

Operational and Cost Implications of Firms’ Integration with a National Payments Switch: A Preliminary Assessment of industry views of the Tanzanian Instant Payments System (TIPS)



JUNE 2026

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Operational and Cost Implications of Firms' Integration with a National Payments Switch:

Executive Summary

This policy brief draws on key informant interviews (KIIs) with leading financial service providers (FSPs) in Tanzania to assess industry views on: a.) how the Tanzania Instant Payment Systems (TIPS) has restructured FSP costs; b.) whether industry expects the introduction of TIPS to increase the affordability of digital financial services (DFS) in Tanzania; and c.) how it expects TIPS to affect market competition, merchant payments, payment settlement, and financial inclusion.

KEY FINDINGS

1. The Tanzanian Instant Payment System (TIPS) was launched in 2022, supporting both person-to-person (P2P) and person-to-merchant (P2M) use cases. While 46 financial service providers (FSPs) in Tanzania have integrated with TIPS, not all FSPs have fully phased out the legacy bilateral integrations, which had enabled P2P interoperability and (partial) P2M interoperability since 2014.
2. **FSPs believe TIPS brings significant technical and operational advantages:** The introduction of TIPS has streamlined FSP operations by replacing multiple bilateral integrations with a single, centralized connection. Standardized Application Programming Interfaces (APIs) enable faster onboarding, simplify reconciliation through a single account, and reduce the technical burden on FSPs. FSPs note that the Bank of Tanzania's (BoT) strong support further ensured a smooth and scalable transition.
3. **At same time, FSPs see that the centralization of payment infrastructure is not without trade-offs:** While centralizing both off network and cross network transactions enhance efficiency and improves liquidity, it introduces potential vulnerabilities, such as exposure to systemic failures.¹ FSPs raised concerns about reliance on a single infrastructure. In the meantime, FSPs are maintaining bilateral integrations as a back-up system.
4. **Cost savings are uncertain in the short term:** While TIPS has introduced operational efficiencies like centralized pre-funding and streamlined reconciliation, FSPs have not yet realized significant cost savings due to upfront investments, ongoing infrastructure requirements (such as in expanding and maintain cash in cash out (CICO) networks), and their decision to maintain bilateral integrations as backups.
5. **FSPs don't anticipate major cost savings without large-scale increases in payment transaction volumes.** Moreover, uncertainty around future TIPS fees and cost structures complicates financial planning and modeling of long-term expenses and potential savings. EMI also pointed to the fact that, as opposed to banks, they do not have a sufficiently diversified product portfolio leading to diversity in revenue streams.. This naturally reduces margins for EMIs versus Banks.
6. **FSPs see TIPS reshaping market dynamics:** FSPs expect TIPS to intensify market competition by reducing barriers to expansion particularly for merchant payments, leading to a "race to the merchant" as providers compete to expand their networks. Banks, in particular, see an opportunity to leverage TIPS to offer value-added services like credit and business analytics to micro and small merchants, potentially gaining market share from EMIs.
7. **FSPs are unsure about the impact on financial inclusion:** FSPs are uncertain about whether TIPS will meaningfully increase financial inclusion in Tanzania. While, on the one hand, it may create incentives for new players to challenge FSPs' existing market monopolies in rural areas as they can acquire merchants without also needing to establish a customer base, they are skeptical that TIPS alone will significantly increase new account ownership, citing structural barriers such as low financial literacy, inadequate smartphone ownership and gaps in CICO agent network coverage. They emphasize the need for complementary initiatives, including subsidies for literacy programs and expansion of the CICO agent network, to empower underserved communities.

¹ Off network transactions are those made between two providers of different categories (e.g. bank and mobile money provider) whereas cross-network transactions are those made between two providers of a similar category (e.g. one mobile money provider to a different mobile money provider). We refer to off-net and cross-net transactions collectively as off-net transactions throughout this brief, unless otherwise stated.

Introduction

Tanzania is home to a dynamic digital financial services (DFS) ecosystem. It consists of a total of [42 banking institutions](#), [6 mobile financial services \(MFS\) firms](#) and [more than 30 fintechs](#) (collectively referred to as Financial Service Providers or FSPs). As of September 2024, there were a total of [1.4 million](#) cash-in cash-out (CICO) agents in the country. [Financial inclusion has primarily been driven by MFS firms](#); the country has experienced a sharp increase in mobile money adoption since MFS services were launched in 2008. Recent nationally representative surveys estimate that 62% of adult Tanzanians are using mobile money, with around 22% using banking services ([FinScope 2023](#)).

