



Financial inclusion and inclusive growth: a theoretical model for equitable and sustainable economic development

Inclusión financiera y crecimiento inclusivo: un modelo teórico para el desarrollo económico equitativo y sostenible


DOI: <https://doi.org/10.17981/econcuc.Econ.6610>

Abstract

Review Article

Date received: 05/03/2025
Date returned: 05/23/2025
Date accepted: 06/10/2025
Date published: 13/06/2025

Engler de Jesús Ariza-García 

Corporación Universitaria del Caribe – CECAR
Sincelejo, Sucre (Colombia)
engler.ariza@cecar.edu.co 

Martha Cecilia Méndez-Prada 

Corporación Universitaria del Caribe – CECAR
Sincelejo, Sucre (Colombia)
martha.mendez@cecar.edu.co

Lucimio Levis Jiménez-Paternina 

Corporación Universitaria del Caribe – CECAR
Sincelejo, Sucre (Colombia)
lucimio.jimenez@cecar.edu.co

Stiven Vitola-Zambrano 

Corporación Universitaria del Caribe – CECAR
Sincelejo, Sucre (Colombia)
stiven.zambrano@cecar.edu.co

Para citar este artículo:

Ariza-García, E. de J., Méndez-Prada, M. C., Jiménez-Paternina, L. L., & Vitola-Zambrano, E. (2025). Financial inclusion and inclusive growth: a theoretical model for equitable and sustainable economic development. *Económicas CUC*, 46(1), e156610. <https://doi.org/10.17981/econcuc.Econ.6610>

JEL: E12, E21, E24, O16, I38.

In a global scenario where reducing poverty and inequality is a priority, financial inclusion is proposed as a central driver for an equitable future. Therefore, the primary objective of this research was to develop and validate a theoretical framework that provides a comprehensive understanding of the relationship between financial inclusion and inclusive growth. From a methodological standpoint, this study was conducted through a review of the literature in databases such as Scopus and Web of Science, and empirical research conducted over the last 20 years was used to support the causal relationships included in the model. The results indicate that financial inclusion drives inclusive growth by facilitating economic empowerment, promoting capital accumulation, improving labor market efficiency, and strengthening resilience. The implications of this work are significant, as the proposed model provides a foundation for developing public policies that aim to increase financial access and promote social justice. The primary contribution of this work is the explicit incorporation of these components into a single theoretical framework, thereby filling a gap in the economic literature. We therefore conclude that financial inclusion is necessary to achieve inclusive growth; however, its effectiveness is largely contingent upon the policies that support it in addressing structural barriers and prioritizing financial education.

Keywords: Financial inclusion; inclusive growth; economic equity; sustainable development; theoretical model; economic empowerment; public policies.

Resumen

En un escenario global donde la reducción de la pobreza y la desigualdad es prioritaria, la inclusión financiera se propone como un motor central para el futuro equitativo. Por eso, el objetivo principal de esta investigación fue construir y validar un marco teórico que permita comprender de manera integral la relación entre la inclusión financiera y el crecimiento inclusivo. Desde el punto de vista metodológico, este estudio se llevó a cabo mediante una revisión de la literatura en bases de datos como Scopus y Web of Science, y se apoyó en investigaciones empíricas realizadas en los últimos 20 años para respaldar las relaciones causales incluidas en el modelo. Los resultados indican que la inclusión financiera impulsa el crecimiento inclusivo al facilitar el empoderamiento económico, promover la acumulación de capital, mejorar la eficiencia del mercado laboral y fortalecer la resiliencia. Las implicaciones de este trabajo son importantes, dado que el modelo propuesto proporciona una base para el desarrollo de políticas públicas cuyo objetivo es aumentar el acceso al financiamiento y la justicia social. La contribución principal de este trabajo es la inclusión explícita de estos componentes en un único marco teórico que cubre una laguna en la literatura económica. Por ello, llegamos a la conclusión de que la inclusión financiera es necesaria para lograr un crecimiento inclusivo, pero su eficacia se ve reducida en gran medida por las políticas que la sustentan para abordar las barreras estructurales y priorizar la educación financiera.

Palabras clave: Inclusión financiera; crecimiento inclusivo; equidad económica; desarrollo sostenible; modelo teórico; empoderamiento económico; políticas públicas.

INTRODUCTION

Inclusive growth, understood as an economic development process that distributes its benefits equitably among all social sectors, has become a priority objective within global development policies (World Bank, 2013). Within this context, financial inclusion emerges as a key element for reducing poverty and inequality by facilitating access to formal financial services that promote the economic participation of individuals and businesses (Demirguc-Kunt et al., 2018).

The primary motivation of this study is to understand how financial inclusion can promote more inclusive economic growth, particularly in developing economies where significant gaps in access to formal financial services persist. Therefore, this research addresses the urgency of mitigating the structural inequalities that limit sustainable development and proposes a theoretical framework to guide the formulation of effective public policies.

Several studies have explored the relationship between financial inclusion and inclusive economic growth. For instance, Beck et al. (2009) argue that access to financial services contributes to reducing inequality by facilitating asset accumulation, while Armendáriz and Morduch (2010) highlight the role of microcredit in promoting entrepreneurship.

However, these studies do not explicitly address intermediate mechanisms such as economic empowerment, human capital formation, labor market dynamics, and socioeconomic resilience, nor do they propose a unified theoretical model that articulates these interactions. This omission constitutes the starting point of the present study, as the absence of a comprehensive framework limits the formulation of effective public policies that could enhance the impact of financial inclusion on inclusive growth.

The scientific relevance of this study lies in its theoretical contribution to development economics, as it proposes an innovative conceptual model that synthesizes and enriches the existing literature. This model not only identifies the components through which financial inclusion can foster inclusive growth (such as economic empowerment, human capital formation, and socioeconomic resilience) but also provides a solid foundation for future empirical research and for applications in the field of public policy.

The study adopts a qualitative approach based on a review of economic and financial literature published over the past two decades, using specialized databases such as Scopus and Web of Science. Its objective is to construct and validate a theoretical framework that enables a comprehensive understanding of the relationship between financial inclusion and inclusive growth, and to utilize it as a guide for designing strategies that promote more equitable and sustainable development.

In addition to this introduction, the article comprises several complementary sections that guide the reader through the analysis. The first section presents the current state of the field, examining the main theoretical and empirical contributions

on the relationship between financial inclusion and inclusive growth. The second section outlines the methodology, describing the qualitative approach adopted and the criteria used for source selection. The following sections present and discuss the results in light of the proposed conceptual framework and previous research. Finally, the conclusion synthesizes the key contributions of the study and proposes future perspectives for the development of public policies that aim to strengthen the impact of financial inclusion on sustainable and equitable economic development.

STATE OF THE ART

Financial inclusion and inclusive growth have established themselves as fundamental axes in the field of development economics, given their ability to reduce poverty, promote social equity, and stimulate sustainable economic growth (Demirguc-Kunt et al., 2018). These elements are considered key catalysts in the structural transformation of economies, especially in emerging and developing contexts (World Bank, 2022). Therefore, this section examines the theoretical evolution of both concepts, as well as the most recent findings in the specialized economic literature. Likewise, the main limitations and conceptual gaps that highlight the need for a comprehensive theoretical model articulating their interrelations and enhancing their application in the design of public policies are identified.

Evolution of financial inclusion

In its early stages, the concept of financial inclusion primarily focused on physical access to traditional banking services in areas with limited financial coverage (Sarma, 2008). This original vision, although it was a necessary first step, conceived inclusion as merely the availability of infrastructure, without considering its practical use, quality, or adequacy to meet the needs of users (World Bank, 2014).

This initial perspective, focused exclusively on supply, significantly limited subsequent policy approaches and analysis. Defining the problem as a simple lack of access, strategies focused on one-dimensional metrics, such as the number of bank accounts per capita, are employed. This led to a phenomenon where a high percentage of accounts remained inactive, masking the persistence of absolute exclusion (Demirgüç-Kunt et al., 2022). This situation hindered the development of a deeper understanding of its underlying barriers, including a lack of financial literacy, product affordability, and a lack of trust in formal institutions (Atkinson & Messy, 2012; Rojas-Suarez, 2016).

