



2023

ANNUAL REPORT

NATIONAL PAYMENT SYSTEMS



NATIONAL PAYMENT SYSTEM ANNUAL REPORT FOR 2023

Governor

Bank of Tanzania

16 Jakaya Kikwete Road

P.O. Box 2303

40184 DODOMA

Tel: +255 22 223 3183-7

Fax : +255 22 223 4194

<https://www.bot.go.tz>

TABLE OF CONTENTS

List of Tables	iii
List of Figures	iii
List of Charts	iv
List of Abbreviations	v
Definition of key terms	vi
FOREWORD	x
EXECUTIVE SUMMARY	xi
CHAPTER ONE	1
1.0 OVERVIEW OF TANZANIA’S PAYMENT SYSTEMS	1
1.1 Bank’s Mandate and Payment System Structure	1
CHAPTER TWO	6
2.0 DEVELOPMENTS AND PERFORMANCE OF PAYMENT SYSTEMS	6
2.1 Payment Systems Developments	6
2.2 Performance of Systemically Important Payment Systems.....	13
2.3 Performance of Alternative Delivery Channels (ADCs)	22
3.0 MARKET ANALYSIS & INTERVENTION	37
3.1 Introduction.....	37
3.2 Study Findings	38
3.3 Recommendations	39
3.4 Policy Intervention.....	39
CHAPTER FOUR	41
4.0 OVERSIGHT ACTIVITIES	41
4.1 Introduction.....	41
4.2 Payment System Licensing Procedures	41
4.3 Procedures for Approval of Payment System Instruments.....	41
4.4 Payment System Providers	42
4.5 Electronic Money Issuers.....	42
4.6 Offsite Surveillance	42
4.7 Onsite Oversight Activities.....	42
4.8 Public Awareness on Payment System	43

4.9	Risk Based Oversight Framework.....	43
CHAPTER FIVE	45
5.0	EMERGING TECHNOLOGIES	45
5.1	Introduction.....	45
5.1	Cryptocurrencies and Central Bank Digital Currency	45
5.2	Supervisory Technologies (SupTech)	46
5.3	Cloud Computing	46
5.2	5G Internet Services	46
5.4	Digital Identity.....	46
5.5	Regulatory Standards	47
5.6	Distributed Ledgers Technologies.....	47
6.0	ANNEXURES	48
	Annexure A. TISS transactions.....	48
	Annex B: TIPS Data	48
	Annex C: TACH Transactions.....	48
	Annex D: Regional Transactions	49
	Annex E: Card Records	50
	Annex F: Money Remittance	51
	Annex G: Cross-Border Fund Transfer	51
	Annex H: Mobile Money Indicators.....	52
	Annex I: Point of Sales (POS) Machines.....	55
	Annex J: Internet Banking Transactions.....	55
	Annex K: Merchant Statistics	56
	Annex L: Mobile Banking	59
	Annex M: Non-Bank Payment System Providers	60
	Annex N: Electronic Money Issuers.....	64

List of Tables

Table 1: Payment System Indicators 4

Table 2: EFT interbank transfer fees 39

Table 3: TISS Transactions charges 39

List of Figures

Figure 1: Payment System 5

Figure 2: Cost Model 37

List of Charts

Chart 1: TISS Transactions in TZS	14
Chart 2: TISS Transactions in USD	14
Chart 3: TIPS Transactions in TZS	16
Chart 4: Trend of EFTs.....	17
Chart 5: TZS Denominated Cheque	18
Chart 6: Trend of USD Cheque Transactions.....	18
Chart 7: EAPS Transactions in TZS	19
Chart 8: EAPS transactions in KES	20
Chart 9: EAPS Transactions in UGX	21
Chart 10: Trends of card transactions	25
Chart 11: Point of Sale Transactions	26
Chart 12: P2P transactions	28
Chart 13: P2B transactions	28
Chart: 14 Wallet to Bank Transactions	29
Chart 15: Bank to wallet Transactions	29
Chart 16: Digital Credit	31
Chart 17: Digital Saving.....	31
Chart 18: EMIs Merchant Transactions	32
Chart 19: Banks Merchant Transactions	33
Chart 20: Internet Banking	34

List of Abbreviations

AML-CFT	Anti-Money Laundering and Combating the Financing of Terrorism
CBPR+	Cross-border Payments and Reporting Plus
CSPCS	Communication, Security and Payment Card Standards (CSPCS)
EFT	Electronic Fund Transfer
EMI	Electronic Money Issuer
FSPs	Financial Service Providers
ISO20022	International Standard Organization (For electronic data interchange between institutions)
MMO	Mobile Money Operators
MNO	Mobile Network Operators
PFMI	Principles for PFMI
PSP	Payment System Providers
RBOF	Risk-Based Oversight Framework
RTGS	Real Time Gross Settlement
SIPS	Systemically Important Payment Systems
TACH	Tanzania Automated Clearing House
TANQR	Tanzania Quick Response Code
TIPS	Tanzania Instant Payment System
TISS	Tanzania Interbank Settlement System
USSD	Unstructured Supplementary Service Data

Definition of key terms

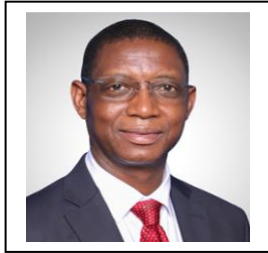
Item	Descriptions
Aggregators	Service providers with existing integrations to several Electronic Money Issuers (EMIs) and/or payment system providers to facilitate billing, technical, and operational relationships and interfacing across operators via one link to the aggregator, as opposed to separate integrations with each provider.
Automated Tellers Machines (ATM)	This electromechanical device permits authorized users, typically using machine-readable plastic cards, to withdraw cash from their accounts and/or access other services, such as balance enquiries, fund transfers, or deposit acceptance. ATMs may be operated online or offline with real-time access to an authorization database.
Bank agent	The Guidelines on Agent Banking for Banks and Financial Institutions, 2017 defines an agent as a person contracted by an approved bank or financial institution to carry out agent banking business on behalf of the approved bank or financial institution.
Contactless cards/Near Field Communication	cards that do not require physical contact between the card and the card reader or terminal.
Credit card	A card indicating that the holder has been granted a line of credit. It enables the holder to make purchases and/or withdraw cash up to a prearranged ceiling; the credit granted can be settled in full by the end of a specified period or can be settled in part, with the balance taken as extended credit. Interest is charged on the amount of any extended credit and the holder is sometimes charged annual fees.
Debit card	Card enabling the holder to have his purchases directly charged to funds on his account at a deposit-taking institution (may sometimes be combined with another function, e.g. that of a cash card or cheque guarantee card)
E-wallet or E-money	It is the value stored electronically in a device such as a chip card or a hard drive in a personal computer.
Financial Service Provider	an institution licensed to provide payment system services and is licensed, regulated and supervised by the Bank.

Global System for Mobile Communication (GSM)	An open, digital cellular technology used for transmitting mobile voice and data services (call and messages). It is the most common standard for mobile communication.
International brand card	Payment card brands are issued by foreign or domestic financial institutions but have global recognition. These include Visa, MasterCard, American Express (Amex), and Union Pay.
Internet banking	An electronic payment system that enables customers to conduct financial transactions on a secure website operated by a financial service provider (FSP).
Interoperability	a situation in which payment instruments belonging to a given scheme may be used in other countries and in systems installed by other schemes. Interoperability requires technical compatibility between systems but can only take effect where commercial agreements have been concluded between the schemes concerned.
Local brand card	Cards that are locally issued by a local financial institution for usage within the country.
Merchant	A person or business that provides goods and services to customers in exchange for payment. Merchants can operate retail and wholesale shops, supermarkets, gas and oil stations, airlines, hotels and restaurants, pharmacies and online marketplaces. Domestic merchants offer their services within the country, while international merchants provide services domestically and across borders.
Mobile banking	The World Bank defined mobile banking as the connection between a mobile phone and a personal or business bank account. Mobile banking enables customers to access banking services through mobile devices, facilitating transactions like balance inquiries, fund transfers, bill payments, airtime purchases, and occasionally, loan applications or new account openings

Mobile Money Agents	An agent is an entity contacted by a payment system provider to provide services on behalf of the payment system provider under the agency agreement. Agents are divided into retail and wholesale agents. Their primary functions include managing cash-in and cash-out operations, which involve depositing funds into the mobile money system and facilitating withdrawals as necessary. Moreover, agents often assist in onboarding new customers. Commissions serve as the typical compensation structure for agents providing these services.
Mobile Network Operators (MNOs)	A company licensed by the Tanzania Regulatory Authority (TCRA) to provide telecommunications services through mobile devices.
Mobile payment	Mobile payment involves the provision of financial services through a mobile phone device. For this report, the term refers to services issued by Mobile Money Operators (MMOs) through mobile phones. It includes payment services conducted through a mobile device, such as person-to-person transfers (P2P), customer payments to businesses (C2B), business disbursements to customers (B2C), bill payments and tax collections."
Money Transfer Operators (MTOs)	This means a financial service provider that facilitates funds transfer across national boundaries. MTOs typically offer services such as wire transfers, online money transfers, and cash pickup options, providing convenience and accessibility for sending and receiving funds across borders.
Payment system provider	"Payment system provider " means a body corporate that provides electronic payment services licensed under this Act;
Point of Sale (POS)	Electronic devices are used to process card payments at the point at which a customer makes a payment to a merchant in exchange for goods and services. The POS device is a hardware (fixed or mobile) device that runs software to facilitate the transaction. The hardware used may vary.
Prepaid card	A card on which value is stored, and for which the holder has paid the issuer in advance. See also electronic purse, limited-purpose prepaid card, multipurpose prepaid card, stored value card.

