by evidence. Relationships among these themes are presented in Figure 1.

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EISSN: 2682-8545
Volume: 8 Issue: 29 (September 2026) PP. 1796-1813

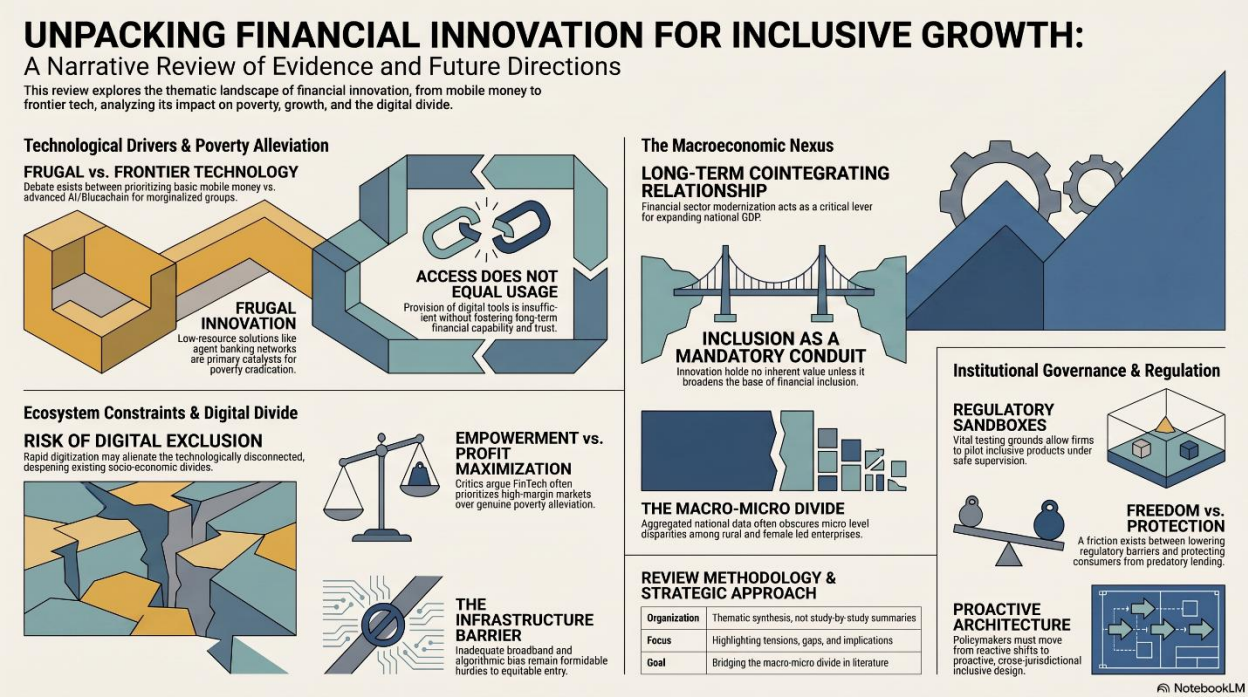



**Figure 1: Thematic Review of Literature**

## Critical Discussion

This section builds on the financial innovation and inclusive growth theme by moving from description to critical analysis of the current literature. By considering the complexities and theoretical tensions in this area under four analytical dimensions, the discussion will highlight the important issues. The discussion will focus on the important issues by considering the complexities and theoretical tensions in this area under four analytical dimensions. First, it reviews the shared consensus in the literature on potential benefits of the digital finance. Second, it considers issues of contention and dissonance. Thirdly, it signals empirical and methodological gaps in the research of the long-term socioeconomic outcomes. Lastly, it provides suggestions for future research and institutional policymaking.

### *Agreements in the Literature*

The literature shows that there is consensus that financial innovation can lower the barriers to economic participation. Overall, digital financial technologies, specifically mobile money, e-banking and agent networks, are likely to help increase access to financial services for marginalised and unbanked people, especially in emerging economies (Chu, 2018; Jain, Kumar, & Alam, 2026; Kabir, 2022). Research indicates that these technologies can lower transaction costs and overcome infrastructure challenges, allowing vulnerable households to save, handle remittances and access basic credit, amongst others (Satpathy et al., 2024; Slade, 2024). Additionally, certain macro-level econometric studies report positive relationships between the integration of these technologies, economic growth and poverty-related outcomes, which imply that FinTech can make a contribution to development-related outcomes in different regional contexts (Bara, Mugano, & Le Roux, 2016; Guo et al., 2024).

