DIGITAL FINANCIAL INCLUSION: A PATHWAY TO POVERTY ALLEVIATION IN DEVELOPING COUNTRIES

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ABSTRACT
Digital financial inclusion, encompassing the spread of digital financial services like mobile money and online banking, has emerged as a powerful tool for poverty alleviation and sustainable development. This paper explores the transformative potential of digital financial inclusion in tackling poverty by providing accessible, affordable, and secure financial services to underserved populations. This study utilizes content analysis by using secondary data to examine the significant role of digital financial access in mitigating poverty among disadvantaged groups. The major review of the present work shows the crucial aspects of digital financial inclusion in empowering individuals, fostering economic opportunities, and driving inclusive growth. Drawing upon evidence from developing countries, digital financial services also show positive impacts on income generation, savings, credit access, and women's economic participation. While acknowledging potential challenges, the paper advocates for policy interventions that foster a conducive environment for digital financial inclusion, ultimately contributing to the achievement of global poverty reduction goals.

Keywords: Digital Financial Inclusion, Poverty Alleviation, Developing Countries

INTRODUCTION

In recent years, the topic of digital financial inclusion has gained significant attention as a potential solution to the persistent challenge of poverty alleviation. Digital financial services, including mobile banking, mobile money, and other digital payment solutions, have the potential to reach millions of previously unbanked or underserved individuals, particularly in developing countries (Digital Financial Inclusion, 2016). The World Bank defines digital financial inclusion as the "deployment of cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers" (Anakpo et al., 2023). This approach has been recognized as a key driver in achieving several of the Sustainable Development Goals (SDGs), including reducing poverty, empowering women, and promoting economic growth.

Digital financial inclusion can play a crucial role in poverty alleviation by enabling access to affordable and tailored financial services, such as savings, credit, and insurance, for individuals and small businesses in marginalized communities (Achugamonu et al., 2020). Mobile phones, for instance, can eliminate the need for individuals to travel long distances to a financial institution, reducing the barriers to accessing these services. Additionally, digital financial services can facilitate the efficient distribution of social safety net payments, improving the effectiveness of government welfare programs (Anakpo et al., 2023).

Moreover, increased digital financial inclusion has the potential to gradually narrow the wealth gap between the rich and the poor. As more individuals, particularly from low-income backgrounds, gain access to mainstream financial services through digital platforms, they can use these tools to create wealth, start businesses, and build financial resilience, ultimately lifting themselves out of poverty. Evidence from various studies suggests that digital financial inclusion can have a positive impact on poverty reduction and income inequality in developing countries.
This paper revisits research conducted in the area of digital financial inclusion. The plausible potential of digital financial access to impact society is reviewed, emphasizing

developing countries. The review aims to synthesize current practices of digital financial inclusion by exploring and identifying the impacts and challenges. The paper is structured as follows. The next section provides an overview of financial inclusion. The methodology is presented in the following section followed by findings and discussion. The final section concluded the study.

LITERATURE REVIEW

Financial inclusion refers to the access and availability of financial services to individuals and businesses, regardless of their socio-economic status. This includes services such as savings accounts, payment and transfer services, credit facilities, and insurance options. Financial inclusion has emerged as a critical component in the global development agenda, with the potential to reduce poverty and income inequality (Osagie, 2020; Babajide et al., 2021; Romeo & Nautwima, 2022). It is defined as the process of ensuring easy access, availability, and usage of financial services by all members of society. The key elements of financial inclusion include access, availability of products and services, usage, and quality of financial services.

The importance of financial inclusion lies in its ability to enable individuals and businesses, especially the unbanked and vulnerable population, to access a range of financial services such as deposits, loans, insurance, and payments at an affordable cost. This, in turn, can lead to capital accumulation, increased savings and investments, greater financial stability, as well as entrepreneurial and economic growth (Anastesia et al., 2020). Recent studies have highlighted the significant impact of financial inclusion on entrepreneurial growth, particularly in the retail and wholesale sub-sectors. By providing access to credit and other financial services, financial inclusion empowers individuals and small businesses to invest in productive activities, expand their operations, and diversify their income sources.

