Innovations for Poverty Action

TANZANIA AFFORDABLE DIGITAL FINANCE RESEARCH INITIATIVE

Understanding Digital Financial Services Consumers in Tanzania

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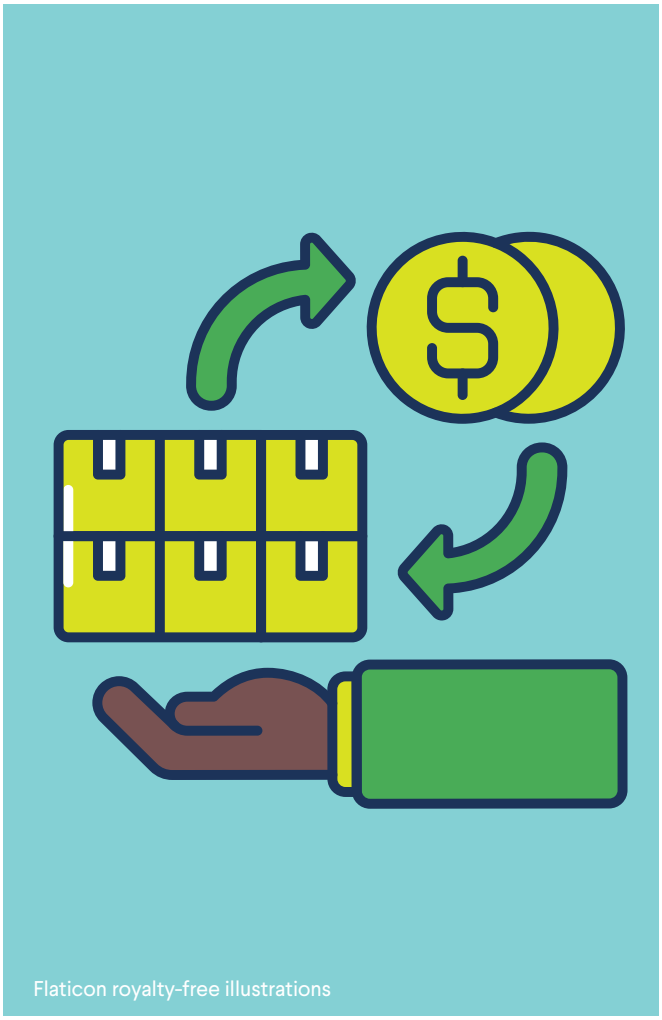
Executive Summary

This brief summarizes findings from a nationally representative household survey conducted under the *Tanzania Affordable Digital Finance Research Initiative* (TADFRI), implemented by Innovations for Poverty Action (IPA). We find that mobile money drives access to and use of digital financial services (DFS) among Tanzanian households, with significantly higher usage rates compared to bank accounts. When asked about barriers to mobile money use, consumers identify both supply- and demand-side factors as important obstacles. Supply-side barriers include high transaction fees (cited as a barrier by 58 percent of respondents)—the focus of this brief—as well as low acceptance of digital merchant payments by local retailers (47 percent of respondents) and distance to mobile money agents, particularly in rural areas (32 percent in rural areas versus 18 percent in urban areas). On the demand side, difficulty using mobile money (49 percent), concerns about safety and trust (39 percent), and preference for cash (29 percent emerge as the primary barriers. This is consistent with consumers' beliefs that cash is easier and cheaper to use than mobile money and banks for payment, though consumers rate cash poorly in terms of safety.

We explore whether consumer reports of high transaction costs reflect incorrect beliefs about actual pricing. Our analysis reveals that while knowledge of transaction fees is poor across all transaction types, consumers consistently underestimate the cost of cash-outs—the most common and most expensive transaction. On the other hand, consumers systematically overestimate the price of person-to-person (P2P) transfers and person-to-merchant (P2M) payments, both of which are used less frequently and cost three times less than cash-outs. These patterns may stem from historically higher prices of P2P transfers before the removal of the e-money levy on transfers and the slow adoption of P2M payments by local merchants. These findings, particularly consumers' underestimation of costs for the most common transactions, suggest that high costs represent a genuine barrier to use rather than merely inflated consumer perceptions.

Limited pricing knowledge may result from poor pricing disclosures. In a separate survey examining consumers' experiences with mobile money agents, we find low pricing transparency: while 77.7 percent of consumers reported that agents displayed official price lists in their shops, only 2.2 percent reported that agents proactively informed them about transaction fees. Additional IPA evidence suggests that provider websites often lack easily accessible, clear, and accurate pricing information. In a smaller pilot survey, we found that while most customers agreed that accessing account statements would be helpful, only 19 percent reported knowing how to access them, and only 4 percent had done so.. These challenges became evident in our own efforts to collect account statements from study participants; 50 percent of respondents who agreed to share their statements were unable to do so due to technical difficulties, even after repeated attempts with support from trained research staff. This places a substantial burden of price discovery on consumers in a context where most are not informed about service prices and can't access —or do not know how to access— their account statements.

Finally, we find suggestive evidence that consumers may respond differently to costs depending on whether they are framed as government taxes versus provider fees. In a hypothetical cash-out scenario with fixed total costs, consumers indicated they would prefer paying higher government levies than higher provider fees. We caution that these represent stated preferences based on a hypothetical scenario rather than revealed preferences.



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1. Introduction

DFS are a cornerstone of Tanzania's financial inclusion strategy, enabling widespread access to payments, savings, and transfers through mobile money, digital banking, and agent networks. As of 2021, over 52 percent of Tanzanians reported using formal financial services—up from just 17 percent in 2011—with mobile and digital platforms driving this transformation (Klapper et al., 2022). Yet despite these gains, the high cost of DFS remains a key barrier to further adoption and deeper usage, particularly among low-income and rural populations.

