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**Influence of Digital Financial Inclusion Policies on Household Economic
Resilience in Ghana**



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Influence of Digital Financial Inclusion Policies on Household Economic Resilience in Ghana



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Abstract

Purpose: The purpose of this article was to analyze influence of digital financial inclusion policies on household economic resilience in Ghana.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: The findings established that digital financial inclusion policies positively influence Household Economic Resilience in Ghana by improving access to savings, mobile money, remittances, credit, and other financial services. These policies enhance households' ability to manage income shocks, maintain consumption, build financial buffers, and recover from economic difficulties. However, their effectiveness depends on financial literacy, reliable digital infrastructure, affordability, consumer protection, and equitable access to digital financial services.

Unique Contribution to Theory, Practice and Policy: The capability approach, unified theory of acceptance and use of technology & institutional theory may be used to anchor future studies on the influence of digital financial inclusion policies on household economic resilience in Ghana. Financial institutions, FinTech companies, mobile network operators, and other financial service providers in Ghana should expand affordable and accessible digital financial services beyond basic money transfers. The Government of Ghana and the Bank of Ghana should strengthen policies that promote affordable, secure, interoperable, and inclusive digital financial services, particularly for rural households, women, low-income earners, and informal-sector workers.

Keywords: *Digital, Financial Inclusion, Policies Household, Economic Resilience*

INTRODUCTION

Household Economic Resilience refers to the capacity of households to withstand, adapt to, and recover from economic shocks such as income loss, unemployment, inflation, unexpected expenditure, and financial crises while maintaining essential consumption and living standards. In the United States, household resilience improved substantially over the longer term, with the proportion of adults able to meet a US\$400 emergency expense using cash or its equivalent increasing from 50% in 2013 to 68% in 2021, before falling to 63% in 2023, indicating some erosion following inflationary pressures. In 2023, 72% of American adults reported that they were doing okay or living comfortably financially, compared with 78% in 2021, illustrating declining resilience following the pandemic-era peak. These trends demonstrate that savings, income stability, financial assets, credit access, and the ability to meet unexpected expenditure are important dimensions of household resilience. Household economic resilience therefore reflects not merely household income but the financial buffers and adaptive resources available for maintaining welfare when shocks occur.

The United Kingdom provides a second developed-economy example where household resilience has been affected by cost-of-living pressures, inflation, housing costs, and increasing household financial commitments. In May 2022, approximately 12.9 million UK adults, or 24% of the adult population, had low financial resilience, compared with 11.9 million in 2020, while 7.8 million adults reported being heavily burdened by bills and credit commitments compared with 5.8 million in 2020. By 2024, approximately 13.1 million adults (24%) still had low financial resilience, showing that vulnerability remained persistently high despite economic recovery. Furthermore, 20% of UK families had no savings in 2023/24, while another 10% had less than £100, indicating that substantial numbers of households lacked adequate financial buffers against shocks. The US and UK evidence consequently demonstrates that developed economies can maintain relatively sophisticated financial systems while significant segments of their populations remain vulnerable to economic shocks.

In developing economies, Household Economic Resilience is particularly important because households frequently encounter unstable employment, low incomes, informal economic activities, limited social protection, and restricted access to formal mechanisms for managing financial risks. India provides an important example, where empirical research shows that COVID-19 intensified household financial vulnerability, particularly among lower-income populations, and that financial knowledge and money-management capability significantly influence households' capacity to manage income and expenditure shocks (Kumar et al., 2022). A large study of COVID-19 responses covering 5,200 rural households across six Indian states further demonstrated the importance of social assistance, including food transfers and direct cash-benefit programmes, in supporting households during severe economic disruption. Research using India's consumer confidence data similarly indicates that employment, income, savings, banking access, outstanding credit, and digital transactions are important indicators and determinants of consumer financial resilience (Chhatwani, 2023). These findings suggest that strengthening financial literacy, savings, digital finance, social protection, and income diversification can increase households' ability to withstand economic shocks in developing economies.

