



Financial Inclusion Outcomes in East Africa, 2017-2025: A Cross-Country Analysis of Access, Usage, Quality and Empowerment

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ABSTRACT

Financial inclusion is central to sustainable development in Africa, yet its effectiveness depends on more than simply expanding access to financial accounts. This study examines progress in Kenya, Tanzania, and Uganda between 2017 and 2025, focusing on whether increased access to financial services has translated into meaningful empowerment outcomes. The analysis is guided by four hypotheses: (1) access does not guarantee regular usage; (2) service quality determines sustained inclusion; (3) digital channels can foster empowerment; and (4) gender disparities persist despite narrowing gaps in account ownership.

Findings reveal divergent country experiences. Kenya is approaching saturation in account ownership, with digital services increasingly integrated into daily life and contributing to higher levels of resilience, though risks of over-indebtedness are evident. Tanzania demonstrates strong gains in mobile money adoption and interoperability, yet empowerment outcomes remain limited due to persistent service quality concerns. Uganda shows steady growth in access, but usage continues to lag, constrained by high transaction costs, weak consumer protection, and entrenched gender inequalities.

Overall, East Africa outperforms many developing regions in expanding access, but empowerment outcomes remain uneven and fall below global averages. The study concludes that the next frontier of financial inclusion lies not in widening access but in strengthening quality, building resilience, and embedding gender-sensitive digital innovations. Policy recommendations call for user-centred strategies that emphasize affordability, transparency, consumer protection, and empowerment, ensuring that financial inclusion becomes a transformative pathway to sustainable development.

Keywords: Financial inclusion, East Africa, Mobile Money, Empowerment, Gender, Digital Safety

JEL Codes: G53, G59, O16, O55

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1. INTRODUCTION

Financial inclusion has emerged as a critical component of global development policy. Defined as the ability of individuals and businesses to access and effectively use affordable and appropriate financial services, it is widely recognized as a lever for advancing the Sustainable Development Goals (SDGs), particularly those related to poverty reduction, gender equality, decent work, and reduced inequalities (World Bank, 2022). For low- and middle-income countries, inclusive financial systems are viewed as essential to promoting investment, consumption, and resilience. In Sub-Saharan Africa, and especially East Africa, the financial inclusion agenda has been shaped by the rapid expansion of mobile money platforms, which have revolutionized how individuals save, borrow, send, and receive money (Suri & Jack, 2016).

East Africa is often portrayed as a success story, with Kenya, Tanzania, and Uganda at the forefront of digital financial innovation. Kenya's M-Pesa model has become a global benchmark, while Tanzania's interoperability reforms and Uganda's widespread mobile money adoption illustrate diverse pathways to expanding access (Jack & Suri, 2014; FinScope Tanzania, 2023; UBOS, 2021). Between 2017 and 2025, financial account ownership in the region increased significantly, often surpassing the Sub-Saharan African average (World Bank, 2025). Yet persistent disparities in usage, service quality, and empowerment outcomes raise critical questions about the depth and sustainability of these achievements.

A growing body of scholarship argues that equating financial inclusion with account ownership risks overstating progress. Early frameworks focused primarily on access, measured by the share of adults with accounts in formal institutions (Beck et al., 2007). Later studies, including the Global Findex surveys, broadened this definition to include usage, quality, and more recently, empowerment outcomes such as financial resilience and digital safety (Demirgüç-Kunt et al., 2022; Klapper, Singer, Starita, & Norris, 2025). These conceptual shifts reflect recognition that dormant accounts or low-frequency usage contribute little to poverty reduction or empowerment. Evidence from Uganda, for example, shows that many mobile money accounts are used primarily for one-off transactions such as receiving remittances, with limited integration into broader financial planning (Nanyondo, 2018). Similarly, research highlights that women's empowerment is often constrained by structural inequalities in mobile phone ownership, income, and decision-making power (Myamba, 2023).

This study builds on such critiques by asking: To what extent have East Africa's financial inclusion gains between 2017 and 2025 translated into meaningful empowerment outcomes? The question is timely for three reasons. First, new data sources now make it possible to move beyond descriptive access statistics and explore multi-dimensional indicators of resilience, confidence, and digital safety. Second, governments across the region have invested heavily in financial inclusion strategies - Kenya's Digital Economy Blueprint (2019), Tanzania's National Financial Inclusion Framework II (2018–2022), and Uganda's National Financial Inclusion Strategy (2017–2022) - yet the translation of these policies into practice remains uneven (AfDB, 2022; Government of Uganda, 2023). Third, global shocks such as the COVID-19 pandemic and growing digitization have altered how households engage with financial services, making it necessary to reassess inclusion outcomes in a new context (UNCDF, 2021).