This is especially relevant in developing countries where a large portion of the population remains financially excluded, often due to geographic, economic, or social barriers. Financial inclusion can serve as a vital tool for driving inclusive economic development and reducing poverty and inequality in these regions. The benefits of financial inclusion extend beyond just economic outcomes. Increased access to financial services can also contribute to improved health, education, and overall social welfare outcomes. For instance, access to savings and credit products can enable households to better manage financial shocks, invest in their children's education, and access healthcare services. While financial inclusion is crucial for the overall economic growth and poverty alleviation, it plays a significant role in promoting the adoption of fintech solutions. Fintech solutions, such as digital payments and mobile banking, have the potential to bridge the gap between the unbanked population and formal financial services by providing convenient and accessible alternatives. However, the adoption of fintech solutions is influenced by various socio-economic factors, including literacy levels, cultural norms, and trust in financial institutions. These factors can either hinder or facilitate the adoption of fintech solutions, and therefore, need to be taken into consideration when designing and promoting financial inclusion initiatives (Hudaefi, 2020; Lee & Shin, 2018; Collins, 2011). For example, literacy levels have a significant impact on the adoption of fintech solutions. Individuals with higher literacy levels are more likely to understand and navigate digital platforms, making it easier for them to adopt fintech solutions.

On the other hand, individuals with low literacy levels may face challenges in using digital financial services, which can hinder their adoption. Cultural norms also play a crucial role in the adoption of fintech solutions. Certain cultural norms may prioritize traditional and face-to-face interactions for financial transactions, leading to a reluctance to trust and adopt fintech solutions. In addition, trust in financial institutions is a key factor that influences the adoption of fintech solutions. Individuals who have had negative experiences or lack trust in traditional financial institutions may be hesitant to adopt fintech solutions, despite their potential benefits. Therefore, it is important for financial inclusion initiatives to address these socio-economic factors and build trust in fintech solutions through education, awareness campaigns, and user empowerment programs. Education and awareness campaigns can help improve literacy levels and familiarize individuals with digital financial services, thus removing barriers to adoption. Furthermore, building trust in fintech solutions requires transparency, reliability, and security measures to assure individuals of the safety and stability of these platforms.

Apart from addressing socio-economic factors, it is also crucial to consider the infrastructural support for fintech adoption. The availability of internet connectivity, mobile network coverage, and digital infrastructure greatly influences the accessibility of fintech solutions, especially in rural and remote areas. Therefore, fostering partnerships between financial institutions, technology firms, and government agencies to improve digital infrastructure can significantly enhance the reach and effectiveness of fintech solutions. Moreover, the design of fintech solutions should prioritize user experience and suitability to the diverse needs of the population. Customizing fintech platforms to accommodate different languages, cultural practices, and varying levels of technological familiarity can facilitate greater acceptance and usage. User-centered design principles can ensure that fintech solutions are intuitive, inclusive, and user-friendly for individuals from diverse socio-economic backgrounds. Though neglected a couple of decades ago, financial inclusion is currently viewed as an important aspect of economic and social development, enabling seven out of seventeen Sustainable Development Goals (Dostov et al., 2019).

METHODS

This study employs qualitative content analysis to investigate the possible impact of digital financial access in addressing poverty through a more inclusive financial system. Content analysis involves systematically collecting and analyzing data from various communication sources like written texts to identify patterns. It has been extensively used across disciplines like anthropology, cognitive science, media studies, and the social sciences to organize collected information and draw realistic conclusions. Content analysis aims to understand the usage of language and terminology in certain texts by producing meaningful interpretations and logical inferences (Bengtsson, 2016). This technique helps assess reference frameworks and textual interpretations (Handayani, et al., 2019).

