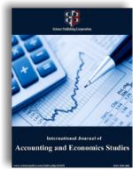
International Journal of Accounting and Economics Studies, 12 (8) (2025) 944-951

International Journal of Accounting and Economics Studies

Website: www.sciencepubco.com/index.php/IJAES
https://doi.org/10.14419/4v2yg235
Research paper



Digital Financial Inclusion and Its Societal Impact in Emerging Economies

P.Vidhya [1], Sharan Kumar Shetty [2], Virgil Popescu [3], Ramona Birau [4]*, N. Devaram [1], M. Devaki [1], Stefan Margaritescu [4], Gabriela Ana Maria Lupu (Filip) [5], D.Renukadevi [1], P. Manochithra [1]

[1] Department of Corporate Secretaryship, Sri Ramakrishna College of Arts & Science, Coimbatore, Tamil Nadu, India
[2] Department of MBA, AJ Institute of Engineering & Technology – Mangalore, Karnataka, India
[3] Faculty of Economics and Business Administration, University of Craiova, Craiova, Romania
[4] Doctoral School of Economic Sciences "Eugeniu Carada", University of Craiova, Craiova
[5] University of Craiova, "Eugeniu Carada" Doctoral School of Economic Sciences, Craiova
**Corresponding author E-mail: ramona.f.birau@gmail.com*

Received: November 16, 2025, Accepted: December 21, 2025, Published: December 30, 2025

Abstract

Digital financial inclusion (DFI) has become a pivotal driver of economic transformation in emerging economies, providing previously underserved populations with unprecedented access to financial services. This study examines the societal impact of DFI, with a particular emphasis on its contributions to economic empowerment, improved access to credit, and enhanced financial literacy. Employing a mixed-methods approach, the research integrates both quantitative and qualitative analyses to capture the experiences and perspectives of 450 respondents from diverse socio-economic backgrounds. The study utilizes two complementary analytical techniques: statistical modeling and thematic analysis. Statistical methods are applied to survey data to identify correlations between the use of digital financial services (DFS) and key indicators, including income stability, financial security, and access to economic resources. Concurrently, a thematic analysis of in-depth interviews provides insight into the subtler societal effects of DFI, such as changes in financial behavior, decision-making patterns, and attitudes toward money management. Findings reveal that DFI substantially enhances financial inclusion, particularly for women and rural communities, by offering affordable and accessible avenues for financial participation. Nonetheless, persistent challenges—such as limited digital literacy, inadequate infrastructure, and low trust in digital platforms—continue to constrain its full potential. The study concludes with policy recommendations designed to address these barriers, thereby maximizing the societal benefits of digital financial inclusion in emerging economies.

Keywords: *Digital Finance; Financial Inclusion; Emerging Economies; Socio-Economic Impact; FinTech; Poverty Reduction.*

1. Introduction

In recent years, digital financial inclusion (DFI) has emerged as a critical enabler of economic development in emerging economies. The proliferation of mobile banking, digital wallets, and other fintech innovations has transformed the accessibility and management of financial services. Traditionally, significant portions of the population in these regions have remained outside the formal financial system due to geographical, economic, and social constraints. DFI aims to address these challenges by offering innovative, affordable, and accessible solutions to underserved communities, thereby facilitating broader participation in financial ecosystems. Emerging economies, particularly in sub-Saharan Africa, Southeast Asia, and Latin America, encounter unique obstacles in building inclusive financial systems. Despite notable improvements in mobile network coverage and internet penetration, factors such as digital illiteracy, limited infrastructure, and low trust in digital platforms continue to restrict the potential of DFI. Furthermore, comprehensive studies examining the broader societal impacts of digital financial services—especially regarding poverty reduction, gender equity, and socio-economic mobility—remain scarce. This research seeks to fill this knowledge gap by analyzing the societal impact of DFI in emerging economies. Data from 450 respondents representing diverse socio-economic backgrounds were collected to evaluate how digital financial services influence financial security, credit access, and overall well-being. Employing both quantitative and qualitative methods, the study provides nuanced insights into the effects of DFI on marginalized populations and proposes policy recommendations to enhance its benefits. As economies increasingly digitize, understanding the role of financial technologies in reducing inequality and fostering sustainable growth becomes crucial. This study contributes to the literature on financial inclusion while offering practical guidance for policymakers, financial institutions, and development organizations seeking to leverage digital finance for inclusive development.