Remittances	Remittance means “send back”. In terms of money remittance, it is the sending of money to a recipient who lives abroad. Remittances are household incomes from foreign economies, arising from the temporary or permanent movement of people to those economies. Remittance consists of funds transferred cross-border by individual residents who have migrated to a foreign jurisdiction or by short-term workers employed in an economy where they are not residents.
Virtual card	A virtual card is a digital payment card, stored in mobile wallets or banking apps, that offers a secure and convenient means of conducting online transactions. It is limited to one-time use or limited-time validity, which reduces the risk of unauthorized use. The card is issued by card schemes, integrated into mobile wallets, and used to facilitate contactless payments.
Unstructured Supplementary Service Data (USSD)	A protocol used by GSM mobile devices to communicate with the service provider’s computers/network. This channel is supported by all GSM handsets, enabling an interactive session consisting of a two-way exchange of messages based on a defined application menu.
Virtual Private Network (VPN)	A private data network that makes use of the public telecommunication infrastructure, maintaining privacy using a tunneling protocol and security procedures. It enables a computer to send and receive data across shared or public networks as if it is directly connected to the private network, while benefiting from the functionality, security, and management policies of the private network.

FOREWORD



This Second Annual Payment System Report provides an insightful overview of the significant developments and performance of payment systems in Tanzania for the year ended December 2023.

During the year, there was a notable surge in the adoption of digital payments, both retail and large-value payment platforms, through our Systemically Important Payment Systems (SIPS) and regional payment systems, namely the East African Payment System (EAPS) and the SADC-RTGS.

In addition, through close collaboration with payment system stakeholders, the Bank continued to implement initiatives to foster a cash-lite agenda. This included encouraging the widespread adoption of digital payment solutions, particularly for merchant collections and disbursements. This momentum in digitalization was underpinned by the safety, reliability and efficiency of the payment systems.

In a bid to ensure accessibility and affordability of payment services, the Bank in collaboration with stakeholders provided guidelines on fees and charges for digital transactions involving both retail and large-value transactions. These measures aim to increase usage of digital payments, promote financial inclusion and support the transition towards a more inclusive and efficient payment ecosystem in the country. The Bank continued to uphold a robust supervisory framework to safeguard the payment systems against potential risks, thereby maintaining trust through their reliability, efficiency, security, and inclusiveness.

Our strategic priorities remain centered around key objectives, including enhancing public awareness, fortifying consumer protection measures, fostering innovation in adaption of digital products, preserving the affordability of payment systems, and adhering to compliance standards. These initiatives collectively aim to reinforce the resilience and efficiency of the payment infrastructures while promoting broader objectives of financial inclusion, digital transformation, financial stability and economic growth in general.

Emmanuel M. Tutuba
Governor
BANK OF TANZANIA

EXECUTIVE SUMMARY

In 2023, the financial sector's stability was maintained, which was contributed by, among other things, the smooth operations of all systemically Important Payment Systems (SIPS), including TISS, TACH, and TIPS.

Transactions denominated in local currency processed through TISS recorded a notable increase in both volume and value, rose by 7.28 percent and 23.39 percent to 4.11 million and TZS 256,028 billion, respectively. Similarly, transactions denominated in US Dollars through TISS increased by 31.13 percent in terms of volume and 9.09 percent in value, reaching 545,161 transactions worth USD 27,501.77 million.

Electronic Fund Transfers (EFT) experienced growth, with transactions increasing by 13 percent in volume and 19 percent in value to reach 19.10 million transactions worth TZS 14,422.41 billion.

While the volume of local Cheque transactions decreased by 11 percent to 485,972, the value decreased by 4 percent to TZS 1,893.47 billion, indicating a gradual shift towards digital payment systems.

Equally, the volume and value of USD-denominated cheques decreased by 18 per cent and 19 per cent to 88,041 transactions and USD 192.41 million, respectively.

Interoperable retail transactions processed through TIPS increased, reaching 235.04 million transactions worth TZS 12,270.47 billion. The number of financial service providers registered on TIPS increased to 45, up from 34 in 2022.

Nineteen new non-bank payment system providers were licensed in 2023, bringing the total number to ninety-two (92), while the number of licensed electronic money issuers remained at six (6), the same as reported in 2022.

Merchant payments experienced significant adoption, with the number of merchants increasing by 68 percent to 657,346. Transaction volume increased by 80.98 percent to 301,21 million, while the value rose by 48.04 percent to TZS 17,918.12 billion. This growth was facilitated by a conducive regulatory environment, especially the elimination of transaction levies on merchant payments.

Cross-border fund transfers facilitated by banks and financial institutions through SWIFT experienced a decline trend, with transaction volume and value decreasing by 53.03 percent and 44.73 percent, respectively. In contrast, fund transfers facilitated by Electronic Money Issuers (EMIs) to the EAC and SADC regions saw substantial growth. Inflow volume and value increased by 42.17 percent and 68.03 percent, respectively. Outflow volume and value also saw significant increases of 61.58 percent and 78.92 percent, respectively.

Remittances terminating through mobile phones decreased, with incoming transactions falling by 10.50 percent in volume and 6.39 percent in value, resulting in a total of 3.6 million inflow transactions worth TZS 980.46 billion. In contrast, incoming remittances terminating through bank accounts increased significantly, rising by 67.66 percent to 839,734 transactions worth TZS 1,405.41 billion, a 4.5 percent increase in value. Additionally, outgoing remittances processed through banks saw a substantial increase of 40.55 percent, totaling TZS 899.70 billion compared to TZS 640.14 billion in 2022.

Mobile payments rebounded from a negative growth of 0.79 percent in 2022 to a growth rate of 40.78 percent in terms of volume and 35.33 percent in values. The highest growth was registered in person-to-person (P2P) transactions.

There was also impressive adoption of digital financial services enabled by banks in collaboration with EMIs. These digital platforms enable communities to save and access microloans. In line with various government initiatives to improve affordability, the Bank implemented measures to ensure Tanzanians afford access to formal digital payments and are protected against unreliable lenders.

Efforts to create a conducive environment for digital payments included reduction of fees and charges, reduction of transaction levies for digital transactions, strengthening of risk management systems for non-bank PSPs, and increasing use cases in digital products. Additionally, TANQR was implemented to enable merchants to receive payments from various networks via a standardized quick response code. Measures were also taken to minimize losses from cyber-attacks, including revising contactless card limits, alerting the public on financial scam messages, and developing cloud computing guidelines. In addition, the TANQR Guidelines were published to facilitate seamless adoption of the standards.

Therefore, in 2023, the payment systems, including TISS, TACH, and TIPS, demonstrated strong performance in electronic fund transfers processing. Digital merchant payments surged, partly due to supportive regulatory reforms and the elimination of transaction levies. In 2023, cross-border transactions processed through SWIFT decreased while fund transfers through EMIs in the EAC and SADC regions recorded impressive growth, resulting in a positive net transfer. In addition, mobile payments rebounded, driven by the uptake of person-to-person transactions; the Bank implemented TANQR and reduced fees on digital payments to foster usage.

CHAPTER ONE

1.0 OVERVIEW OF TANZANIA'S PAYMENT SYSTEMS

1.1 Bank's Mandate and Payment System Structure

Box 1: Bank's Mandate

Under the Bank of Tanzania Act 2006 and the National Payment Systems (NPS) Act 2015, the Bank of Tanzania is assigned the roles to regulate, monitor, and supervise payment, clearing, and settlement systems and relevant products and services with the broader objective of safeguarding the safety, reliability, and efficiency of payment systems in Tanzania. In executing this mandate, the Bank issues regulatory tools, conducts supervisory activities of payment system providers and monitors the performance of internal and regional payment systems.

The Bank of Tanzania develops, maintains, and oversees the performance of the payment systems to ensure their optimal efficiency and reliability. The internally developed and managed payment systems comprise of the Tanzania Interbank Payment

System (TISS), Tanzania Clearing House (TACH), and Tanzania Instant Payment System (TIPS). These payment systems facilitate the exchange of goods and services by providing a means for completing both commercial and public transactions conducted domestically and internationally. Also, the Bank oversees the performance and integrity of retail payment systems facilitated by banks and non-bank payment system providers. These retail payment system channels include card payments, internet banking, mobile banking, and mobile payments.

To enhance the efficiency of payment systems, the Bank has been collaborating with international payment system providers such as SWIFT and card schemes such as VISA and MasterCard to facilitate cross-border and card payments, respectively. In addition, Tanzania is among the pioneers of regional payment systems, including the East African Payment System (EAPS) and the SADC-Real Time Gross Settlement System (SADC-RTGS).

In 2023, payment systems recorded significant growth in terms of transaction volume and value processed on account of the increased adoption of digital channels, especially the use of mobile phones and electronic fund transfers (EFT). The year 2023 saw notable

adoption of digital merchant payments as more businesses digitized their collections. The adoption of a merchant business is a cornerstone for attaining a cash-lite economy. The payment system continued to provide a mechanism for the Tanzanian to access credit and the means for digital saving. Payment systems address the challenges faced by community groups in mobilizing contributions from members by developing appropriate payment collection solutions.

To increase efficiency and improve interoperability among financial service providers of payment systems, over 45 Financial Service Providers (FSPs) were on-boarded to TIPS. The Bank also implemented the Tanzania Quick Responses Code (TANQR) use case within TIPS, which facilitates the interoperability of merchant payments. Both TIPS and TANQR facilitate an efficient clearing and settlement system of digital financial services transactions by reducing the processing time for retail transactions and, to a large extent, the barriers to retail payment system service interoperability between banks and non-banks.

The year 2023 saw an increased appetite for international brand cards, indicated by an increased number of cards issued as local banks phase out domestic brand cards. Card payments are increasingly being adopted owing to increased digital and online payments and merchant payments. Digital enabled cards named Virtual Cards that are acquired and issued through smartphones and the Internet continue to record impressive growth.

By 2023, cross-border remittance services increased for both inward and outwards transactions. The rise in cross-border payments was primarily explained by increased diaspora remittances, increased remittance facilitators, and relaxation of outgoing remittance conditions.