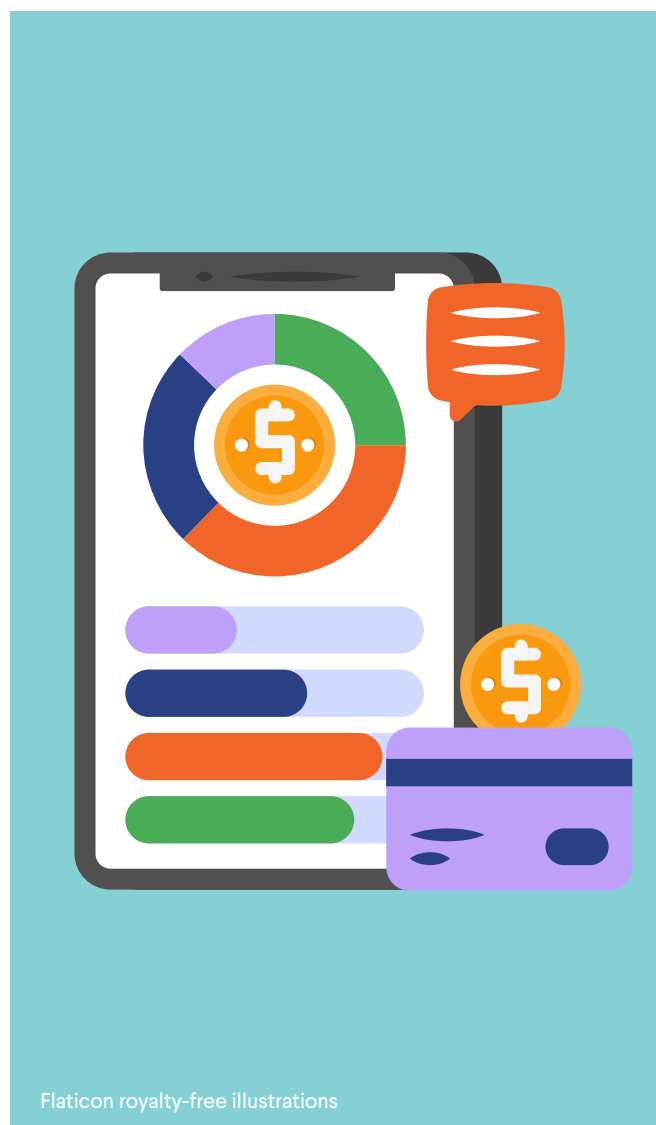
Despite the rise of mobile money and P2P transfers, there are still many people without access to DFS. Moreover, among those with mobile money accounts, very few are using their mobile money wallets to make digital payments for goods and services. By one estimate, only 16% of Tanzanians have ever used Lipa Kwa Simu (or ‘pay-by-phone’) to make purchases ([FinScope 2023](#)). One recent change in the ecosystem that is poised to further accelerate financial inclusion and amplify digital payments is the introduction of the Tanzania Instant Payment System (TIPS). Launched in 2022, TIPS is a centralized, interoperable platform facilitating instant payments between banks and MFS firms. TIPS currently has two live use-cases: person to person (P2P) payments and person to merchant (P2M) payments.

Mobile money interoperability was first introduced in Tanzania in 2014 ([IFC, 2024](#)). Since then, most providers, including banks and non-banks, including electronic money institutions (EMIs) have established bilateral integrations to enable both off-network and P2P transactions. While interoperability for P2P transactions had enabled DFS consumers in Tanzania to transact with each other, certain challenges persisted. These include, but are not limited to, high costs of off-net transactions, inefficient interchange models, and lack of off-network (bank to mobile money and vice versa) interoperability for P2M payments. The introduction of TIPS by the Bank of Tanzania (BoT) has created a major shift in the DFS ecosystem in the country, potentially bringing down costs of off-net transactions, creating a level-playing field for all FSPs by introducing balanced interchange models, and enabling interoperability of P2M transactions across all types of providers. This policy brief assesses how FSPs in the ecosystem perceive the cost implications on FSPs as they transition away from multiple bilateral integrations to a hub model organized around a central switch – TIPS.

Approach

To gain insights into this question, we conducted key informant interviews (KIIs) with eight FSPs in Tanzania. These included banks, EMIs and fintechs. A full list is attached in Annex A. We utilized a semi structured questionnaire to record these insights, which is attached in Annex B.