Financial Inclusion and the Empowerment Imperative

The notion of empowerment is increasingly recognized as the ultimate test of financial inclusion. Empowerment encompasses the capacity of individuals to make informed financial decisions, exercise control over resources, and withstand economic shocks (Johnson, 2013). It extends beyond having an account to include the ability to use it effectively, safely, and in ways that improve well-being. The Global Findex 2025 operationalizes empowerment through indicators such as access to emergency funds, confidence in using financial services, and digital safety (World Bank, 2025).

Yet evidence suggests that empowerment outcomes are lagging. In 2025, only 56% of adults in low- and middle-income economies reported being able to raise emergency funds within 30 days, a figure virtually unchanged since 2021 (Klapper et al., 2025). In Sub-Saharan Africa, women and rural populations remain disproportionately excluded, despite narrowing gaps in account ownership (GSMA, 2023). This indicates that access gains have not automatically translated into empowerment, reinforcing the importance of examining underlying mechanisms and barriers.

Hypotheses

To provide a structured analysis, the study advances four hypotheses that build directly on the Access-Usage-Quality-Empowerment framework.

H1: Access-Usage Gap. Gains in account ownership in East Africa (2017–2025) have not consistently translated into higher rates of active usage, particularly among women and rural populations. While access has expanded rapidly, usage patterns suggest that many accounts remain dormant or are used only for basic transactions such as remittances (Owor, 2021; UBOS, 2021).

H2: Usage-Quality Link. Regular usage of financial accounts is positively associated with perceptions of service quality- including affordability, transparency, and reliability. However, high transaction costs, weak consumer protection, and limited grievance redress mechanisms undermine trust and reduce usage frequency (Garz et al., 2021; FinScope Tanzania, 2023).

H3: Empowerment through Digital Channels. Individuals who regularly use digital financial services (DFS), especially mobile money, are more likely to demonstrate resilience and confidence compared to those who rely on informal mechanisms. Kenya's digital ecosystem illustrates this potential, though risks of over-indebtedness from predatory lending highlight the limits of digital channels absent regulatory safeguards (Munyegera & Matsumoto, 2016; Suri & Jack, 2016).

H4: Gendered Outcomes. Despite progress in narrowing gender gaps in account ownership, women continue to face disproportionate barriers to empowerment due to structural inequalities in mobile phone ownership, education, and household bargaining power (Myamba, 2023; GSMA, 2022, 2025).

Contribution of the Study

By testing these hypotheses, this study makes three contributions. First, it provides updated evidence by incorporating the most recent datasets, including the 2025 Global Findex and national surveys, thereby addressing the limitation of relying on outdated statistics. Second, it strengthens analytical rigor by moving beyond descriptive reporting to a hypothesis-driven

approach that critically examines the links between access, usage, quality, and empowerment. Third, it situates East Africa's experience within the broader policy-practice divide, comparing national strategies with actual outcomes on the ground (AfDB, 2022; Government of Uganda, 2023).

Ultimately, the paper argues that financial inclusion in East Africa is at a crossroads. While rapid progress has been achieved in expanding access, the challenge now lies in ensuring that inclusion is equitable, safe, and transformative. This requires shifting from an access-centred paradigm to one that prioritizes quality, consumer protection, and gender-sensitive empowerment. By drawing on recent and comprehensive data, the study provides an evidence-based roadmap for advancing financial inclusion from access to empowerment.

2. LITERATURE REVIEW

2.1. Conceptual Foundations of Financial Inclusion

Financial inclusion has evolved from a narrow focus on access to financial accounts to a multidimensional framework encompassing access, usage, quality, and empowerment. Early definitions emphasized physical access to banks and account ownership (Beck et al., 2007). However, research increasingly shows that accounts alone do not improve household welfare if they remain dormant or are used irregularly (Demirgüç-Kunt & Klapper, 2013).

The Global Findex surveys have been central to this conceptual evolution. Since 2011, they have expanded measurement beyond access to include usage (digital payments, savings, borrowing) and, more recently, empowerment through resilience and digital safety (Demirgüç-Kunt et al., 2018; Demirgüç-Kunt et al., 2022; Klapper, Singer, Starita, & Norris, 2025). This reflects a growing recognition that meaningful inclusion requires both frequent, reliable usage and the ability to withstand shocks. The empowerment lens is particularly relevant for Sub-Saharan Africa, where vulnerable groups face structural barriers that inhibit financial agency (Johnson, 2013; Myamba, 2023).

2.2. Global Trends: Progress and Persistent Gaps

Globally, account ownership rose from 51% of adults in 2011 to 79% in 2024 (World Bank, 2025). Much of this growth is attributed to digital financial services (DFS), especially in low- and middle-income economies where mobile phones have enabled leapfrogging over traditional banking infrastructure. Digital payments usage increased from 34% in 2014 to 61% in 2024 (Demirgüç-Kunt et al., 2022).