To overcome these conceptual limitations, financial inclusion has evolved into a more holistic perspective. This new vision encompasses not only access, but also the regular use, quality of service, and relevance of a broader range of financial services, such as credit, savings, insurance, and digital payments (Demirguc-Kunt et al., 2018; Cámara & Tuesta, 2015).

This progress has been accompanied by a growing recognition of the strategic role that financial inclusion plays in promoting sustainable economic development and poverty reduction (Allen et al., 2016). Authors such as Levine (2005) and Dimova & Adebawale (2018) argue that an inclusive financial system enhances the overall efficiency of the economic system. It also facilitates access to financing for productive activities, promoting human capital and entrepreneurship in traditionally marginalized sectors (Beck et al., 2007; Damane & Ho, 2024).

Additionally, a significant milestone in this evolution has been the digital revolution. The emergence of financial technologies (FinTech) has structurally transformed the global landscape (Feyen et al., 2023). Innovations such as mobile money and digital banking have generated scalable and low-cost solutions, allowing the expansion of services to historically excluded populations (Carè et al., 2025; Navarro et al., 2025).

However, for these benefits to materialize, adequate regulatory frameworks and effective financial education policies are required (Sahay et al., 2015). As Urdaneta et al. state (2025), a regulation that integrates impact assessments can identify barriers and adjust policies to improve access without compromising stability.

It is within this evolving context, transitioning from a conceptually limited vision to a complex and multifaceted digital ecosystem, that the shortcomings of the original approach become more apparent. The implications of these failures are direct and fundamental for the formulation of the theoretical model proposed in this research (Demirguc-Kunt et al., 2018).

This conceptual evolution of financial inclusion, from an approach focused on physical access to a holistic vision that integrates use, quality, and technology, can be summarized in Table 1.

Table 1. Conceptual evolution of financial inclusion

Period/Vision	Key features	Authors and key references	Identified limitations
Initial phase – Physical access (before 2010)	Emphasis on the availability of traditional banking services and infrastructure (branches, counters).	Sarma (2008); World Bank (2014).	One-dimensional vision focused on supply; Persistent exclusion despite the creation of bank accounts.
Mid-Term – Access and Use (2010-2018)	Integration of regular use and financial education; Emergence of inclusion policies.	Demirguc-Kunt et al. (2018). Atkinson & Messy (2012).	Limited data on the quality of services; Low institutional confidence.
Late Phase: Holistic and Digital Perspective (2018-2025)	Inclusion based on three pillars: access, use, and quality; and the rise of financial technologies (FinTech).	Cámara & Tuesta (2015); Feyen et al. (2023); Carè et al. (2025).	Insufficient regulatory frameworks; risks related to the digital divide and technological complexity.

Source: own elaboration

The historical evolution of the concept of financial inclusion reveals important conceptual and methodological limitations. Early approaches, which focused on physical access to banking services, overlooked the dimensions of actual use and quality, thereby limiting the analytical scope of the phenomenon. This partial view led to an overestimation of actual inclusion and an incomplete understanding of structural barriers, such as poor financial literacy and distrust of formal institutions.

For this reason, and in response to the traditional framework's inability to explain the difference between nominal access and meaningful participation, our model abandons the one-dimensional vision and proposes a multidimensional theoretical framework. This model conceptualizes financial inclusion as a phenomenon comprising three interrelated theoretical pillars: Access, Use, and Quality (Cámara & Tuesta, 2015).

In this way, a more robust and complete understanding is offered, aligned with the modern and holistic understanding of the phenomenon, which serves as a basis for future empirical research and more effective policy interventions (Roa, 2015).

Key dimensions of financial inclusion

Financial inclusion is a multidimensional concept that extends beyond the mere availability of financial products to encompass their practical use and the quality with which they are offered. The specialized literature identifies three fundamental dimensions: access, use, and quality (Demirguc-Kunt et al., 2018; Cámara & Tuesta, 2015).

1. Access:

This dimension refers to the physical and economic availability of formal financial services, including banks, ATMs, correspondent agents, and digital platforms. Allen et al. (2016) highlight that in many rural and marginalized regions, access is limited by poor banking infrastructure and high transaction costs. Additionally, administrative exclusion occurs due to barriers such as a lack of legal documentation, poor credit history, or unstable income (Rojas-Suárez & Gonzales, 2010). According to Hannig and Jansen (2010), access also depends on regulatory frameworks that allow flexible business models, such as banking correspondents or microfinance institutions.

2. Use:

It is not enough to have access; the actual impact of financial inclusion is achieved when people actively use financial services. Lusardi and Mitchell (2014) note that effective use is closely linked to financial literacy, which is the ability to understand basic concepts such as interest rates, savings, responsible borrowing, and long-term planning. In fact, Klapper et al. (2015) found that low levels of financial literacy are one of the main reasons why many unbanked adults are wary of the financial

system. In addition, [Demirgüç-Kunt and Klapper \(2013\)](#) stress that use is also related to the frequency and diversity of products used, such as savings, credit, insurance, or transfers.

3. *Quality:*

The third dimension refers to the relevance, transparency, and sustainability of the financial products and services offered. According to [Mylenko et al. \(2010\)](#), quality encompasses factors such as clarity in the communication of terms and conditions, consumer protection, customer service, and the adequacy of products to meet the user's needs. [Klapper et al. \(2016\)](#) emphasize that transparency is a crucial component of building trust, particularly in contexts where distrust of financial institutions prevails, often due to past experiences of abuse or a lack of clear information. Thus, the ease with which consumers can obtain relevant information from banks forms the perception of transparency ([Rawlins, 2008](#)).

The dimensions of financial inclusion and emerging technologies:

The emergence of financial technologies (fintech) has transformed the three key dimensions of financial inclusion (access, use, and quality), acting as an engine for sustainable development by reducing costs and offering products adapted to the needs of users ([Demirgüç-Kunt et al., 2022](#)). Digital innovations, such as mobile banking and instant payments, have dramatically expanded access to financial services, overcoming geographical barriers and reducing transaction costs that historically excluded rural and low-income populations ([Ozili, 2018](#)). This new access facilitates greater use, as fintech platforms enable transactions to be carried out more frequently, securely, and conveniently. Finally, technology also enhances quality by enabling the design of personalized and transparent products that are better tailored to users' needs ([OECD, 2022](#)).

However, [Prina \(2015\)](#) notes that innovation should not be limited to technological development, but should also encompass a deep understanding of user needs and the design of solutions tailored to their context. Especially, if the introduction of technology in financial markets has made financial products and services more complex ([Mushtaq & Bruneau, 2019](#)).

In this sense, fintech-driven financial inclusion is considered an essential tool for poverty eradication in emerging markets, provided that its implementation is accompanied by regulatory frameworks that guarantee consumer protection and system stability ([Ediagbonya & Tioluwani, 2023](#)).

Among these technologies, mobile telephony has played a prominent role, particularly in rural areas and communities with limited banking infrastructure, where it has enabled the greater inclusion of previously excluded populations ([Jack & Suri, 2014](#)).

Likewise, neobanks as emerging players in the financial environment have made it possible to expand access to financial products in territories historically neglected by traditional banking, since these digital platforms contribute not only to improving the socioeconomic situation of inhabitants of rural areas, but also help to promote the economic empowerment of vulnerable communities (Pérez et al., 2023).

In summary, the analysis of the literature shows that financial inclusion is based on three interdependent dimensions (access, use, and quality) that have been profoundly transformed by technological innovation. **Table 2** below summarizes these dimensions, their mechanisms of action, and their direct relationship to inclusive growth.

Table 2. *Key dimensions of financial inclusion and their relationship to inclusive growth*

Dimension	Definition / Main objective	Mechanisms of action	Link to inclusive growth	Main references
Access	Physical and economic availability of financial services.	Banking infrastructure, correspondent agents, digital banks.	It allows economic participation and productive investment.	Allen et al. (2016); Hannig & Jansen (2010). Lusardi & Mitchell (2014); Klapper et al. (2015).
Use	Effective and frequent use of financial products.	Financial education, economic education, and product diversity.	It promotes socio-economic empowerment and resilience.	Mylenko et al. (2010); Klapper et al. (2016).
Quality	Relevance, transparency, and sustainability of the services offered.	Consumer protection, clear communication, and adaptation to needs.	It strengthens confidence and stability in the financial system.	Jack & Suri (2014); Pérez et al. (2023); Eddiagbonya & Tioluwani (2023).
FinTech Technologies	Digital innovations that promote inclusion.	Mobile payments, neobanks, blockchain, AI.	Cost reduction, inclusion of rural areas, and empowerment of women.	