The Bank continued to align its regulatory framework with payment system developments. The National Payment Systems Act 2015 and its regulations were reviewed to meet the current and anticipated future needs of payment systems and technological advancements. In addressing the public outcry on charges and fees, the Bank capped

the charges for large payment transactions at TZS 10,000 and retail transactions at TZS 2,000.

The Bank collaborated with payment system industry associations, such as the Tanzania Mobile Network Operators (TAMNOA) and Tanzania Bankers Associations (TBA), to implement various payment initiatives. In 2023, a new association for Fintech, named the Tanzania Fintech Association (TAFINA) was formed that brings together Fintech to jointly address challenges facing the Fintech segment.

To enhance the integrity and safety of payment systems, six on-site inspections were conducted for both Mobile Money Operators (MMO) and non-bank payment system providers. Offsite surveillance and monitoring of payment systems were conducted to ensure that high value and retail payment systems operated efficiently with high availability.

At the end of 2023, the number of licensed payment system providers reached 92, composed of 44 banks and 48 non-banks. The number of electronic money issuers remained at six (6). A total of 19 Fintech was licensed to provide payment services in Tanzania. The new licenses were issued to Oma Emirates Tanzania Limited, DLT CP Tanzania Company Limited, Nlolo Company Limited, Elipa (TZ) Limited, Payguard Limited, One Payment Tanzania Limited, PayBy Click Limited, Oya Fintech Limited, Brij Fintech Tanzania Limited, Mytalu Tanzania Limited, TempoPlus Company Limited, Airpay Tanzania Limited, Instant Payment Solution Limited, Tunzaa Digital Holdings Limited, EvMak (T) Limited, UOB Global Capital Finance Limited, Kuda Tanzania Limited, Aron Group Tanzania Limited, and Paylon Tanzania Limited.

The number of Electronic Money Issuers remained six (6). Issuance of electronic money is restricted to banks and mobile network operators (MMO). These restrictions aimed to safeguard the stability of the financial system and promote effective oversight of electronic money issuance. Table1-indicates the movement of various payment indicators.

Table 1: Payment System Indicators

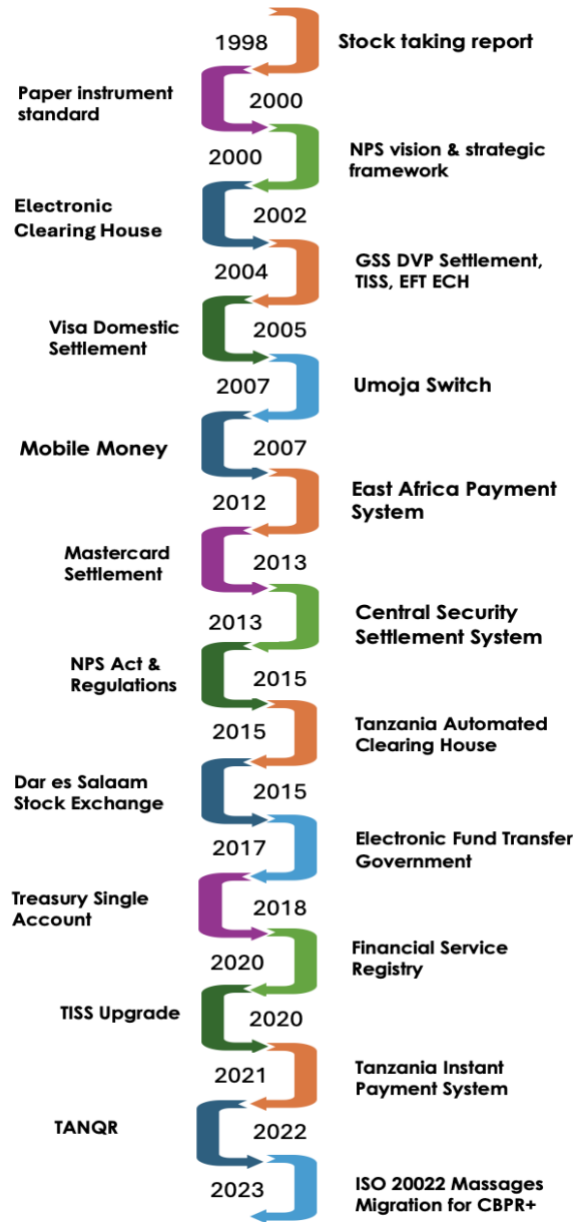
Particulars	2022	2023	% increase/ (decrease)
Mobile banking subscribers	7,923,053	8,990,468	13.47
Mobile banking active subscribers	1,623,386	2,449,886	50.91
Internet banking subscribers	245,438	313,586	27.77
Internet banking active subscribers	110,692	134,091	21.14
ATM	1,885	1,981	5.09
POS -Restated	7,317	8,652	18.25
Licensed banks	44	44	0.00
Licensed non-banks	27	48	78.00
Electronic money issuers	6	6	0.00
Mobile money agents	1,038,874	1,240,052	19.67
Mobile phone subscribers	60,192,331	70,215,144	16.65
Active mobile money users	38,338,776	51,715,462	34.89
Local brand cards	2.88	2.40	(16.67)
Local brand active cards	0.35	0.16	(54.29)
International brand cards – All	9.01	10.43	15.86
International brand cards - Active	2.03	1.94	(4.43)
TZS Cheque processed	546,620	485,972	(11.10)
USD Cheque processed	107,497	88,041	(18.10)
Number of merchants	393,977	657,346	66.85

Source: Bank of Tanzania

In its efforts to attain a cash lite economy, several digital payments have been implemented in Tanzania such as TISS, TACH, Mobile Money, EAPS, SADC-RTGS, and the most recent one TIPS, that facilitates interoperable retail transactions. In 2023, the Bank continued to enhance the performance of the payment systems. In 2023, ISO20022 CBPR+ was introduced to enable processing of cross-border payments through SWIFT. Figure 1 indicates the payment system Journey in Tanzania.

In 2023, the oversight of payment systems was conducted to ensure the payments are safe and support the processing of transactions. There were no significant changes in the regulatory tools and instruments. The *Banking and Financial Institutions Act 2006*, *National Payment Systems Act 2015*, *Anti-Money Laundering Act 2006*, *Payment System Licensing Approval Regulations 2015*, *Electronic Money Regulations 2015*, and the *Financial Consumer Protection Regulations 2019*, were the key instruments used for oversight of payment systems.

Figure 1: Payment System



CHAPTER TWO

2.0 DEVELOPMENTS AND PERFORMANCE OF PAYMENT SYSTEMS

This section highlights developments and performance of payment systems in Tanzania during the year ending December 2023, as well as policy initiatives. It also explores the strategic direction set for payment systems, regulatory structures guiding their functioning, and integration with global standards. Additionally, it highlights the evolution of Tanzania Instant Payments, the adoption of International Standards Messaging, Direct Debit transactions, and notable progress in refining the regulatory frameworks.

2.1 Payment Systems Developments

In 2023, the Bank directed its efforts towards attaining interoperability of retail payment systems through the national switch (TIPS), introduction and implementation of interoperable Quick Responses Code, migration of high-value payment systems to SWIFT ISO20022 compliance as well as government billing system through TIPS.

To achieve a cash-lite economy, the Bank continued to implement policies that promote the adoption and usage of payment systems. These policies include enhancing the affordability of payment system services, improving the interoperability of payment systems, increasing public awareness of digital payment products, and conducting onsite and offsite surveillance.

By leveraging Fintech innovation, the Bank continued to collaborate with and encourage FSPs to introduce new, simple, and adoptive digital payment products relevant to Tanzanians' needs. The Bank explored the potential for the introduction of a Central Bank Digital Currency (CBDC).

2.1.1 Regulatory Frameworks

To build a trusted payments ecosystem, the Bank implemented initiatives to minimize payment, clearing, and settlement risks. Revising and improving the legal and regulatory framework was a key priority to ensure their relevance in this dynamic system environment. Most importantly, the Bank coordinated the harmonization of oversight and supervisory activities at the national, regional, and international levels.

In 2023, the Bank of Tanzania, in collaboration with stakeholders, continued to review the National Payment Systems Act 2015 and its accompanying regulations. The proposed amendments aim to address the evolving market demands amidst the rapid advancement in financial technologies (Fintech).

2.1.2 International Standards in Payment Systems

International standards and practices provide the basis for formulating laws and regulations for payment systems. In 2023, the Bank directed its efforts towards aligning the risk management systems with PFMI and FATF recommendations on AML/CFT measures. The aim was to protect consumers and the public against payment system risks and unacceptable practices. The Bank Developed Risk Management Guidelines for Non-Bank Systemically Important Payment System Providers (NBSIPS), 2024.

In addition, the Bank continued to align the domestic payment systems to international standards on payment systems such as CSPCS, PCI-DSS; ISO200022; EMVCo and PFMI.

2.1.3 Systemically Important Payment Systems

In line with the PFMI, the Bank developed a framework for identifying SIPS, Framework for Identification of Systemically Important Payment System Providers (SIPS) 2024. The identification based on the volume and value of transactions processed by payment systems which continued to grow, signaling stability of the systems, size and importance in facilitating economic and financial transactions.

In 2023, the framework was under pilot and shall apply to both internally and externally managed payment systems that are designated to be SIPS. The framework sets the minimum criteria for classifying payment systems into SIPS and non-SIPS.

The framework will guide risk-based prioritization of oversight efforts, reduce the regulatory burden for startups, and ensure the efficient utilization of supervisory resources by the Bank. Supervisory efforts will now be directed not only to payment systems with higher risks but also to more systemically important ones.

Internally, the Bank has designated the TISS, TACH, and TIPS as SIPS. The monitoring of internally managed SIPS remains a key priority to ensure the efficiency and reliability of these systems. Risk assessment and performance of retail SIPS will continue to be conducted through regular onsite and offsite surveillance.