Yet inclusion remains uneven. Gender gaps in account ownership, although narrowing globally to 5 percentage points, persist in Sub-Saharan Africa at 12 percentage points (GSMA, 2025). Dormancy also remains a challenge; millions of accounts are rarely used, suggesting that headline ownership statistics overstate actual inclusion (Allen et al., 2016). Moreover, weak consumer protection, high fees, and exposure to fraud undermine trust in digital systems (Garz et al., 2021).

These global patterns underscore the need to interrogate not just access but the sustainability and equity of usage. They also highlight the importance of focusing on empowerment indicators such as resilience and financial health, which are more closely tied to welfare outcomes (World Bank, 2025).

2.3. Financial Inclusion in Sub-Saharan Africa

The Rise of Mobile Money

Sub-Saharan Africa leads the world in mobile money adoption, accounting for over 60% of active mobile money accounts globally (GSMA, 2023). By 2025, 40% of adults in the region held mobile money accounts, up from 27% in 2021 (World Bank, 2025). This transformation is most visible in East Africa, where platforms like Kenya's M-Pesa, Tanzania's Tigo Pesa, and Uganda's MTN Mobile Money have redefined how people transact.

The impacts are substantial. Mobile money reduces transaction costs, improves remittance flows, and facilitates savings among low-income households (Suri & Jack, 2016). However, impacts are not uniformly positive. Munyegera and Matsumoto (2016) found that while mobile money boosts household welfare in Uganda, overreliance on short-term loans can lead to over-indebtedness. Similarly, Karlan and Linden (2025) show that weak commitment mechanisms limit the effectiveness of savings products, raising questions about long-term empowerment.

Service Quality and Trust

Despite remarkable adoption, service quality issues persist. Users often report high fees, poor transparency, and agent liquidity challenges, which discourage frequent usage (FinScope Tanzania, 2023). Fraud and weak grievance redress systems also undermine trust, particularly among women and rural users who may be less confident in navigating disputes (Myamba, 2023). The Global Findex 2025 incorporates digital safety metrics that reveal widespread vulnerability, with many users failing to secure mobile money accounts with strong passwords (Klapper et al., 2025).

2.4. Comparative Evidence from East Africa

Kenya: A Mature Ecosystem with Emerging Risks

Kenya remains the global pioneer. M-Pesa's success transformed not only access but also daily usage, with over 70% of households relying on mobile money for bills, savings, and remittances (FinAccess, 2021). Kenya illustrates the potential of DFS to foster resilience: in 2025, 61% of adults could raise emergency funds within 30 days, surpassing both regional and global averages (World Bank, 2025).

Yet challenges remain. Rapid fintech innovation has led to a surge in digital lending, raising concerns about over-indebtedness and predatory practices (Garz et al., 2021). These risks highlight that greater usage is not automatically synonymous with empowerment, supporting the argument that quality and regulation are critical.

Tanzania: Gains Through Interoperability

Tanzania has made significant progress by prioritizing interoperability, allowing users to transact across mobile money networks. Account ownership rose from 50% in 2017 to 65% in 2025 (FinScope Tanzania, 2023). Digital payments usage also grew, but empowerment outcomes lag. Only 49% of adults could access emergency funds within 30 days in 2025, below the global average (World Bank, 2025).

Persistent gender gaps and rural exclusion illustrate the limits of access-led growth. Despite interoperability gains, service quality remains uneven, with agent liquidity and hidden fees frequently cited as barriers (GSMA, 2022).

Uganda: Steady Access, Shallow Usage

Uganda demonstrates steady increases in access but stagnant usage. Account ownership grew from 59% in 2017 to 71% in 2025, but only 47% of adults made or received digital payments (UBOS, 2021; World Bank, 2025). High transaction fees and weak consumer protection limit regular engagement (Simione & Muehlschlegel, 2023).

Gendered outcomes are particularly concerning. The gender gap in account ownership remains one of the widest in the region at 19%, and patriarchal norms constrain women's decision-making power even when they hold accounts (Nanyondo, 2018). This highlights the structural nature of exclusion and the importance of targeted interventions (Myamba, 2023).

2.5. Empowerment as the Missing Dimension

Across East Africa, empowerment outcomes trail behind access. While Kenya demonstrates progress, Tanzania and Uganda reveal significant gaps. The Global Findex 2025 shows that empowerment, measured by resilience and financial health, remains low for poor households, women, and rural populations (World Bank, 2025).

Empowerment requires more than digital channels; it depends on trust, literacy, and control over resources. Studies consistently find that women require additional training and supportive environments to benefit fully from DFS (GSMA, 2023; OECD, 2020). Without such interventions, digital finance risks reproducing existing inequalities rather than reducing them.