We organize the analysis in two parts. In Part I, we consider the implications of the legacy system organized around bilateral integrations and FSP participants’ perceptions on the technical advantages of moving to TIPS’ hub model. We also document how FSPs assess cost savings under TIPS. Part II explores how FSPs believe TIPS will change market competition and the most important use cases.



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1. Legacy Interoperable Systems and the Transition to TIPS

1.1 Design Features of Bilateral Interoperability in Tanzania

For over a decade, Tanzania has been at the forefront of payments interoperability among emerging economies. Bilateral interoperability represented a collaborative, market-led approach, facilitated by the BoT and other partners, such as the International Finance Corporation (IFC). Driven by the country's competitive mobile money landscape and customer demand, FSPs recognized the value of enabling clients to seamlessly send transfers to account holders on other networks. First implemented by Tigo, Zantel and Airtel in 2014, soon all EMIs signed bilateral agreements that enabled off-net P2P transfers.

INTERCHANGE

Bilateral interoperability had several distinct design features to ensure smooth and reliable settlement of transactions between FSPs. For P2P payments, EMIs agreed on a receiver-pays model, with the receiving EMI paying an interchange fee to the sending EMI to account for the revenue loss of the money leaving the sender's network. As the receivers were then able to recoup the costs of paying the sender from fees on cash out (the primary source of revenue), this enabled a revenue-neutral approach. This interchange model was followed for transactions between banks and EMIs as well, with the exception of one EMI operating on a sender-pays model. For transactions between banks, a zero interchange model was adopted, which continues to be the case under TIPS as well. For P2M transactions, a zero interchange was adopted by all providers under bilateral integrations, which has been extended under TIPS as well.

PRE-FUNDING

Second, to facilitate the movement of financial flows between FSPs, pre-funding arrangements were put in place. This entailed FSPs depositing funds with partner FSPs to ensure that off-net transactions originating from one of their clients could be settled immediately and credibly. Having such an arrangement ensured that the receiving FSP could confidently credit the recipient's account, knowing the funds are backed by the pre-funded pool.

1.2 Trends in Bilateral Interoperability

Bilateral interoperability achieved swift uptake. By September 2017, interoperable transfers represented more than [25 percent](#) of total P2P volume.

Interoperability remains a valued feature of DFS in Tanzania. According to [FinScope 2023](#), of those who use mobile money, around 11 percent of end-users report that what they value most about the service is the ability to send and receive money across networks (versus 70 percent who report they value that the service is easy and quick to use).

Initially on-net and off-net P2P transfer fees were the same but over time the relative cost of off-net fees have increased. According to [IPA's Transaction Cost Index](#), average on-net fees cost 2.7 percent of the transaction value versus 3.7 percent for off-net.² Despite this price increase, P2P interoperability remains a notable feature of DFS in Tanzania. In a survey conducted by IPA of 300 micro-markets across nine regions of Tanzania in early 2022, 35 percent of consumers reported having sent an off-net P2P transfer, with almost ten percent sending off-net transfers more than once a month.³ Overall, TIPS processed 51 million transactions in December 2024, up from 34 million in the same year 2024. ([BoT Payment System Statistics](#))

Higher costs for off-net transactions, however, appear to hinder use. In the same survey, more than 60 percent of consumers said higher transaction fees compared to on-net are one of the primary reasons they don't make more off-net payments. When they do want to send off-net, some 70 percent of consumers say they use a CICO agent to send rather than make the transaction themselves and pay a higher fee.⁴

Where enabled, fees for off-net P2M transactions are substantially higher than for off-net P2P transactions and tend to be the same as cash out (which is around 8% of the transaction value and almost twice that at lower price bands) compared to around 3% for on-net P2M. As a result of this 267 percent premium for off-net P2M, the survey found that the few consumers who use pay-by-phone (only [1 percent](#) of adults made a digital in-store merchant payment in 2021), transact almost exclusively within their own network.

1.3 Frictions in Bilateral Interoperability and the Perceived Technical Benefits of Transitioning to TIPS

Bilateral interoperability proved successful in increasing the scope of P2P transactions in Tanzania, but it was not without its frictions. One of the major challenges was maintaining separate technical agreements with multiple FSPs. This concern was voiced by many interviewees and is one of the key reasons they view the transition to TIPS favorably. As one participant noted, "I am very positive about TIPS. I don't know about the other FSPs, but from a technical perspective...TIPS is a lifesaver because I don't need to be integrating with 50 FSPs just for me to do these bilateral integrations. Once I'm connected to TIPS, then I can connect to everybody else."