Pricing structures for DFS in Tanzania reflect both market dynamics and regulatory factors. On the consumer side, fees for basic transactions such as P2P transfers and cash-outs can be substantial. A 2023 comparative analysis by IPA found that Tanzanian consumers face some of the highest effective prices in East Africa (Adams et al., 2025). For example, at the time of that analysis, the cost of cashing out a typical amount averaged 8.6 percent of the transaction amount in Tanzania, compared to 2 percent in Kenya and 4.4 percent in Uganda. These high prices reflect not only provider fees but also significant tax components, including VAT, excise duties, and a mobile money levy.

Policy experiments, including the temporary suspension and subsequent modification of the mobile money levy, underscore the price sensitivity of Tanzanian consumers. Evidence from GSMA suggests that increases in transaction costs—whether from provider fees or taxation—lead to meaningful reductions in DFS usage (Penteriani & Fichers, 2023). After the introduction of the levy in July 2021, mobile money transaction volumes declined significantly. Although partial rebounds occurred after policy adjustments, recovery was slow. By March 2023, P2P transfers were still 30 percent lower, and cash-outs 60 percent lower relative to "expected values" without the levy calculated by GSMA (Ibid.). However, as of March 2025, total mobile money transaction volumes have fully recovered and increased 70 percent over their June 2021 (pre-levy) levels (Bank of Tanzania, 2025).

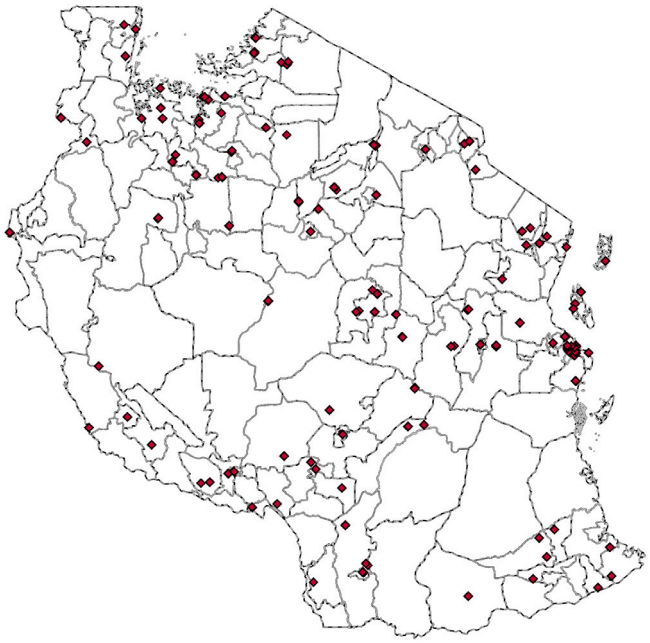
Against this backdrop, IPA's *Tanzanian Affordability Digital Finance Research Initiative* (TADFRI) aims to generate rigorous evidence on the drivers of DFS pricing and affordability. One of the TADFRI workstreams investigates consumers' perceptions of DFS pricing, including use of DFS, pricing knowledge and transparency, and preferences for different types of fees.

This brief shares key findings from this workstream focused on understanding DFS consumers in Tanzania. To generate nationally representative insights on DFS use, IPA conducted two large-scale household surveys between May 2024 and October 2024. The surveys targeted a sample size of 1,680 households across 29 regions of mainland Tanzania and Zanzibar. Given the study's focus on the use of DFS services, we restricted eligibility to households where at least one member owned a mobile money account and were able to independently access their transaction statements (i.e., without a mobile money agent). In practice, this implied sampling households with either (i) at least one Tigo Pesa user or (ii) at least one mobile money user who owns a smartphone.[1] Findings from this study should be interpreted in the context of these eligibility requirements which likely overestimate Tigo users and smartphone users relative to the overall population of DFS users.

1 We approached a total of 2,426 households, out of which 56% were screened to be ineligible for the study. We interpret this as an estimate of the population share of households who were eligible for the study, that is, households with either no mobile money user, or mobile money users who were unable to access their account statements (either because they did not use Tigo Pesa or they did not have a smartphone, which is necessary to access account statements from other providers). The share of eligible households varies substantially across rural and urban areas—only 37% of households were eligible in rural areas, as compared to 61% in urban areas.

To maintain the intended sample size, we replaced households where no individuals above 18 years of age met the eligibility criteria, where contact could not be established, or where household members declined to participate. Our sampling weights account for the total number of households surveyed per enumeration area (including replacements) and the total population in that enumeration area. This sampling approach was developed with guidance from the National Bureau of Statistics (NBS), which also reviewed and approved the final sampling plan to ensure alignment with national statistical standards. Our final sample comprises 1,227 households and 2,867 individuals above the age of 18. To assess whether our replacement strategy affected results, we re-ran all analyses restricted to originally sampled NBS households (excluding replacements). Results were not substantially different from those reported here.

Figure 1.
Location of Survey Respondents



Within each household, we collected individual-level data on mobile phone ownership, DFS usage patterns, provider access, and related attitudes and experiences. The survey also included collection of account statement data from major DFS providers, enabling cross-verification of self-reported behavior with administrative records. This dataset offers a unique window into the experience of Tanzanian DFS users and non-users alike, with rich demographic detail to support disaggregated analysis.

Section III presents key descriptive insights drawn from the survey data, highlighting patterns of DFS access and usage, reported barriers, knowledge and transparency around pricing, and consumer preferences related to how digital financial services are charged and taxed. Each section explores how these findings vary across key population subgroups - rural versus urban users and female versus male users.[2] Section IV concludes with a discussion of the policy implications of these insights.

2 Each table in this brief also reports the p-value of the difference between rural-urban (female-male) means to determine whether these differences are statistically significant. P-values above 0.10 indicate that differences are not statistically distinguishable from zero at conventional levels.

2. Findings

Findings are organized into five sections. Section A provides an overview of survey respondents and their characteristics. Section B explores patterns in DFS access and usage and how these patterns vary by key demographic segments. Section C describes common barriers toDFS usage. Section D explores issues around knowledge of DFS prices and pricing transparency, while Section E explores consumers fee preferences, particularly preferences for costs in the form of provider fees versus government taxes.