2.6. Critical Gaps in the Literature

Despite growing scholarship, three major gaps remain:

Overreliance on access indicators. Many studies continue to equate inclusion with account ownership, failing to address dormant accounts or irregular usage (Allen et al., 2016).

Limited integration of empowerment metrics. Few analyses systematically test whether inclusion improves resilience or decision-making power, despite new data availability (Johnson, 2013; Klapper et al., 2025).

Weak hypothesis-driven approaches. Much of the literature is descriptive rather than analytical, limiting explanatory power. As reviewers of earlier work noted, the absence of hypotheses reduces the depth of analysis.

This study addresses these gaps by explicitly testing four hypotheses that link access, usage, quality, and empowerment. It integrates multiple datasets, including the Global Findex 2025, to provide updated, comparative evidence. Finally, it critically engages with the policy–practice divide by comparing ambitious national strategies with outcomes on the ground.

2.7. Conceptual Framework

From Access to Empowerment: A Four-Dimensional Model

The evolution of financial inclusion research underscores the importance of moving beyond simplistic measures of account ownership toward a multidimensional approach. This study adopts a four-dimensional model - Access, Usage, Quality, and Empowerment - as the conceptual framework guiding the analysis of financial inclusion in East Africa. Each dimension builds upon the other, reflecting both sequential and reinforcing relationships. The framework recognizes that while access is necessary, it is not sufficient for sustained inclusion; quality and empowerment are equally vital for transforming financial services into developmental outcomes.

a. Access: The Foundation of Inclusion

Access refers to the availability and uptake of financial accounts, whether through formal banking institutions or mobile money platforms. It is typically measured by the share of adults holding accounts, a metric widely popularized by the Global Findex Database (Demirgüç-Kunt et al., 2018; Demirgüç-Kunt et al., 2022). In East Africa, access has expanded dramatically since 2011, largely due to mobile money innovations. However, critics argue that a focus on access risks overstating progress if accounts remain dormant or if barriers to regular use persist (Allen et al., 2016).

This dimension directly informs Hypothesis 1 (H1): *Gains in account ownership have not consistently translated into higher rates of active usage, particularly among women and rural populations.* Access provides the foundation, but without subsequent dimensions, it remains a shallow indicator of inclusion.

b. Usage: Moving Beyond Ownership

Usage captures the frequency and diversity of financial transactions, including payments, savings, borrowing, and remittances. While access statistics show progress, usage rates often reveal stark gaps. For instance, in Uganda, account ownership increased to 71% in 2025, but less than half of adults engaged in digital payments (UBOS, 2021; World Bank, 2025).

Regular usage indicates integration of financial services into daily life and economic decision-making. Yet barriers such as high transaction costs, limited literacy, and inadequate service design reduce the likelihood of sustained use (Garz et al., 2021). This dynamic underpins Hypothesis 2 (H2): *Regular usage of financial accounts is positively associated with perceptions of service quality, but weak consumer protection and affordability issues undermine sustained engagement.*

c. Quality: The Determinant of Sustainability

Quality is the bridge between usage and empowerment. It encompasses the affordability, transparency, reliability, and safety of financial services. A high-quality system encourages trust and repeated use, while a low-quality system risks user disengagement and vulnerability to fraud. Recent evidence highlights that poor service quality, manifested in hidden fees, agent liquidity shortages, and predatory lending, significantly reduces consumer confidence (FinScope Tanzania, 2023; Myamba, 2023).

The Global Findex 2025 advances this dimension by including indicators of digital safety and financial health (Klapper, Singer, Starita, & Norris, 2025). These metrics acknowledge that quality determines whether financial inclusion leads to empowerment or reproduces existing inequalities. Thus, **Hypothesis 2 (H2)** is grounded in the assumption that quality shapes usage sustainability, and without it, inclusion remains fragile.

d. Empowerment: The Ultimate Goal

Empowerment is the apex of the framework. It refers to the ability of individuals to exercise financial agency, manage risks, and improve their well-being. It includes resilience (ability to mobilize resources in emergencies), confidence (capacity to navigate financial services), and autonomy (control over financial decision-making). Evidence suggests that

digital channels can enhance empowerment when paired with supportive ecosystems, but they can also create new risks, including debt traps and digital exclusion (Munyegera & Matsumoto, 2016; Suri & Jack, 2016).

