The consequences of Uganda's mobile money tax

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- Uganda's mobile money tax led to a sharp decline in usage and a shift toward banks and cash.

- The substitution was most intense in districts with stronger financial infrastructure, widening existing inequalities.

- Banks faced liquidity inflows but responded conservatively, reallocating credit to lower-risk borrowers.

- Policymakers should avoid abrupt digital taxation and align regulation with financial inclusion goals.

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Policy issue

In July 2018, Uganda introduced a 1% tax on the value of all mobile money transactions, later revised to 0.5% and limited to withdrawals. This tax—intended to raise domestic revenue—sparked public protest and a significant contraction in mobile money usage. Given mobile money's role in expanding access to finance, especially among the unbanked, the tax posed critical risks to financial inclusion. Uganda's case reflects a broader policy dilemma across sub-Saharan Africa, where governments aim to increase fiscal capacity without reversing gains in digital financial access.

The timing and structure of the tax also reveal a broader tension in how digital innovation intersects with legacy fiscal systems. While mobile money has rapidly scaled across Africa, policy and tax frameworks have lagged. In many cases, governments have responded reactively without considering behavioural incentives, substitution effects, or infrastructure gaps. Uganda's experience exemplifies what can go wrong when introducing reforms without sufficient regulatory planning, stakeholder engagement, or impact forecasting.

Moreover, the equity implications of the tax are non-trivial. Regions with higher infrastructure density—particularly urban centres—could move away from mobile money by shifting to bank agents or ATMs. By contrast, users in rural districts faced higher effective costs of financial access or reverted to cash-based, informal systems. This uneven impact distribution raises critical concerns for both financial and spatial equity.

Finally, the Ugandan case is a useful precursor to the challenges countries may face when deploying central bank digital currencies (CBDCs). The substitution dynamics observed here—where digital flows shift abruptly toward or away from banks—mirror those discussed in the theoretical literature on CBDCs. Hence, the policy lessons drawn from Uganda's mobile money tax may have far-reaching implications for digital finance governance across developing countries.

Research contribution

This research investigates the behavioural and institutional effects of Uganda's mobile money tax. The study is motivated by two significant gaps in the academic literature. First, while a large body of evidence documents the positive impact of mobile money on financial inclusion, far less is known about how best to regulate this expanding technology. Second, although theoretical frameworks are rapidly developing around central bank digital currencies and the digitisation of financial systems, empirical evidence on their real-world impact on liquidity and bank credit remains limited.

Our research contributes to these debates by using Uganda's policy change as a natural experiment to analyse the broader ripple effects of digital finance regulation. We exploit the unexpected introduction of the tax and compare districts with differing levels of access to financial alternatives (for example, ATMs or bank branches). Using a rich combination of administrative and survey data—including transaction-level mobile money records, geocoded ATM infrastructure, credit registry data, and household panel surveys—we assess how individuals, banks, and agents adjusted their financial behaviour. The design allows for causal inference through difference-in-differences and event study approaches.

Beyond documenting behavioural change, the study provides new insights into institutional adaptation. We analyse how liquidity moved across platforms, banks reacted to new inflows, and loan terms evolved. These microeconomic changes have systemic implications for financial stability and access. In addition, we explore the spatial heterogeneity of the tax's effects, highlighting the uneven distributional consequences that emerge when digital financial reforms outpace physical infrastructure.

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Key findings

Uganda's mobile money tax had immediate and widespread consequences. Leveraging a natural experiment created by regional variation in access to mobile money substitutes, our findings provide new insights into how digital finance policies shape real-world financial behaviour, particularly in financially fragile contexts. Below, we outline the major outcomes of the reform, supported by empirical analysis and visual evidence.

FIGURE 1: Mobile money customer balance
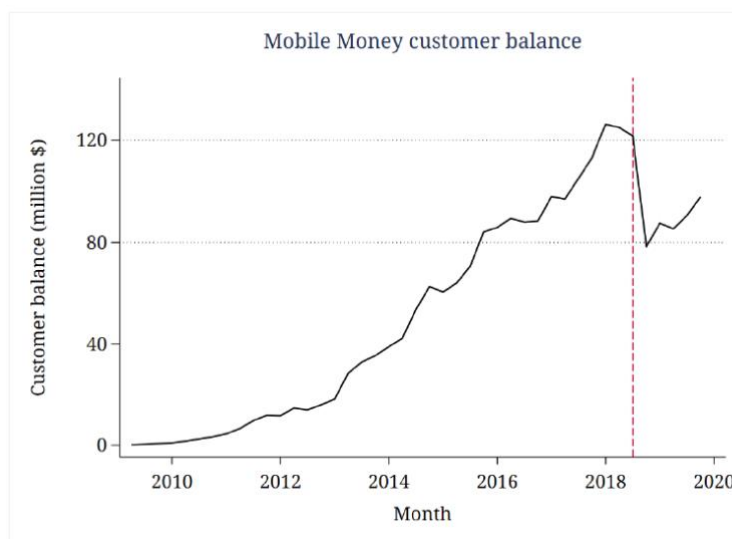
- **Mobile money usage dropped sharply:** Over USD 40 million in balances were withdrawn in the quarter after the tax. Transaction frequency and volume fell most in ATM-rich areas, showing that users responded more drastically where alternatives were more accessible.

