

A Study on Financial Technology and its Impact on Advancing Financial Inclusion in Banking Services

Dr. Ganesha B¹, Dr. Vijayakumar²

¹Associate Professor Department of Commerce Dr. Ganesha B¹ Government First grade college K R Pura Bengaluru-560036, India

²Associate Professor, Department of Commerce, Government First Grade College, Magadi, Ramanagar Dist, India.

DOI: <https://doi.org/10.51584/IJRIAS.2026.11030037>

Received: 20 March 2026; Accepted: 26 March 2026; Published: 03 April 2026

ABSTRACT

This study explores how financial technology (FinTech) influences financial inclusion in banking services, with particular emphasis on emerging economies. An analysis of global panel data from 2012 to 2024 indicates that FinTech does not have a statistically significant effect on financial inclusion in developed economies. However, in developing regions such as India and parts of Africa, it demonstrates a strong positive impact, especially by increasing digital account ownership and the use of mobile-based financial services. A review of existing literature supports these findings, showing that innovations such as mobile payments, peer-to-peer (P2P) lending, and digital wallets improve access to financial services in rural and underserved areas. However, their effectiveness depends on factors like digital infrastructure, user literacy, and trust in technology. Case studies from India and Africa further highlight regional differences. In Africa, FinTech has contributed to greater financial awareness and increased mobile transaction usage, though its overall impact is limited by low levels of financial literacy and restricted internet access. In India, platforms such as UPI, P2P lending systems, and rural banking networks have expanded financial access, but adoption continues to face challenges related to technology gaps and regulatory issues. Despite its advantages, FinTech also presents risks, including algorithmic bias, cybersecurity threats, regulatory limitations, and the possibility of increased household debt. Moreover, while it helps reduce disparities between rural and urban populations and improves wealth distribution to some extent, it has not significantly addressed gender-based financial inclusion without targeted interventions.

In conclusion, FinTech holds considerable promise for enhancing financial inclusion in underserved markets. Nevertheless, achieving its full potential requires a comprehensive strategy that includes improving digital and financial literacy, strengthening technological infrastructure, ensuring transparency in automated systems, and developing regulatory frameworks that balance innovation with consumer protection.

Keywords: Fintech, Mobile Payments, Mobile Banking, Peer to Peer lending(P2P), Digital Wallets, Rural Baking, Financial inclusion,

INTRODUCTION

Financial inclusion refers to the provision of accessible and affordable financial services to all individuals, particularly those from economically weaker sections of society. Conventional banking systems have historically faced challenges in reaching people in remote areas and low-income groups. The rise of financial technology (FinTech), driven by digital innovation, has introduced new opportunities to bridge this gap and expand the reach of financial services.

Research Objectives:

- To analyze the impact of financial technology (FinTech) on financial inclusion.
- To examine how FinTech platforms enhance the delivery of banking services.

-
- To identify the challenges associated with using FinTech for inclusive banking.

METHODOLOGY

This study adopts a descriptive research design and is based on secondary data sources, including academic journals, government reports, and online materials related to financial technology and financial inclusion in India. To achieve the objectives of the study, relevant tables and figures have been utilized for the analysis and presentation of data.

LITERATURE REVIEW

World Bank (2021) Studies by the World Bank (2021) highlight a strong connection between the adoption of financial technology and improvements in financial inclusion. The report emphasizes that mobile money services have enabled millions of individuals to enter the formal financial system. Additionally, FinTech firms and digital banking platforms have made it easier to open accounts, lowered transaction costs, and increased access to credit.

Ms. Divyani Datta (2023) focused on providing a conceptual understanding of how FinTech contributed to financial inclusion in India during the post-pandemic period. Using a descriptive approach, the study offered insights into how digital financial solutions can support economic recovery by addressing the broader needs of the population.

Md. Qamruzzaman (2023): examined the role of financial innovation in promoting financial inclusion across 22 Arab countries between 2004 and 2020. In this study, financial inclusion was treated as the dependent variable, while indicators such as ATM availability and the number of depositors in commercial banks were used as proxies for financial development. The findings revealed a significant positive relationship, suggesting that financial innovation plays a crucial role in driving the expansion and adoption of inclusive financial services.