2.1.4 Tanzania Quick Response Code (TANQR)

The TANQR solution continued to provide an alternative channel for initiating and accepting payments between customers and merchants. The broad objectives of the TANQR Code standards are to promote customer convenience and security and support interoperability among different payment service providers. The TANQR code follows the EMV QRCPS specification published by the EMVCo as a basis to offer an effective solution for interoperability.

Implementation of TANQR payments through TIPS was completed in the year with noticeable adoption by FSPs. TANQR improves the interoperability of retail payments across all FSPs by easing the connection and communication among multiple independent and potentially heterogeneous systems to process merchant QR payments. The Bank expects that TANQR will minimize Personal to Merchant (P2M) payment risks by enhancing payment security as well as reducing costs. Enabling the interoperability of merchant QR payments will accelerate the adoption of digital merchant payments, hence fueling the country's efforts towards attaining a cash-lite society.

2.1.5 Tanzania Instant Payment System

Tanzania Instant Payment System (TIPS), which became operational in 2021, continued to perform satisfactorily in 2023. The Bank continued to monitor performance and onboard payment system providers, whereby 45 licensed PSPs were on-boarded. TIPS facilitates the system interoperability of different Digital Financial Service Providers (DFSPs) and handles real-time instant payments among participating DFSPs. TIPS has facilitated an efficient clearing and settlement platform for retail digital financial service transactions for all Payment Service Providers (PSPs).

In addition, the system has improved transaction processing efficiency by moving from bilateral to multilateral interoperability. More important, TIPS offers a level playing field that fosters competition amongst payment system providers, optimizes liquidity, reduces operational and integration costs, and reduces the barrier to entry for new payment service providers that may offer innovative and cost-effective products.

A TIPS use case indicates that an average of 651,438 transactions valued at TZS 34.30 billion were processed per day in 2023. The onboarding of more FSPs to TIPS has improved the efficiency of the payment system, providing customers with a more convenient and reliable means to conduct financial transactions. TIPS, being an inclusive level one, retail payment platforms, has shown remarkable performance in transaction processing speed, security and reliability.

2.1.6 Financial Service Registry

The Financial Services Registry (FSR), established by the Bank in February 2020, serves as a comprehensive database documenting the accessibility and range of financial services available nationwide. FSR records important information about various financial services access points such as bank branches, agents, ATMs, mobile money agents, bank merchants, POS systems, insurance providers, SACCOs, payment aggregators, bureau de change, securities dealers and brokers, medical facilities accepting insurance, mortgages, and finance companies. It captures the GPS coordinates and precise

locations of all publicly accessible financial service outlets and their offerings. This ensures accuracy and facilitates efficient tracing of the location of FSPs. This system is a dynamic tool that supports regulators and policymakers in formulating effective policies and strategies to enhance financial inclusion. In addition, the system provides insights into the underserved markets. FSPs can leverage the data and analytics offered by the registry and tailor their services to meet the specific needs of these communities.

In 2023, as recorded in the FSR, the number of registered outlets was 117,294 containing 301,890 access service points across the country. FSPs have been periodically updating the FSR on the deployment of access points.

2.1.7 International Organization for Standardization (ISO)

In 2023, the Bank continued with efforts to implement ISO20022, as a messaging standard for TISS. Upon completion, ISO20022 will improve the quality of financial transaction details by providing more information about an individual transaction. The ISO20022 will help domestic financial institutions to streamline their internal processes and cultivate stronger data interchanges with both domestic and international financial institutions.

Moreover, the integration of ISO20022 Swift Messaging seamlessly aligns with Tanzania's broader vision of financial inclusion and innovation. As the country endeavors to modernize its financial infrastructure, this standardization effort provides a robust foundation for the widespread adoption of electronic payments and digital financial services, thus empowering individuals and businesses across the nation.

In 2023, the Bank continued to promote the adoption of SWIF by all banks and financial institutions to harness the benefits brought by ISO20022 Messaging Standards.

2.1.8 Direct Debit Initiatives

In 2023, the Bank continued with its efforts towards the introduction of a Direct Debt within TACH to address the infrastructure gap related to the payment of recurring

transactions, such as airtime postpaid bills, utility bills, insurance premiums, credit card payments, television subscriptions, and other merchant payments.

2.1.9 Regulatory Instruments

The National Payment Systems Act 2025 and the Bank of Tanzania Act 2006 are the key regulatory instruments used to regulate, monitor and supervise payments, clearing and settlement systems, including all payment system products and services. In addition, the Payment Systems Licensing and Approval Regulations 2015 and the Electronic Money Regulations 2015 provide guidance for the licensing and management of electronic money, respectively. Apart from the cited laws and regulations, the Bank uses various regulations, rules and directives to manage payment system risks. These include the Foreign Exchange Regulations 2022, Anti-Money Laundering Regulations 2022, TACH Rules, TISS Rules, Paper Instrument Standards, Cheque Standards and Specifications, Tanzania Quick Response Code Standard (TANQR Code Standard 2022), and Customer Experience Guideline for Merchant Payments. In 2023, the Bank issued a number of circulars and directives as follows: -

Cloud Computing

The Cloud Computing Guidelines for Financial Service Providers, 2023, were released. The guidelines apply to all financial service providers licensed, regulated and supervised by the Bank. The guidelines provide the basis for evaluating applications from financial service providers who intend to adopt cloud computing solutions. The guidelines provide a mechanism for outsourcing IT services and classifying systems into Mission Critical Systems (MCS) and Non-Mission Critical Systems (NMCS). The guidelines prohibit hosting a mission-critical system or any other system whose data are considered critical for the operations of the FSPs in a primary data centre or cloud services whose hosting infrastructure is outside the United Republic of Tanzania.

Contactless Cards

In 2023, the Bank issued a circular establishing limits for contactless transactions. The limit per domestic transaction was set at TZS 100,000 and United States Dollar (USD) 100 for cross-border transactions. The circular also imposed a daily limit of TZS 400,000 for local transactions and USD 200 for cross-border transactions. The objective of the circular was to protect users of contactless cards from inherent fraud risks.

TISS Transaction Purposes

In ensuring that FSPs solicit sufficient information about the purpose of a transaction in line with anti-money laundering regulations, the Bank issued directives demanding all TISS participants to provide sufficient information to facilitate the identification of the purpose or reason for a payment transaction. The Bank also introduced a penalty fee of TZS 50,000 per transaction to the sending bank that fails to comply.

Proliferation of Financial Scam Messages

In 2023, the Bank noticed a rapid increase in financial frauds involving Tanzanians receiving credit advice or an email that claims to be a confirmation of payment through SWIFT and/or other funds transfer systems. The frauds deceive individuals that a certain amount of funds has been credited to a certain bank or account in a financial institution in Tanzania, in some instances, the recipient is required to pay a facilitation fee and or insurance to access the funds. In most cases, the messages involved large sums of money purported for project financing or personal use.

To address this issue, the Bank issued a public circular advising the public to refrain from these messages as they are fictitious and intended to defraud people. Additionally, individuals were advised not to be lured by such messages, typically intended to defraud them. Furthermore, the public was urged to avoid sharing information with third parties.

TANQR Guidelines

In 2023, TANQR Standards to guide FSPs on how to create a standardized menu for merchant payments through TIPS were issued. The objective of the circular was to ensure

the use of a standardized Merchant QR Code or Number (Lipa Namba) is consistent when making payments from payer (customer) to payee (merchant) through TIPS to enable interoperability of PSPs and enhance uptake of merchant payments electronically.

2.2 Performance of Systemically Important Payment Systems

2.2.1 Tanzania Interbank Settlement System

In 2023, TISS operated smoothly and maintained safety, and efficiency settlement of interbank transactions across both SWIFT and VPN channels. TISS also maintained high availability, operating 24/7.

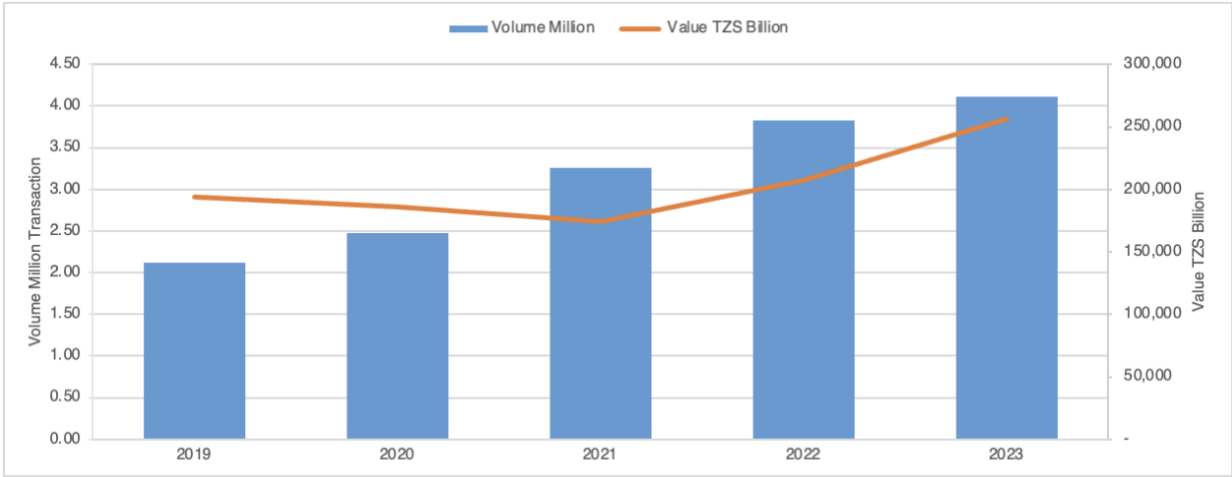
The number of TISS participants was 51 in 2023, which included 41 commercial banks, 4 East African central banks (Bank of Tanzania, Central Bank of Kenya, Bank of Uganda and National Bank of Rwanda) and six non-bank indirect participants (i.e., Dar es Salaam Stock Exchange, MasterCard Worldwide, UMOJA Switch, VISA International, Tanzania Automated Clearing House, Zanzibar Revenue Authority and Tanzania Revenue Authority). Cross-border payments were processed through the East African Payment System (EAPS) and SADC RTGS. The cross-border systems facilitated the settlement of international payments between domestic and foreign banks.