These overlaps, however, need to be critically examined as some interpretations may be along the lines that technological deployment automatically leads to economic empowerment. The literature also recognizes that digital tools create opportunities for inclusion, but a shift from transactional to sustained improvement in economic wellbeing could be confused (Corrado & Corrado, 2017). This focus can ignore the qualitative aspects of the use of financial services, neglecting to account for differences between short-term financial-service consumption smoothing and entrepreneurial investment (Rybakovas & Zigiene, 2022). The theoretical relevance of this mass of work is that it offers a foundation to consider the relationship between finance and growth but can be conducive to the narrow definition of inclusive growth, if account ownership is equated to structural economic inclusion.

***Disagreements***

Even with this common ground, there are theoretical and empirical gaps on how financial innovation can be linked to inclusive growth. One of the main conflicts is between those who believe in direct and those who believe in indirect macroeconomic effects of technology. Other researchers propose that financial innovation can have a 'direct' effect on economic growth by creating new sectors and efficiencies of operations (Otekunrin, Chinoda, & Matowanyika, 2021) while some others hold that financial innovation can have a 'direct' effect on economic growth, through the impact on financial inclusion, which may be a mediator (Domeher, Konadu-Yiadom, & Aawaar, 2022). Additionally, studies vary with regard to their perspectives on ecosystem governance. Financial technologies (FTs) are an emerging field of discussion for institutional economists, who often suggest that increased economic freedom and reduced regulatory stringency will promote the growth of FTs (Su & Si, 2015). Other academics, however, believe that more proactive regulation of the market could help mitigate the risks of predatory lending and improper use of consumer data (Das, Mallick, & Das, 2025; Wang & Yu, 2025).

These differences in structure represent theoretical and methodological differences in the field. The controversy around direct versus mediated growth mechanisms could lead to using different measurement standards for macroeconomic results. This regulatory debate also signals a conflict between a market-based view of FinTech that focuses on its social benefits (Mbayo & Rajula, 2025) and critical socioeconomic perspectives that suggest the limited attention on inclusion and commercial practices (Mehrotra, 2019; Mehrotra, 2023). This tension implies a mismatch between existing models of financial innovation and the tension between these conflicting goals. Lack of an integrated theoretical framework can make the evidence harder to interpret and may make it difficult to design approaches to protecting low-income consumers in the policy arena.

***Gaps***

Although the link between financial technology and economic development has been thoroughly studied, a significant gap in theory exists because the available literature either fails to simultaneously incorporate financial innovation, financial capacity, and institutional governance or is not inclusive. The literature is heavily weighted towards cross-sectional information by country, which can target the deployment of technology without considering its socioeconomic and regulatory environment (Monga & Sharma, 2026; Wong, Badeeb, & Philip, 2023). Most of these three are studied individually, where the use of digital finance is explored without considering the necessary digital capabilities or regulatory setups for its proper

management (Liu et al., 2025). The separation can create a lack of theorisation at the micro-level mechanisms of digital exclusion. The role of financial innovation in achieving equitable growth could be contingent on users' digital skills and institutions' ability to offer adequate governance, consumer protection, and the like.

Theoretical development and usefulness of literature may be limited due to these omissions. The literature has not been able to link macro-level and micro-level evidence, leaving the distributional effects on vulnerable groups, such as rural females, and ethnic minorities, under-researched. There is a lack of research that examines the technology's life cycle, which might not capture the changing nature of digital exclusion (Suhrab et al., 2024). In sum, existing academic models could be incomplete, since they capture the start of IF but not necessarily the sustainability and equitable distribution of inclusive finance, and therefore evidence is limited to support specific socioeconomic interventions.