RESULTS

Digital Financial Inclusion

The Digital financial inclusion (DFI) involves the use of digital to access and use formal financial services by excluded and underserved populations at affordable cost. The advent of digital technologies has transformed the financial landscape, offering new avenues for reaching underserved populations. The concept of DFI was formally proposed at the G20 Summit held in 2016. The Global Partnership for Financial Inclusion (GPFI) outlines the definition of DFI as “refers broadly to the use of digital financial services to advance financial inclusion” (GPFI, 2016). While Demirgüç-Kunt et al (2018) refer DFI as the provision of affordable and accessible digital financial services, such as mobile banking, digital payments, and online credit, to individuals and businesses excluded from traditional financial systems. Digital financial services (DFS) cover the whole set of financial products and services, including payments, remittances, transfers, savings, credit, insurance, securities, financial planning and account statements.

The World bank defines DFS as financial services that rely on digital technologies for their delivery and utilization by consumers (World Bank, 2024). These services leverage digital platforms, such as mobile devices and the internet, to provide convenient, accessible, and secure financial solutions. DFS encompass a wide range of financial activities and products, including electronic money, digital wallets, and digital payment platforms, loans, savings, insurance, and investment. By harnessing digital technologies, DFS enable individuals and businesses to conduct financial transactions, access financial products, and manage their finances more efficiently and effectively. The use of digital technologies in DFS promotes financial inclusion by reaching underserved market segments and drives innovation in the financial sector.

Digital financial inclusion presents numerous opportunities for enhancing access to financial services including enhanced accessibility, cost efficiency (Jack & Suri, 2014), innovation and product diversity (Lauer & Lyman, 2015). Jack and Suri (2014) found that digital services lower transaction costs, making financial products more affordable for low-income users. Digital financial inclusion can help reduce transaction costs and improve the efficiency of credit transactions to mitigate capital misallocation (Sun et al., 2021). There is serious information asymmetry in the traditional financial service system, which will intensify the misallocation of market resources and inhibit the green innovation activities of enterprises (Yang et al, 2022). The most distinctive feature of digital financial inclusion is that it changes the traditional financial service mode, reduces the transaction cost of credit business, and makes the credit process between enterprises and financial institutions more transparent, thus enhancing the matching degree between capital supply and demand sides and reducing the degree of capital misallocation.

Digital Financial Inclusion in Developing Countries

The expansion of digital finance can lead to greater financial inclusion, the extension of financial services to non-financial sectors, and the provision of affordable, convenient, and secure banking services to poor individuals in developing countries (Ozili, 2018). This is particularly relevant as financial inclusion is a necessary condition for addressing inequality issues in both emerging and developed economies, with policies aimed at developing human capital, skill acquisition, and installing progressive tax systems (Achugamonu et al., 2020). Though neglected a couple of decades ago, financial inclusion is currently viewed as an important aspect of economic and social development, enabling seven out of seventeen SDGs (Achugamonu et al., 2020).

Research has shown that increased digital financial inclusion can lead to a reduction in income inequality, as the poor are able to access the necessary credit and savings tools to build wealth and improve their economic standing. For example, Achugamonu et al., (2020) found that digital finance can serve as a mechanism for extending the boundaries of financial inclusion in sub-Saharan Africa, where traditional banking infrastructure has been limited. Meanwhile in Kenya, the widespread adoption of mobile money services from 2008 to 2014 is estimated to have lifted one million people out of extreme poverty (Developing Inclusive Digital Payment Systems, 2021). The study shows that digital financial services can help improve people's income-earning potential, increase women's economic participation, and lead to more inclusive societies.