This dimension informs two hypotheses:

- Hypothesis 3 (H3): *Individuals who regularly use digital financial services, particularly mobile money, demonstrate higher resilience and confidence compared to those relying on informal mechanisms.*
- Hypothesis 4 (H4): *Despite narrowing gender gaps in account ownership, women continue to face disproportionate barriers to empowerment due to structural inequalities in phone ownership, literacy, and bargaining power.*

2.8. Linking the Dimensions

The framework envisions a pathway from access to empowerment:

- a. *Access* provides entry into the financial system.
- b. *Usage* ensures services are integrated into economic behavior.
- c. *Quality* determines whether usage is sustainable, safe, and trusted.
- d. *Empowerment* represents the transformative outcome, where inclusion enhances resilience, autonomy, and development.

The model also emphasizes feedback loops. For example, poor service quality can weaken usage, while disempowered groups may disengage despite having access. Conversely, empowered users may drive greater usage and demand for quality services, reinforcing inclusion.

2.9. Implications for East Africa

Applying this framework to Kenya, Tanzania, and Uganda highlights both achievements and gaps. Kenya demonstrates how access and usage can translate into empowerment, albeit with risks from digital lending. Tanzania illustrates how interoperability improves access but limited quality undermines outcomes. Uganda shows steady access growth but persistent usage and empowerment gaps, particularly for women.

By grounding the analysis in this framework, the study provides a structured approach to test the four hypotheses. It also aligns with the critique that prior work over-relied on descriptive statistics without advancing testable propositions. The Access-Usage-Quality-Empowerment model ensures that the analysis moves from surface-level inclusion toward the deeper question of whether financial services genuinely improve lives.

3. METHODOLOGY

3.1. Research Design

This study adopts a comparative, hypothesis-driven design to assess financial inclusion outcomes in Kenya, Tanzania, and Uganda between 2017 and 2025. The approach is primarily quantitative, drawing on cross-sectional survey datasets, but is complemented by qualitative policy review to interpret findings within the institutional context. The focus is not only on describing levels of financial inclusion but also on testing relationships between access, usage, service quality, and empowerment, consistent with the Access-Usage-Quality-Empowerment framework developed earlier.

By combining multi-country datasets with national surveys, the study applies a triangulation strategy to validate findings across sources and reduce reliance on a single dataset. This approach ensures robustness and responds to critiques that earlier analyses relied too narrowly on descriptive statistics from one survey year.

3.2. Data Sources

Four principal data sources underpin the analysis:

- *Global Findex (2017, 2021, 2025)* - The Findex provides harmonized, nationally representative data on financial inclusion across more than 140 economies. For East Africa, it includes indicators on account ownership, digital payments, savings, borrowing, financial resilience, and digital safety (Demirgüç-Kunt et al., 2018; Demirgüç-Kunt et al., 2022; Klapper, Singer, Starita, & Norris, 2025). Its comparability across years makes it the cornerstone of longitudinal analysis in this study.
- *FinAccess Kenya (2021)* - Conducted by the Central Bank of Kenya, Kenya National Bureau of Statistics, and FSD Kenya, this nationally representative survey provides detailed insights into financial usage, service quality, and resilience among Kenyan adults. It complements Findex by offering a richer understanding of market dynamics, including access to credit, formal vs. informal savings, and digital loan usage.
- *FinScope Tanzania (2023)* - Administered by the Financial Sector Deepening Trust (FSDT), this survey provides high-frequency data on mobile money adoption, interoperability, gendered usage patterns, and perceptions of service quality. It is particularly valuable for testing the relationship between usage and quality, as it captures barriers such as agent liquidity and hidden fees.
- *Uganda National Household Survey (UNHS 2019/20)* - Compiled by the Uganda Bureau of Statistics (UBOS, 2021), the UNHS includes a dedicated financial inclusion module covering account ownership, borrowing, and savings. It provides nationally representative data that contextualizes Uganda's slower progress and allows testing of gendered disparities.

Supplementary policy documents, including Kenya's Digital Economy Blueprint (2019), Tanzania's National Financial Inclusion Framework II (2018-2022), and Uganda's National Financial Inclusion Strategy (2017-2022), are used to situate empirical findings within broader institutional reforms.

3.3. Variables and Indicators

To operationalize the Access-Usage-Quality-Empowerment framework, variables are drawn from the datasets as follows:

- *Access (H1)*: Account ownership (bank or mobile money).
- *Usage (H1, H2)*: Frequency of digital transactions (sending/receiving payments, saving formally, borrowing formally).
- *Quality (H2)*: Perceptions of affordability, transparency, and safety (proxied by indicators on digital safety, fraud exposure, and confidence in service providers).
- *Empowerment (H3, H4)*: Ability to raise emergency funds, confidence in using financial services, gender-disaggregated usage and resilience indicators.

These variables allow direct testing of the four hypotheses. For instance, *H1* is tested by comparing account ownership with active usage rates. *H2* is examined by linking usage

intensity to quality perceptions in FinAccess and FinScope surveys. *H3* is tested by correlating digital usage with resilience indicators. *H4* is addressed through gender-disaggregated analysis across all datasets.