### *Implications*

Themes and literature critique/analysis have implications for research and institutional policies. Theoretically, based on the results, a new axis of financial innovation and equitable socioeconomic development can be added to the relationship between finance–growth perspectives and the potential role of digital capability, adaptive governance and financial inclusion. According to the results, it is theoretically possible to extend the perspectives of the relationship between financial innovation and equitable socioeconomic development to the role of digital capability, adaptive governance and financial inclusion. Longitudinal and mixed-methods study designs are desired to explore the links between aggregate macroeconomic patterns and experiences of local and demographic-specific patterns. From a practical perspective, the literature indicates that the introduction of financial technology, driven by market forces, may not be enough to promote inclusive growth and may even increase inequalities in certain contexts (Valencia et al., 2021). Public institutions should consequently take a more proactive and adaptive approach to regulation, such as regulatory sandboxes, where appropriate, which aim at achieving a balance between innovation and consumers protection (Goel, 2023; Serwanga, 2024).

What is bigger picture is that financial innovation is not an independent factor for equitable development but depends on the context. Algorithm transparency and infrastructure limitations, along with inadequate institutional governance of inclusion, can create the potential for FinTech to bring to life the same financial exclusion patterns seen in traditional financial systems (Wang & Yu, 2025; Xie, 2021). The translation of technological capacity into widespread economic returns can only be realised with an interdisciplinary strategy that integrates financial-modernisation strategies with the right socio-economic support systems. This may help build the capacity of financial innovation to support poverty alleviation and equity growth.

## Recommendations and Future Directions

### *Recommendations for Practice*

Practitioners and the FinTech developers could think about building user-centred, frugal innovations that fit the socio-economic situation and digital-literacy of marginalised people. Developers could concentrate on scalable, cost-effective approaches like developing simplified

mobile-banking interfaces and establishing agent networks, which might be more viable for initial entry barriers facing the poorest consumers, instead of promoting technologies that are resource-hungry and possibly not accessible to them (Jain, Kumar, & Alam, 2026; Slade, 2024). Moreover, financial-service providers might have to sacrifice high-margin middle-class urban markets for financial-inclusion goals (Mehrotra, 2019).

There is scope to utilize alternative data and artificial intelligence (AI) in credit-scoring processes when supporting micro, small and medium-sized enterprises (MSMEs) and social entrepreneurs in an appropriate manner. These should involve steps to detect and redress past bias, minimise information asymmetries in transactions for borrowers who are not served well, and guard against predatory lending (Mbayo & Rajula, 2025; Ganesan Alias et al., 2025). Issuing credit cards with access points and encouraging financial capability learning would need to be taken beyond this, as vulnerable users may need financial-innovation implementation to help them operate with existing technologies and to acquire the skills needed to help them make their finances more resilient over time.

### *Recommendations for Policy or Organizational Use*

For regulating the potential contribution of financial innovation to equitable macro-economic growth, policy makers and regulators may want to consider more proactive and adaptive regulation. As appropriate, financial authorities can offer the use of regulatory sandboxes that can offer a conducive and controlled setting for FinTech businesses to test financial products under regulatory oversight. These are frameworks that could allow regulators to monitor new risks and consumer-protection concerns, and help with product testing (Evangeline, 2025; Serwanga, 2024).

Also, elementary digital infrastructure and financial literacy could be given policy priority by public sector strategies. To solve the digital divides and mitigate the potential for digital exclusion among rural and low-income populations due to rapid digitisation, policymakers can invest in broadband expansion and digital-education programmes. Policymakers can invest in broadband expansion and digital-education programmes to address digital divides and reduce the risk of further digital exclusion among rural and low-income populations, because of rapid digitisation (Liu, Dong, & Peng, 2025; Suhrab, Pinglu, & Qian, 2024). Lastly, cross-jurisdictional solutions for data privacy and consumer safeguards might be required for decentralised financial systems (DFE) (Khatoon et al., 2026; Wang & Yu, 2025).

## Future Research Directions

Future research could enhance the theory and empirical literature on this topic by combining micro-level with macroeconomic measures. Longitudinal studies can be employed in the study of the socioeconomic mobility of the marginalised FinTech users over longer period. This kind of study can contribute to the measurement of whether technological access results in long-term increases in asset acquisition, a decrease in poverty and income inequality (Monga & Sharma, 2026; Wong, Badeeb & Philip, 2023).

Moreover, the use of mixed methods could help answer vital research questions, such as the extent to which financial inclusion is a mediator in the link between financial innovation and growth, especially in different cultural and regulatory environments (Domeher, Konadu-Yiadom, & Aawaar, 2022). Future research may also consider potential long-term constraints

for ecosystems related to new technologies, such as the externalities of the use of big data and blockchain in the socioeconomic domain. The study of both theory and practice helps address these empirical gaps, which may shift the academic discussion from theory to assessing the equitable implementation of inclusive finance in practice (Xie, 2021).