Digital financial inclusion is not an end in itself, but rather an enabler of development and a powerful tool to achieve the SDGs. It shows that in those countries that have embraced digital financial services, financial inclusion has improved, and stronger banks have emerged as more people are able to open bank accounts (Harnessing Africa's digital potential, 2018). As the digital revolution continues to unfold, harnessing the potential of digital financial inclusion will be crucial in the fight against poverty and the pursuit of more equitable and sustainable development. The development of digital technology has made it a potent weapon for financial inclusion, and initiatives like government-to-person payments and domestic remittances have a special significance for the financial inclusion of disadvantaged populations (Kasiisii et al., 2023).

Furthermore, digital financial inclusion has the potential to address gender inequality and enhance educational access by creating digital platforms that are more accessible and inclusive (Kasiisii et al., 2023; Ozili, 2018). The Global Findex Database 2021 shows that the gender gap in account ownership across developing economies has fallen to 6 percentage points from 9 percentage points, where it hovered for many years (Demirguc-Kunt et al, 2022). Digital financial services can help improve people's income-earning potential, increase women's economic participation, and lead to more inclusive societies (Developing Inclusive Digital Payment Systems, 2021). Li and Liu (2023) in their study in China found that digital financial inclusion plays an increasingly important role in raising residents' income levels and optimizing income structures.

Importantly, the effectiveness of digital financial inclusion in improving financial capability and minimizing potential drawbacks requires a careful assessment and adaptation of the concept to local contexts (Dostov et al., 2019). As more people embrace mainstream finance through digital technology, the gaps between the poor and rich will gradually begin to close because they are able to access needed credit to create wealth for themselves and their families, thereby lifting themselves from extreme poverty (Achugamonu et al., 2020). Virtual savings and credit supply platforms enable users to apply for loans, better manage fluctuations in their cash flow, and cope with unexpected needs, shortening the savings/investment cycles for the poor and providing a strong avenue for the links among financial inclusion, inclusive growth, and sustainable poverty reduction (Harnessing Africa's digital potential, 2018).

Challenges in Digital Financial Inclusion

Digital financial inclusion, while promising, faces several significant challenges. Many regions, especially in developing countries, lack the necessary digital infrastructure. This includes reliable internet access, electricity, and mobile network coverage. Without these fundamental infrastructures, the deployment and use of digital financial services become difficult (UNCTAD, 2020). The World Bank (2014) reports even in areas with adequate digital infrastructure, access to digital devices such as smartphones and computers can be limited. This limitation is particularly pronounced among low-income individuals who may not afford such devices that hinder them from using digital financial services. In addition, the cost of internet connectivity can be prohibitively high for low-income populations. High data costs can deter the use of digital financial services, especially in regions where income levels are low (GSMA, 2019).

Arner et al (2017) in their study found that regulatory and legal barriers, including inconsistent regulations, outdated legal frameworks, and high compliance costs, further complicate the deployment and scaling of these services. Additionally, consumer protection and trust issues, driven by concerns over data privacy, security, and fraud, deter potential users from adopting digital financial platforms (AFI, 2016). Finally, a lack of financial and digital literacy impedes the effective use of digital financial tools, underscoring the need for targeted education programs to enhance users' understanding of both digital technologies and financial management (OECD, 2018; GSMA, 2019). Implementing targeted education programs to improve both financial and digital literacy is essential. These programs should be tailored to the specific needs and contexts of different user groups, including women, rural populations, and low-income individuals (Lauer & Lyman, 2015). Addressing these challenges is crucial for realizing the full potential of digital financial inclusion in fostering economic development and reducing poverty.

CONCLUSION

Digital financial inclusion has the potential to significantly reduce poverty, particularly in emerging nations. Increased financial access through digitization has a significant influence on income production, savings, loan availability, and women's engagement in economic activities. While digital financial inclusion has the potential to revolutionize access to financial services, addressing the associated challenges is crucial for its success. Bridging the digital divide, streamlining regulatory frameworks, enhancing consumer protection, and improving financial and digital literacy are all necessary steps. By tackling these challenges, stakeholders can ensure that digital financial services are accessible, secure, and beneficial for all segments of the population especially in the developing countries.

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