Relatedly, as integrations and APIs are standardized across the platform, this leads to faster onboarding of new FSPs and reduced delays in launching new interoperable services.

In making this transition, FSPs expressed appreciation for the BoT's strong support and guidance provided during the implementation process. One respondent shared: "The support and hand-holding were exceptional, even up to now. The BoT team has been very supportive in case of any issues. During the implementation, we received maximum support from their end. The way they structured the APIs made them very easy to use, and whenever we encountered an issue, they were open and responsive. We could reach out to them anytime, and they would provide valuable input—explaining how things were done or how other FSPs approached similar

2 IPA's analysis on 'Measuring the True Cost of Digital Financial Services' was completed in 2023, with fee's captured as of December 2022, prior to the removal of the mobile money levy.

3 As these markets tend to have above average mobile money use, this should be seen as a high-level estimate of off-net transfers

4 Sending via a CICO agent involves providing cash to the agent who has an account with the same FSP as the receiver. The agent therefore incurs on-net transfer costs only, which is charged to the consumer.

challenges. I can confidently say the integration process was smooth sailing.”

Respondents also pointed to the efficiency gains in financing that TIPS has enabled. As noted earlier, under bilateral interoperability, FSPs were required to establish pre-funded accounts with other FSPs to enable transactions, necessitating deposits into multiple systems to ensure operational functionality. TIPS has eliminated this requirement by allowing FSPs to pre-fund a single account, which they can use to cover off-net transactions with multiple FSPs. While it’s not clear whether the TIPS pre-funding amount is an aggregation of individual pre-funding amounts under bilateral integrations or is lesser, this has helped to streamline reconciliation processes. Instead of reconciling multiple accounts and connections, FSPs only manage a single TIPS account. This shift simplifies account management and improves operational efficiency from the FSPs’ perspective.

Finally, participants noted that TIPS provides a standardized platform that is more scalable and

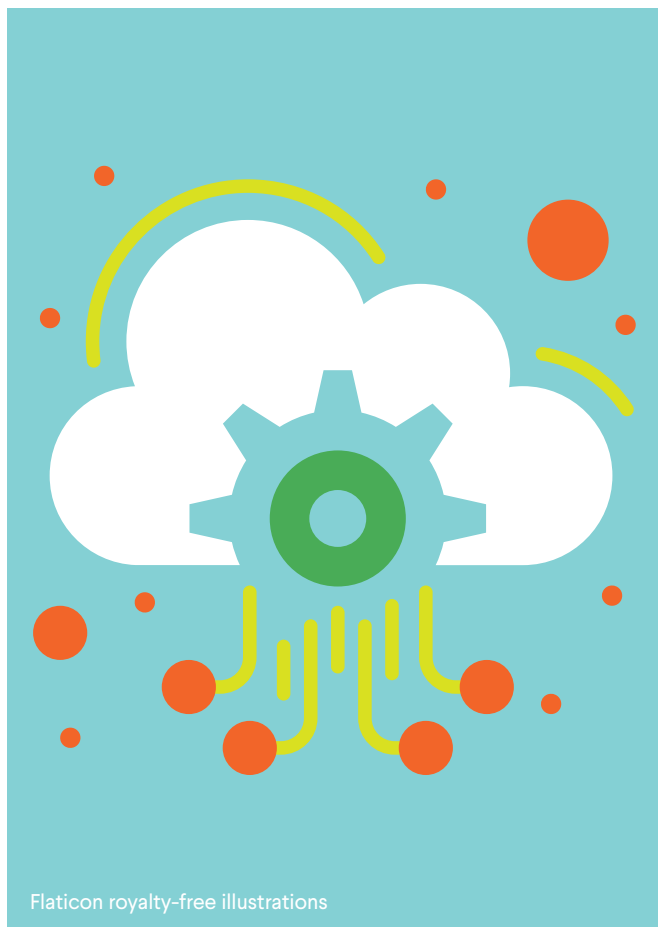
adaptable to future use cases, reducing the need for frequent upgrades or customizations compared to bilateral arrangements.

1.4 Centralization Enhances Efficiency but Introduces Vulnerability

While participants noted the efficiency gains in transitioning from bilateral integrations to a single hub, they also raised concerns about the potential risks associated with centralization.