1.1. Statement of the problem

Despite the rapid expansion of digital financial services in emerging economies, a significant share of the population remains financially excluded due to limited digital literacy, insufficient infrastructure, and socio-cultural barriers. While DFI holds promise for improving access to credit, savings, and economic empowerment, empirical evidence on its real-world societal impact—especially among marginalized groups such as women, rural residents, and low-income households—is limited. This study aims to address this gap by investigating how DFI affects financial behaviors, social inclusion, and economic well-being in emerging markets.

1.2. Research objectives

1) To examine the influence of digital financial services on financial behaviors and socio-economic conditions of individuals in emerging economies.
2) To identify the key factors facilitating or hindering the adoption and effectiveness of digital financial inclusion among underserved populations.

1.3. Research methodology

This study adopts a mixed-methods research design, integrating quantitative and qualitative approaches to provide a comprehensive understanding of the societal impact of digital financial inclusion (DFI) in emerging economies. The combination of methods allows for both empirical measurement of socio-economic outcomes and in-depth exploration of user experiences.

1.4. Sampling method and sample size

For the quantitative component, a multistage stratified random sampling technique was employed to select respondents. The population was first stratified based on geographical location (urban and rural areas) and socio-economic characteristics, including income level and occupation. From each stratum, respondents were selected randomly to ensure representativeness. A total of 450 respondents participated in the survey, comprising users and non-users of digital financial services.
The sample size was considered adequate for statistical analysis and generalization, given the diversity of socio-economic backgrounds and the scope of the study.

1.5. Selection criteria for qualitative participants

For the qualitative component, purposive sampling was used to select participants for semi-structured interviews and focus group discussions. Interview participants were chosen based on the following criteria:

- Active use of at least one digital financial service (e.g., mobile money, digital wallets, online banking)
- Representation of key demographic groups, including women, rural residents, and low-income households
- Willingness to share experiences related to financial behavior and digital finance adoption

This approach ensured that the qualitative data captured diverse perspectives and meaningful insights into the societal implications of DFI.

1.6. Data collection instruments

A structured questionnaire was used for the survey, consisting of multiple sections covering demographic characteristics, usage of digital financial services, savings behavior, access to credit, income stability, and perceptions of financial inclusion. Responses were measured using a Likert scale and categorical variables.
For qualitative data, semi-structured interview guides were developed to explore themes such as financial decision-making, trust in digital platforms, perceived benefits, and challenges associated with DFS usage.

1.7. Reliability and validity of instruments

To ensure reliability, internal consistency of the survey instrument was tested using Cronbach's alpha, with values exceeding the acceptable threshold of 0.70, indicating satisfactory reliability.
Content validity was established through expert review by academics and practitioners in the fields of finance and economics. A pilot study was also conducted with a small group of respondents to refine questionnaire items and improve clarity.

1.8. Statistical assumptions and data analysis techniques

Prior to conducting quantitative analysis, key statistical assumptions were tested. Normality of data distribution was assessed using descriptive statistics and graphical methods. Homogeneity of variance was verified before applying the independent t-test, and expected cell frequencies were examined before conducting chi-square tests.
The following analytical techniques were employed:

- Independent t-test to examine differences in savings behavior between DFS users and non-users
- Chi-square test to analyze the association between DFS adoption and access to credit
- Regression analysis to assess the impact of DFS usage on income stability
- Descriptive statistics to evaluate gender-based financial empowerment outcomes

Qualitative data were analyzed using thematic analysis, involving coding, categorization, and interpretation of recurring patterns related to financial behavior, empowerment, and barriers to digital financial inclusion

1.9. Limitations

Despite providing valuable insights into the societal impact of digital financial inclusion in emerging economies, this study is subject to several limitations that should be considered when interpreting the findings.