TISS Transactions Denominated in Tanzanian Shillings

In 2023, the volume of Tanzanian Shillings denominated transactions processed by TISS increased by 7.28 percent to 4,112,906 transactions from 3,833,790 transactions, recorded in 2022. The corresponding value of transactions increased by 23.39 percent to TZS 256,028 billion in 2023 from TZS 207,503 billion, recorded in 2022. The increase is

partly attributed to the growth of the economy, stability and liquidity of the banking sector, and high adoption of digital payment for processing payments by both the public and private sector entities. Chart 1 indicates the trend of volume and value of TZS denominated transactions processed by TISS for the past five years.

Chart 1: TISS Transactions in TZS

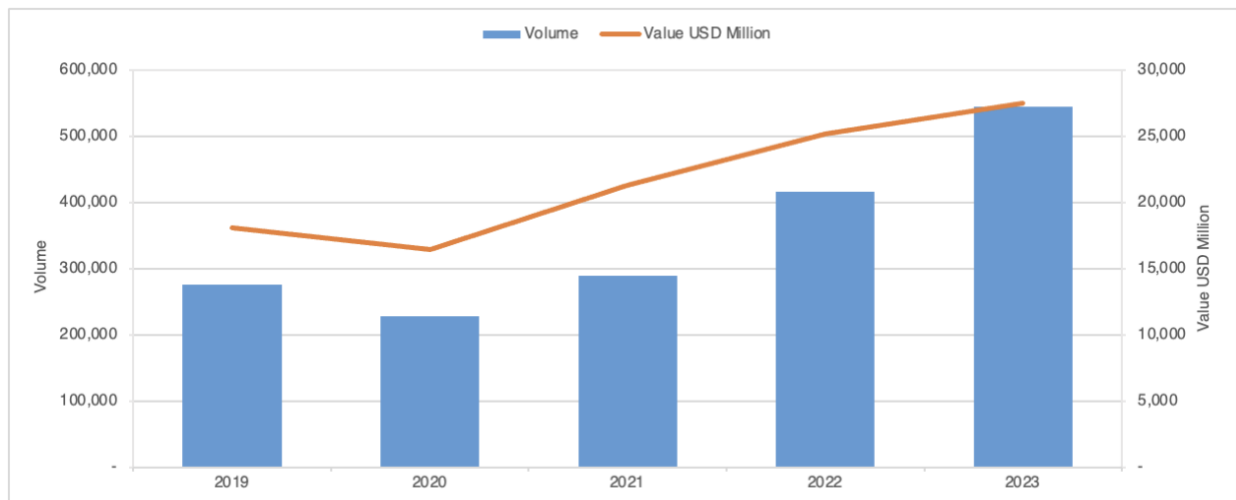


Source: Bank of Tanzania

TISS Transaction Denominated in United States Dollar (USD)

The volume and value of USD (\$) denominated interbank transactions processed through TISS recorded a growth rate of 31.13 percent and 9.09 percent, respectively. The volume and value were 545,161 transactions and USD 27,501.77 million in 2023 compared to 415,752 transactions and USD 25,210 million, recorded in 2022. Chart 2 indicates movement of TISS volume and value for the past five years. The increase is explained by the growth of the economy, adequate availability of USD to meet the demand, and increased usage of USD in the economy.

Chart 2: TISS Transactions in USD



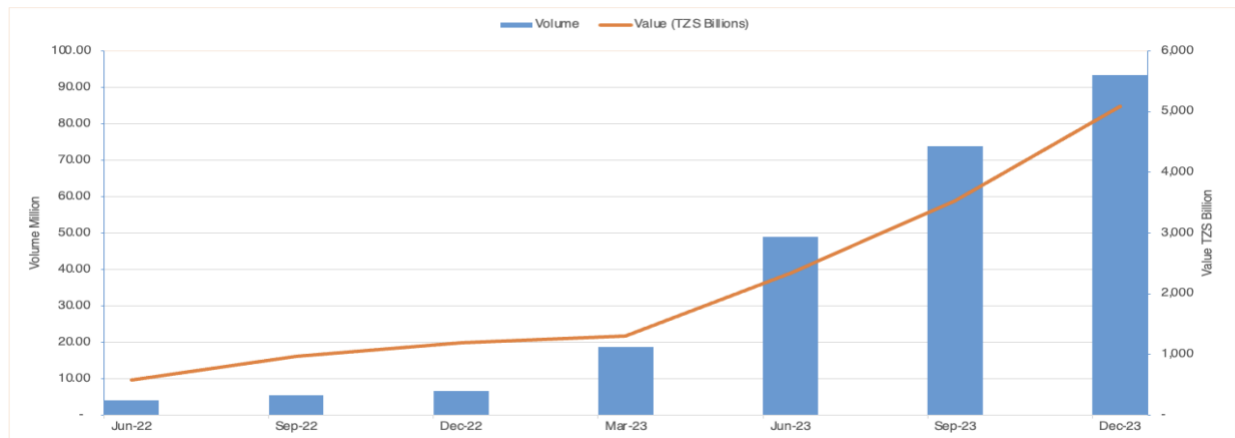
Source: Bank of Tanzania

2.2.2 Tanzania Instant Payment System

In 2023, the number of FSPs on-boarded in TIPS reached 45 compared to 28 reported in 2022.

The year 2023 observed a surge of transactions processed by TIPS as new FSPs were on-boarded. The volume and value of transactions processed were 235.04 million worth TZS 12,270.47 billion, respectively. Services supported by TIPS were Personal-to-Personal transfers (P2P), Business to Business Payments (B2B), and Business to Government (B2G). The trend of volume and value of transactions are indicated in Chart 3.

Chart 3: TIPS Transactions in TZS



Source: Bank of Tanzania

2.2.3 Tanzania Clearing House

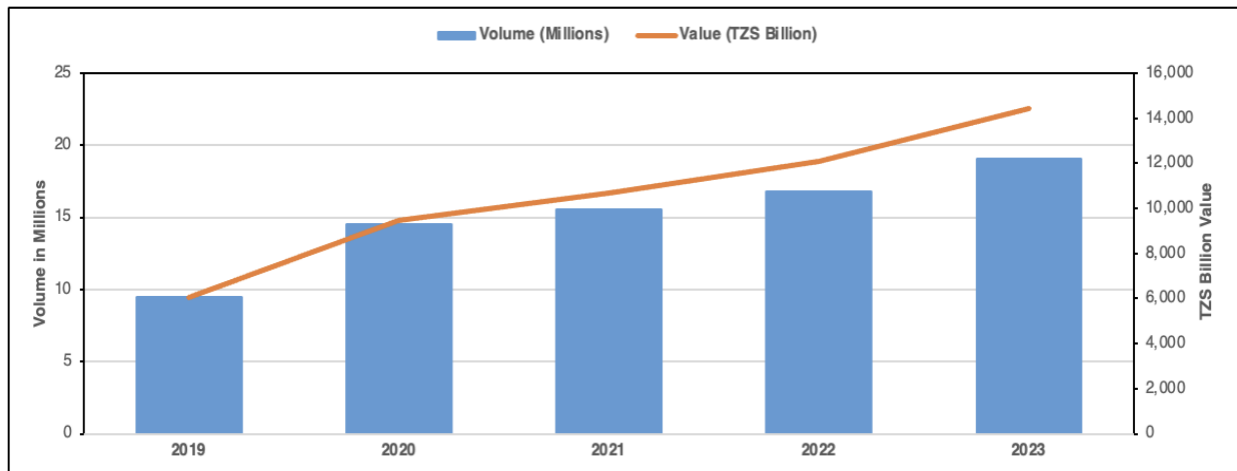
For 2023, the system operated safely, with a high uptime availability of 99.92 percent. Transaction processing was efficient observing same day settlement of batch files.

In 2023, the Bank continued to operate system, support TACH participants, and oversee the settlement and clearing of cheque and Electronic Fund Transfer (EFT) processed through TACH.

2.2.3.1 Electronic Fund Transfer

In 2023, both the volume and value of Electronic Fund Transfer (EFT) processed by TACH increased by 13 percent and 19 percent, respectively. The growth rate reflected an increase in volume and value to 19.10 million transactions and TZS 14,422.41 billion, respectively. Chart 4 indicates the trend of EFT transactions.

Chart 4: Trend of EFTs



Source: Bank of Tanzania

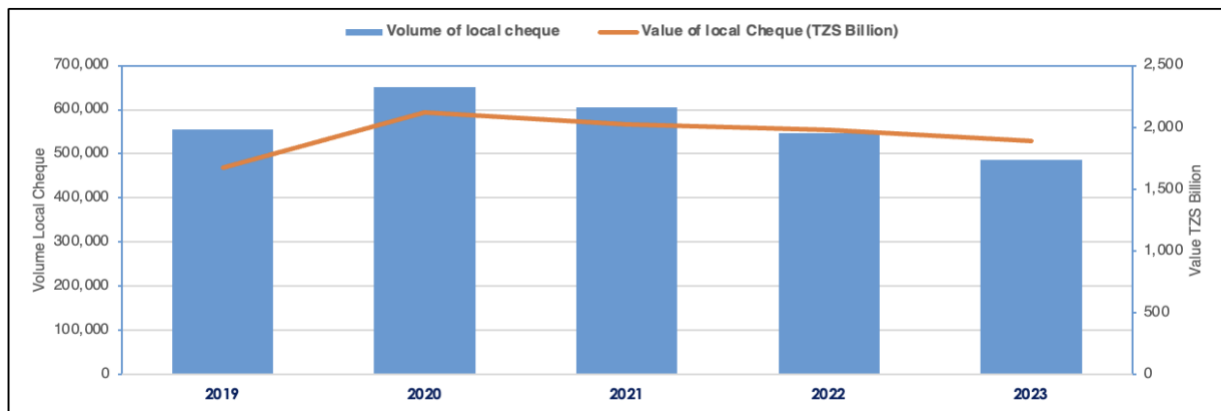
2.2.3.2 Cheque Transactions

In 2023, usage of cheques continued to record a gradual decline which is associated to uptake of emerging digital payment channels that are more reliable and efficient such as TISS, TIPS, mobile money, and EFT. Digital channels mitigate credit and float risks caused by default and delays that are eminent in cheque payments.