- **Users shifted to agents and cash:** Agent banking activity surged in urban areas with existing financial infrastructure. ATM withdrawals and central bank cash issuance increased substantially, indicating a behavioural reversion to cash-based transactions.

- **Volatile bank liquidity:** Banks received inflows of demand deposits but not savings or time deposits. These volatile deposits were often quickly withdrawn, offering little room for long-term credit expansion.

- **Credit allocation became more exclusive:** Banks reallocated credit toward clients with strong credit histories and low risk scores. Loans to riskier or first-time borrowers declined. Banks also shortened repayment terms and increased interest rates for unbanked borrowers, returning to risk-averse lending practices.

These findings underscore the importance of understanding the broader consequences of taxing digital transactions. While mobile money platforms were originally celebrated for expanding access and reducing transaction costs, introducing a marginal cost like a transaction tax can undo years of progress in financial inclusion if not managed carefully and supported with infrastructure and policy safeguards.

Recommendations for policy

Based on our findings, we propose a set of actionable recommendations for governments, central banks, and digital finance regulators:

- **Avoid abrupt or blanket digital taxation:** Even small transaction taxes can produce large behavioural distortions, erode trust in digital platforms, and reduce overall system usage. Fiscal objectives must be carefully weighed against potential damage to financial inclusion.
- **Integrate taxation with infrastructure development:** Where taxes are introduced, they should be accompanied by investments in physical and digital financial infrastructure—particularly in underserved areas. These investments include expanding agent networks, ATM coverage, and mobile connectivity.
- **Promote liquidity stability in the banking sector:** The study shows that volatile deposits prompt banks to behave defensively. Policies to stabilise liquidity—such as deposit insurance, liquidity backstops, or incentives for term savings—can mitigate these effects and encourage productive lending.
- **Safeguard inclusive credit access:** Reforms should be accompanied by mechanisms that protect vulnerable borrowers. These mechanisms may include inclusive lending quotas, subsidised credit scoring tools for new borrowers, or risk-sharing arrangements to incentivise lending to first-time clients.
- **Enhance regulatory foresight and behavioural monitoring:** Governments must improve their capacity to anticipate and monitor behavioural responses to financial policy. Real-time data sharing between financial institutions and regulators can enable early warning systems and adaptive regulation.
- **Foster cross-sectoral coordination:** Mobile money sits at the intersection of telecom and banking. Successful policy implementation will require joint oversight from central banks, telecom regulators, ministries of finance, and competition authorities.

Implementation challenges and considerations

Implementing these recommendations presents several political and operational hurdles. First, digital transaction taxes are often introduced under fiscal pressure, which creates incentives to act swiftly without adequate consultation or phased rollouts. Second, financial and telecom regulators may operate in silos, making coordinated implementation difficult. Successful policy reform will require strong collaboration across institutions, including ministries of finance, central banks, and communications authorities.

Another major constraint lies in infrastructure disparities. Urban areas responded to the tax by substituting banks and agents, but many rural districts lacked alternatives. Without further investment in rural financial infrastructure—

agent networks, ATMs, and mobile connectivity—such policy shifts risk increasing exclusion.

Finally, governments must monitor behavioural feedback in real time. The effectiveness of reforms can hinge on the early detection of unintended consequences. Real-time monitoring calls for improvements in administrative data systems, integration of private-sector transaction records, and capacity to analyse granular data within policymaking institutions.

Implementing these recommendations requires close coordination between fiscal and financial regulators. The political pressure to raise revenue can conflict with long-term financial deepening and inclusion goals. Moreover, rural and underserved regions may lack the infrastructure to absorb displaced mobile money flows. Therefore, effective implementation must include targeted investments in agent networks, ATMs, and digital identification systems. Finally, institutions should enhance real-time monitoring capacity to anticipate behavioural responses to policy changes—ensuring that future reforms avoid unintended reversals in financial inclusion.

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