Kenya provides another developing-economy example where digital financial services have become important instruments for improving households' ability to respond to economic shocks. Empirical evidence indicates that mobile-money usage has a positive effect on household resilience and that a 10-kilometre reduction in distance to a mobile-money agent increases the household resilience measure by approximately one percentage point (Koomson et al., 2023). The study further established that mobile-money users were more likely to withstand severe shocks, demonstrating that digital financial accessibility can facilitate transfers, savings, liquidity, and consumption smoothing during difficult periods. These findings are particularly important for developing economies because agricultural and low-income households often have limited access to formal credit, insurance, and other conventional risk-management instruments. Consequently, policies expanding affordable digital finance, household savings, social protection, financial literacy, and diversified income opportunities can significantly strengthen Household Economic Resilience in developing economies.

In Sub-Saharan Africa, Household Economic Resilience refers to households' capacity to maintain consumption, protect productive assets, and recover from shocks despite relatively high exposure to poverty, unemployment, climate variability, food insecurity, health emergencies, and financial exclusion. Evidence from Ghana demonstrates that financial inclusion significantly strengthens household financial resilience, although the magnitude of the effect varies according to gender, location, and type of financial service (Koomson et al., 2022). Financial literacy is also important because experimental evidence from Ghana shows that financial literacy training promotes household asset accumulation, while financial literacy levels have historically been lower in Northern Ghana (44%) than in Middle and Southern Ghana (51%) (Koomson, 2023). Household assets, savings, formal financial accounts, and access to financial services therefore provide buffers that households can mobilize when confronted with economic shocks. The Ghanaian experience demonstrates that financial inclusion policies need to move beyond access alone toward meaningful usage, savings accumulation, financial capability, and household asset creation.

A second Sub-Saharan African example is Kenya, where the widespread availability of mobile money provides households with mechanisms for transferring resources and responding to unexpected shocks. Recent peer-reviewed evidence shows that improved proximity to mobile-money agents increases household resilience and that users are better positioned to withstand severe economic shocks than non-users (Koomson, 2023). More broadly, research covering five Sub-Saharan African countries has demonstrated that mobile-money adoption can improve households' responses to idiosyncratic shocks, supporting the importance of digital financial inclusion for resilience (Koomson, 2021). Nevertheless, substantial differences in household income, rural infrastructure, financial literacy, digital connectivity, and access to formal financial products mean that resilience remains uneven across the region. Thus, Sub-Saharan African governments should complement digital financial inclusion with social protection, financial literacy, livelihood diversification, affordable credit and insurance, and household asset-building strategies to strengthen long-term Household Economic Resilience.

Digital Financial Inclusion Policies refer to government and regulatory interventions designed to expand affordable, secure, accessible, and effective use of digital financial services among individuals and households, particularly populations traditionally excluded from formal financial systems. In Ghana, these policies seek to create an enabling environment in which financial

institutions, telecommunications companies, FinTech firms, mobile-money agents, and consumers interact to broaden financial inclusion (Senyo, 2022). Four key dimensions that can operationalize Digital Financial Inclusion Policies are digital financial infrastructure development, financial literacy and digital capability policies, consumer protection and financial security policies, and financial interoperability and accessibility policies. Digital financial infrastructure expands households' access to mobile money and other digital services, while financial literacy enables households to make informed financial decisions and effectively utilize savings, credit, insurance, and payment products (Koomson, 2023; Coffie & Hongjiang, 2023). Consumer protection and financial security increase confidence and reduce risks associated with digital transactions, while interoperability enables households to transfer funds conveniently across financial institutions and mobile-money networks (Senyo, 2022).

Household Economic Resilience refers to the capacity of households to anticipate, absorb, adapt to, and recover from financial and economic shocks while maintaining acceptable living standards and essential consumption. Digital financial infrastructure can enhance resilience by providing timely access to savings, payments, credit, and remittances, while financial literacy strengthens households' capacity to accumulate and manage resources for emergencies (Koomson, 2023). Consumer protection and financial security policies can enhance resilience by increasing trust and safeguarding households against fraud and financial losses, whereas interoperability and accessibility facilitate rapid movement of financial resources during economic emergencies (Senyo, 2022). Evidence from Ghana shows that mobile-money use increases saving behaviour, including savings for emergencies, education, and business activities, although access to mobile money does not necessarily increase the amount of credit households receive (Koomson, 2022; Atta-Ankomah, 2022). Therefore, combining digital infrastructure, financial literacy, consumer protection and security, and interoperability and accessibility within an integrated policy framework is likely to strengthen Household Economic Resilience by improving financial preparedness, resource mobilization, risk management, and recovery from economic shocks.