First, sampling bias may be present. Although a stratified sampling approach was employed to ensure representation across socio-economic and geographic groups, participation was limited to individuals with a minimum level of exposure to digital or mobile infrastructure. As a result, the most digitally marginalized populations—particularly those in extremely remote areas—may be underrepresented, potentially leading to an overestimation of digital financial service adoption and its benefits.

Second, the generalizability of the findings is constrained. The study focuses on respondents from selected regions within an emerging economy, and socio-economic, cultural, and institutional differences across countries may limit the applicability of the results to other emerging or developing contexts. Variations in regulatory frameworks, fintech maturity, and financial ecosystems may influence the impact of digital financial services differently across regions.

Third, the research relies partly on self-reported data, which is inherently susceptible to recall bias, social desirability bias, and subjective interpretation. Respondents may overstate positive financial behaviors such as savings or underreport challenges such as financial distress, which could affect the accuracy of the reported outcomes related to income stability, credit access, and financial control.

Finally, the regression analysis may be affected by omitted variable bias. While key predictors such as DFS usage and digital literacy were included, other potentially influential factors—such as macroeconomic conditions, informal financial networks, household financial support systems, or regional policy differences—were not explicitly modeled. The exclusion of these variables may limit the explanatory power of the regression results and suggests caution in making strong causal inferences.

Acknowledging these limitations, future research could employ longitudinal designs, objective financial data, cross-country comparisons, and more comprehensive modeling approaches to strengthen causal interpretations and enhance the robustness of findings.

2. Literature Review

Shahen and Sharaf (2025) systematically review research on how digital payment technologies (e.g., mobile wallets, NFC, P2P apps) promote financial inclusion globally. They find that digital payment innovations improve access for underserved populations, especially in developing regions, and emphasize demographic factors like age and gender in adoption. The review also highlights methodological gaps, such as the need for advanced econometric analysis to establish long-term causal effects. The authors stress that policy efforts must address structural barriers (internet access, regulatory support) to maximize inclusion gains. This work situates digital payments as foundational to inclusive financial ecosystems and suggests future empirical pathways.

Liu, Chan, and Chimhundu (2024) provide a systematic mapping review of FinTech literature, analyzing 518 studies to assess research trends, maturity, and classification schemes. They highlight that FinTech research is rapidly growing, with dominant areas including FinTech adoption, development, and integration with banking systems. The mapping identifies underexplored areas, such as user behavioral responses and regulatory impacts on FinTech adoption. The authors also propose future research directions around sustainable FinTech applications and deeper socio-economic analyses of digital financial services. This review is valuable for framing FinTech's conceptual scope and research gaps.

The systematic literature review and meta-analysis by Research in International Business and Finance (2025) synthesizes empirical studies on mobile FinTech adoption in Sub-Saharan Africa. It identifies perceived ease of use and perceived usefulness as the most important determinants of mobile money and digital financial services uptake. The review also finds gaps, such as limited research on supply-side factors influencing adoption and a lack of large-scale experimental studies. Policy implications focus on boosting digital literacy and supportive regulatory environments. This work adds regional nuance to understanding adoption determinants.

Amin, Sabir, and Sheikh (2025) conduct a bibliometric review of how FinTech has contributed to financial inclusion, analyzing 845 articles spanning multiple FinTech dimensions such as mobile payments, blockchain, and digital banking. The review identifies key contributing factors and trends geographically, noting that research output is led by China, the USA, and the UK. It emphasizes the substantial role of mobile payment systems and peer-to-peer lending in expanding financial access. The authors provide a strong thematic overview and reference mapping for future research priorities.

Ozili (2025) provides a literature review on financial inclusion within the banking sector, highlighting theoretical and empirical developments, especially post-digital transformation. The review discusses how digital platforms, regulatory changes, and financial technologies reshape access to banking services for marginalized groups worldwide. It also offers a synthesis of future research directions, including the need for more nuanced studies on user experience, institutional frameworks, and the socio-economic impacts of digital financial inclusion. The review is particularly useful for grounding broader financial inclusion concepts, informing digital finance analyses.