## Conclusion and Limitations

### *Conclusion*

Financial innovation has changed the way access to financial services could contribute to inclusive economic growth, providing instruments that could expand access to capital to historically marginalised groups (Kabir, 2022; Rybakovas & Zigiene, 2022). But this review indicates that technological progress does not always translate into poverty alleviation, and that the effects of technological progress are not necessarily equally beneficial to all groups. It is not only the case that financial innovation is a key enabler of inclusion, but also that financial innovation might be more conducive to equitable and inclusive outcomes when the users have relevant digital skills, and the institutions offer suitable governance and consumer protection. If not properly supported by ecosystems, the introduction of FinTech can deepen the socioeconomic inequalities already present, as well as create new forms of financial exclusion in digital environments (Liu, Dong & Peng, 2025; Mehrotra, 2023).

This review offers a conceptual synthesis of the literature that addresses related issues through various strands and a synthesis of views that highlight opportunities for technology and threats to regulations. This paper uses reported macroeconomic relationships in addition to ecosystem constraints to create a framework for evaluating the potential for the financial system to provide societal benefit in addition to institutional efficiency. Looking forward, with new technologies like AI and decentralised finance hitting the scene, policymakers, academics and developers should reflect on the ways in which ethical inclusion can be integrated into technological systems. The benefits of financial innovation can be measured in terms of its ability to contribute to inclusive and resilient economic results.

### *Limitations*

Although this review draws together the literature identified, a number of methodological limitations should be noted. First, the literature search was limited to those that appeared in the Scopus database and those published from 2010 to August 2026. Relevant empirical studies and/or policy analyses not included in other databases, published in languages other than English and grey literature were not included. In addition, the literature reviewed has conceptual overlaps and sectorial imbalance because terms like “FinTech”, “digital finance” and “inclusive innovation” could be applied to various socioeconomic contexts without any distinction, making comparative analysis difficult (Wong, Badeeb, & Philip, 2023). Furthermore, the reviewed studies might focus on emerging-market contexts, such as South Asian and African countries, and could, therefore, not easily be generalised to other settings.
Finally, limitations inherent in the narrative-review methodology should also be recognised. Narrative reviews are interpretative, rather than systematic reviews, which tend to be done using fixed methods and transparent criteria to minimize selection bias, or meta-analyses, which statistically pool compatible quantitative findings. They might use the author's judgment to a significant degree when organising, prioritising and synthesising thematic patterns. This can be beneficial for conceptual integration and theory building within a complex and rapidly

changing field like financial technology but may be prone to interpretation and selection bias. Hence, the themes and implications described in this manuscript are conceptual in nature, and do not exhaustively or statistically represent a synthesis and should be interpreted with this in mind, highlighting the need for future systematic reviews and empirical studies.

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| **Acknowledgements:** | The authors would like to express their sincere gratitude to the Kedah State Research Committee, UiTM Kedah Branch, for the generous funding provided under the Tabung Penyelidikan Am. This support was crucial in facilitating the research and ensuring the successful publication of this article. |
| **Funding Statement:** | No Funding |
| **Conflict of Interest Statement:** | The author declares that there are no known conflicts of interest or competing financial interests that could have appeared to influence the work reported in this paper. |
| **Ethics Statement:** | This study did not involve any human participants, animals, or sensitive data requiring ethical approval. The authors confirm that the research was conducted in accordance with accepted academic integrity and ethical publishing standards. |
| **Author Contribution Statement:** | All authors contributed significantly to the development of this manuscript. [Author 1] was responsible for the conceptualization, methodology, and overall supervision of the study. [Author 2, Author 3& Author 4] contributed to the literature review, drafting, and critical revision of the manuscript. All authors read and approved the final version of the manuscript prior to submission. |

## References

Bara, A., Mugano, G., & Le Roux, P. (2016). Financial innovation and economic growth in the SADC. African Journal of Science, Technology, Innovation and Development, 8(5-6), 483–495. https://doi.org/10.1080/20421338.2016.1226705.