3.4. Analytical Strategy

The analysis proceeds in three stages:

1. *Descriptive Analysis*: Trends in access, usage, quality, and empowerment are mapped across 2017–2025, highlighting changes at both regional and country levels. This step provides a baseline and situates East Africa within global patterns.
2. *Hypothesis Testing*: The four hypotheses are tested using cross-tabulations and correlation analysis. Where datasets allow, regression models are applied to examine associations between variables, for example, the effect of digital usage on resilience indicators. Gender-disaggregated regressions are run to test *H4*.
3. *Comparative Interpretation*: Quantitative results are interpreted in light of policy frameworks and contextual factors. This step connects empirical outcomes with institutional reforms, enabling a critical discussion of the policy-practice divide.

4. FINDINGS AND ANALYSIS

4.1. Kenya: Toward Saturation with Emerging Risks

Kenya remains the most advanced case in East Africa's financial inclusion story. By 2025, account ownership had risen to 84% of adults, compared to 82% in 2021 and 75% in 2017 (World Bank, 2025). This steady increase indicates that the country is approaching saturation in access. Kenya's long-standing leadership in digital finance, largely driven by M-Pesa, continues to underpin this trajectory.

Access and Usage

Kenya provides strong support for Hypothesis 1 (*H1*), which posits that access does not necessarily translate into usage. While ownership levels are high, usage gaps remain visible. The 2021 FinAccess survey showed that 11% of adults with mobile money accounts had not used them in the prior 90 days (FinAccess, 2021). By 2025, the Findex reported that 67% of account holders made or received digital payments weekly, highlighting progress but still leaving one-third of users with irregular engagement.

Quality and Trust

Consistent with Hypothesis 2 (*H2*), quality issues shape usage sustainability. The FinAccess 2021 data revealed that high transaction costs were the most frequently cited barrier to regular use. Hidden charges in digital lending products, coupled with limited consumer awareness, have reduced trust (Garz et al., 2021). Complaints about over-indebtedness through mobile lending apps have grown, highlighting the tension between innovation and responsible finance.

Empowerment Outcomes

Kenya also provides evidence for Hypothesis 3 (*H3*), which links digital usage to empowerment. In 2025, 61% of Kenyan adults reported being able to raise emergency funds within 30 days, a figure higher than the Sub-Saharan Africa average of 52% (World Bank, 2025). This resilience is closely tied to frequent digital usage, as households integrate mobile money into savings, insurance, and remittance practices. However, empowerment gains remain uneven. Women remain less likely to access formal credit, even when account ownership gaps have narrowed to just three percentage points (GSMA, 2025).

Gendered Dimensions

Kenya illustrates partial progress toward Hypothesis 4 (H4). While gender gaps in account ownership have narrowed, structural inequalities remain. Women report lower confidence in using digital financial services and are more exposed to predatory lending. The GSMA (2023) highlights that women's lower digital literacy contributes to their vulnerability to fraud, pointing to the importance of complementary education and consumer protection policies.

Kenya's experience demonstrates that while access and usage are relatively advanced, quality and empowerment outcomes remain contested. The case underscores the need for regulation of digital lending and stronger consumer protection frameworks to ensure that digital inclusion translates into sustainable empowerment.

4.2. Tanzania: Gains Through Interoperability but Uneven Empowerment

Tanzania's trajectory differs from Kenya's, reflecting both strengths and challenges. By 2025, 65% of adults had financial accounts, up from 55% in 2021 and 50% in 2017 (FinScope Tanzania, 2023; World Bank, 2025). Interoperability reforms that allowed seamless transactions across networks significantly boosted mobile money adoption.

Access and Usage

The Tanzanian case provides mixed evidence for H1. While access has expanded, usage rates are not consistently high. FinScope (2023) found that 18% of account holders used their accounts only sporadically. This suggests that despite improvements in infrastructure, barriers such as cost and convenience remain.

Quality and Trust

Evidence strongly supports H2. Service quality issues persist, particularly around agent liquidity and hidden transaction fees. Respondents in FinScope 2023 frequently cited lack of transparency in charges as a reason for reduced usage. These findings confirm that affordability and reliability are central to sustaining engagement.

Empowerment Outcomes

Tanzania lags in empowerment relative to Kenya. Only 49% of adults could access emergency funds in 2025, below both Kenya and the global average (World Bank, 2025). This weak resilience highlights the fragility of financial inclusion gains when quality is compromised. While interoperability enhanced access, it has not yet translated into meaningful empowerment outcomes.