Local Currency Cheque

In 2023, the volume of processed local cheques was 485,972, indicating an annual decrease of 11 percent, from 546,620 cheques processed in 2022. Equally, the corresponding value decreased by 4 percent to TZS 1,893.47 billion in 2023, from TZS 1,977.71 billion, processed in 2022. Chart 5 indicates the trend of local currency denominated cheques.

Chart 5: TZS Denominated Cheque

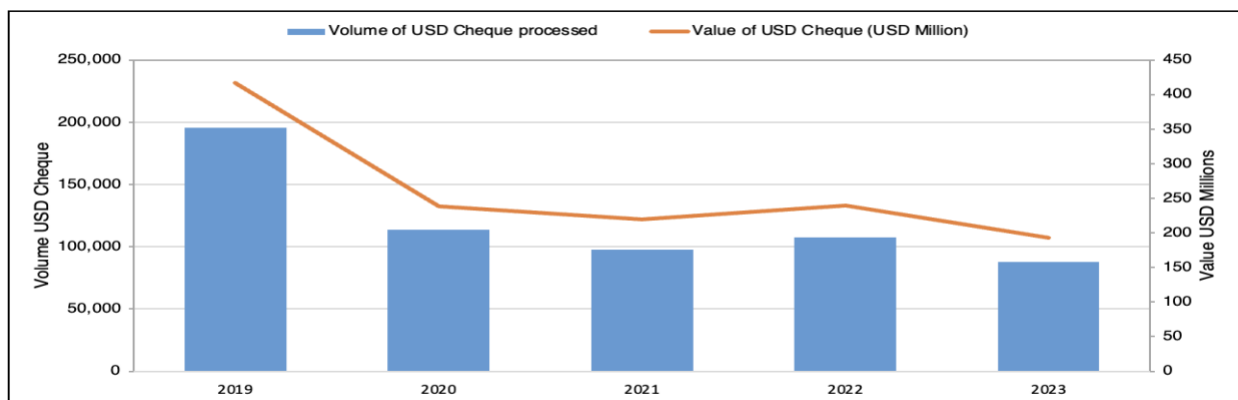


Source: Bank of Tanzania

US Dollar Cheque

In 2023, the volume and value of USD denominated cheques processed through TACH decreased by 18 percent and 19 percent, respectively. The volume of USD transactions was 88,041 in 2023 compared to 107,497 reported in 2022, while the corresponding value was USD 192.41 million in 2023 compared to USD 238.96 million reported in 2022. The limitation on the use of cheques in making large payments and increasing uptake of electronic payments are among the underlying factors for the decrease. Chart 6 indicates the volume and value of USD denominated cheques.

Chart 6: Trend of USD Cheque Transactions



Source: Bank of Tanzania

2.2.4 Regional Payment Systems

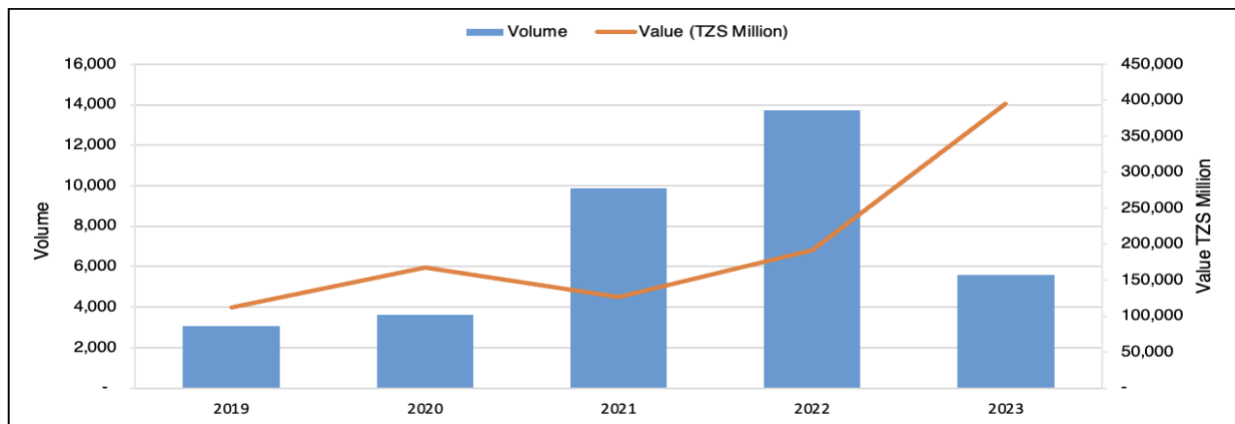
Tanzania participates and oversees operations in the East African Payment System (EAPS) and SADC-Real-Time Growth Settlement System (SADC-RTGS).

2.2.4.1 EAPS Transactions in TZS

The East African Payment System (EAPS), a bank-to-bank funds transfer (payment) platform within the East African Community member countries. The system facilitates payment in local currencies.

The volume of Tanzanian Shillings (TZS) denominated transactions processed by EAPS was 5,571, indicating a decrease of 59.42 percent, from 13,730 transactions recorded in 2022. However, the corresponding value of TZS transactions processed by EAPS increased by 106 percent to TZS 394.43 billion in 2023 from TZS 191.78 billion, recorded in 2022. Inadequate awareness and usage of EAPS remained to be one of the challenges to be addressed. Chart 7 indicates the trend in volume and value of EAPS TZS transactions for the past five years.

Chart 7: EAPS Transactions in TZS

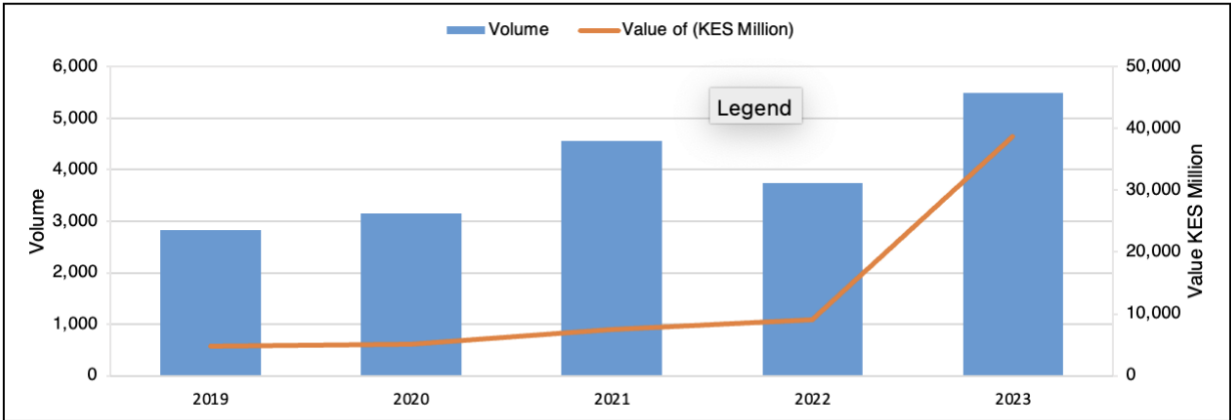


Source: Bank of Tanzania

2.2.4.2 EAPS Transactions in KES

The volume of Kenyan Shilling (KES) denominated transactions processed by EAPS was 5,493, being an increase of 46.68 percent from 3,745 transactions processed in 2022. The corresponding value of transactions increased by 310.21 per cent to KES 38,642.57 million in 2023 from KES 8,982 million, recorded in 2022. Chart 8 indicates trend of volume and value of EAPS transaction in Kenyan Shillings. The increase in transactions processed is explained by efforts taken to strengthen bilateral ties by reducing trade barriers in the East African Region.

Chart 8: EAPS transactions in KES

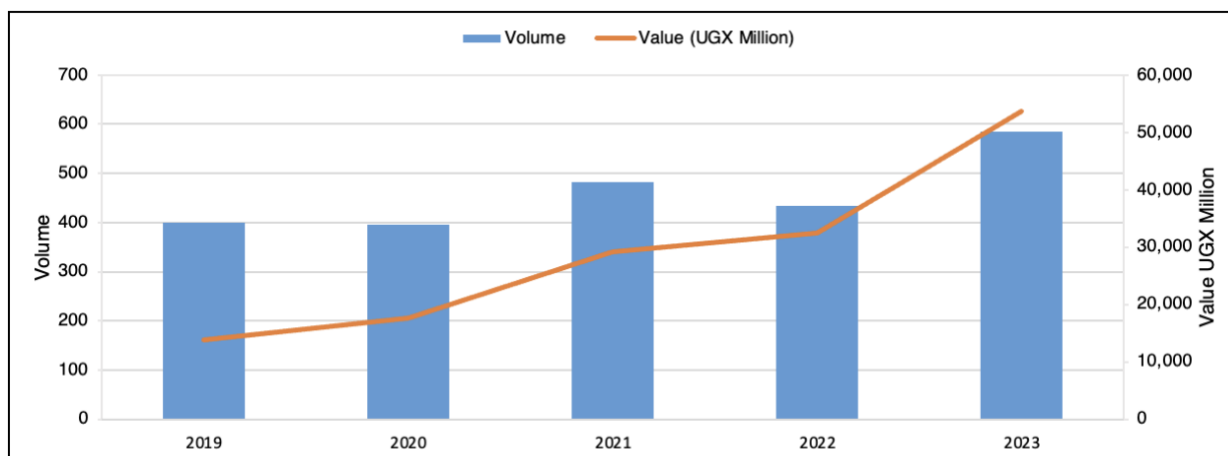


Source: Bank of Tanzania

2.2.4.3 EAPS Transactions in UGX

The volume of Ugandan Shilling (UGX) denominated transactions processed by EAPS was 584 for the year ended December 2023, indicating an increase of 34.56 percent from 434 transactions processed in a similar period in 2022. The value of UGX transactions processed by EAPS increased by 65.25 percent to UGX 53.61 billion in 2023 from UGX 32.44 billion, recorded in 2022. Chart 9 indicates trend of volume and value of EAPS transaction in Ugandans Shillings. The increase in transactions processed is explained by efforts taken to strengthen bilateral ties by reducing trade barriers in the East African Region.