Chu, A. B. (2018). Mobile technology and financial inclusion. In Handbook of Blockchain, Digital Finance, and Inclusion, Volume 1: Cryptocurrency, FinTech, InsurTech, and Regulation (pp. 131–144). https://doi.org/10.1016/B978-0-12-810441-5.00006-3.

Corrado, G., & Corrado, L. (2017). Inclusive finance for inclusive growth and development. Current Opinion in Environmental Sustainability, 24, 19–23. https://doi.org/10.1016/j.cosust.2017.01.013.

Das, S., Mallick, M., & Das, T. (2025). Harnessing fintech for financial inclusion: Bridging the gap for the unbanked and underbanked. In Insights in Banking Analytics and Regulatory Compliance Using AI (pp. 183–208). https://doi.org/10.4018/979-8-3373-0209-6.ch010.

Domeher, D., Konadu-Yiadom, E., & Aawaar, G. (2022). Financial innovations and economic growth: Does financial inclusion play a mediating role? Cogent Business and Management, 9(1), Article 2049670. https://doi.org/10.1080/23311975.2022.2049670.

Dutta, S., Kataria, A., & Dhaundiyal, P. (2026). Empowering social enterprises through financial inclusion in emerging markets. In Government Influence in Shaping a Sustainable Fintech Ecosystem (pp. 55–92). https://doi.org/10.4018/979-8-3373-0325-3.ch003.

El Haddad, S., Idrissi, A., & Habachi, M. (2024). Financial inclusion in Morocco: The impact of financial development, financial innovation and economic growth. Edelweiss Applied Science and Technology, 8(4), 1791–1809. https://doi.org/10.55214/25768484.v8i4.1554.

Evangeline, S. I. (2025). Regulatory frameworks for inclusive FinTech ecosystems. In Promoting Inclusivity and Accessibility With FinTech (pp. 377–393). https://doi.org/10.4018/979-8-3373-1112-8.ch013.

Ganesan Alias, K. M., Veluchamy, R., Vimalnath, V., & Karthick, K. K. (2025). Revolutionizing financial services with AI and blockchain pioneering innovations for a digital future. In Emerging Trends and Innovations in Financial Services: A Futurology Perspective (pp. 159–190). https://doi.org/10.4018/979-8-3693-7160-2.ch010.

Goel, A. (2023). Trends and reforms of financial inclusion in India. International Review of Applied Economics, 37(2), 275–285. https://doi.org/10.1080/02692171.2023.2167952.

Guo, Z., Wei, Y., Fan, S., & Shahbaz, M. (2024). Is FinTech making world more "inclusive"? Evidence from inclusive growth story of China. Technological Forecasting and Social Change, 209, Article 123780. https://doi.org/10.1016/j.techfore.2024.123780.

Jain, C., Kumar, S., & Alam, N. (2026). Breaking barriers: How technology is revolutionizing access to financial services for the underserved. In E-Financial Strategies for Sustainable Development: A Handbook for Promoting Financial Inclusion and Ending Poverty (SDG 1) (pp. 89–105). https://doi.org/10.1201/9781779640956-5.

Kabir, H. (2022). Financial innovation: Accelerating financial inclusion in South Asia. In Research Anthology on Business Continuity and Navigating Times of Crisis (pp. 1556–1581). https://doi.org/10.4018/978-1-6684-4503-7.ch075.

Kabir, M. H. (2020). Financial innovation: Accelerating financial inclusion in South Asia. In Fostering Innovation and Competitiveness With FinTech, RegTech, and SupTech (pp. 186–208). https://doi.org/10.4018/978-1-7998-4390-0.ch010.

Khatoon, G., Sherwani, K. H., Bala, H., Kushwah, S. V., Zahid, U., Ashraf, M., Malik, F. A., & Sani, A. A. (2026). Financial inclusion and sustainability: Challenges, curative measures and prospects. In World Sustainability Series (pp. 189–205). https://doi.org/10.1007/978-3-032-01715-4_10.

Liu, C., Dong, T., & Peng, F. (2025). Bridging the technological gap: Digital inclusive finance and inclusive innovation development [跨越技术鸿沟：数字普惠金融与包容性创新发展]. Modern Economic Science, 47(6), 73–85. https://doi.org/10.20069/j.cnki.DJKX.202506006.