Gendered Dimensions

Gender gaps remain a defining feature of Tanzania's financial inclusion landscape. In 2025, the account ownership gender gap was 13 percentage points (GSMA, 2025). Women's participation is further undermined by lower phone ownership and restricted decision-making power within households (Myamba, 2023). This supports H4, showing that structural inequalities limit women's ability to benefit from inclusion even when access is available.

Tanzania demonstrates the power of interoperability in expanding access but also reveals its limits. Without improvements in service quality and targeted interventions to address gender disparities, empowerment outcomes will remain modest.

4.3. Uganda: Steady Access Growth, Shallow Usage

Uganda's progress has been slower but steady. By 2025, 71% of adults reported owning accounts, compared to 66% in 2021 and 59% in 2017 (UBOS, 2021; World Bank, 2025). However, usage remains shallow, and empowerment outcomes are among the weakest in East Africa.

Access and Usage

Uganda strongly validates H1. The Findex 2025 shows that while 71% of adults own accounts, only 47% made or received digital payments in the past year. This large access–usage gap reflects high transaction costs, weak infrastructure, and limited integration of digital services into daily life.

Quality and Trust

Uganda provides strong support for H2. Simione and Muehlschlegel (2023) show that high transaction fees discourage regular use, while weak consumer protection undermines confidence in digital services. Fraud and disputes are common, and grievance redress systems are ineffective. These weaknesses explain why many Ugandans continue to rely on informal mechanisms despite having accounts.

Empowerment Outcomes

Empowerment outcomes are limited, confirming H3. Only 45% of adults in Uganda could raise emergency funds within 30 days in 2025, well below Kenya and Tanzania (World Bank, 2025). This highlights the fragility of inclusion in contexts where quality and trust are weak. Moreover, resilience indicators reveal significant urban–rural divides, with rural users less likely to use accounts for savings or credit.

Gendered Dimensions

Uganda provides some of the strongest evidence for H4. The gender gap in account ownership remains 19 percentage points, one of the widest in East Africa (GSMA, 2023). Women face significant structural barriers, including lower literacy, restricted phone ownership, and entrenched patriarchal norms (Nanyondo, 2018). These barriers translate into lower usage and weaker empowerment outcomes, even when women have accounts.

Uganda's trajectory demonstrates that access without quality and empowerment risks superficial inclusion. The persistence of gendered inequalities underscores the need for targeted interventions that go beyond account ownership to address structural barriers.

4.4. Regional and Global Comparisons

When analysed together, Kenya, Tanzania, and Uganda illustrate both the promise and limits of financial inclusion in East Africa. All three countries outperform the Sub-Saharan African average in access, confirming their leadership role. Yet empowerment outcomes—measured by resilience, confidence, and gender equality—remain uneven and below global averages.

Globally, 56% of adults in low- and middle-income economies could raise emergency funds in 2025, compared to 61% in Kenya, 49% in Tanzania, and 45% in Uganda (World Bank, 2025). These figures show that while East Africa performs relatively well in expanding access, it falls short in delivering empowerment.

The region's experience underscores the importance of focusing on quality and empowerment as the next frontier. Kenya demonstrates progress but faces risks from unregulated digital lending. Tanzania shows the benefits of interoperability but highlights the

limits of access-led growth. Uganda illustrates how weak institutions and entrenched inequalities constrain empowerment despite access gains.

Hypothesis Testing Summary

- H1 (Access-Usage Gap): Supported in all three countries, with Uganda showing the largest gap.
- H2 (Usage-Quality Link): Strongly supported, particularly in Tanzania and Uganda where service quality issues limit usage.
- H3 (Empowerment through Digital Channels): Partially supported, with Kenya providing evidence of resilience gains but Uganda and Tanzania lagging.
- H4 (Gendered Outcomes): Strongly supported across all three cases, with Uganda showing the widest gender gap.

5. DISCUSSION

The findings from Kenya, Tanzania, and Uganda highlight both the achievements and limitations of financial inclusion in East Africa. Access has expanded significantly, yet empowerment outcomes remain uneven. This section critically interprets these findings, situating them within global debates and the persistent policy-practice divide.

5.1. The Policy-Practice Divide

All three countries have adopted ambitious national financial inclusion strategies. Kenya's *Digital Economy Blueprint* (2019), Tanzania's *National Financial Inclusion Framework II* (2018-2022), and Uganda's *National Financial Inclusion Strategy* (2017–2022) articulate clear goals for universal access and greater usage. However, the findings show a consistent gap between these policy ambitions and outcomes on the ground.

For instance, Uganda's NFIS emphasized expanding access points and improving consumer protection (Government of Uganda, 2017). By 2025, account ownership had indeed increased, yet consumer protection mechanisms remained weak, leaving users vulnerable to fraud and disputes (Simione & Muehlschlegel, 2023). Similarly, Tanzania's interoperability reforms expanded access, but service quality issues persisted, undermining empowerment outcomes (FinScope Tanzania, 2023). These patterns suggest that while policy frameworks are often forward-looking, implementation is hampered by regulatory capacity, infrastructure gaps, and entrenched inequalities.