2.1 Respondent Characteristics

Table 1.
Sample Characteristics

	Overall	Rural	Urban	Rural-Urban *p-value*	Female	Male	Female - Male *p-value*
Household Characteristics							
Rural	0.73				0.71	0.75	0.00
Likelihood of Living below Poverty Line	0.60	0.62	0.56	0.00	0.66	0.54	0.00
Report good network coverage	0.46	0.39	0.64	0.00	0.44	0.47	0.39
Individual Characteristics							
Age	38.84	38.46	39.88	0.04	37.30	40.55	0.00
Female	0.53	0.51	0.56	0.00			
Above Primary School	0.29	0.24	0.41	0.00	0.26	0.32	0.01
Self-Employed	0.79	0.84	0.64	0.00	0.76	0.82	0.00
Occupation: Agriculture	0.68	0.80	0.30	0.00	0.69	0.67	0.30
Owns Phone	0.87	0.85	0.93	0.00	0.81	0.94	0.00
Owns Smart Phone	0.33	0.27	0.49	0.00	0.31	0.35	0.07
Observations	2867	1701	1166		1547	1320	

NOTE: This table reports means for outcomes listed across rows, for the overall sample (column (1)), rural/urban respondents (columns (2)-(3)) and females/males (columns (5)-(6)). Columns (4) and (7) report p-values from a regression of each variable on an indicator for rural and female respectively, with standard errors clustered at the individual level. Values above 0.10 indicate that rural/urban (female/male) differences are not statistically significant. Likelihood of living below povery line refers to the household's PPI score, defined as the probability that the household is below poverty line.

3 Tanzania's Poverty Probability Index was used to estimate poverty rates.

Table 1 presents demographic information about all households included in our sample, regardless of their use of digital financial services. Survey respondents were primarily drawn from rural households (73 percent), roughly corresponding to the 63 percent of Tanzania's overall population residing in rural areas (World Bank, 2025). 60 percent of households fall below the national poverty line, with a slightly higher poverty rate in rural areas (62 percent) than urban areas (56 percent). Mobile phone network coverage was a common concern, with just 46 percent of households reporting good network coverage. This varies substantially between rural and urban areas, with rural households 25 percentage points less likely to report good coverage than urban households.

Individual respondents were, on average, 38 years old and approximately evenly split by gender. Nearly one in three individuals had completed more than primary education, with higher education rates in urban areas than rural areas. The majority of respondents were self-employed (79 percent) and worked in agriculture (68 percent), with rural individuals more likely to be both self-employed and working in agriculture than their urban counterparts. Among individuals in our selected households—all of which all had at least one member with a phone, based on our eligibility requirements—mobile phone ownership is quite high, particularly among urban respondents. However, only one-third of respondents own smartphones, with urban respondents almost twice as likely to own smartphones as rural respondents. (Note that these smartphone ownership rates likely exceed population values given our study eligibility requirements.)

2.2 DFS Access and Usage

Table 2.
Access to DFS

	Overall	Rural	Urban	Rural-Urban *p-value*	Female	Male	Female - Male *p-value*
Has Bank Account	0.22	0.19	0.30	0.00	0.15	0.30	0.00
Has MM Account	0.89	0.87	0.94	0.00	0.84	0.94	0.00
Has MM Account in Own Name (among MM users)	0.72	0.70	0.76	0.01	0.67	0.76	0.00
Has > 1 Providers (among MM users)	0.67	0.68	0.64	0.19	0.61	0.72	0.00
Has an account with:							
Mpesa	0.45	0.44	0.47	0.45	0.42	0.47	0.07
Tigo	0.53	0.52	0.54	0.71	0.50	0.56	0.02
Airtel	0.40	0.39	0.42	0.44	0.37	0.44	0.01
Halotel	0.19	0.23	0.12	0.00	0.14	0.24	0.00
Observations	2867	1701	1166		1547	1320	

NOTE: This table reports means and standard deviations in parentheses for outcomes listed across rows, for the overall sample (column (1)), rural/urban respondents (columns (2)-(3)) and females/males (columns (5)-(6)). Columns (4) and (7) report p-values from a regression of each variable on an indicator for rural and female respectively, with standard errors clustered at the individual level. Values above 0.10 indicate that rural/urban (female/male) differences are not statistically significant. Provider usership was updated at endline for all individuals in the household (not just those individuals who were present and eligible to be surveyed).

Table 2 demonstrates that formal financial inclusion is driven by mobile money, with access exceeding 80 percent even in rural areas and reaching 94 percent in urban areas. Access to bank accounts is lower at 22 percent, with urban consumers 10 percentage points more likely to have a bank account than rural consumers. Both bank account and mobile money account ownership are significantly higher for men than women, with gaps of 10 to 15 percentage points. One-fifth of consumers with access to mobile money accounts use an account not registered under their own name, with rural and female consumers less likely to have an account under their own names than urban and male consumers.

In our sample, Tigo was the leading provider, with more than half of respondents reporting a Tigo Pesa account, followed closely by M-Pesa and Airtel Money. HaloPesa had the lowest penetration among leading providers. This distribution is not representative of actual market shares, as our eligibility requirements led to an over-representation of Tigo users.[4] We observed a relatively few differences by urbanicity or consumer gender, with the exception of HaloPesa, which is slightly more common among rural and male users.

Multi-homing—maintaining more than one active account—is common among mobile money users, with 67 percent of users maintaining accounts with multiple providers. This may be a strategic response to historically high off-network transfer fees. Men are 10 percentage points more likely to "multi-home" than women, while we observe no differences between urban and rural users. Additionally, respondents appear to coordinate with others in their transaction networks when selecting their primary provider. As shown in Table 3, respondents tend to send money to recipients who use the same mobile money provider—a trend especially pronounced among the three largest providers, where 74 to 80 percent of transfers are on-network. Even among users of HaloPesa, which has a smaller market share, the plurality of transfers (45 percent) still go to other HaloPesa users, though this proportion is notably lower than for larger providers.

Table 3.