Problem Statement

Ghana has experienced substantial growth in digital financial services, particularly mobile money, creating opportunities for households to access payments, savings, remittances, credit, and other financial services that can help them withstand economic shocks. Despite this progress, many Ghanaian households remain economically vulnerable, suggesting that increased access to digital finance does not automatically translate into stronger household resilience. Previous evidence shows that financial inclusion significantly improves household financial resilience in Ghana, but the benefits vary according to the type of financial service, gender, and location (Koomson, 2022). Similarly, mobile-money usage has been found to increase savings for emergencies, education, and business activities, with stronger effects among rural populations, demonstrating its potential to improve households' financial preparedness (Koomson, 2022). However, access to finance remains constrained because mobile money increases the probability of households applying for credit without significantly increasing the amount of credit actually received (Atta-Ankomah, 2022). These mixed outcomes raise concerns about whether Ghana's Digital Financial Inclusion Policies are sufficiently comprehensive to strengthen households' ability to absorb, adapt to, and recover from economic shocks.

Furthermore, existing studies have largely concentrated on individual components of digital financial inclusion, particularly mobile-money adoption, rather than examining Digital Financial Inclusion Policies as a comprehensive construct encompassing digital financial infrastructure, regulatory support, financial literacy, consumer protection, accessibility, and interoperability. Empirical research has also focused on outcomes such as savings, credit access, poverty, livelihood diversification, and food security rather than Household Economic Resilience as an integrated outcome. For example, Okyere (2024) found that mobile-money adoption improved food security and specific resilience dimensions such as access to basic services, assets, and social safety nets, but did not significantly improve the aggregate Resilience Capacity Index. Similarly, digital financial services have been associated with livelihood diversification among rural Ghanaian households, indicating potential resilience benefits that extend beyond financial transactions (Atta-Ankomah, 2024). Consequently, there remains insufficient empirical evidence regarding the collective influence of Digital Financial Inclusion Policies on Household Economic Resilience in Ghana, creating a need for the present study to establish how such policies can strengthen households' financial stability, adaptive capacity, and ability to recover from economic shocks.

Theoretical Review

Capability Approach

The capability approach was originated by Amartya Sen (1980s–1990s) and argues that development should be assessed by people's real opportunities and capabilities to achieve valued economic and social outcomes rather than by resources alone. Applied to digital finance, access to mobile money, savings, credit, insurance, and financial knowledge expands households' capability to manage resources and respond to economic shocks. The theory is relevant because Digital Financial Inclusion Policies can enhance households' ability to save, transfer funds, diversify financial resources, and withstand income disruptions. Evidence from Ghana confirms that financial inclusion significantly strengthens household financial resilience, particularly through savings and formal financial accounts (Sakyi-Nyarko, 2022).

Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT was developed by Venkatesh, Morris, Davis, and Davis (2003) to explain technology adoption through performance expectancy, effort expectancy, social influence, and facilitating conditions. It is relevant because the benefits of digital financial inclusion policies depend on households actually adopting and consistently using digital financial services. Ghanaian evidence shows that performance expectancy, trust, perceived risk, price value, and other technology-related factors significantly influence consumers' intentions to use mobile money (Penney, 2021).

Institutional Theory

Institutional theory, advanced by Meyer and Rowan (1977) and DiMaggio and Powell (1983), explains how regulatory, normative, and institutional structures influence organizational and economic behaviour. The theory is relevant because Digital Financial Inclusion Policies depend on regulations, financial institutions, FinTech providers, consumer protection mechanisms, and government support that create an enabling digital financial ecosystem. In Ghana, collaborative, equitable, protective, and legitimizing practices among FinTech ecosystem actors have been shown to shape the expansion of financial inclusion (Senyo, 2022).