One key risk highlighted by participants was regarding potential implications of a centralized infrastructure on fraud. While in the bilateral model pre-funding required more operational effort as FSPs had to manage allocations across multiple FSPs, the upside is it effectively distributed risk across multiple smaller pools of funds. Each pool was only as large as necessary to cover transactions with that specific FSP, limiting potential exposure in case of system downtime, cyber attacks or errors. In contrast, under TIPS, pre-funding is centralized into a single TIPS account. While this increases liquidity efficiency, the amount pre-funded must be large enough to cover transactions with all other DFSPs. This centralization means that if a cyber attack or system error occurs, the (now cumulative) pre-funding level could lead to greater absolute exposure before the issue is detected and resolved. The centralized nature of TIPS heightens the stakes, requiring robust monitoring systems and swift response mechanisms to mitigate potential losses.

The second risk arising due to centralization is that TIPS down-time affects all off-net transaction across institutions connected to TIPS. In the bilateral model, a failure in one integration would only halt transactions between the affected DFSPs, leaving other integrations unaffected. With TIPS, however, any downtime or failure halts all off-net transactions, creating a critical single point of failure. Early outages on TIPS that have taken place have heightened FSP sensitivities around this issue. Although reliability issues with TIPS have improved over time, this remains a salient concern, as voiced in the KIIs.

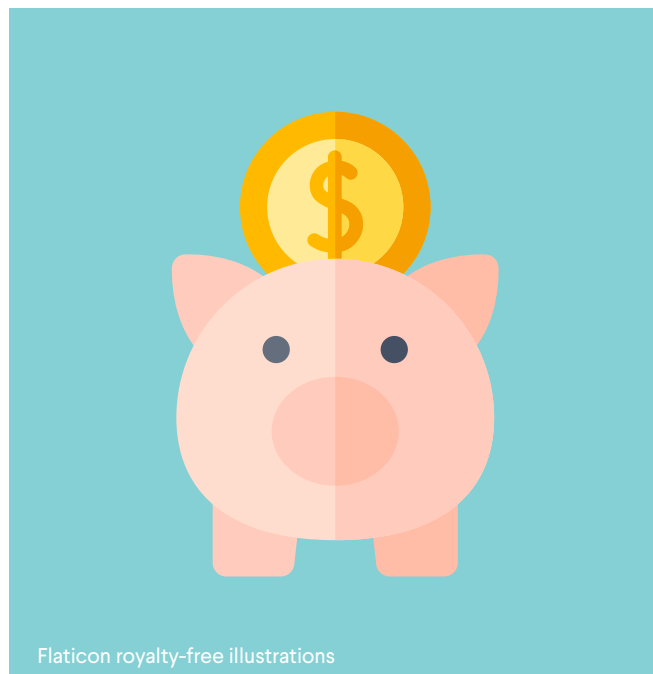


One consequence of these perceived risks is that FSPs are maintaining bilateral integrations as a back-up system, thereby incurring costs and not being able to realize the cost-saving potential of transitioning to TIPS.

1.5 FSPs Perceive Limited Short-Term Savings from TIPS and Uncertainty Over Future Costs

FSP interviewees widely acknowledged that, although TIPS introduces operational efficiencies—such as the previously discussed centralized pre-funding and streamlined reconciliation—it has not yet reduced core costs associated with operating a DFS business. Costs for acquiring customers and merchants, and maintaining the CICO infrastructure required to support P2P and P2M transactions are and will continue to be incurred. Additionally, FSP respondents noted the upfront investments and ongoing costs associated with transitioning to the system—such as the need to distribute TANQR to all of their merchants and establish new API connections—have offset immediate financial benefits. As a result, customer-facing transaction fees have remained largely unchanged.

More fundamentally, many participants are uncertain about overall potential cost savings because of a lack of clarity regarding future fees and cost structures associated with TIPS. They emphasized that the ultimate impact depends on the level of the fees and their alignment with transaction volumes. For example, higher transaction volumes for P2P and P2M use transactions can reduce CICO agent dependency, thereby reducing costs of CICO infrastructure management. Thus, if the fees are reasonable and aligned with transaction volumes and growth, the system could result in a “win-win” situation where both cost savings and efficiencies are achieved. It is important to note here that the BoT has currently waived the fee for transactions being routed via TIPS but FSPs expect a fee to be instated



in the next few years to allow for a sustainable cost recovery mechanisms for TIPS.

The absence of transparent information on future TIPS standardized fees makes it difficult for FSPs to accurately project the long-term financial implications of the system. This uncertainty complicates their ability to assess when, or if, initial investments in TIPS will be fully recovered and whether operational efficiencies will translate into meaningful cost reductions.