Coordination in Provider Use within Networks

	Respondent's Main Provider			
	MPesa	Tigo	Aitel	Halo Pesa
Network Individual's Provider:				
MPesa	0.80	0.14	0.14	0.22
Tigo	0.13	0.70	0.10	0.14
Airtel	0.06	0.13	0.74	0.19
Halo Pesa	0.04	0.03	0.05	0.45
Observations	316	533	177	43

NOTE: This table reports the probability that respondents' network individuals - i.e., individuals the respondent sends or receives P2P transfers to or from - use M-Pesa, Tigo Pesa, Airtel Money, or Halo Pesa as a mobile money provider. Columns denote our survey respondents divded by the main provider they use. Within each column, rows denote the fraction of network individuals using each provider. Cells within each column add up to 100% or more because network individuals may use more than one provider.

4 Recall to be eligible, respondents must either have a smartphone or be a Tigo user, as only Tigo allows for account statement access via USSD.

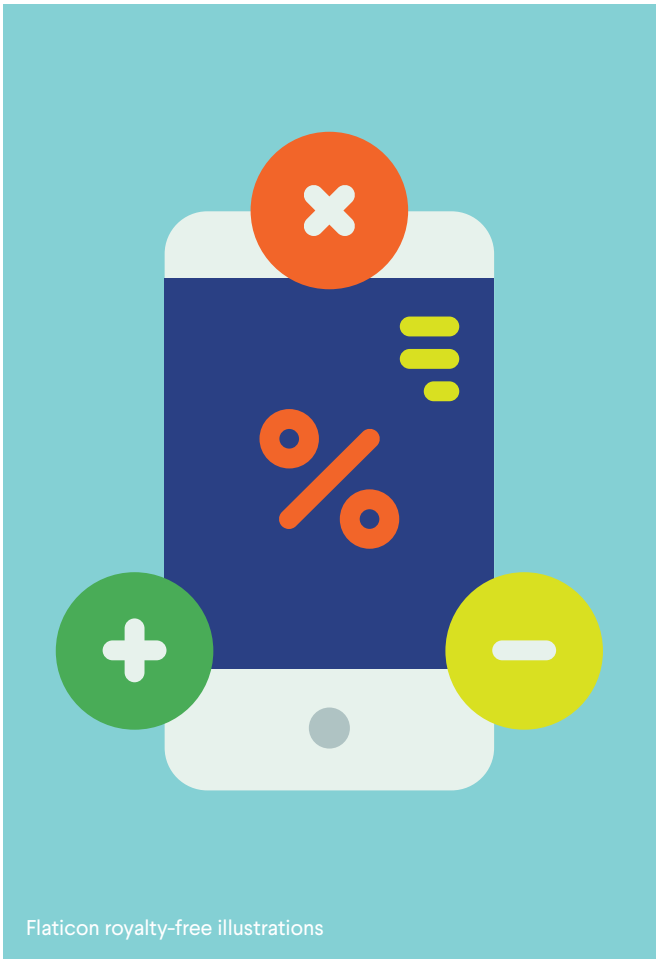
Focusing on mobile money accounts, we observe that consumers' accounts have typically been active for 5-6 years, with longer tenure for urban and male consumers than their rural and female counterparts. Account balances tend to be higher for urban consumers and, perhaps contrary to expectation, for female consumers.

Table 4 examines specific mobile money use cases, including agent access, cash-outs, P2P transfers, merchant payments, and wage or government payments. Panel A reports data from the baseline survey. On average, urban respondents reported a 7-minute travel time to reach a mobile money agent, but this time nearly doubled for rural users. 79 percent of respondents reported conducting a cash-out in the last 30 days, making cash-outs the most frequent use of mobile money services across rural and urban areas and among both female and male users.

Table 4.
DFS Use Cases 2018

	Overall	Rural	Urban	Rural-Urban *p-value*	Female	Male	Female - Male *p-value*
Panel A: Data from Baseline Survey							
Account Balance	11,404.67	9,060.15	16,024.70	0.03	11,590.00	11,225.10	0.91
Years since First Account	5.22	4.66	6.74	0.00	4.45	6.02	0.00
Distance to Closest Agent (mins)	11.26	13.01	7.49	0.00	11.21	11.29	0.95
Conducted Cash Out (last 30 days)	0.79	0.78	0.81	0.41	0.79	0.79	0.81
Can Conduct P2P Transfer Independently	0.58	0.57	0.62	0.22	0.49	0.67	0.00
Conducted P2P (last 30 days)	0.34	0.35	0.32	0.42	0.31	0.37	0.15
Received Wage or Govt Payment via MM (last 30 days)	0.10	0.09	0.10	0.92	0.06	0.14	0.01
Used MM to pay merchant (last 30 days)	0.12	0.08	0.21	0.00	0.10	0.14	0.23
Used P2M to Pay Merchant vs. P2P (cond. on using MM)	0.29	0.29	0.29	0.99	0.22	0.36	0.01
% Shops Accepting Payments via MM	0.17	0.15	0.23	0.00	0.17	0.17	0.78
Observations	1887	1121	766		1020	867	

NOTE: This table reports means and standard deviations in parentheses for outcomes listed across rows, for the overall sample (column (1)), rural/urban respondents (columns (2)-(3)) and females/males (columns (4)-(5)). Columns (4) and (7) report p-values from a regression of each variable on an indicator for rural and female respectively, with standard errors clustered at the individual level. Values above 0.10 indicate that rural/urban (female/male) differences are not statistically significant. Panel A reports summary statistics from a sub-sample of individuals randomly sampled from each sample household. Panel B reports summary statistics for individuals who (a) were eligible to access their transaction statements during the survey, (b) consented to do so and (c) whose statements could be accessed successfully in the field. By design, any user with a Tigo account, or a smartphone was eligible to have their statements accessed. Conditional on eligibility, 99% individuals consented to access their statements, but only 56% statements could be successfully accessed. Please refer to point # 4 in section D of the brief for further details.