Source: own elaboration

Inclusive growth

Inclusive growth is defined as a process of economic expansion that distributes its benefits equitably among all social groups, with a special emphasis on reducing poverty and inequality (World Bank, 2013). Unlike traditional approaches focused exclusively on increasing gross domestic product (GDP), this perspective incorporates social equity as an intrinsic goal of economic development.

Along these lines, Klasen (2010) states that to determine if a country is growing inclusively, it is not enough to examine global GDP figures. It is necessary to go further and review how income is distributed, who has access to basic services such as health, education, or employment, and whether citizens actively participate in economic and political life. In other words, growth will only be inclusive if it leads

to genuine and lasting improvements in the quality of life for people who have historically been marginalized.

For their part, [Ranieri & Almeida Ramos \(2013\)](#) argue that this type of growth does not occur automatically, as it requires a favorable environment that encourages productive investment, the creation of decent jobs, technological innovation, and public policies that serve as a support network for the most vulnerable.

In addition, [Anand et al. \(2013\)](#) propose a more holistic view, integrating economic (such as income or employment), social (such as health or safety), and environmental (such as ecological sustainability) dimensions in the measurement of inclusive growth. According to these authors, focusing solely on GDP is insufficient to capture the nuances of development that aim to be fair, equitable, and sustainable.

On the other hand, recent literature has recognized financial inclusion as one of the fundamental drivers of inclusive growth. Studies, such as that of [Carè et al. \(2025\)](#), show that ensuring equitable access to financial products, including bank accounts, insurance, credit, and digital payments, allows excluded individuals (such as women, informal workers, or rural dwellers) to develop economic capacities and build sustainable livelihoods. Similarly, [Demirguc-Kunt et al. \(2018\)](#) highlight that this access promotes equal opportunities by facilitating savings, investment in human capital, and the ability to respond to economic crises.

From a structural perspective, [Ianchovichina and Lundström \(2009\)](#) propose that in order to achieve truly inclusive growth, productive efficiency must be combined with distributive equity. This requires breaking down the structural barriers that prevent many people from accessing essential markets, assets, and services.

Finally, a critical view, such as that of [Piketty \(2014\)](#), warns that without effective redistributive mechanisms, such as progressive taxes or social transfers, economic growth can reinforce existing inequalities. For this reason, in the author's view, it is necessary to rethink growth not only as an economic end, but also as a path towards a more equitable and cohesive society.

Mechanisms for connecting financial inclusion and inclusive growth

Recent literature identifies various ways in which financial inclusion fosters inclusive growth, including expanding access to credit, enhancing asset accumulation, promoting entrepreneurship, and mitigating economic vulnerabilities ([Sahay et al., 2015](#)). [Beck et al. \(2007\)](#), for example, showed that access to financial services reduces inequality by facilitating the accumulation of assets, while [Armendáriz and Morduch \(2010\)](#) highlighted the impact of microcredit on entrepreneurship, especially in low-income communities.

In this context, technological innovations have expanded traditional mechanisms. [Carè et al. \(2025\)](#) reveal that FinTech innovations, including mobile payments, peer-to-peer (P2P) platforms, crowdfunding for digital financial services to underserved populations, and blockchain technology to decentralize transactions,

are transforming these traditional mechanisms. In addition, Giné et al. (2012) demonstrate that insurance enhances resilience to climate risks, while Azar et al. (2018) highlight the empowerment of women in Latin America through increased financial access.

Studies, such as those of Demirgüç et al. (2022), show that the increase in bank account ownership is directly associated with greater economic participation and financial well-being in households. According to these authors, receiving payments (such as salaries or government transfers) directly into formal accounts serves as a catalyst for the use of other financial services, including savings, credit, and cash management, which in turn can boost economic growth. This relationship is supported by studies that confirm a positive correlation between FinTech development and economic growth (Li et al., 2020; Song & Appiah-Otoo, 2022). Similar findings are observed in the link between financial technology and inclusion (Agarwal & Assenova, 2024; Beck, 2020; Yang & Zhang, 2022).

Additionally, recent research has explored the impact of financial inclusion. Studies conducted by Zins & Weill (2016) found that access to credit improves agricultural productivity in sub-Saharan Africa, while Demirgüç-Kunt et al. (2018) highlight the positive impact of financial inclusion on women's empowerment. Carè et al. (2025) also identify new research topics, such as the impact of AI on financial service delivery and its potential to reduce gender gaps. Even so, Ozili (2021) notes that digitalisation has reduced many barriers, but it has also introduced new challenges, such as the digital divide and the exclusion of certain groups.

In the case of Latin America, López-Lapo et al. (2022) reviewed financial education programs and concluded that these have strengthened people's ability to make informed economic decisions. However, there are still structural barriers that limit the scope of financial education.

In summary, the recent literature highlights several ways in which financial inclusion favors more equitable development, while underlining the structural limitations that hinder its impact. Table 3 below provides a summary of these mechanisms, their observed effects, and the main challenges identified in previous studies.

Table 3. Connection mechanisms and challenges identified in the literature

Mechanisms to connect financial inclusion and inclusive growth	Observed effects / Main results	Challenges and constraints identified	Key references
Access to credit and financial services	Improved productivity, asset accumulation, and poverty reduction.	Lack of infrastructure in rural areas; Reliance on informal mechanisms.	Beck et al. (2007); Zins & Weill (2016).
Microcredit and entrepreneurship	Promotion of employment and economic empowerment, especially for women.	Risks of over-indebtedness and poor monitoring of the project.	Armendáriz & Morduch (2010); Azar et al. (2018).

Financial Technology (FinTech)	Inclusion of previously excluded populations and reduction of transaction costs.	Digital divide, product complexity, and inadequate regulation.	Carè et al. (2025); Ozili (2021).
Insurance and risk management	Build economic resilience to climate and social shocks.	Low diffusion of insurance products in developing countries.	Giné et al. (2012).
Financial education and education	More efficient use of services, better economic decision-making.	Low educational level, gender inequalities, and access to information.	Lusardi & Mitchell (2014); López-Lapo et al. (2022).
Public policies and governance	Integration of inclusive finance into national development strategies.	Lack of a unified conceptual framework and limited intersectoral coordination.	PNUD (2019); Sahay et al. (2015).

Source: own elaboration

Challenges and gaps in the scientific literature

Despite progress in financial inclusion at the global and regional levels, structural challenges persist that limit its effectiveness, especially in contexts of high inequality such as Latin America and the Caribbean (PNUD, 2019). For Allen et al. (2016), one of the most persistent obstacles is the lack of financial infrastructure in rural and peripheral areas, which considerably restricts access to formal services, as they point out. This lack translates into a greater dependence on costly informal mechanisms, with negative implications for the financial stability of households (Roa & Mejia, 2018).

Thus, low financial literacy remains a critical factor hindering the effective use of available financial services. According to Wójcik-Czerniawska (2024), there is a direct relationship between low levels of financial education and limited financial inclusion, which is manifested in suboptimal decisions regarding savings, indebtedness, and investment. This problem has also been widely documented by Lusardi and Mitchell (2014), who argue that, without basic financial knowledge, even those who have formal access to the financial system are unable to take advantage of its benefits.

On the other hand, gender, ethnic, and socioeconomic gaps also perpetuate patterns of exclusion. The World Bank warns that women, indigenous peoples, and other vulnerable groups face additional barriers in terms of access to financial products, both due to institutional biases and sociocultural norms (World Bank, 2017). Studies, such as those by Arnold & Gammage (2019), show that financial inclusion with a gender approach requires differentiated strategies that recognize these structural inequalities.

In addition to these practical challenges, a significant theoretical gap is identified in the literature regarding the absence of a comprehensive theoretical model that articulates how financial inclusion interacts with key dimensions of inclusive development, such as economic empowerment, human capital accumulation, labor market integration, and household economic resilience. Although there are partial

studies on each of these elements (Beck et al., 2007; Dupas & Robinson, 2013; Sahay et al., 2015), a comprehensive framework that integrates them into a systemic and policy-oriented logic has not yet been consolidated.