As one KII participant put it, “There is a lack of transparency around TIPS—where are we going with this technology and what is the end game. We don’t know what the TIPS fees will be and lack clarity around which use cases will be launched. This doesn’t help in planning and as a private sector institution, we need to plan for the next 5 years.”

In response to a question about whether and perhaps when TIPS will charge FSPs an annual fee, another respondent said, “These are the questions we have been asking. We don’t have a clear answer so far—because even the governance model is not decided who will run the switch, who will own it. So, I think until those are answered, we will not have a complete picture on costs.”

2. Expected Market Effects and New Use Cases

Beyond discussing the technical and operational efficiencies and costs of transitioning to TIPS, we also asked FSPs about their views on how TIPS will reshape market competitiveness and identify the most important use cases. Here we gauge their assessments on the perceived effects of TIPS on market competition, merchant payments, payment settlement, and financial inclusion.

2.1 Merchant Payments is Seen as the next DFS Growth Area

FSP participants shared their expectation that TIPS would reshape market dynamics, though their perspectives on how it would do so, varied. Five respondents noted that, in enabling clients to transact with other end-users no matter which FSP they use, TIPS had the potential to increase market competition particularly for digital merchant payments. As TIPS lowers the barriers to making off-net payments through industry-wide P2M interoperability, there will be more competition to acquire merchants and encourage them to accept digital payments, including off-net payments. Some see this as leading to a “race to the merchant,” where multiple providers compete to expand their merchant network, particularly motivated by the ability of providers to accept payments via their merchants in areas dominated by a different FSPs users. As one interviewee remarked, “We see value of TIPS in merchant payments, not in P2P which was always there.” To win over merchants however, FSPs would need to provide attractive incentives, such as reduced fees, commissions or value-added services, to differentiate themselves from competitors.

However, given the costs of merchant acquisition and Tanzania's consumer pays model adopted by EMIs as merchants are perceived to be more price sensitive in Tanzania, another interviewee thought that some FSPs may adopt a more consumer-centric approach. Under this strategy, FSPs would focus on encouraging their customers to transact seamlessly with existing merchants acquired by other players.

These changes are expected to not only intensify competition in the existing competitive markets, but also lead to new entrants into markets historically dominated by a single FSP. Some see this as benefitting banks who lagged behind EMIs in terms of retail market penetration, but who are well-positioned to offer merchants value-added services like credit facilities, business analytics, and integrated financial products that go beyond simple payment acceptance. This could enable banks to carve out a stronger presence in the retail payments acceptance ecosystem and claim market share from EMIs.

Another respondent suggested that some FSPs may prioritize keeping transactions internal and try to minimize off-net payments as a competitive strategy to retain value within its network—while also recognizing that this was nigh impossible as it required defying the structural changes TIPS was designed to bring about.



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2.2 The New Interchange Model is Expected to Level the Playing Field

As noted, under the legacy bilateral system, an interchange fee was instituted between EMIs to offset the cost of off-net transfers for P2P payments. This established a receiver-pays model, where receiving EMIs paid sending EMIs. The rate of interchange varied across bilateral integrations in the market, with receiving EMIs paying between 0.2% and 0.8% of the transaction value to the sending EMI. While this same arrangement was followed for banks and EMIs, one EMI instituted a sender-pays model with banks. This meant that this specific receiving (EMI) charged sending institutions (banks) an interchange fee.⁵

With the launch of TIPS, FSPs have voluntarily agreed upon a standardized interchange fee whether payments are cross-network or off-network. For transactions between EMIs, the interchange fee has been established at 0.69%, paid by the receiving EMI to the sending EMI. For transactions between banks and EMIs (and vice versa), a zero-interchange fee has been adopted. A zero interchange fee has also been adopted for bank-bank transactions. Similarly, a zero interchange fee model has also been continued for P2M payments.

By standardizing cross-net interchange under a uniform receiver-pay model for EMI P2P payments and a zero-fee model for EMI and Banks, TIPS is likely to foster a level playing field between small and large EMIs, as well as between EMIs and banks. In a zero fee model, one potential downside is that EMIs with a larger consumer base are worse off as they are not able to recoup the costs of funds flowing out of their network to banks. This can reduce their incentives to invest in maintaining their extensive networks of end-users, particularly in marginal areas, which could ultimately hinder financial inclusion.⁶ It is important to note that a zero fee model, or lower consumer pricing, does not hurt banks in the same way as it would affect EMIs since banks are able to generate revenues from a diversified product portfolio. EMIs on the other hand have limited sources of revenue. See further discussion below on the potential implications of TIPS on financial inclusion).