Empirical Review

Koomson, Villano, and Hadley (2022) examined the gender-differential effect of financial inclusion on household financial resilience in Ghana. The purpose was to determine whether access to and use of financial services strengthen households' capacity to withstand financial shocks and whether the effect varies according to gender and location. The researchers employed repeated cross-sectional data from two large-scale Ghanaian household surveys and applied kernel propensity score matching with a difference-in-differences approach. The findings showed that financial inclusion significantly improved household financial resilience, while savings and formal account ownership generated stronger resilience effects than mobile money alone. Mobile-money remittances nevertheless produced significant resilience benefits, particularly among rural households. The study recommended expanding meaningful financial inclusion beyond basic mobile-money transactions by promoting savings, account ownership, and remittance services. This study directly supports the proposition that policies expanding access to diverse digital and formal financial services can strengthen household economic resilience in Ghana.

Sakyi-Nyarko (2022) investigated the multidimensional well-being implications of mobile-money access and usage in Ghana. The study sought to establish whether digital financial services improve financial inclusion, household resilience, and broader dimensions of household well-being. The researchers used cross-sectional data from a representative survey of 1,000 Ghanaian households conducted in 2019 and employed instrumental-variable estimation, alongside ordinary least squares estimates, to address potential endogeneity. The findings indicated that access to and use of mobile money contributed positively to several dimensions of household well-being and provided an efficient mechanism for transferring financial resources, particularly between urban and rural households. Mobile money was particularly important for remittance flows that could support households facing economic constraints and unexpected shocks. The study therefore emphasized the importance of expanding accessible digital financial services as part of inclusive development strategies. Its findings demonstrate how digital financial inclusion can strengthen the financial mechanisms households use to maintain welfare and cope with economic difficulties.

Atta-Ankomah (2022) investigated whether mobile money had improved inclusive household access to credit in Ghana. The study sought to determine the effect of mobile money on credit applications and amounts received and whether the effects differed according to gender, residence, and ownership of other financial accounts. Using observational data from the seventh Ghana Living Standards Survey, the researcher employed treatment-effect models, including augmented inverse probability weighting and inverse probability regression adjustment estimators. The findings showed that mobile money significantly increased households' probability of applying for credit but did not significantly increase the amount of credit they received. Complementarity between mobile money and other financial accounts was particularly evident among rural and male-headed households. The study concluded that mobile money's contribution to financial inclusion remained stronger in payments and savings than in expanding actual credit availability. It recommended policies that broaden mobile money beyond transactional services and strengthen its integration with formal financial services, making the study particularly relevant to policies intended to improve households' capacity to obtain emergency finance during economic shocks.

Atta-Ankomah and Okyere (2023) examined the welfare effects of financial inclusion services in Ghana by comparing mobile money with other alternative financial services. The purpose was to establish how these services influence household consumption expenditure and poverty status.

Using nationally representative Ghanaian survey data, the researchers applied the augmented inverse probability weighted estimator to address selection bias and unobserved heterogeneity associated with financial-service adoption. The findings established that adopting financial inclusion services significantly increased household consumption expenditure and reduced the probability of being poor. Alternative financial services generated larger welfare effects than mobile money alone, while simultaneously adopting mobile money and other financial services produced complementary benefits. The effects also differed across households and were more evident among male-headed households. The researchers' findings imply that financial inclusion strategies should promote a diversified portfolio of financial services rather than depending exclusively on mobile money, providing important evidence that comprehensive digital financial inclusion policies can improve the resources households require to withstand economic shocks.

Okyerere, Atta-Ankomah, and Asante-Addo (2024) examined whether digital financial inclusion improves food security and household resilience among households in Northern Ghana. The study used mobile-money adoption as the principal measure of digital financial inclusion and assessed outcomes through the Household Dietary Diversity Score, Food Insecurity Experience Scale, and Resilience Capacity Index. The findings demonstrated that mobile-money adoption improved household dietary diversity and reduced moderate food insecurity and Food Insecurity Experience Scale scores. Although adoption did not significantly improve the aggregate Resilience Capacity Index, it positively influenced important resilience pillars, including access to basic services, household assets, and social safety nets. These findings suggest that digital financial inclusion can strengthen specific components of economic resilience even where its aggregate resilience effect is less pronounced. The authors recommended that digital economic transformation policies explicitly incorporate mobile-money adoption to enhance the welfare of resource-poor and farming households. The study is particularly relevant because it directly connects digital financial inclusion with measurable dimensions of household resilience in Ghana.