This gap justifies the need to develop a unified theoretical model, such as the one proposed in this study, that allows understanding the interactions between these factors and offering guidelines for the design and implementation of more effective public policies.

METHODOLOGY

This study employs a qualitative approach, aiming to develop a theoretical model that enables an understanding of how financial inclusion can serve as an engine of inclusive growth. The methodology is articulated in five complementary stages:

1. Literature review: A systematic search was carried out in recognized academic databases such as JSTOR, Scopus, Web of Science, and Google Scholar. To do this, keywords such as “FINANCIAL INCLUSION”, “INCLUSIVE GROWTH”, “POVERTY”, “INEQUALITY”, “ENTREPRENEURSHIP”, “PRODUCTIVITY”, and “RESILIENCE” were used. Priority was given to studies published between 2004 and 2025, including both academic articles and technical reports from international organizations (such as the World Bank and the International Monetary Fund), with an emphasis on those that employ rigorous methodologies.

The selection and exclusion criteria applied to the consulted bibliography are presented in Table 4:

Table 4. Criteria for selecting and excluding literature

Criteria	Inclusion	Exclusion
Publication period	2004-2025	Before 2004
Font Type	Academic articles, reports from international organizations	Blogs, unverified reviews
Methodology	Studies with empirical and analytical rigor	Anecdotal or unverified studies
Tongue	English, French, Spanish	Other languages are not translated
Content	Financial inclusion, inclusive growth, poverty, inequality, entrepreneurship, resilience	Topic not directly related to financial inclusion or inclusive development

Source: own elaboration

2. Critical analysis: Based on the material collected, the main mechanisms through which financial inclusion can affect inclusive growth were identified and synthesized. This analysis assessed the robustness of the empirical evidence and the diversity of theoretical approaches available in the literature. For the analysis and synthesis of the selected literature, the concept mapping technique was used (Novak & Cañas, 2008). This qualitative method was used to deconstruct and visualize the theoretical and empirical architecture of the reviewed articles.

3. Construction of the theoretical model: Seven key components were defined that structure the relationship between financial inclusion and inclusive growth: financial inclusion, economic empowerment, human capital, physical capital, labor market, household resilience, and inclusive growth. The causal relationships between these elements were based on classical and contemporary economic theories, such as those of Schumpeter (1911), Becker (1964), and Solow (1956).

The key components of the theoretical model and their causal relationships are summarized in Table 5:

Table 5. Table of components of the theoretical model and their relationships

Component	Definition / Role	Primary causal relationship
Financial inclusion	Equitable access to financial services (accounts, credit, insurance, FinTech)	Promotes economic empowerment and the accumulation of human capital
Economic empowerment	Ability to make independent economic decisions	Influences household resilience and labour market participation
Human capital	Education, Skills, and Training	Increases productivity and investment capacity
Physical capital	Hardware Infrastructure and Assets	Facilitates economic activity and market access
Labour market	Employment opportunities and working conditions	Engage with human capital and inclusive growth
Household resilience	Capacity to absorb economic and social shocks	Enables economic stability and business continuity
Inclusive growth	Fair and sustainable economic expansion	Result of the interaction of all components

Source: own elaboration

The following conceptual outline (Fig 1) illustrates the relationships between the identified components and their contribution to inclusive growth:

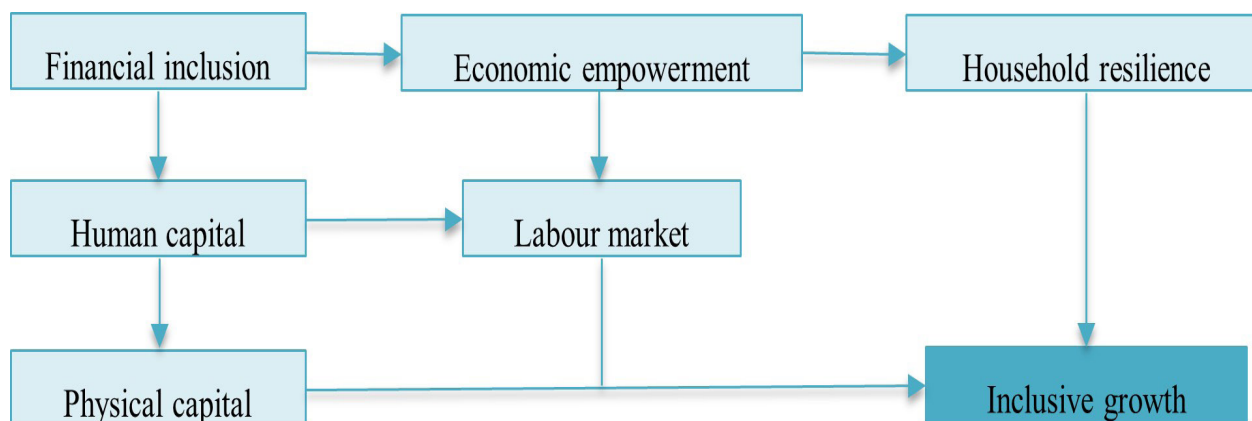


Fig. 1. Conceptual diagram of the model
Source: Own elaboration

4. Empirical contrast: The proposed model was contrasted with empirical evidence from influential studies such as those of Burgess & Pande (2005), McKenzie & Woodruff (2008), Giné et al. (2012), and Omar and Inaba (2020), which made it

possible to refine its coherence and ensure its applicability to different socioeconomic contexts.

5. Implications for public policy: Finally, the practical implications of the proposed model were analyzed, identifying concrete strategies to strengthen each of its components. These recommendations aim to provide valuable insights for the development and implementation of more comprehensive and effective public policies.

Justification of the methodological approach

A qualitative approach has been chosen to capture the complexity and contextual interactions between financial inclusion and inclusive growth, which are difficult to measure with quantitative methods alone. This approach enables the integration of the diverse experiences and mechanisms identified in the literature, while providing a conceptual framework adaptable to various socio-economic contexts.

Data analysis and tools

Conceptual mapping was applied to:

- Identify key concepts and their relationships.
- Structure the causal mechanisms between financial inclusion and inclusive growth.
- Synthesize empirical evidence visually.

The extracted data were coded and classified to ensure consistency and completeness, using comparative analysis matrices.

Rigor, validation, and ethical values

To ensure reliability and validity:

- Triangulation of sources: academic articles and institutional reports.
- Comparison of the model with empirical data from various contexts.
- Transparency in the selection of studies and codification of concepts.
- Compliance with the ethical standards of scientific research: correct attribution of sources, impartiality in analysis, data protection where applicable, and commitment to research that contributes to inclusive and equitable development.

The main strategies adopted to ensure scientific rigour and ethical values are summarised in **Table 6**:

Table 6. Summary table of rigor, validation, and ethical value

Aspect	Method used	Objective
Triangulation des sources	Academic articles + institutional reports	Ensuring reliability and integrity
Empirical contrast	Comparison with studies by Burgess and Pande, McKenzie and Woodruff, Giné et al., Omar and Inaba	Verify the consistency and applicability of the model.
Transparency	Codification of concepts, explicit inclusion/exclusion criteria	Reproducibility and impartiality
Ethical value	Correct attribution, impartiality, respect for data	Contributing to responsible research and inclusive development

Source: own elaboration

This methodological approach not only provides a solid conceptual base but also offers robust empirical validation, offering a practical analytical framework for future research and the formulation of strategies aimed at promoting more just and equitable development.

Methodological limitations

- Trust in secondary literature, which may reflect publication biases.
- Heterogeneity of socioeconomic contexts, which can limit the generalization of the model.
- Need for future direct empirical validations to strengthen the robustness of the proposed model.

RESULTS

Components of the theoretical model

The theoretical model developed in this study presents a comprehensive conceptual framework that enables us to understand how financial inclusion can serve as an engine of inclusive growth. This model identifies seven key and interrelated components: Financial Inclusion (FI), Economic Empowerment (EE), Human Capital (HC), Physical Capital (PC), Labor Market (LM), Resilience (R), and Inclusive Growth (IG). The interaction between these elements reflects the complexity of economic processes in real and diverse contexts.