Chart 9: EAPS Transactions in UGX



Source: Bank of Tanzania

2.2.4.4 SADC – Real Time Gross Settlement (SADC – RTGS)

In 2023, SADC - RTGS performed efficiently in facilitating funds transfers for cross-border payments in the SADC regions. Fifteen countries participated in SADC-RTGS. Those countries were Angola, Botswana, Eswatini, South Africa, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Tanzania, Democratic Republic of Congo, Zambia, and Zimbabwe.

The number of participants were 90, comprising of commercial banks and central banks.

The number of local participating banks in SADC-RTGS was 6, same as reported in 2022. Those banks were Equity Bank Tanzania Limited, ABSA Bank Tanzania Limited, Stanbic Bank Tanzania Limited, NBC Bank Limited, Ecobank Tanzania Limited, and Standard Chartered Bank Tanzania Limited.

In 2023, the total regional transactions processed through SADC-RTGS were 493,805, an increase of 13.37 percent compared to 435,569 transactions, recorded in 2022. The total value increased slightly by 30.96 percent to ZAR 2,229 billion in 2023, compared to ZAR 1,702 billion, recorded in 2022.

Tanzania contributed 0.69 percent and 0.14 percent of the total volume and value of SADC-RTGS, respectively. The volume and value processed by Tanzanian local banks through SADC-RTGS were 3,429 and ZAR 3.04 billion, indicating a decrease of 10.29 percent in terms of volume and an increase in value by 285 percent.

2.3 Performance of Alternative Delivery Channels (ADCs)

ADCs expand the reach of payment system services beyond the traditional bank branch channel. They bridge the supply side for financial services by filling the access demand gaps. The following are some of the ADCs: -

2.3.1 Automated Tellers Machines

In Tanzania, some banks with closed-loop ATMs serve their customers only. Similarly, some ATMs are connected to interbank networks, such as Umoja Switch, enabling customers to access machines that do not directly belong to their bank. Most ATMs in Tanzania support domestic and international cards such as VISA, MasterCard, China Union Pay, American Express, Cirrus, and Maestro.

In 2023, the number of ATMs increased to 1981, which is a growth rate of 5.09 percent, from 1,885 ATMs reported in December 2022.

The volume of transactions processed through ATM increased by 29.85 percent to 75.01 million in December 2023, compared to 57.77 million, recorded in 2022.

Similarly, the value of ATM transactions recorded a growth rate of 41.64 percent to TZS 14,351.47 billion, in December 2023, from TZS 9,810.70 billion, recorded in 2022. Table E2-indicates trends of ATM transactions.

2.3.2 Payment Cards

Up to 2023, 12.83 million payment cards were issued to customers. The records indicate that over 98.11 percent were debit cards, followed by prepaid cards (1.77 percent) and

Credit cards (0.12 percent). Card brands that operated effectively in Tanzania were Visa and MasterCard. Other card schemes, including China Union Pay, Maestro, Cirrus, and American Express, recorded minimal operation in terms of volume and values.

The local brand cards decreased as banks' preference shifted to international brand cards. The number of local brand cards decreased by 17 percent to 2.40 million cards in 2023 compared to 2.88 million cards reported in 2022. Equally, international brand cards increased by 15.76 percent to 10.43 million in 2023 from 9.01 million cards, reported in 2022. The adoption of international brand cards was influenced by demand for cross-border payments, the digitization of merchant payments, the uptake of e-commerce and the limitation imposed by local brand cards and mobile money in cross-border payments.

Debit cards: the debit cards were the most prevalent cards in Tanzania. These cards are linked to the holder's bank accounts.

Card payments provide several benefits, such as ease of making payments and enhanced security using chip, pin and contactless payments that reduce fraud risk. In addition, cardholders benefit from controls designed to mitigate risks in payments through transaction monitoring and limits imposed on cards. Despite the cited advantages, card usage is still low in Tanzania, as reflected by the number of active cards. Out of 12.83 million cards, cards that conducted at least one transaction within 90 days were only 2.1 million or 16.33 per cent, of the issued cards.

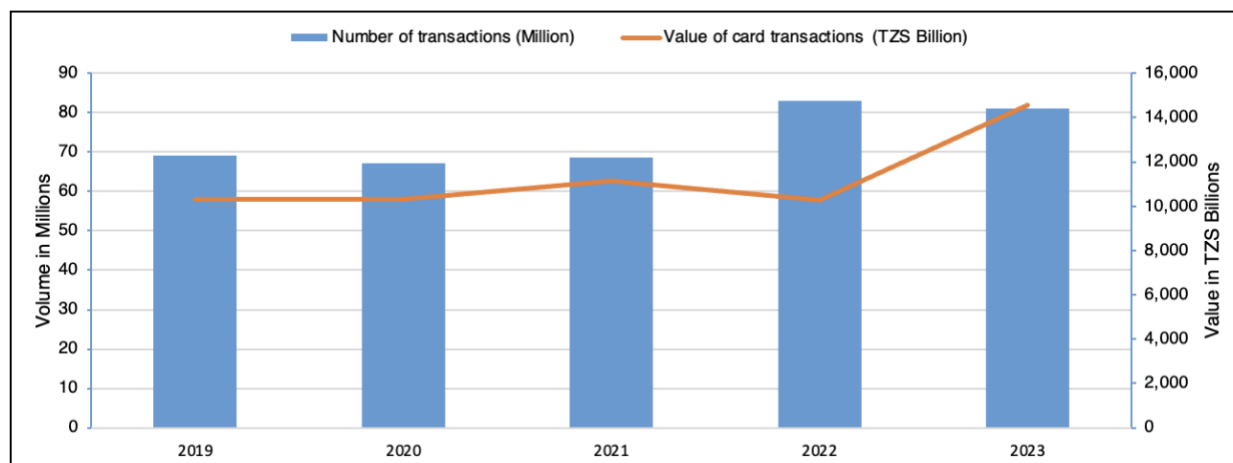
Virtual cards are used by smartphone owners to fund their prepaid virtual cards using their mobile wallets and make card payments. M-Pesa Limited, Tigo Pesa, and Airtel Money Tanzania Limited provided virtual card services. In 2023, the number of registered Virtual cards registered was 511,826, which was 65.64 percent higher than the 309,006 cards registered in 2022. Similarly, the value of cross-border transactions processed by virtual cards was TZS 77.20 billion (91 percent), while domestic transactions worth TZS 7.21 billion (9%) were processed. Table E1 indicates trends of card payments.

In 2023, PSPs continued to adopt enhanced card features such as contactless, which allows cardholders to make quick and secure transactions by tapping their cards or mobile phones on the payment terminals. The Bank enforced transaction limits to minimize the risk of loss to cardholders if a card is lost or a fraudulent transaction is conducted through contactless cards. From 12th December 2023, the maximum amount of a contactless transaction in local currency was set at TZS 100,000 and USD 100 for foreign currency transaction. In addition, the maximum daily transaction limits of TZS 400,000 in local currency and USD 200 for foreign currency were established.

Apart from the contactless features, the co-branded cards issued jointly between banks and corporate entities recorded a positive adoption. These cards used the branding of banks and corporate entities to target a particular customer segment to increase an institutional image. Co-branded cards carry features such as rewards programs, loyalty programs and promotions. In Tanzania, Equity Bank Tanzania Limited, NMB Bank Plc, CRDB Bank Plc were some of the pioneers of co-branded cards.

In 2023, the volume of card transactions decreased to 81.10 million from 82.90 million, recorded in 2022. However, the corresponding value of card transactions increased by 41.74 percent to reach TZS 14,547.18 billion from TZS 10,263 billion, recorded in 2022. Chart 10 indicates the trend of card transactions for the past five years. A detailed summary of card statistics is provided in the annexures.

Chart 10: Trends of card transactions



Source: Bank of Tanzania

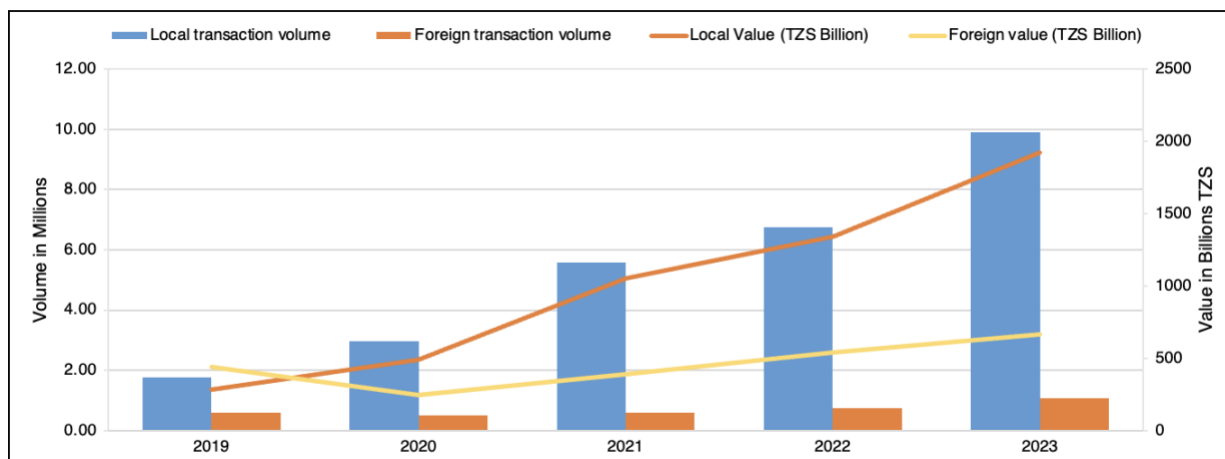
2.3.3 Point of Sale

In 2023, the role of merchant POS was emphasized as one of the strategies to digitize businesses. POS is one of the efficient channels for merchant collection. High merchant adoption has also raised the demand for and adoption of POS Machines.