Mbayo, R., & Rajula, W. G. (2025). Innovative lending solutions for underserved populations in Africa. In Sustainable Development Goals Series (pp. 111–133). https://doi.org/10.1007/978-3-031-96716-0_5.

Mehrotra, A. (2019). Financial inclusion through FinTech - A case of lost focus. In 2019 International Conference on Automation, Computational and Technology Management (ICACTM 2019) (pp. 103–107). https://doi.org/10.1109/ICACTM.2019.8776857.

Mehrotra, A. (2023). FinTech driven financial inclusion – the hype and the reality of missed targets. International Journal of Public Sector Performance Management, 11(2), 165–176. https://doi.org/10.1504/IJPSPM.2023.129690.

Monga, R., & Sharma, V. (2026). Financial inclusion as a catalyst for inclusive growth: Empirical evidence from Haryana. International Journal of Drug Delivery Technology, 16(2), 80–89. https://doi.org/10.25258/ijddt.16.2s.7.

Otekunrin, A. O., Chinoda, T., & Matowanyika, K. (2021). The nexus between economic growth, financial development, financial inclusion and financial innovation in Africa. Asian Economic and Financial Review, 11(8), 672–681. https://doi.org/10.18488/JOURNAL.AEFR.2021.118.672.681.

Qamruzzaman, M., & Jianguo, W. (2017). Financial innovation and economic growth in Bangladesh. Financial Innovation, 3(1), Article 19. https://doi.org/10.1186/s40854-017-0070-0.

Rybakovas, E., & Zigiene, G. (2022). Financial innovation for financial inclusion: Mapping potential access to finance. Proceedings of the European Conference on Innovation and Entrepreneurship, ECIE, 17(1), 451–457. https://doi.org/10.34190/ecie.17.1.645.

Salampasis, D., & Mention, A.-L. (2018). FinTech: Harnessing innovation for financial inclusion. In Handbook of Blockchain, Digital Finance, and Inclusion, Volume 2 (pp. 451–461). https://doi.org/10.1016/B978-0-12-812282-2.00018-8.

Satpathy, I., Nayak, A., Baral, S. K., Islam, M., & Patnaik, B. C. M. (2024). e-Financial strategies as a catalyst for poverty alleviation and financial inclusion. In Sustainable Finance (pp. 235–251). https://doi.org/10.1007/978-3-031-67523-2_14.

Serwanga, R. (2024). Special section: Assessing new testing grounds for online money safety in Uganda. Journal of Law, Market and Innovation, 3(3), 294–322. https://doi.org/10.13135/2785-7867/11333.

Slade, K. (2024). Driving financial inclusion through frugal innovation to achieve UN SDG Target 8.10. In Sustainable Development Goals Series (pp. 61–72). https://doi.org/10.1007/978-3-031-68803-4_5.

Su, Y., & Si, S. (2015). What motivates financial innovation across countries? The influences of performance aspiration and economic freedom. Management International Review, 55(4), 563–587. https://doi.org/10.1007/s11575-014-0237-0.

Suhrab, M., Pinglu, C., & Qian, N. (2024). Equality in the digital age: Leveraging technological innovation for fostering access to financial services. SN Business and Economics, 4(12), Article 168. https://doi.org/10.1007/s43546-024-00763-x.

Valencia, D. C., Calabuig, C., Villa, E., & Betancur, F. (2021). Financial inclusion as a complementary strategy to address the SDGs for society. In Sustainable Development Goals Series (pp. 79–89). https://doi.org/10.1007/978-3-030-70948-8_6.

Wang, Y., & Yu, E. (2025). Financial innovation through AI and blockchain: Opportunities and challenges. In Handbook of Blockchain, Digital Finance, and Inclusion, Volume 3: Web3, AI, Privacy and Greentech (pp. 159–182). https://doi.org/10.1016/B978-0-443-34717-7.00020-9.

Wong, Z. Z. A., Badeeb, R. A., & Philip, A. P. (2023). Financial inclusion, poverty, and income inequality in ASEAN countries: Does financial innovation matter? Social Indicators Research, 169(1-2), 471–503. https://doi.org/10.1007/s11205-023-03169-8.

Xie, W. (2021). The research on big data promoting innovation and development of inclusive finance. In Advances in Intelligent Systems and Computing, 1282 (pp. 419–425). https://doi.org/10.1007/978-3-030-62743-0_60.