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Just over half of respondents report being able to complete P2P transfers without assistance, with a statistically significant 18 percentage point gap between female and male users. Despite this, nearly one-third of respondents report having sent or received at least one P2P transfer in the past 30 days, with slightly higher rates among male users. Among recent senders, nearly half of transfers were to individuals in the same village or neighborhood, indicating that mobile transfers are commonly used even when in-person cash exchanges would be feasible. Just 10 percent of respondents report receiving either government support or wages via mobile money, with male consumers more than twice as likely to report this use case relative to female consumers.

Payment of merchants via mobile money remains relatively nascent and informal. Of all payments made at shops in the last 30 days by survey respondents, 12 percent were made via mobile money. Paying merchants via mobile money is substantially more common in urban areas (21 percent) than rural areas (8 percent). Of payments made via mobile money, just 29 percent were made via formal merchant accounts (e.g., Lipa Kwa Simu), with the remainder paid via standard person-to-person transfer. Digital merchant payments are more common among men (36 percent) than women (22 percent). Low usage rates may reflect limited adoption by merchants themselves—only 17 percent of shops were reported to accept digital payments, differing markedly between urban (23 percent) and rural areas (15 percent).

We also report observed measures of mobile money use in Panel B of Table 4, using data from transaction statements accessed during the survey. This data source reflects a more objective measure of active mobile money use, however comes from a limited sample of users whose statements could successfully be accessed during the survey (please refer to point #4 in section D for further details on statement access). Among 548 individuals whose statements could successfully be accessed at baseline, 83% had conducted any transaction in the last 30 days. Users conducted on average 16 transactions in the last 30 days. As in the self-reported data, active usership statistics vary significantly across urban and rural areas, with active usership significantly higher among urban users.

2.3 Barriers to DFS Use and Adoption

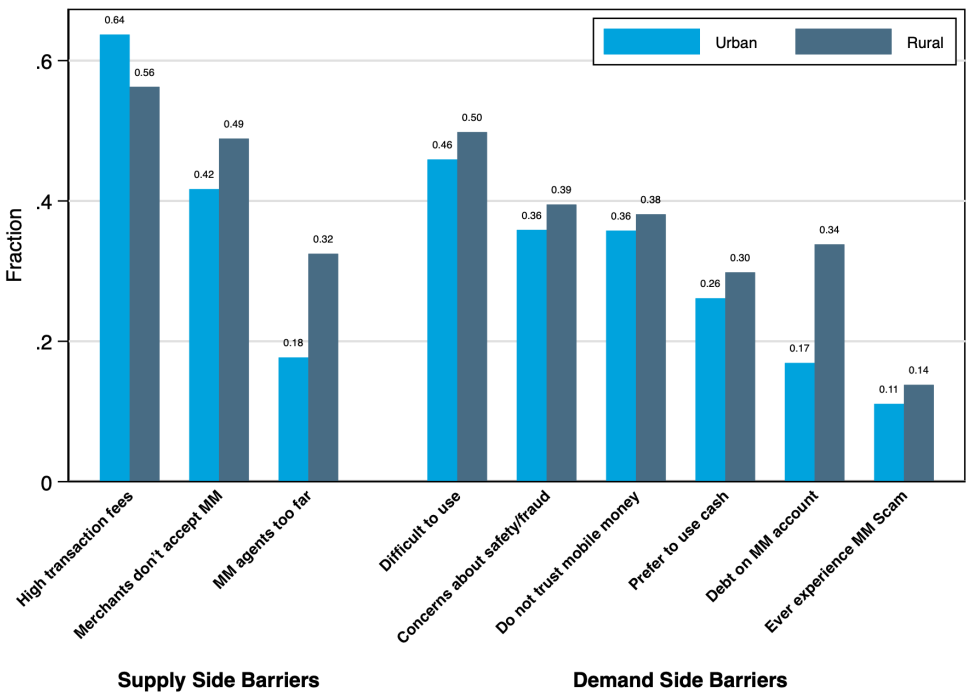
Next, we investigate factors which may restrict individuals' use of mobile money.

2.3.1 BARRIERS TO USAGE OF DFS

We asked respondents who use mobile money whether a set of factors restricts their use of mobile money (i.e., restricts "a little" or "a lot," versus "does not restrict at all").

High transaction fees is the most commonly reported barrier (64 percent in urban areas and 56 percent in rural areas), followed by a combination of demand-side barriers such as difficulty of use, safety and trust concerns, preference for cash, as well as supply-side barriers such as merchants' ability to accept digital payments and distance to agents. Among supply-side factors, low rates of acceptance of digital payments by merchants is reported by nearly half of respondents in both rural and urban areas, while distance to agents is more commonly reported by respondents in rural areas. Coverage quality represents another important supply-side barrier—as mentioned earlier, only 44 percent of respondents report that their main provider has good coverage in their location.[5] Few respondents reported experiencing a scam as a significant barrier to usage, with consistent rates across rural and urban consumers. However, male respondents are more likely to report experiencing a scam (17 percent), as compared to female respondents (9 percent). This may reflect actual differences in scam susceptibility, differences in scam awareness, willingness to report scams to surveyors, or differences in usage patterns between males and females.

Figure 2.
Challenges of Using Mobile Money



5 In addition to this self-reported measure of coverage quality, we are also able to assess coverage quality using an objective measure of the rate at which enumerators could successfully access transaction statements during field work.

Agent reliability also emerged as a potential barrier to usage: 43 percent of respondents had encountered a closed or non-functional agent in the last 90 days. Interestingly, urban users were 11 percentage points more likely to report this issue, which could indicate greater reliability issues in urban markets or simply greater use of mobile money agents by urban consumers. Agent reliability may be less of a concern in urban contexts where many agents are available; when respondents were asked what they did when an agent was closed or refused service, 70 percent of urban respondents reported proceeding to an alternate agent (instead of attempting to approach the same agent at a later time), compared to 59 percent of respondents in rural areas where fewer agents are available.