Atta-Ankomah, Adjei-Mantey, and Amankwah (2024) investigated the influence of digital financial services on livelihood diversification among rural households in Ghana. The purpose was to determine whether mobile money, as the dominant digital financial service available to rural households, enables households to diversify their income-generating activities. The researchers employed nationally representative Ghanaian household data and econometric analysis to estimate the relationship between digital financial-service usage and livelihood diversification. Their analysis recognizes livelihood diversification as an important strategy through which rural households reduce dependence on a single income source and manage livelihood risks. The study found evidence supporting a relationship between digital finance and household livelihood diversification, illustrating that digital financial services can have economic effects extending beyond payments. This is important to household economic resilience because diversified livelihoods can reduce vulnerability when one source of household income is disrupted. The study consequently highlights the importance of expanding accessible digital financial services in rural communities, where financial exclusion and vulnerability to economic shocks remain particularly significant.

Serbeh, Adjei, and Forkuor (2022) explored the financial inclusion potential of mobile money among rural households in the Sunyani West District of Ghana. The purpose was to understand rural households' experiences with mobile money and determine whether digital finance was

effectively overcoming traditional barriers to formal financial inclusion. Unlike the predominantly quantitative studies, the researchers adopted a qualitative approach, enabling them to examine users' experiences and constraints in greater depth. The findings revealed a mixed picture: mobile money expanded financial access for rural households, but digital illiteracy, poor network connectivity, unreliable services, and other practical constraints prevented households from realizing its full financial-inclusion potential. The researchers therefore cautioned against assuming that access to mobile-money infrastructure automatically results in meaningful financial inclusion. Their findings imply that policymakers should complement digital financial expansion with improvements in connectivity, digital literacy, service reliability, and user support. The study is relevant to household economic resilience because policies can strengthen resilience only when vulnerable households can reliably and effectively access and use the digital financial services intended to help them manage economic shocks.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Gap

The reviewed studies demonstrate that financial inclusion and digital financial services contribute to different aspects of household welfare and resilience in Ghana; however, they conceptualize the independent and dependent variables differently. Koomson (2022) examined general financial inclusion, while Sakyi-Nyarko (2022), Atta-Ankomah (2022), Okyere (2024), and Atta-Ankomah (2024) largely concentrated on mobile money adoption and usage rather than Digital Financial Inclusion Policies as a comprehensive construct. Similarly, the outcome variables varied considerably, including financial resilience, multidimensional well-being, access to credit, consumption and poverty, food security, and livelihood diversification. Even Okyere (2024), who directly examined household resilience, found that mobile-money adoption did not significantly improve the aggregate Resilience Capacity Index despite improving some individual resilience dimensions. Consequently, limited evidence exists on how broader Digital Financial Inclusion Policies, such as digital financial infrastructure, regulatory support, consumer protection, financial literacy, and interoperability, collectively influence Household Economic Resilience. The present study addresses this conceptual gap by directly examining the influence of Digital Financial Inclusion Policies on Household Economic Resilience.

Contextual Gap

Previous studies have primarily investigated specific financial services or particular household welfare outcomes rather than the broader policy environment within which digital financial inclusion operates. For example, Atta-Ankomah (2022) focused on household credit access, Atta-Ankomah and Okyere (2023) examined consumption expenditure and poverty, and Atta-Ankomah

(2024) concentrated on livelihood diversification. Serbeh (2022) focused specifically on rural households' experiences with mobile money, while Okyere (2024) concentrated on food security and resilience among households in Northern Ghana. These contexts provide valuable evidence but do not sufficiently establish whether Ghana's broader Digital Financial Inclusion Policies enhance households' overall capacity to absorb, adapt to, and recover from economic shocks. Therefore, a contextual gap exists regarding the direct influence of the digital financial policy environment on Household Economic Resilience across different categories of Ghanaian households.