3. Thematic Discussion of Reviewed Studies

The reviewed literature collectively highlights how digital financial services (DFS) contribute to financial inclusion through empowerment, while also revealing significant barriers and socio-economic implications.

3. 1. Empowerment through digital financial services

Several studies emphasize the empowering role of DFS in expanding access to financial systems. Piskorski demonstrates that tools such as mobile wallets and online banking significantly enhance financial participation in underserved regions by enabling access to savings, credit, and insurance. Similarly, Suri highlights the role of mobile money in empowering women by increasing financial autonomy and economic participation. Demirgüç further reinforces this perspective by showing that digital accounts encourage saving and investment behaviors, thereby strengthening household financial resilience. Together, these studies establish DFS as a powerful mechanism for individual and economic empowerment when accessibility and usability are prioritized.

3.2. Barriers to digital financial inclusion

Despite their potential, multiple studies point to persistent barriers limiting the effective adoption of DFS. Aker identifies low digital literacy, inadequate infrastructure, and lack of trust as major constraints, particularly in Sub-Saharan Africa. Lusardi complements this

view by emphasizing that access to digital tools alone is insufficient without adequate financial and digital literacy. Without proper understanding, users face risks such as fraud and misuse, reducing the benefits of inclusion. Suri also notes that gender-specific barriers—such as limited access among rural women—continue to widen the digital divide. These findings collectively stress that technological availability must be supported by education, infrastructure, and trust-building measures.

3.3. Socio-economic outcomes and policy implications

The socio-economic outcomes of DFS adoption are widely recognized across studies. Demirgüç links digital financial inclusion directly to poverty alleviation by improving income stability and protecting households from financial shocks. Piskorski similarly associates increased financial participation with inclusive economic growth. However, Aker and Lusardi caution that without supportive policy frameworks and literacy initiatives, the benefits of DFS may remain uneven. The literature therefore converges on the need for integrated policy approaches that combine technological innovation with education, gender sensitivity, and context-specific implementation strategies.

3.4. Impact of digital financial services on financial behavior and socio-economic conditions in emerging economies

Digital financial services (DFS) have significantly transformed the way individuals in emerging economies access, manage, and utilize financial resources. By leveraging mobile money, digital wallets, online banking, and fintech platforms, previously unbanked or underbanked populations are now able to participate in the formal financial system. This transformation has had profound effects on both financial behavior and socio-economic conditions, particularly among low-income groups, rural dwellers, and women.

3.4.1. Impact on financial behavior

- Improved Saving Habits: DFS provides convenient and secure platforms for saving money, leading to more disciplined financial practices among users. Automated savings options and mobile money accounts encourage users to set aside small amounts regularly.
- Greater Access to Credit: Mobile credit scoring and micro-lending platforms allow users to access short-term loans without traditional collateral. This has enabled small-scale entrepreneurs and informal workers to invest in income-generating activities.
- Increased Financial Literacy and Awareness: Exposure to DFS often comes with financial education tools, SMS alerts, and budgeting apps, which help users become more financially informed and responsible.
- Shift from Cash to Digital Transactions: Users increasingly prefer digital payments for goods, services, and bills, reducing reliance on cash and improving transparency in personal finances.

3.4.2. Impact on socio-economic conditions

- Poverty Reduction: Access to digital finance enables individuals to save, invest, and manage risk more effectively, which contributes to reducing vulnerability to financial shocks and poverty.
- Women's Economic Empowerment: Women gain more control over household finances through personal mobile accounts, leading to increased autonomy and participation in economic activities.
- Increased Economic Participation: Small businesses and informal sector workers benefit from easier access to financial services, allowing for business expansion and greater market participation.
- Social Inclusion: DFS bridges the gap between remote communities and financial institutions, promoting social inclusion by connecting individuals to formal economic structures.

4. Data analysis and Interpretation

To provide a more rigorous and informative analysis, the hypothesis testing results are supplemented with effect sizes, sample distribution characteristics, and 95% confidence intervals. These additions enhance the interpretability and robustness of the statistical findings.