⁵ We were not able to source information on what the interchange value was under the sender-pays model. We expect that this value varied for different bilateral integrations the EMI had with other banks.

⁶ This trade-off arising from interoperability between enhanced competition and lower prices, on the one hand, and reduced investment in FSP networks and depressed financial inclusion, on the other, has been observed in other markets. See [Brunnermeier, Limodio, and Spadavecchia 2023](#).

2.3 Views on Payment Settlement

Participants note that before the introduction of TIPS, the settlement landscape for digital payments in Tanzania varied significantly between small and medium merchants and larger, merchants. For the former, such as small shops and restaurants using mobile money platforms, settlements were already near real-time. This was made possible through the use of suspense or float accounts, which allowed merchants to receive funds immediately after transactions were completed, with reconciliation between both parties occurring at appointed intervals. However, for larger merchants, such as distributors and corporations, settlement times were slower, often requiring 24 to 48 hours. These delays arose from the reliance on trust accounts and manual end-of-day fund sweeps to merchant bank accounts.

2.4 Will TIPS Increase Financial Inclusion? FSPs Aren't So Sure

FSPs are uncertain about whether TIPS will meaningfully increase financial inclusion in Tanzania. While they recognize TIPS as a tool for enhancing operational efficiency and fostering interoperability, they question its capacity to drive financial deepening and account ownership, particularly in underserved rural areas. According to respondents, over 70 percent of Tanzanians already have an account, a rate achieved prior to the implementation of TIPS. However, rural populations continue to remain excluded from the formal financial system. Respondents believe that the absence of targeted incentives for rural populations to open accounts or engage with the financial system limits the broader inclusivity potential of TIPS.

Respondents argue that addressing the needs of rural populations requires more than just enhanced infrastructure. A lack of financial and digital literacy, combined with limited penetration of CICO agent networks, poses significant barriers to inclusion. As one respondent put it, "To serve the rural population, there needs to be more work on financial and digital literacy and broader penetration of agent networks. The BoT should subsidize both these efforts in partnership with market players." FSPs believe that TIPS alone cannot bridge the inclusion gap; complementary initiatives are needed to empower rural communities to adopt and benefit from DFS.

Nonetheless, some respondents highlight the potential of TIPS to support last-mile financial inclusion through increasing competition in rural markets and taking advantage of shared infrastructure. In terms of the former, one FSP remarked that with TIPS they now have an incentive to invest in rural areas as they can acquire merchants who can accept payments from any customer.

Another respondent drew a parallel with the telecommunications sector, where shared base stations managed by entities like Helios have alleviated operational burdens on individual providers. They suggested that TIPS could create a similar effect in payments. By enabling multiple service providers to operate in the same rural locations, TIPS could increase the availability of digital payment services in remote regions, addressing coverage gaps that hinder financial inclusion.



3. Conclusion

Instant Payment Systems, such as TIPS, can impact a range of outcomes, such as expanding financial inclusion rates, reducing cost of transactions and enhancing innovation in the financial sector. However, the [evidence](#) on these impacts is still limited, and mostly based on more developed DFS markets such as India and Brazil. It is therefore likely that broader impacts from TIPS will emerge as the payment system matures and the market behavior adjusts accordingly. These insights can be useful to ensure that the design of the payment system is aligned with FSP expectations and conducive to the overall DFS ecosystem in Tanzania.



Annex A:

List of organizations consulted

- Viettel Commerce Limited – HaloPesa
- M-Pesa Tanzania
- Airtel Money Tanzania Limited
- NMB Bank Plc
- CRDB Bank Plc
- AzamPay Tanzania Limited
- DigitalMobile (Fintech)
- Equity Bank Tanzania Limited

Annex B: Questionnaire

Tanzania Affordable Digital Finance Research Initiative (TADFRI)

RESEARCH STREAM 5: IMPACT OF INTEROPERABILITY ON DFS AFFORDABILITY

PARTICIPANT INFORMATION – SURVEY MODULE

DATE ____/____/____ (DD/MM/YY)

INTERVIEWER _____

INSTITUTION NAME _____

PARTICIPANT NAME, TITLE _____

BACKGROUND

According to FinScope Tanzania 2023, more than three-quarters of Tanzanian adults (76%) are included in the formal financial system, driven largely by the spread of mobile money accounts rather than traditional bank products (only 22.2% of adults use formal banking services). The latest Tanzanian National Financial Inclusion Framework (NFIF) 2023 - 2028 sets a target of 85 percent of the adult population having a formal transactional account by 2028. The NFIF also outlines priorities and enablers for the financial sector to advance financial inclusion. One of these enablers is access to affordable financial products and services.