Table 5.
Agent Reliability

	Overall	Rural	Urban	Rural-Urban *p-value*	Female	Male	Female - Male *p-value*
MM Agent Closed/Refused Trn (last 90 days)	0.43	0.40	0.51	0.01	0.41	0.45	0.36
Goes to Alternate Agent (if Closed/Refused Trn)	0.62	0.59	0.70	0.01	0.60	0.64	0.25
Observations	1887	1121	766		1020	867	

NOTE: This table reports means and standard deviations in parentheses for outcomes listed across rows, for the overall sample (column (1)), rural/urban respondents (columns (2)-(3)) and females/males (columns (4)-(5)). Columns (4) and (7) report p-values from a regression of each variable on an indicator for rural and female respectively, with standard errors clustered at the individual level. Values above 0.10 indicate that rural/urban (female/male) differences are not statistically significant.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2.3.2 CONSUMER PERCEPTIONS

To better understand demand-side barriers, we asked users to rate physical cash, mobile money, and bank accounts on three dimensions: safety, ease of use, and cost. As shown in Figure 3, perceptions of mobile money and bank accounts are broadly similar, but differ markedly from views of cash. Both mobile money and bank accounts are seen as nearly twice as safe as cash. However, cash stands out as much easier to use and less costly. Fewer than half of respondents found either mobile money or bank accounts easy to use, though respondents ranked mobile money as significantly easier to use than bank accounts. Only 17 and 15 percent of respondents rated mobile money and bank accounts as inexpensive, respectively. This underscores the importance of both high prices and difficulty of use as barriers to using mobile money adoption.

Figure 3.
Consumer Beliefs about Payment Modes

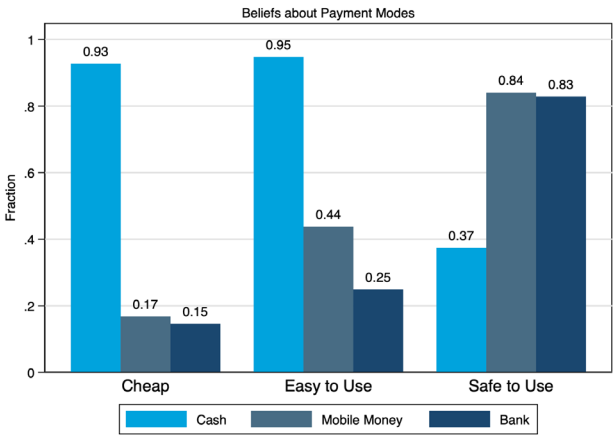
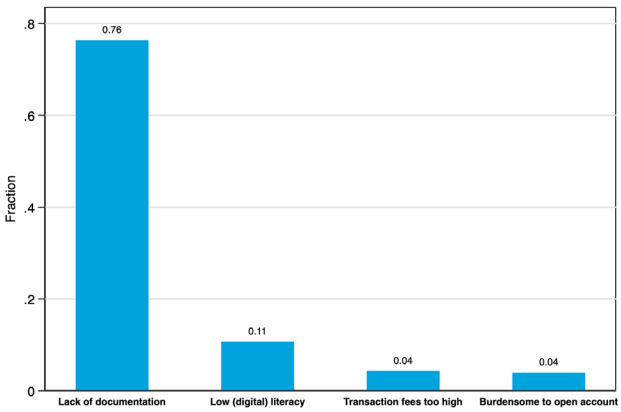


Figure 4 reports the top four reasons for not adopting mobile money among *non-adopters*—individuals who do not have any type of mobile money account.[6] Lack of documentation is the single, largest driver of non-adoption, as reported by 76 percent of rural respondents without an account. Lack of documentation is also the leading cause of consumers opening accounts in someone else's name. Low literacy or digital literacy levels are reported by 11 percent of rural non-adopters as a barrier to use. This includes individuals who decide not to adopt due to literacy concerns and individuals who attempt to adopt but are not successful because of literacy barriers. Transaction fees and a burdensome account opening process are reported as barriers for less than four percent of non-adopters.

Figure 4.
Reasons for Non-Use



NOTE: N = 59. This graph only includes respondents from rural areas who do not have any mobile money account, and were selected to be surveyed during baseline. We exclude urban respondents due to low sample sizes in this sub-category (N = 6)

6 Since we only surveyed a random subset of users and non-users in participating households, we collected reasons for non-adoption from a total of 65 respondents, out of which 59 were from rural areas and 6 from urban areas. We only report statistics from the rural sample given the low sample size from urban areas.

2.4 Pricing Knowledge and Transparency

The results thus far suggest that high transaction fees are a significant barrier to the use of DFS among existing account holders, though our self-reported data indicate that high fees are not a primary reason why non-adopters choose not to open accounts.[7] To understand further how high transaction fees affect actual use, we explore whether consumers are in fact knowledgeable about transaction fees. For instance, if consumers systematically over-estimate fees, this can discourage their use, and policies that improve pricing knowledge could increase use, as well as shift consumer preferences in favor of mobile money over cash. On the other hand, if consumers systematically under-estimate fees, policies that increase pricing knowledge could have the unintended effect of reducing preferences for and use of digital financial services.We asked respondents to provide their best estimate of the price of a set of typical, TZS 10,000 transactions: a cash-out with an agent, an on-network P2P transfer, an off-network P2P transfer, and a P2M payment. Fees include both provider fees and government levies. Using real fees from each respondents' primary provider, we then compared respondents' estimated fee with the actual fee, categorizing estimates as lower than the actual fee (i.e, less than the actual fee minus 20 percent), within 20 percent of the actual fee, or greater than the actual fee (i.e., greater than the actual fee plus 20 percent).

We learned that pricing knowledge is low across all transaction types; fewer than one-third of respondents estimated the fee within 20 percent of the actual amount. As shown in Table 6, cash-out fees, which in fact are much higher than that of transfers or payments, were typically underestimated (55 percent. However, respondents were more likely to correctly estimate cash-out fees (32 percent) than transfer or payment fees (11 and 13 percent, respectively). In contrast, respondents were more likely to overestimate transfer fees, particularly on-network transfer fees, and equally likely to both under- and over-estimate merchant payment fees.