1. Financial Inclusion (FI): Refers to the access to and effective use of affordable, adequate, and secure financial services, such as bank accounts, microcredits, insurance, and digital means of payment. This component serves as the starting point of the model, as it enables the economic participation of traditionally excluded sectors. In countries such as Kenya, the introduction of mobile banking platforms has reduced poverty by up to 10% (Suri & Jack, 2016), facilitating savings and income management among low-income households (Demirguc-Kunt et al., 2018).

2. **Economic Empowerment (EE)**: It is understood as the ability of people to make informed decisions about their resources, actively participate in the economy, and build productive assets. Access to financial services fosters this empowerment by granting greater economic autonomy. [Beck et al. \(2007\)](#) demonstrate that microcredit can increase the likelihood of starting a business by 15%, particularly in marginalized communities ([Lal, 2021](#)). However, its effectiveness depends on eliminating structural barriers such as gender discrimination or low financial literacy ([World Bank, 2017](#); [Arnold & Gammage, 2019](#)).

3. **Human Capital (HC)**: This component covers education, health, and skills that increase labor productivity. Greater economic empowerment enables families to invest in education and healthcare, thereby increasing the potential for individual and collective development. In Kenya, for example, households with access to digital financial services spend 20% more on early childhood education ([Suri & Jack, 2016](#)), contributing to the accumulation of human capital (Becker, 1964).

4. **Physical Capital (CF)**: Includes tangible assets such as housing, productive tools, basic infrastructure, and technology. Financial inclusion allows investment in these assets, which are essential for stability and economic growth. In Latin America, microcredit programs for housing have significantly improved the living conditions of vulnerable households (IDB, 2020), boosting productivity from the social base.

5. **Labor Market (ML)**: An inclusive labor market promotes the generation of decent employment, labor formalization, and entrepreneurship. Financial inclusion plays a crucial role in financing small and medium-sized enterprises, which account for nearly 90% of employment in developing economies ([World Bank, 2020](#)). In Bangladesh, microcredit managed by institutions such as the Grameen Bank reduced rural unemployment by 12 percent by facilitating the creation of microenterprises ([Khandker, 1999](#)).

6. **Resilience (R)**: Refers to the ability of households to cope with and recover from adverse events, such as economic crises or natural disasters. Access to services such as insurance, emergency lines of credit, and formal savings strengthens this resilience. In the Philippines, the availability of microinsurance enabled households to reduce economic losses from extreme weather events by 25% ([Giné et al., 2012](#)).

7. **Inclusive Growth (IC)**: Represents the integrated result of the interactions between the six previous components. This type of growth not only implies economic expansion but also ensures that the benefits are distributed equitably among the entire population. In economies such as South Korea's, the articulation of investment in human and physical capital with inclusive employment policies has been essential to achieve sustained growth with a low level of inequality ([World Bank, 2013](#)).

Dynamic Model Relationships

The proposed model does not limit itself to describing static components, but establishes causal relationships between them (see Fig 2), providing a framework for understanding how financial inclusion drives more equitable development:

IF → EE: Access to financial services strengthens economic empowerment by facilitating resource management and autonomous decision-making (Agarwala et al., 2023).

EE → CH and CF: Economic empowerment facilitates investment in education, health, and basic infrastructure, resulting in a direct improvement in well-being and economic opportunities (Solow, 1956).

IF → ML: Financial inclusion finances entrepreneurship, improves labor mobility, and facilitates insertion into formal jobs (Ahmed & Alvi, 2024).

IF → R: Services such as insurance and savings make it possible to face crises without neglecting the well-being of households (Giné et al., 2012).

CH, CF, ML → CI: The synergy between human and physical capital and the labour market drives sustainable, equitable, and inclusive growth.

EE, R → CI: Active economic participation and the ability to withstand shocks are essential for growth to benefit society as a whole (Ranieri & Almeida Ramos, 2013).

This integrative approach offers a powerful analytical tool for designing effective public policies. By recognizing the systemic nature of financial inclusion and its ability to activate multiple dimensions of development, the model contributes to building a solid foundation for moving towards inclusive, sustainable, and people-centered growth.

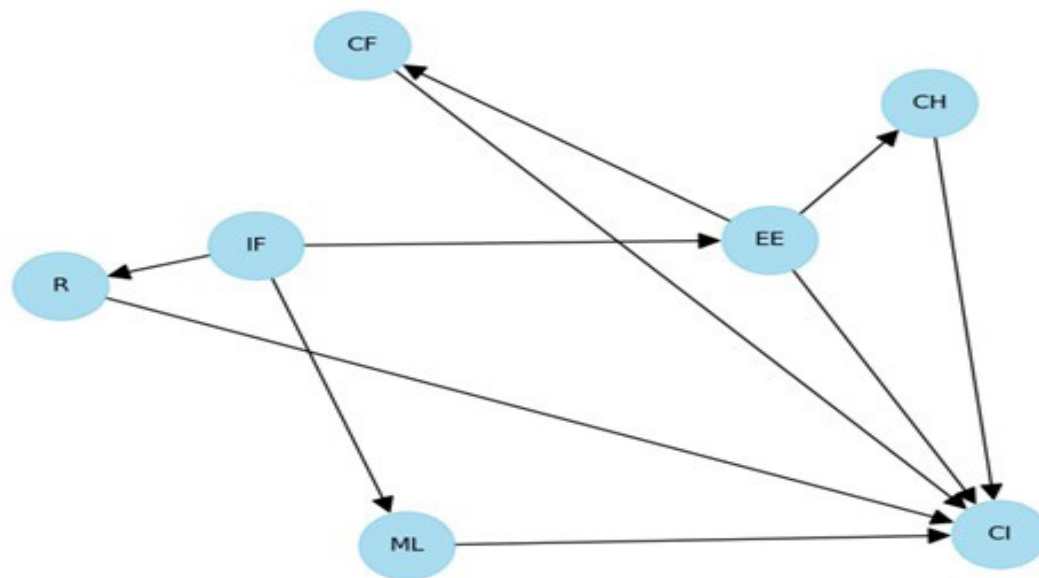


Fig 2. Theoretical model of the relationship between financial inclusion and inclusive growth
Source: Authors.

DISCUSSION OF THE RESULTS

The proposed theoretical model successfully meets the central objective of this study, which is to articulate the relationship between financial inclusion (FI) and inclusive growth (IG), by identifying and structuring the primary mechanisms by which FI acts as a catalyst for development. In this sense, the model points out clear routes that link FI with economic empowerment, the strengthening of human and physical capital, the improvement in labor participation, and the increase in the economic resilience of households.

This approach finds support in fundamental economic theories. Schumpeter's (1911) view of the role of credit in business innovation, Becker's (1964) model of investment in human capital, and Solow's (1956) contributions on the accumulation of productive factors offer a solid basis for understanding how FI accelerates growth and reduces inequalities. In fact, empirical studies, such as those by Beck, Demirgüç-Kunt & Levine (2007), have shown that greater financial depth directly contributes to poverty reduction and equity.

One of the most direct mechanisms that the model demonstrates is the promotion of entrepreneurship, particularly in informal contexts. By allowing entrepreneurs to access working capital and plan for the long term, formal financial services are crucial to scaling productive initiatives, as McKenzie and Woodruff (2008) highlight. This is particularly relevant in economies where self-employment constitutes a substantial part of the productive apparatus.

Along with entrepreneurship, another key aspect is strengthening the financial resilience of households. The possibility of having insurance, programmed savings, or loans enhances the ability of families to face adverse events without resorting to regressive strategies, such as selling productive assets or incurring costly informal borrowing (Giné et al., 2012). This finding is consistent with a development approach focused on the sustainability of long-term well-being.

In this context, financial digitalization emerges as a crucial catalyst to amplify the reach of these mechanisms. Authors such as Ozili (2021) demonstrate that fintech platforms, e-wallets, and mobile banking have significantly reduced transaction costs, thereby democratizing access and energizing the economy by integrating new actors and facilitating real-time payments, transfers, and savings.

Despite this enormous potential, the effectiveness of financial inclusion as a development tool faces structural barriers that the model also helps to identify. The first and most fundamental is the persistent lack of infrastructure in rural and marginalized areas. The absence of branches, ATMs, or digital connectivity limits effective access (Allen et al., 2016), while low institutional quality can prevent financial development from translating into absolute poverty reduction (Elumah, Taiwo & Zubairu, 2024).