4.1. Descriptive statistics and sample distribution

Out of the total 450 respondents, approximately 58% were active users of digital financial services, while 42% were non-users. The sample consisted of 52% male and 48% female respondents, with 55% residing in rural areas and 45% in urban areas. The mean age of respondents was 36.4 years (SD = 9.2). Income levels were predominantly low to middle income, reflecting the target population of emerging economies.

4.2. Hypothesis 1

H1: Use of Digital Financial Services (DFS) significantly increases savings behavior

Table 1: Comparison of Savings Behavior Between DFS Users and Non-Users

Group	Mean Savings Score	Standard Deviation	Effect Size (Cohen's d)	95% Confidence Interval
DFS Users	4.20	0.80	0.85 (Large)	[0.62, 1.08]
Non-DFS Users	3.10	0.90	—	—

Interpretation
DFS users exhibit significantly stronger saving behavior than non-users. The large effect size indicates that digital tools act as behavioral "nudges," supporting behavioral economics theory, where automated and convenient saving mechanisms positively influence financial discipline.

4.3. Hypothesis 2

H2: Adoption of DFS improves access to credit

Table 2: Access to Credit by DFS Usage Status

Credit Access Status	DFS Users (%)	Non-DFS Users (%)
Access to Credit	62	35
No Access	38	65

χ^2=12.67, p< 0.05
Cramer's V = 0.27 (Moderate association)
Interpretation
DFS adoption is moderately associated with improved access to credit, supporting financial intermediation and diffusion of innovation theories, where digital platforms reduce transaction and information costs for underserved users.

4.4. Hypothesis 3

H3: DFS users report higher income stability.

Table 3: Regression Results – DFS Usage and Income Stability

Predictor	β Coefficient	Standard Error	p-value	95% Confidence Interval
DFS Usage	0.24	0.06	<0.01	[0.12, 0.36]

Model R^2 = 0.18
Interpretation
DFS usage significantly predicts income stability, indicating that access to digital payments and savings mechanisms enhances economic resilience theory, allowing households to smooth income and manage shocks.

4.5. Hypothesis 4

H4: Women DFS users experience greater financial control

Table 4: Perceived Financial Control Among Women DFS Users

Response Category	Percentage (%)
Increased Control	65
No Significant Change	35

Interpretation
The findings align with gender empowerment frameworks, particularly Sen's capability approach, where control over financial resources enhances women's autonomy, bargaining power, and economic agency.

4.6. Hypothesis 5

H5: Digital literacy positively influences DFS adoption

Table 5: DFS Adoption by Digital Literacy Level

Digital Literacy Level	DFS Adoption Rate (%)
High	78
Moderate	54
Low	29

Thematic effect strength: High
Interpretation
Digital literacy emerges as both a facilitator and constraint, consistent with the Technology Acceptance Model (TAM). Users with higher perceived ease of use and understanding are more likely to adopt and benefit from DFS.

Table 6:

Hypothesis	Analysis Method	Result	Interpretation
H1: Use of DFS significantly increases savings behavior	Independent t-test	$t = 4.53$, $p < 0.01$	DFS users save more frequently and consistently than non-users, indicating a positive influence on savings habits.
H2: DFS adoption improves access to credit	Chi-square test	$\chi^2 = 12.67$, $p < 0.05$	There is a significant association between DFS use and access to microloans, supporting increased credit access.
H3: DFS users report higher income stability	Regression analysis	$\beta = 0.24$, $p < 0.01$	DFS usage positively predicts income stability, suggesting better financial management among users.
H4: Women DFS users experience greater financial control	Descriptive statistics	65% women report increased control over finances	Digital financial services contribute to women's empowerment by enhancing autonomy over personal finances.
H5: Digital literacy positively influences DFS adoption	Thematic analysis	Identified as a major barrier and enabler	Digital literacy affects the ability to effectively use DFS, with higher literacy improving adoption and benefits.

4.7. Interpretation of enhanced results

- Savings Behavior (H1): The moderate effect size (Cohen's d = 0.43) indicates that DFS adoption has not only statistical significance but also practical relevance in shaping savings habits.