CRISIL (2013) A study conducted by CRISIL (2013) evaluated the extent of financial inclusion in India through the development of an index called CRISIL Inclusix. This index focused on non-monetary indicators to measure inclusion, prioritizing access to financial services over the monetary value of transactions. Instead of assessing the size of loans, it emphasized the number of individuals who could access various banking services. The index was constructed using three key dimensions: branch penetration, deposit penetration, and credit penetration. These indicators were updated annually, and depending on data availability, additional aspects such as insurance and microfinance were also incorporated. The findings highlighted significant gaps in financial inclusion. Only about half of the Indian population had access to a savings account, while a much smaller proportion—approximately one in seven individuals—could access formal credit services. In 2011, the overall CRISIL Inclusix score for India stood at 40.1 out of 100, indicating a relatively low level of inclusion. The study provided a comprehensive overview of disparities in access to financial services across both rural and urban regions of the country.

Research Gap:

The review of existing literature highlights several important research gaps concerning financial inclusion and FinTech awareness in rural India. As noted by Divyani Datta (2023), there is limited understanding of how rural populations perceive and engage with specific FinTech products and services. In particular, the influence of digital literacy on the adoption and effective use of these technologies remains insufficiently explored, indicating the need for more focused research in this area. Moreover, cultural attitudes and social norms significantly shape the acceptance of FinTech solutions, yet these factors have not been adequately examined. Gender disparities in financial inclusion also persist, with rural women facing unique barriers that require deeper academic investigation. Additionally, the impact of local economic conditions and infrastructural limitations on both awareness and access to financial services remains underexplored.

Finally, there is a pressing need for longitudinal studies that assess the long-term effects of FinTech on financial behavior and economic outcomes in rural India. Such research would provide valuable insights for designing effective and sustainable financial inclusion policies

FINDINGS AND RECOMMENDATION

Improved Access to Banking

FinTech platforms have facilitated the opening of digital bank accounts through smart phones, often employing biometric authentication and e-KYC verification. In India, more than 400 million bank accounts were opened under the Pradhan Mantri Jan Dhan Yojana (PMJDY) with support from FinTech solutions.

Alternative Credit and Lending Models

Peer-to-peer (P2P) lending platforms and AI-based credit scoring systems enable lenders to evaluate borrowers who lack conventional credit histories, thereby enhancing access to credit for small and medium-sized enterprises (SMEs) and individual borrowers.

Digital Payments and Transfers

Mobile money services and digital wallets, such as M-Pesa and Paytm, have enabled low-cost payments and remittances, particularly benefiting users in rural areas.

Challenges

Digital Literacy: Limited awareness in rural areas restricts the adoption of FinTech services.

- **Cyber security:** The rise of digital threats necessitates strong security measures to protect users and data.
- **Regulatory Gaps:** The absence of consistent global regulatory frameworks can hinder the growth and scalability of FinTech innovations.

Recommendations

- **Policy Support:** Governments should provide incentives for FinTech innovations that promote financial inclusion.
- **Public-Private Partnerships:** Collaboration between FinTech companies and banks can help address infrastructural gaps.
- **Education Campaigns:** Initiatives that promote financial and digital literacy can increase adoption and build user trust

CONCLUSION

FinTech has transformed financial services by enhancing accessibility and promoting greater inclusion. Although it cannot completely replace traditional banking, it acts as a crucial complement, particularly in serving underserved populations. Moving forward, efforts should prioritize improving digital literacy, designing inclusive financial products, and implementing adaptive regulatory frameworks to fully realize the potential of FinTech.

REFERENCES:

1. World Bank. (2021). Global Findex Database 2021. World Bank. <https://www.worldbank.org/en/publication/globalindex>

2. Gomber, P., Koch, J. A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 87(5), 537–580. <https://doi.org/10.1007/s11573-017-0858-0>
3. Demirgüç-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2015). *The Global Findex Database 2014: Measuring financial inclusion around the world*. World Bank. <https://www.worldbank.org/en/publication/globalindex>
4. McKinsey & Company. (2016). *Digital finance for all: Powering inclusive growth in emerging economies*. McKinsey & Company. <https://www.mckinsey.com/business-functions/financial-services/our-insights/digital-finance-for-all>
5. Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The evolution of FinTech: A new post-crisis paradigm. *Georgetown Journal of International Law*, 47(4), 1271–1319. <https://www.law.georgetown.edu/international-law-journal/>