Beyond physical barriers, there are significant limitations on human capital. Low financial literacy hinders many individuals from comprehending products, evaluating risks, and making informed decisions. As Lusardi and Mitchell (2014)

warn, education is a necessary condition for inclusion to prevent new forms of exclusion, such as over-indebtedness, a risk exacerbated by the digital literacy gap (Morelo et al., 2023).

Even when access and education are present, the irresponsible expansion of services can lead to systemic risks, as institutions serving low-income people in remote locations increase information asymmetry and the risk of default (Damane & Ho, 2024). This can compromise financial stability if access is promoted without considering the level of risk or the user's education, generating inefficiencies throughout the system (Koudalo & Toure, 2023).

Finally, the model highlights the sociocultural and gender barriers that persist. Restrictive social rules, lack of legal documents, or income control by other household members prevent women's full participation in the financial sector (World Bank, 2017). Although a clear gender gap in financial education has been identified, its origin remains poorly understood (Bucher-Koenen et al., 2021), reflecting a profound structural challenge, particularly in regions such as Latin America and the Caribbean that are characterized by inequality (De Olloqui et al., 2015).

Faced with this landscape of challenges, evidence suggests that a comprehensive public policy approach is required to maximize the impact of financial inclusion. It is necessary to combine the promotion of technology, such as digital wallets (Aron, 2018; Ozili, 2021), with financial education programs adapted to the needs of each population (Hidayatinnisa et al., 2021). This approach aligns with the proposed theoretical model, as it connects the provision of services with the strengthening of human capital and resilience to achieve truly equitable growth.

Latin America offers a laboratory of lessons learned. Colombia, for example, took an important step with Law 1735 of 2014, which regulated SEDPE and massively expanded access to digital services. However, its initial focus was almost entirely on the dimension of access, achieving high coverage, but not necessarily guaranteeing high-impact use or greater financial well-being for all its users.

The necessary evolution, therefore, implies a new generation of public policies. The case of Peru highlights significant challenges in gender policies (Machuca et al., 2024) and in digital literacy, highlighting the urgency of strengthening human capital so that access translates into effective use (Náñez Alonso et al., 2024). For its part, the analysis of the legal framework in Ecuador suggests that regulation should go beyond simply allowing services to focus on active supervision to ensure their quality and sustainability (Urdaneta et al., 2025).

Consequently, for financial inclusion to become a valid driver of development, regulators must ensure that products are adequate (quality), foster users' skills to take advantage of them (use), and measure the real impact on their economic stability (Sahay et al., 2015). This change in focus is crucial for Colombia and the region as a whole to transform the massive access already achieved into inclusive and sustainable development.

CONCLUSIONS

Financial inclusion is a fundamental strategic axis to promote inclusive and sustainable economic growth. Whereas, by providing historically marginalized individuals and communities with access to formal financial services, not only do they expand their economic capacities, but also enhance their empowerment, promote investment in human and physical capital, boost the labor market, and strengthen resilience in the face of adverse situations, such as economic crises or health emergencies.

The theoretical model proposed in this study provides a comprehensive analytical framework that enables us to understand the complex and multifaceted interactions between financial inclusion and inclusive development. Beyond its explanatory function, this model is presented as a valuable tool for formulating equity-oriented public policies, as it makes visible the channels through which financial inclusion can reduce structural gaps and improve the living conditions of the most vulnerable sectors of society.

However, for financial inclusion to fully unfold its transformative potential, it is necessary to recognize and address a series of structural challenges that persist in many contexts, particularly in Latin America and the Caribbean. Among the most significant challenges is the poor coverage of financial infrastructure in rural or geographically isolated areas, where the presence of banking institutions is limited and digital connectivity is poor. Added to this are low levels of financial literacy, which restrict users' ability to understand, evaluate, and use financial products in an informed way. Similarly, significant gender barriers persist that limit women's equal access to the formal financial system.

Against this backdrop, it is essential to implement comprehensive and multidimensional strategies that are not limited to access but also consider the quality, practical use, and social impact of financial services. It is also essential to promote financial education programs from the early stages of the life cycle, incorporating relevant content into both formal and informal education systems, with differentiated approaches tailored to age, gender, socioeconomic level, and ethnic-cultural background.

On the other hand, it is crucial to adopt a truly inclusive approach that recognizes the diversity of needs, contexts, and trajectories of historically excluded and vulnerable groups. This involves designing culturally relevant, gender-sensitive, and accessible financial policies and services to vulnerable populations such as women, indigenous communities, migrants, people with disabilities, and rural dwellers. Therefore, financial inclusion, in this sense, cannot be understood as an end in itself, but as a means to expand people's fundamental freedoms and promote social justice.

Looking ahead, this study presents promising avenues for further research that can enrich the field of financial inclusion. One of them is to evaluate the effectiveness of specific interventions, such as the expansion of digital financial services in

rural areas or the design of products aimed at populations with irregular incomes. Another relevant line of inquiry would be the differential analysis of impacts by sociodemographic variables, such as gender, age, ethnicity, and geographical location, in order to identify persistent patterns of exclusion and propose targeted solutions.

Likewise, longitudinal studies have the potential to reveal the cumulative and sustained effects of financial inclusion on indicators such as social mobility, multidimensional poverty reduction, and community resilience. This type of evidence is crucial in guiding the formulation of more effective public policies tailored to the realities of the territories.

Finally, this study makes a substantive contribution to the specialized literature by proposing an innovative analytical framework that places financial inclusion as a driver of structural transformation in contexts of inequality. More than a technical or institutional goal, financial inclusion must be understood as an essential component of human development and the whole exercise of economic citizenship. Only through a systemic, articulated, and people-centred strategy will it be possible to move towards a truly fair, resilient, and sustainable growth model in an increasingly interdependent world.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

Ariza-García: Conceptualization, Methodology, Research, Visualization. Méndez-Prada: Data curation, Formal analysis, Writing – Original draft. Jiménez-Paternina: Writing – Revision and editing. Vitola-Zambrano: Writing – Revision and editing.

FUNDING

This article is the result of the research project entitled “Public Policy Guidelines for the Management of Integral Development from Built Physical Capital and Economic Activity in the City of Sincelejo – Sucre, Period 2023 – 2024”, funded by the Caribbean University Corporation – CECAR during the period 2023-2024.

STATEMENT OF CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest that may have influenced the research, authorship or publication of this article.

ACKNOWLEDGMENTS

The authors express their gratitude to the institution for the financial and academic support provided, as well as to the ESAC Research Group, for its accompaniment in the methodological development and consolidation of the results that made this publication possible.

REFERENCES

- Agarwal, A., & Assenova, V. A. (2024). Mobile money as a stepping stone to financial inclusion: How digital multisided platforms fill institutional voids. *Organization Science*, 35(3), 769-787. <https://doi.org/10.1287/orsc.2022.16562>
- Agarwala, N., Maity, S., & Sahu, T. N. (2023). Efficiency of Indian banks in fostering financial inclusion: an emerging economy perspective. *Journal of Financial Services Marketing*, 1. <https://doi.org/10.1057/s41264-022-00203-7>.
- Ahmed, J., & Alvi, A. A. (2024). The Role of Financial Inclusion in Shaping Labor Market Outcomes in Emerging Economies. *Journal of Business and Economic Options*, 7(4), 33-41. <https://acortar.link/ioLidn>
- Allen, F., Demirgüç-Kunt, A., Klapper, L., & Peria, M. S. M. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of financial Intermediation*, 27, 1-30. <https://doi.org/10.1016/j.jfi.2015.12.003>
- Anand, R., Mishra, S., & Peiris, S. J. (2013). Inclusive growth revisited: Measurement and determinants. IMF Working Paper, (WP/23/45). <https://n9.cl/zcpwfp>
- Armendáriz, B., & Morduch, J. (2010). The economics of microfinance. MIT press.
- Arnold, J., & Gammage, S. (2019). Gender and financial inclusion: the critical role for holistic programming. *Development in Practice*, 29(8), 965-973. <https://doi.org/10.1080/09614524.2019.1651251>
- Aron, J. (2018). Mobile money and the economy: A review of the evidence. *The World Bank Research Observer*, 33(2), 135-188. <https://doi.org/10.1093/wbro/lky001>.
- Atkinson, A., & Messy, F. A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. <https://doi.org/10.1787/5k9csfs90fr4-en>
- Azar, K., Lara, E., & Mejía, D. (2018). Inclusión Financiera de las mujeres en América Latina. Situación actual y recomendaciones de política. *Políticas públicas y transformación productiva*;30, Caracas: CAF. <https://acortar.link/ODaCmt>
- Beck, T. (2020). Fintech and financial inclusion: Opportunities and pitfalls (No. 1165). ADBI working paper series. <https://acortar.link/98iEqo>
- Beck, T., & De La Torre, A. (2007). The basic analytics of access to financial services. *Financial markets, institutions & instruments*, 16(2), 79-117. <https://doi.org/10.1596/1813-9450-4026>
- Beck, T., Demirgüç-Kunt, A., & Honohan, P. (2009). Access to financial services: Measurement, impact, and policies. *The world bank research observer*, 119-145. <https://doi.org/10.1093/wbro/lkn008>

- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of economic growth*, 12(1), 27-49. <https://doi.org/10.1007/s10887-007-9010-6>
- Bucher-Koenen, T., Alessie, R. J., Lusardi, A., & Van Rooij, M. (2021). Fearless woman: Financial literacy and stock market participation (No. w28723). National Bureau of Economic Research. <https://doi.org/10.3386/w28723>
- Burgess, R., & Pande, R. (2005). Do rural banks matter? Evidence from the Indian social banking experiment. *American economic review*, 95(3), 780-795. <https://doi.org/10.1257/0002828054201242>
- Cámara, N., & Tuesta, D. (2015). Measuring financial inclusion: A multidimensional index. *BBVA Research Paper*, (14/26). <https://dx.doi.org/10.2139/ssrn.2634616>
- Carè, R., Boitan, I. A., Stoian, A. M., & Fatima, R. (2025). Exploring the landscape of financial inclusion through the lens of financial technologies: A review. *Finance Research Letters*, 72, 106500. <https://doi.org/10.1016/j.frl.2024.106500>
- Damane, M., & Ho, S. Y. (2024). The Impact of financial Inclusion on financial Stability: review of Theories and international Evidence. *Development studies research*, 11(1), 2373459. <https://doi.org/10.1080/21665095.2024.2373459>
- De Ollouqui, F., Andrade, G., & Herrera, D. (2015). Inclusión financiera en América Latina y el Caribe: Coyuntura actual y desafíos para los próximos años. <https://doi.org/10.18235/0000030>
- Demirgüç-Kunt, A., & Klapper, L. (2013). Measuring Financial Inclusion: Explaining Variation in Use of Financial Services across and within Countries. *Brookings Papers on Economic Activity* 2013(1), 279-340. <https://dx.doi.org/10.1353/eca.2013.0002>.
- Demirgüç-Kunt, A., Klapper, L. F., Singer, D., & Van Oudheusden, P. (2015). The global finindex database 2014: Measuring financial inclusion around the world. World Bank Policy Research Working Paper, (7255). <https://acortar.link/UMt7om>
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). The Global Finindex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19. World Bank Publications.
- Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). The Global Finindex Database 2017: Measuring financial inclusion and the fintech revolution. World Bank Publications.
- Dimova, R., & Adebowale, O. (2017). Does Access to Formal Finance Matter for Welfare and Inequality? Micro Level Evidence from Nigeria. *The Journal of Development Studies*, 54(9), 1534–1550. <https://doi.org/10.1080/00220388.2017.1371293>

- Dupas, P., & Robinson, J. (2013). Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics*, 5(1), 163-192. <https://doi.org/10.1257/app.5.1.163>
- Ediagbonya, V., & Tioluwani, C. (2023). The role of fintech in driving financial inclusion in developing and emerging markets: issues, challenges and prospects. *Technological Sustainability*, 2(1), 100-119. <https://doi.org/10.1108/TECHS-10-2021-0017>
- Elumah, L., Taiwo, M., & Zubairu, U. (2024). Financial development and poverty alleviation: a systematic review. *Journal of Economics and Sustainability*, 6(1), 1-19. <https://doi.org/10.32890/jes2024.6.1.1>
- Feyen, E., Natarajan, H., & Saal, M. (2023). Fintech and the future of finance: Market and policy implications. World Bank Publications.
- Giné, X., Townsend, R., & Vickery, J. (2008). Patterns of rainfall insurance participation in rural India. *The World Bank Economic Review*, 22(3), 539-566. <https://doi.org/10.1093/wber/lhn015>
- Hannig, A., & Jansen, S. (2010). Financial inclusion and financial stability: Current policy issues (No. 259). ADBI working paper. <https://goo.su/PZCNPxZ>
- Hidayatinnisa, N., Fauziah, F., Trivena, S. M., and Aini, Y. N. (2021). The effect of financial literacy and financial inclusion on economic growth in Indonesia. *JBMP (Jurnal Bisnis, Manajemen dan Perbankan)*, 7(2), 339-359. <https://doi.org/10.21070/jbmp.v7i2.1539>
- Ianchovichina, E., & Lundström, S. (2009). Inclusive growth analytics: Framework and application. World Bank Policy Research Working Paper, (4851). <https://acortar.link/6uekOZ>
- Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, 104(1), 183-223. <https://doi.org/10.1257/aer.104.1.183>
- Khandker, S. R. (1999). Fighting poverty with microcredit: experience in Bangladesh (pp. xii+-228). <https://acortar.link/9VMIDU>
- Klapper, L., Lusardi, A., & Van Oudheusden, P. (2015). Financial literacy around the world. World Bank. Washington DC: World Bank, 2, 218-237. <https://goo.su/U81Gb>
- Klasen, S. (2010). Measuring and monitoring inclusive growth: Multiple definitions, open questions, and some constructive proposals. Asian Development Bank. <https://goo.su/OZXBi>
- Koudalo, Y. M., & Toure, M. (2023). Does financial inclusion promote financial stability? Evidence from Africa. *Cogent economics & finance*, 11(2), 2225327. <https://doi.org/10.1080/23322039.2023.2225327>

- Lal, T. (2021). Impact of financial inclusion on economic development of marginalized communities through the mediation of social and economic empowerment. *International Journal of Social Economics*, 48(12), 1768-1793. <https://doi.org/10.1108/IJSE-12-2020-0830>
- Levine, R. (2005). Finance and growth: Theory and evidence. In P. Aghion & S. Durlauf (Eds.), *Handbook of economic growth*. pp. 865–934. [https://doi.org/10.1016/S1574-0684\(05\)01012-9](https://doi.org/10.1016/S1574-0684(05)01012-9)
- Li, J., Wu, Y., & Xiao, J. J. (2020). The impact of digital finance on household consumption: Evidence from China. *Economic modelling*, 86, 317-326. <https://doi.org/10.1016/j.econmod.2019.09.027>
- López-Lapo, J. L., Ocampo, S. E. H., Moreno, L. E. P., Castillo, G. D. P. S., Vélez, M. J. P., Jiménez, N. C. C., & Llorca, J. P. S. (2022). Educación financiera en América latina. *Ciencia Latina Revista Científica Multidisciplinar*, 6(1), 3810-3826. https://doi.org/10.37811/cl_rcm.v6i1.1770
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature*, 52(1), 5-44. <https://doi.org/10.1257/jel.52.1.5>
- McKenzie, D., & Woodruff, C. (2008). Experimental evidence on returns to capital and access to finance in Mexico. *The World Bank Economic Review*, 22(3), 457-482. <https://doi.org/10.1093/wber/lhn017>.
- Montiel, A. J. U., Romero, R. A. M., Altamirano, K. A. L., & Acha, D. M. H. (2025). Marco jurídico para la supervisión del sistema financiero ecuatoriano: factores de inclusión financiera sostenible. *Jurídicas CUC*, 21(1), 89-104. <https://doi.org/10.17981/juridcuc.21.1.2025.05>
- Mushtaq, R., & Bruneau, C. (2019). Microfinance, financial inclusion and ICT: Implications for poverty and inequality. *Technology in Society*, 59, 101154. <https://doi.org/10.1016/j.techsoc.2019.101154>
- Mylenko, N., Arbi, H., Pinar Ardic, O., Cronin, K., Heimann, M., Ibrahim, J. y Saltane, V. (2010) Financial Access 2010. La inclusión financiera durante la crisis: Estado de situación. World Bank Publications. <https://n9.cl/7erdu>
- Náñez Alonso, S. L., Jorge-Vazquez, J., Arias, L. G., & del Nogal, N. M. (2024). What factors are limiting financial inclusion and development in Peru? Empirical evidence. *Economies*, 12(4), 93. <https://doi.org/10.3390/economies12040093>
- Navarro, D., Suarez, F., & Navajas, S. (2025). Perspectivas Sobre Transformación Digital, Fintech e Inclusión Financiera: América Latina y El Caribe. Inter-American Development Bank, <https://doi.org/10.18235/0013361>
- Novak, J. D., & Cañas, A. J. (2008). The theory underlying concept maps and how to construct and use them. <https://goo.su/VR0K7ey>