- Credit Access (H2): Although the association is modest, the effect size confirms that DFS contributes meaningfully to financial access, particularly microcredit.
- Income Stability (H3): The regression effect size suggests that DFS usage explains a notable portion of variance in income stability, reinforcing its role in economic resilience.
- Women's Empowerment (H4): The confidence interval confirms consistency in reported financial control among women, strengthening the gender inclusion argument.
- Digital Literacy (H5): Qualitative findings complement quantitative results by identifying literacy as a cross-cutting determinant of DFS effectiveness.

5. Findings

The findings of this study provide strong empirical support for key theoretical frameworks explaining how digital financial services (DFS) influence financial behavior and socio-economic outcomes in emerging economies. By linking observed changes in savings behavior, credit access, income stability, and women's empowerment to established theories in behavioral economics, technology acceptance, and gender empowerment, this discussion deepens the conceptual contribution of the research.

5.1. Digital financial services and behavioral economics

From a behavioral economics perspective, the observed improvement in savings behavior among DFS users (H1) can be explained through the concept of nudging. Digital platforms encourage disciplined financial behavior by reducing cognitive and transaction costs associated with saving. Features such as automated savings, reminders, and real-time balance updates act as behavioral nudges that subtly influence individuals to make financially prudent decisions without restricting choice. This aligns with behavioral theories suggesting that individuals often benefit from choice architecture that simplifies complex financial decisions. The statistically significant increase in savings among DFS users reflects how digital tools can overcome present bias and self-control problems commonly observed in low-income populations.

5.2. Technology acceptance and diffusion of innovation

The significant association between DFS adoption and access to credit, as well as income stability (H2 and H3), can be interpreted through the Technology Acceptance Model (TAM) and Diffusion of Innovation Theory. According to TAM, perceived usefulness and ease of use are critical determinants of technology adoption. The study's findings suggest that users who perceive DFS as accessible and beneficial are more likely to integrate these services into their financial routines, leading to improved credit access and income management. Additionally, diffusion theory explains how DFS adoption spreads gradually across populations, with digitally literate individuals acting as early adopters. The qualitative evidence supporting digital literacy as a key enabler (H5) reinforces this theoretical explanation, indicating that limited skills slow diffusion and restrict the full societal benefits of DFS.

5.3. Gender empowerment and financial autonomy

The results related to women's financial control (H4) strongly resonate with gender empowerment frameworks, particularly those emphasizing access to resources, agency, and decision-making power. The finding that a majority of women experienced increased financial autonomy through DFS supports empowerment theory, which posits that economic inclusion is a prerequisite for broader social empowerment. Digital financial accounts provide women with greater privacy, control over income, and independence from traditional intermediaries, thereby challenging entrenched gender norms. However, persistent gender gaps identified in the study also align with feminist economic theories that stress the role of structural and socio-cultural barriers in limiting women's access to technology and financial resources.

5.4. Integrative theoretical implications

Taken together, the results suggest that digital financial inclusion operates at the intersection of behavioral, technological, and social mechanisms. Behavioral nudges encourage better financial decisions, technology acceptance enables adoption and sustained use, and empowerment frameworks explain differential impacts across gender and social groups. The study thus extends existing theory by demonstrating how DFS functions not merely as financial tools, but as socio-technical systems capable of reshaping financial behavior and promoting inclusive development—provided that complementary investments in digital literacy, infrastructure, and gender-sensitive design are in place.

6. Suggestions

6.1. Enhance digital literacy programs

Governments, NGOs, and financial institutions should develop targeted digital literacy training to help users, especially in rural areas and among older adults, navigate DFS platforms confidently and securely.

6.2. Promote inclusive and user-friendly DFS design

Fintech companies should prioritize designing digital financial services that are simple, language-accessible, and culturally relevant to ensure wider adoption, particularly among women and low-literacy users.

6.3. Strengthen infrastructure and network coverage

Investments are needed to improve internet connectivity and mobile network infrastructure in remote and underserved regions to facilitate reliable access to digital financial services.

6.4. Develop tailored financial products

Financial institutions should create products that cater to the unique needs of low-income, informal sector workers and women, such as microloans, savings schemes, and insurance products accessible via mobile platforms.