Increasing affordability of digital financial services (DFS) is critical for Tanzania, where the cost of transacting using DFS is the highest in East Africa and among the highest in the world. The high costs are a major obstacle for individuals, businesses, and service providers, hindering progress and creating challenges for policymakers in advancing

the financial inclusion agenda.

OBJECTIVES

Innovations for Poverty Action (IPA) is currently pursuing a research initiative to investigate the cost of DFS in Tanzania, called the 'Tanzania Affordable Digital Finance Research Initiative (TADFRI)'. Alongside partners and key stakeholders, TADFRI aims to gather data and evidence on the factors influencing DFS affordability. This information can assist the Bank of Tanzania and other relevant parties in implementing evidence-based and collaborative strategies to decrease DFS costs. While the overall research program will pursue several lines of inquiry, the introduction of the Tanzania Instant Payment System (TIPS) has the potential to significantly impact financial transaction costs and prices in the country, especially when transacting off-net, or with an account-holder using a different FSP.

Beyond the benefits to individual-users, TIPS also was developed to enable FSPs to leverage interoperability, while helping to reduce administration and operation costs firms incur from bilateral FSP-to-FSP integration. . To gain insights into how TIPS may be redistributing FSP costs as interoperability transitions from a bilateral model to a hub model organized around a single switch, it is imperative to first understand the cost implications of developing and maintaining existing bilateral integrations, and, then, how FSPs see these costs shifting with their integration with TIPS.

To learn this, we will undertake a set of KIs with financial service providers, aggregators, fintechs, and trade associations to better understand how TIPS is redistributing integration costs, enabling other cost savings, potentially giving rise to new costs, and how these are being managed and passed on to consumers, merchants, and suppliers.

QUESTIONS

Market dynamics:

- Could you provide an overview of your customer base, including its distribution across urban and rural areas, as well as its gender composition? How does this reflect your position in the market?
- What do you see as the next major development in digital financial inclusion in Tanzania? How is your organization positioning itself to address this development?

Introduction of TIPS and Market reaction:

- Has your organization integrated with TIPS? Can you tell us about the integration process?
- How satisfied are you with this new payment system? How have other market players responded to its introduction?
- Now I would like you to consider how TIPS will impact the DFS ecosystem in Tanzania. What do you foresee as the major changes it will bring?

Probe: How do you expect it to affect off-net pricing of P2P and P2M?

Probe: In what ways do you think TIPS will affect the adoption and usage of DFS in the country?

Probe: What about market competitiveness in DFS?

- Before TIPS, how long were merchant settlements typically delayed? Do you expect this to change after the launch of the P2M use case, and what impact do you anticipate this will have on both merchants and Financial Service Providers?
- What strategies do you have to encourage adoption and usage of the TIPS infrastructure? Are you developing specific products or services to leverage TIPS, and if so, can you provide examples?
- Do you anticipate that FSPs will be able to expand their services to currently underserved areas for Digital Financial Services (DFS) after the introduction of TIPS and wide-scale interoperability? If so, how?

Cost of DFS and Bilateral Integrations:

- Prior to TIPS how did you manage bilateral integrations? What were the main costs incurred in building and maintaining this bilateral infrastructure?
- With the launch of TIPS, have you kept this bilateral infrastructure in place? Why or why not? Do you plan to maintain it?
- Under the pre-TIPS regime, was your FSP a net sender or receiver of payments? How did this affect your costs?
- [If net receiver] Under TIPS, how will you reallocate the costs that you previously incurred under the receiver pays model?
- [If net sender] Under TIPS, how will you make up for the lost revenue that you previously received under the receiver pays model?

Costs under TIPS

- What is the integration model with TIPS; are you integrated directly via APIs or is there an intermediary involved in the integration?
- How much has your organization invested in the integration with TIPS, including:
 - Investments into upgrading your core banking systems to directly integrate
 - Integration via intermediary (if applicable)
 - Annual subscription fee vs payments per transaction
 - Other costs?
- If there are cost savings through integration with TIPS, will your organization pass these costs savings as reduction in pricing for consumers, or will the savings be invested in product development etc?

Scheme Rules:

- Are you satisfied with the scheme rules under TIPS? Has the Bank of Tanzania (BOT) actively sought input from stakeholders like your organization during the development process?"
- Has the BoT supported you in integrating with TIPS? What has the support looked like?
- Any other questions or comments?