- OECD. (2022). G20/OECD High-Level Principles on Financial Consumer Protection. Organisation for Economic Co-operation and Development. <https://acortar.link/Giqiz1>
- Omar, M. A., & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of economic structures*, 9(1), 37. <https://doi.org/10.1186/s40008-020-00214-4>
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340. <https://doi.org/10.1016/j.bir.2017.12.003>
- Ozili, P. K. (2020). Financial inclusion research around the world: A review. *Forum for Social Economics*, 50(4), 457–479. <https://doi.org/10.1080/07360932.2020.1715238>
- Pereira, D. J. M., Doria, D. D. F., Castro, D. T., & Núñez, K. R. H. (2023). Problemáticas y tendencias de la educación financiera. *Económicas CUC*, 44(2), 75-96. <https://doi.org/10.17981/econcuc.44.2.2023.Econ.3>
- Piketty, T. (2014). *Capital in the twenty-first century*. Harvard University Press. <https://doi.org/10.4159/9780674369542>
- PNUD (Programa de las Naciones Unidas para el Desarrollo). (2019). *Removiendo las barreras de la inclusión financiera de las mujeres y otros grupos poblacionales en América Latina y el Caribe*. Programa de las Naciones Unidas para el Desarrollo. <https://goo.su/8arpzC8>
- Prina, S. (2015). Banking the poor via savings accounts: Evidence from a field experiment. *Journal of development economics*, 115, 16-31. <https://doi.org/10.1016/j.jdeveco.2015.01.004>
- Ranieri, R., & Almeida Ramos, R. (2013). Inclusive growth: Building up a concept (No. 104). Working paper. <https://hdl.handle.net/10419/71821>
- Rawlins, B.R. (2008). Measuring the relationship between organizational transparency and employee trust. *Public Relations Journal*, 2(2), 1-21. <http://hdl.lib.byu.edu/1877/2087>
- Roa García, M., & Mejía, D. M. (2018). *Decisiones financieras de los hogares e inclusión financiera: evidencia para América Latina y el Caribe (Vol. 1)*. Centro de Estudios Monetarios Latinoamericanos, CEMLA. <https://econpapers.repec.org/bookchap/cmlincoes/7sp.htm>
- Roa, M. J. (2015). *Financial inclusion in Latin America and the Caribbean: access, usage and quality (Vol. 10)*. Mexico, DF: CEMLA. <https://acortar.link/1REQpF>
- Rojas-Suarez, L. (2016). *Financial inclusion in Latin America: A new landscape*. Center for Global Development.

- Rojas-Suárez, L. and Gonzales, V. (2010). Access to financial services in emerging powers: Facts, obstacles and policy implications. OECD Development Centre. <http://dx.doi.org/10.2139/ssrn.2559807>
- Sahay, M. R., Cihak, M., N'Diaye, M. P., Barajas, M. A., Mitra, M. S., Kyobe, M. A., ... & Yousefi, M. R. (2015). Financial inclusion: can it meet multiple macroeconomic goals?. International Monetary Fund.
- Sarma, M. (2008). Index of financial inclusion (No. 215). Working paper. <https://hdl.handle.net/10419/176233>
- Schumpeter, J. A. (1983). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle (Vol. 55). Transaction publishers.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The quarterly journal of economics*, 70(1), 65-94. <https://doi.org/10.2307/1884513>
- Song, N., & Appiah-Otoo, I. (2022). The impact of fintech on economic growth: Evidence from China. *Sustainability*, 14(10), 6211. <https://doi.org/10.3390/su14106211>
- Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288-1292. <https://doi.org/10.1126/science.aah5309>.
- Vargas-Salazar, I. Y., Aquino-Yaile, C. A., & Motta-Flores, M. (2025). Inclusión financiera en el Perú: análisis de factores socioeconómicos, geográficos y tecnológicos. *Revista de Economía Institucional*, 27(52), 261-284. <https://doi.org/10.18601/01245996.v27n52.09>
- Vásquez, M. A. P., Baldovino, F. H. P., Díaz, L., & Silva, A. N. (2023). Los Neobancos: Un nuevo modelo de negocio en el ecosistema financiero global en tiempos de COVID-19 y su impacto en la economía colombiana. *Económicas CUC*, 44(2), 97-126. <https://doi.org/10.17981/econcuc.44.2.2023.Econ.4>
- Vílchez, J. A. M. (2024). Empoderamiento económico de la mujer peruana: Pasos para la articulación de las políticas de género y de inclusión financiera. *Revista de la Facultad de Derecho de México*, 74(288), 237-258. <https://doi.org/10.22201/fder.24488933e.2024.288.87338>
- Wójcik-Czerniawska, A. (2023, January). Financial Literacy and How It Affects the Global Economy. In Eurasia Business and Economics Society Conference (pp. 247-258). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-62719-4_14
- World Bank. (2013). World development report 2014: Risk and opportunity—managing risk for development. The World Bank.
- World Bank. (2014). Global Financial Development Report 2014: Financial Inclusion. The World Bank. <https://doi.org/10.1596/978-0-8213-9985-9>

- World Bank. (2017).** The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution. Washington, DC: World Bank.
- World Bank. (2020).** Small and medium enterprises (SMEs) finance: Improving SMEs' access to finance and finding innovative solutions to unlock sources of capital. World Bank. <https://acortar.link/B17rHI>
- World Bank. (2022).** The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19. World Bank. <https://acortar.link/sjlLeu>
- Yang, T., & Zhang, X. (2022).** FinTech adoption and financial inclusion: Evidence from household consumption in China. *Journal of Banking & Finance*, 145, 106668. <https://doi.org/10.1016/j.jbankfin.2022.106668>.
- Zins, A., & Weill, L. (2016).** The determinants of financial inclusion in Africa. *Review of development finance*, 6(1), 46-57. <https://doi.org/10.1016/j.rdf.2016.05.001>.

BIODATA

Engler de Jesús Ariza -García He is a Certified Public Accountant with a master's degree in Administration from the Technological University of Bolívar, a specialist in Financial Management, and currently a doctoral student in Economics and Business. He is a research professor with more than six years of professional experience in the areas of finance, costs, IFRS, and financial auditing. He is a member of the ESAC Research Group. ORCID: <https://orcid.org/0000-0002-6444-7982>

Martha Cecilia Méndez-Prada She holds a PhD in Local Government and Regional Development from the Autonomous University of the West, Culiacán/Sinaloa Campus (Mexico). She is a lecturer and researcher at the Caribbean University Corporation (CECAR), FACEA. She is a member of the ESAC Research Group, classified by Minciencias 2021 in the Junior category. ORCID: <https://orcid.org/0000-0001-7896-6559>

Lucimio Levis Jiménez-Paternina He holds a Master's Degree in Organizational Management, is a Research Professor and Dean of the Faculty of Economic and Administrative Sciences at the Caribbean University Corporation (CECAR), and is a member of the ESAC Research Group. ORCID: <https://orcid.org/0000-0002-2277-028X>

Stiven Vitola-Zambrano He is an economist, specialist in public finance management, holds a master's degree in administration, is a university professor, and coordinator of the CECAR business consulting service. ORCID: <https://orcid.org/0000-0002-1353-2220>