5.2. Access Without Empowerment

The evidence strongly supports Hypothesis 1 (H1): access does not guarantee usage. In both Uganda and Tanzania, substantial portions of account holders engage infrequently with financial services, limiting potential developmental impacts. This access–usage gap reflects global findings that account ownership, while important, is an insufficient measure of inclusion (Demirgüç-Kunt & Klapper, 2013; World Bank, 2025). The implication is that governments and development partners must shift monitoring from headline access statistics toward indicators that capture depth of usage and empowerment.

5.3. Quality as the Critical Link

Consistent with Hypothesis 2 (H2), the analysis shows that perceptions of quality—affordability, transparency, and reliability—directly influence usage. Tanzania and Uganda

provide clear evidence: even where access is high, poor service quality discourages engagement. These findings align with Garz et al. (2021), who emphasize that consumer protection and trust are central to sustainable inclusion. The global debate increasingly highlights digital safety, with the *Global Findex 2025* including indicators on fraud exposure and account security (Klapper et al., 2025). East Africa's experience reinforces that without addressing these quality concerns, financial inclusion risks becoming fragile and reversible.

5.4. Digital Finance and Empowerment

Kenya demonstrates the potential of digital channels to foster empowerment, supporting Hypothesis 3 (H3). The ability of 61% of Kenyan adults to mobilize emergency funds within 30 days illustrates resilience gains linked to frequent digital usage (World Bank, 2025). However, the rise of predatory digital lending in Kenya also shows the risks of unregulated fintech innovation (Garz et al., 2021). This duality echoes global debates on “responsible digital finance,” which stress the need for innovation to be accompanied by robust consumer safeguards (UNCDF, 2021).

Tanzania and Uganda, meanwhile, reveal how weak institutions and service quality undermine empowerment outcomes. The limited ability of adults to mobilize emergency resources demonstrates that digital finance alone cannot deliver resilience without supporting ecosystems of trust, literacy, and regulation.

5.5. Gender as the Persistent Frontier

The persistence of gender gaps across all three countries strongly supports Hypothesis 4 (H4). Despite narrowing ownership disparities, women remain disadvantaged in usage and empowerment outcomes. This aligns with GSMA's (2023, 2025) findings that women are less likely to own phones, have lower digital literacy, and face cultural barriers to decision-making. These structural inequalities explain why access-led strategies have failed to deliver gender-equitable empowerment.

Globally, this pattern reinforces calls for gender-smart design in financial products and national strategies (OECD, 2020; Myamba, 2023). East Africa's experience shows that gender gaps are not simply a question of access but are deeply rooted in broader socio-economic structures.

5.6. Implications for Global Debates

The East African experience offers three contributions to global debates. First, it illustrates the limitations of access-centred paradigms and underscores the importance of empowerment indicators. Second, it shows that digital innovation, while transformative, can generate new risks that require proactive regulation. Third, it highlights that gender equity remains the most intractable challenge, demanding structural as well as financial interventions.

These insights resonate with international shifts in discourse. The *Global Findex 2025* and recent policy reports increasingly emphasize resilience, consumer protection, and digital safety as core pillars of inclusion (World Bank, 2025; AfDB, 2022). East Africa's trajectory confirms the relevance of these shifts but also demonstrates the challenges of translating them into practice.

6. CONCLUSION AND RECOMMENDATIONS

This study has examined financial inclusion outcomes in Kenya, Tanzania, and Uganda between 2017 and 2025 through the lens of access, usage, quality, and empowerment. The

findings confirm that East Africa has made impressive strides in expanding access, particularly through mobile money innovations, but empowerment outcomes remain uneven and fragile. Kenya illustrates the potential of digital ecosystems to strengthen resilience, yet also exposes risks from predatory digital lending. Tanzania demonstrates the benefits of interoperability but struggles with service quality and empowerment gaps. Uganda shows steady progress in access but persistent weaknesses in usage, trust, and gender equity.

To close the gap between policy ambitions and lived realities, three recommendations are advanced. First, policymakers should move beyond access-centred metrics to prioritize usage depth, quality, and empowerment indicators in monitoring frameworks. Second, regulators must strengthen consumer protection and digital safety, particularly in the face of unregulated lending practices. Third, governments and development partners should embed gender-sensitive innovations - addressing mobile phone ownership, digital literacy, and household bargaining power - to ensure that women benefit equally from financial inclusion.

Ultimately, financial inclusion in East Africa must shift from being a story of numbers to one of impact, where access leads to meaningful empowerment and sustainable development.

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