Geographical Gap

Although all the reviewed studies were conducted in Ghana, their geographical coverage varies substantially, creating an important within-country geographical gap. Some studies relied on nationally representative datasets (Atta-Ankomah, 2022; Atta-Ankomah & Okyere, 2023), whereas Okyere (2024) concentrated specifically on Northern Ghana and Serbeh (2022) focused on rural households in the Sunyani West District. The geographically localized studies therefore provide valuable insights but cannot necessarily represent households in other parts of Ghana because access to digital infrastructure, mobile networks, financial institutions, income opportunities, and financial literacy may differ between rural and urban areas and across regions. Koomson (2022) further demonstrated that the resilience benefits of financial inclusion differ according to location, particularly between rural and other households, emphasizing the importance of geographical differences. Consequently, further research with broader geographical coverage is required to establish how Digital Financial Inclusion Policies Influence Household Economic Resilience across Ghana and to generate evidence capable of informing nationally applicable financial inclusion policies.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The reviewed literature demonstrates that Digital Financial Inclusion Policies have a positive influence on Household Economic Resilience in Ghana by expanding access to savings, payments, remittances, credit, and other financial services that help households cope with economic shocks. Evidence from Ghana shows that financial inclusion significantly improves household financial resilience, with savings and formal account ownership producing particularly strong resilience benefits, while mobile money enhances savings for emergencies, education, and business activities (Atta-Ankomah, 2022; Koomson, 2022). However, digital financial inclusion does not automatically generate resilience, as mobile money may increase the likelihood of applying for credit without necessarily increasing the amount of credit received, while rural households continue to encounter digital illiteracy, unreliable services, and poor network connectivity (Atta-Ankomah, 2022; Serbeh, 2022). Recent evidence from Northern Ghana further suggests that mobile money improves food security and important components of household resilience, including access to basic services, assets, and social safety nets, although its effect on the overall resilience index may be limited (Okyere, 2024). Therefore, strengthening Digital Financial Inclusion Policies through affordable services, financial literacy, consumer protection, reliable digital infrastructure, and inclusive access can enhance the capacity of Ghanaian households to withstand, adapt to, and recover from economic shocks while improving their long-term economic welfare.

Recommendations

Theory

Future research should develop integrated theoretical models that explain how Digital Financial Inclusion Policies translate into Household Economic Resilience, particularly through access to savings, credit, digital payments, insurance, and remittance services. Studies should extend frameworks such as the Technology Acceptance Model, Financial Capability Theory, and Institutional Theory by incorporating policy-level factors such as digital infrastructure, consumer protection, interoperability, affordability, and financial literacy. This is important because Ghanaian evidence shows that financial inclusion significantly improves household financial resilience, although different financial services generate different resilience effects, with savings and formal account ownership producing stronger effects than mobile money alone. Future studies should also examine mediating and moderating factors such as household income, gender, financial literacy, rural–urban location, and digital capability.

Practice

Financial institutions, FinTech companies, mobile network operators, and other financial service providers in Ghana should expand affordable and accessible digital financial services beyond basic money transfers. Greater emphasis should be placed on digital savings, affordable emergency credit, micro-insurance, remittances, and household investment products that enable families to absorb and recover from economic shocks. This recommendation is supported by evidence that mobile money increases savings for emergencies, education, and business purposes and that financial inclusion services improve household consumption and reduce poverty in Ghana. Financial service providers should additionally strengthen financial literacy, cybersecurity, fraud prevention, customer support, and rural agent networks to ensure that vulnerable households can safely and effectively use digital financial services.

Policy

The Government of Ghana and the Bank of Ghana should strengthen policies that promote affordable, secure, interoperable, and inclusive digital financial services, particularly for rural households, women, low-income earners, and informal-sector workers. Ghana's regulatory approach has already demonstrated that policy interventions can facilitate expansion of the FinTech ecosystem and financial inclusion, while government policy and financial security measures have been shown to influence consumers' willingness to adopt mobile money services. Policymakers should therefore strengthen consumer protection, digital financial literacy, cybersecurity standards, rural connectivity, affordable transaction pricing, and responsible digital credit regulation while encouraging innovation among banks, FinTech firms, and telecommunications companies.

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