Although accuracy rates are quite low across all transaction types, high accuracy estimating Cash-Out fees should not be surprising given that Cash-Out transactions are far more prevalent than P2P transfers and P2M payments; 79% of consumers reported conducting a Cash-Out in the last 30 days, followed by P2P (34%) and P2M (1%). Cash-Out transactions are also (at least) three times more expensive than other transaction types, though on average consumers are not fully aware of this difference as they tend to underestimate cash-out fees and overestimate less expensive transfer fees.

Differences in pricing knowledge by rural/urban status and gender are minimal, with the exception of knowledge of P2M fees—rural respondents are 7 percentage points less likely than urban respondents to correctly estimate P2M fees.

7 We also find that ease of use and the low prevalence of merchant payments are important barriers—however, these are outside the scope of this brief. For more on adoption of digital merchant payments, see Roessler & Walsh (2022).

Table 6.
Knowledge of DFS Pricing

	Did Transaction last 30 days	Estimated Fee:			Actual Fees	
		LOWER than actual fee	within ± 20% of actual fee	HIGHER than actual fee	TZS	% of Txn Amt
Cash Outs	0.77	0.55	0.31	0.15	1586.00	0.16
P2P Transfers (on-net)	0.38	0.33	0.11	0.57	345.00	0.03
P2P Transfers (off-net)	0.38	0.35	0.11	0.54	390.00	0.04
P2M Payments	0.01	0.52	0.15	0.33	566.67	0.06

NOTE: This table reports the fraction of respondents who reported the total price of a 10,000 TZS transaction to be less than 20%, between -20% and 20%, and more than 20% than the actual fees. 2.5% respondents reported that they "Don't Know" Cash-Out Fees, followed by 5% for P2M Fees, and 7.2% and 11.5% respectively for on- and off-net P2P Transfer Fees. Total price is defined as the sum of provider fees and government levies.

Why is pricing knowledge so low? Several factors can contribute to consumer's incorrect information about prices, including but not limited to low (digital) literacy levels, infrequent usage, and limited transparency from providers, agents, or the government. Consumers can learn about pricing through various channels, including: (1) confirmation screens before transactions and SMS receipts after transactions, (2) provider websites and social media, (3) account statements, and (4) mobile money agents. We provide some suggestive evidence of imperfections across these sources.

2.4.1 CONFIRMATION SCREENS BEFORE TRANSACTIONS AND SMS RECEIPTS AFTER TRANSACTIONS

In an audit of mobile money transactions conducted by IPA, researchers found that mobile money providers nearly universally provided confirmation screens indicating transaction fees prior to processing transactions and sent automated receipts to customers via SMS after transactions were executed (Adams et al., 2025). We have limited evidence of consumers' use of these tools for pricing information in Tanzania, but in a consumer survey carried out by IPA in Kenya, researchers found that the vast majority of consumers learn about their transaction fees through either SMS receipts (72 percent) or confirmation screens (25 percent), with only 3 percent reporting other sources of pricing information (Blackmon et al., 2021).

2.4.2 PROVIDER WEBSITES AND SOCIAL MEDIA

In an multi-country audit of mobile money pricing information provided on providers' webpages, IPA research found that providers fairly commonly either do not make prices available on their website (14 percent) or make pricing information difficult to find (13 percent took trained auditors more than three minutes of searching before pricing information was found) (Adams et. al., 2025). Related ongoing work by IPA tracking financial service provider fees has identified several challenges with pricing information available on provider websites, including missing pricing data, unclear or incomplete disclosures, inconsistent formats, and failure to remove outdated pricing information.

2.4.3 ACCOUNT STATEMENTS

In pilot surveys conducted prior to launching our main survey, we explored whether individuals (i) find it useful to access their account statements, (ii) know how to access their account statements, and (iii) have ever accessed their account statements. Among 26 mobile money users in our sample, 23 users agreed that accessing account statements would be helpful, yet only 5 users reported knowing how to access them. Only 1 individual out of the 26 had ever accessed their statement.[8]

In the main study, we found that only two providers—Tigo Pesa and Halotel—explicitly report service charges on their account statements. Only one provider—Tigo Pesa—made it possible to request full account statements via USSD menus; all other providers only provided access to statements to users who requested them using their smartphone application. We attempted to access statements among individuals who could independently access their statements (i.e, Tigo users or users with smartphones). However, even with the help of surveyors trained in accessing these statements, 50 percent of respondents who agreed to access their statements for research purposes were unable to do so due to technical difficulties — 60 percent of these cases were due to network problems, followed by 17 percent due to difficulties with smartphone applications (among smartphone users) and in 15 percent of cases, respondents could not recall their account passwords (among basic phone users).Issues accessing account statements persisted even after a second attempt by our survey team, suggesting that difficulty accessing account statements is not due to temporary network downtime alone. Further investigation to evaluate the root cause of such technical difficulties would be needed to provide concrete policy interventions.

These practices stand in contrast with the Bank of Tanzania's 2019 Financial Consumer Protection Regulations, which state that monthly account statements must be provided to consumers and must include "fees and penalty charged" (Bank of Tanzania, 2019). Providers should ensure account statements are consistently accessible to all consumers, regardless of the type of device they use and make the process of recovering forgotten passwords easier. Account statements should always include clear information of the fees paid per transaction. Periodic audits can be used to monitor for these outcomes.

2.4.4 MOBILE MONEY AGENTS

In a separate study by IPA, a survey of Tanzanian customers at mobile money agents found that official price lists were displayed at agent shops 77.7 percent of the time, but only 2.2 percent of agents informed consumers of fees without prompting (Adams et al., 2025). This suggests significant scope for improving pricing transparency among customers.

Flaticon royalty-free illustrations

8 These surveys were conducted in two locations in Dar es Salaam. 23 households were selected via a random walk approach.