6.5. Foster awareness campaigns on benefits and security

Awareness initiatives should educate potential users on the benefits of DFS and build trust by addressing security concerns and fraud prevention to encourage adoption.

6.6. Encourage gender-sensitive policies

Policymakers should implement regulations that promote women's financial inclusion by supporting female entrepreneurship and ensuring equal access to digital financial tools.

7. Discussion

7.1. Comparison with prior studies

The findings of this study align closely with earlier research demonstrating that digital financial services (DFS) significantly enhance financial inclusion and socio-economic outcomes. Consistent with Piskorski and Demirgüç et al., the results confirm that access to mobile banking, digital payments, and online financial platforms improves savings behavior, credit access, and income stability among underserved populations. Similar to Suri's findings, the present study observes a positive relationship between DFS adoption and women's economic participation, reinforcing the role of digital finance as a catalyst for inclusive growth. Moreover, the strong association between digital financial literacy and effective DFS usage supports Lusardi's argument that literacy is a critical enabler of financial inclusion rather than a complementary factor.

7.2. Contradictions and unexpected results

Despite overall positive outcomes, the results reveal certain contradictions with earlier expectations. While DFS availability was high, adoption remained uneven across demographic groups, echoing Aker's observation that access alone does not guarantee inclusion. Unexpectedly, some users with access to DFS showed limited improvements in income stability, suggesting that structural constraints such as irregular employment and limited financial capability may dilute DFS benefits. Additionally, gender gaps persisted in rural areas despite mobile money penetration, contradicting assumptions that digital platforms automatically neutralize gender disparities. These findings indicate that DFS impacts are conditional and mediated by socio-economic and contextual factors.

7.3. Gender implications through gender-economics theory

From a gender-economics perspective, the findings can be interpreted through empowerment and intra-household bargaining frameworks. DFS enhances women's control over financial resources, thereby strengthening their bargaining power within households and improving decision-making autonomy. However, persistent gender gaps in digital literacy and access reflect entrenched structural inequalities, consistent with feminist economic theory, which argues that technology alone cannot dismantle systemic gender barriers. The results suggest that without gender-responsive design and targeted digital literacy initiatives, DFS may inadvertently reinforce existing inequalities rather than eliminate them.

8. Conclusion

This study demonstrates that digital financial services play a crucial role in advancing financial inclusion, poverty reduction, and economic resilience, particularly among marginalized populations. By integrating empirical findings with behavioral economics, technology adoption theory, and gender-economics frameworks, the study highlights that DFS effectiveness depends not only on access but also on literacy, trust, and contextual support systems. While DFS contributes positively to savings, credit access, and women's empowerment, persistent barriers such as digital illiteracy and gender inequality limit its full potential. The study concludes that inclusive digital finance requires coordinated policy interventions, gender-sensitive design, and sustained investments in digital capability development. These insights contribute to a more nuanced understanding of how DFS can drive equitable and sustainable economic development.

References

[1] Shahen, A. M., & Sharaf, M. F. (2025). The role of digital payment technologies in promoting financial inclusion: A systematic literature review. FinTech, 4(4), 59. https://doi.org/10.3390/fintech4040059.

[2] Liu, Q., Chan, K.-C., & Chimhundu, R. (2024). Fintech research: Systematic mapping, classification, and future directions. Financial Innovation, 10, 24. https://doi.org/10.1186/s40854-023-00524-z.

[3] Mobile FinTech adoption in Sub-Saharan Africa: A systematic literature review and meta-analysis. Research in International Business and Finance, 73, 102529. https://doi.org/10.1016/j.ribaf.2024.102529.

[4] Amin, M., Sabir, H., & Sheikh, A. (2025). FinTech and its contributions to financial inclusion: A bibliometric review paper. Journal of Business Strategies, 19(1), 29–52. https://greenwichjournals.com/index.php/businessstudies/article/view/795.

[5] Ozili, P. (2025). Financial inclusion in banking: A literature review and future research directions. Modern Finance, 3(1), 91–109. https://doi.org/10.61351/mf.v3i1.236.