2.5 Provider Fee versus Government Tax Preferences

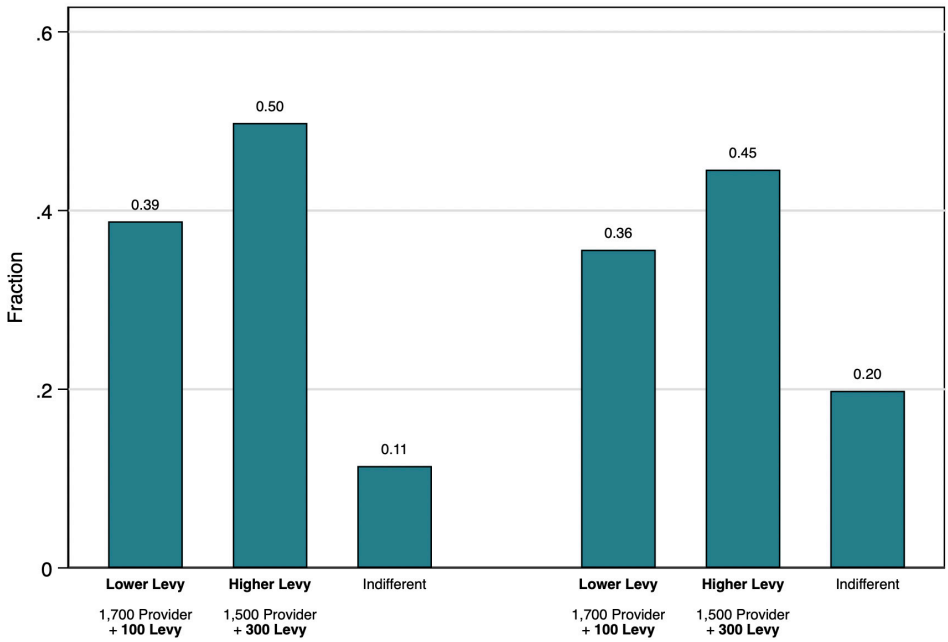
To understand the role of taxation on adoption and use of mobile money, it is important to consider whether consumers may respond differently to costs presented as provider fees as opposed to government taxes.

We elicited respondents' preferences for paying fees to the provider (in the form of provider tariffs) versus the government (in the form of levies) for a hypothetical TZS 10,000 cash-out. Respondents were given a choice between (a) paying a TZS 1,700 provider fee + a TZS 100 levy, (b) TZS 1,500 provider fee + a TZS 300levy, and (c) expressing indifference between the two. The total fee amount—1,800 TZS—was the same across choices (a) and (b), so a consumer without any specific preference for paying the provider versus the government should select the indifferent option. Note that the total fee in this hypothetical example is somewhat higher than the actual cost, and the real-world split between provider fees and government levies falls between the options presented: for instance, M-Pesa charges TZS 1,450 in provider fees and TZS 128 in government levies, totaling TZS 1,578 for this transaction.[9] We interpret choice (a)—paying a lower levy—as a preference for provider fees and choice (b)—paying a higher levy—as a preference for government levies.

As shown in Figure 5, 45 percent of rural respondents and 50 percent of urban respondents indicate a preference for government levies, while 36% of rural respondents and 39% of urban respondents indicate a preference for provider fees. 20 percent of rural respondents and 11 percent of urban respondents expressed indifference between the two options.

Figure 4.

Reasons for Non-Use



9 In reality, the total government tax is greater than the TZS 128 levy indicated in M-Pesa's price list, as VAT and Excise taxes are included in the TZS 1,450 provider fee.

2.6 Implications for tax policy design

These patterns suggest that consumers may respond differently to price changes depending on whether they are driven by provider fees or government levies, with implications for tax policy design. Surprisingly, our data suggests that consumers appear to prefer costs framed as government taxes rather than provider fees. This indicates it may be more efficient to collect taxes on mobile money services through direct levies on mobile money transactions rather than through corporate taxes on providers, which are likely passed on to consumers via higher fees. However, we caution that our data represent self-reported stated preferences, not real-world revealed preferences, and note that these findings contrast with recent experience in Tanzania, where the introduction of a government levy on mobile money transactions triggered significant public pushback.

3. Conclusions

We conclude this report with four key takeaways:

1. We document the presence of both supply and demand side barriers to DFS use in Tanzania. Prominent supply-side barriers include high transaction fees, poor coverage quality, low adoption of merchant payments, distance to mobile money agents and poor agent reliability. On the demand side, consumers express concerns over safety and fraud and indicate a strong preference for using cash over mobile money—**consistent with beliefs that cash is cheaper and easier to use than mobile money and banks.**

2. Pricing knowledge among consumers is low, and varies by transaction type. Consumers are almost three times more likely to correctly state the price of a hypothetical TZS 10,000 cash-out (32 percent), than a TZS 10,000 P2P transfer or P2M payment (13 percent). Most consumers underestimate the price of cash-outs, while they tend to overestimate the price of P2P transfers and P2M payments.

3. We find suggestive evidence that pricing transparency may contribute to limited pricing knowledge among consumers, particularly regarding consumers' ability to access their account statements and learn about prices through mobile money agents. In a supplementary exercise we conducted to access users' account statements, we found that (1) only Tigo-Pesa and Halotel report service charges for accessing account statements, (2) only Tigo-Pesa allows users with basic phones to access their account statements via the USSD menu—other providers require users to either have a smartphone, or visit an agent to access their statement, and (3) among users who could access their statements using their phones, even a trained team of surveyors could only access statements 50 percent of the time, owing primarily to network issues (which persist over multiple days), followed by app-related difficulties and user recall issues.

4. Finally, we also report suggestive evidence that consumers may vary in their preferences for paying higher government levies versus higher fees to providers. When presented with a hypothetical TZS 10,000 cash-out with a TZS 1,800 transaction fee, 46 percent of consumers chose to pay a higher government levy (TZS 1,500 in fees and TZS 300 as a levy), 37 percent chose to pay a higher provider fee (TZS 1,700 in fees and TZS 100 as a levy), and only 17 percent reported that they were indifferent between the two choices—the option that all consumers would have selected if there was indeed no preference for taxes versus fees. These findings rely on stated rather than revealed consumer preferences and stand in contrast to the recent pushback from Tanzanian consumers to the introduction of government levies on mobile money services.

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