During 2023, POS increased by 18.25 per cent to 8,652 from 7,317 reported in 2022. Both local and foreign transaction volumes increased by 46.95 and 43.72 percent, respectively. The value of local transactions grew by 43.04 percent to TZS 1,922.23 billion in 2023 from TZS 1,343.89 billion processed in 2022.

Further, foreign currency denominated transactions processed by POS recorded a growth rate of 23.22 percent to reach TZS 662.28 billion in 2023, rising from TZS 537.50 billion recorded in 2022. Chart 11 indicates the trend of POS transactions.

Chart 11: Point of Sale Transactions



Source: Bank of Tanzania

2.3.4 Mobile Payments

2.3.4.1 Introduction

Since its inception in 2007, mobile money has bridged the infrastructure gap for accessing financial services caused by complexities involving traditional banking systems. Traditional banks require strong Know Your Customer (KYC) compliance, high account balance prerequisites, account maintenance costs and limited availability of rural bank branches that prevent access to majority of individuals. Through a simplified KYC system and the wider agent network, mobile money has been an option for many since it is accessible through different channels including the basic feature phones that are affordable by many.

Moreover, the supportive regulatory environment, availability of network connectivity across the country and the high interoperability of mobile payments enabled by TIPS, have boosted adoption and usage of mobile payments.

In 2023, active mobile money subscriptions saw a significant increase of 34.89 percent, reaching 51.72 million compared to 38.34 million in 2022. This surge indicates a growing adoption of mobile payment solutions among consumers. Electronic Money Issuers continued to onboard more agents to support this increased demand and enhance the

proximity of mobile money services. Consequently, the number of mobile money agents rose by 19.37 percent, from 1,038,874 agents reported in 2022 to 1,240,052 agents in 2023 across the country. This growth in both subscriptions and agents highlights the expanding reach and accessibility of mobile money services.

In 2023, mobile payment transactions increased by 41 percent to 5,061.20 million from 3,595.04 million, recorded in 2022. Mobile transaction value rebounded from the negative growth of 0.79 percent in 2022 to attain an overall growth rate of 35.33 percent. In terms of value, mobile payments increased to TZS 154,705.77 billion in 2023 compared to TZS 114,315.98 billion, recorded in a similar period in 2022. Annexure H indicates trends in mobile money indicators.

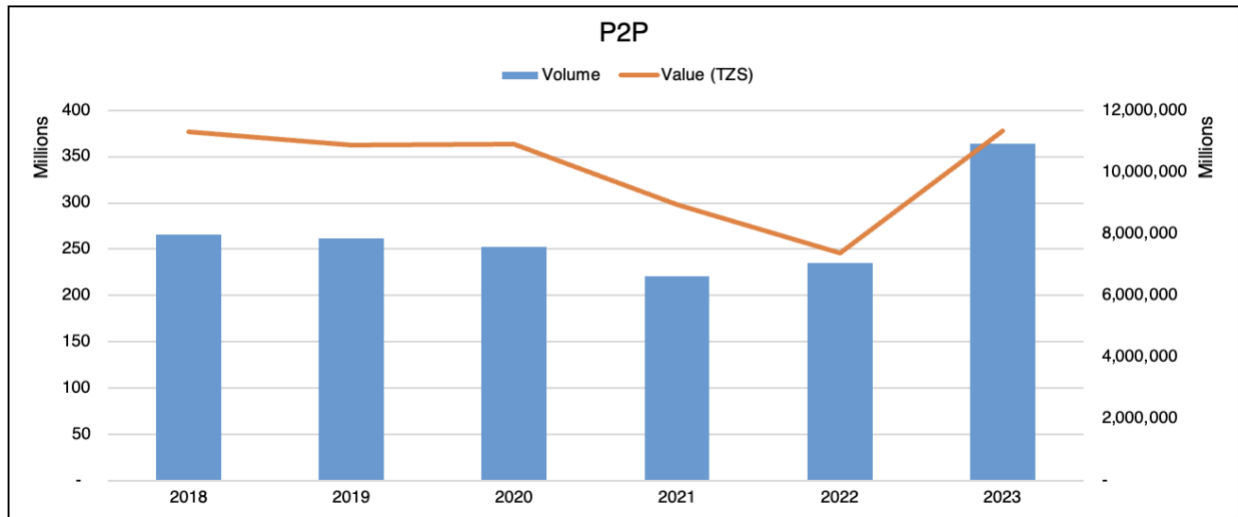
The growth in both volume and value was partly explained by the reduction of the transaction levy and exemption from the transactions levy of all digital government transactions and merchant transactions related to the purchase and sale of goods. The government was among the key players facilitating the high adoption and usage of mobile payments in Tanzania. The digitalization of government payments such as salaries, social benefits, and tax payments all fueled the usage of mobile payments.

In 2023, mobile payment use cases that recorded growth were: Personal to Personal (P2P) transactions, Bank to Wallet (B2W), Wallet to Bank (W2B), Personal to Business (P2B), Personal to Government (P2G), and Government to Person (P2G).

The Government has been creating a conducive environment for digital payments. These efforts aim to improve accessibility, efficiency and affordability. The innovations brought by TIPS, which allow seamless fund transfer across networks, reduction of charges and taxes have all attracted usage of mobile money services.

The Personal to Personal (P2P) transfer (P2P), recorded a growth rate of 54.73 percent and 53.66 percent in terms of volume and value respectively. In 2023, the volume of P2P transactions was 364.36 million worth TZS 11,323.78 billion. Chart 12 indicates the volume and value of P2P transactions.

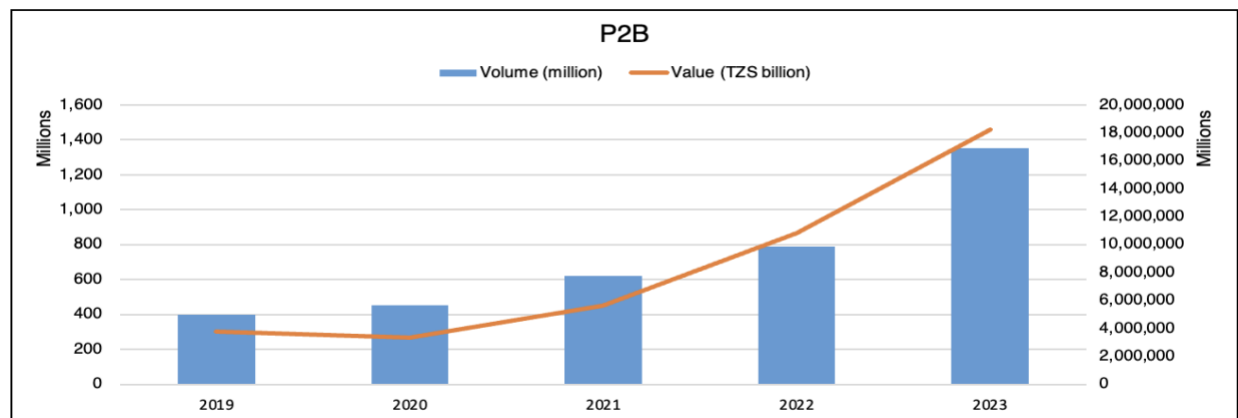
Chart 12: P2P transactions



Source: Bank of Tanzania

Payment to Business (P2B) indicated an exponential growth rate of 71.41 percent and 68.68 percent in volume and value. The number of P2B transactions was 1,350.84 million and the value was TZS 18,250.33 billion. Payment to business reflects the merchant adoption of digital payments. Chart 13 indicates trends of P2B transactions.

Chart 13: P2B transactions

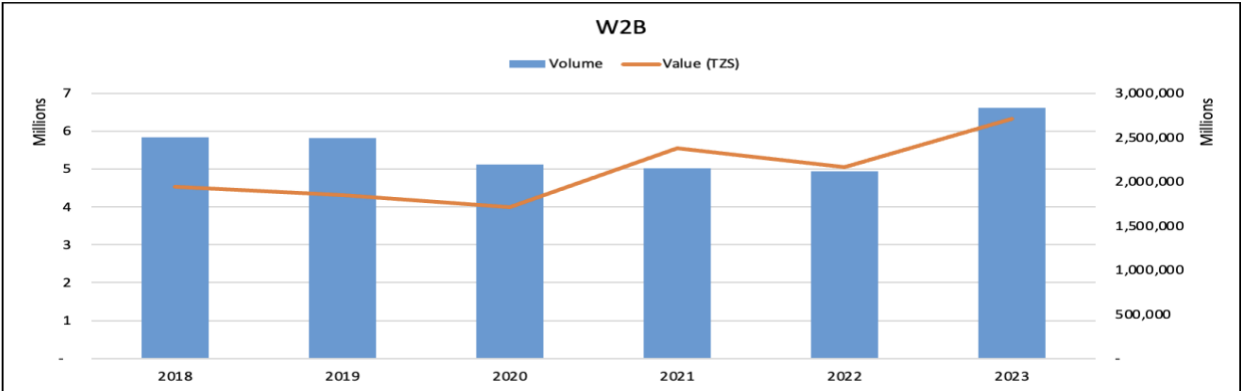


Source: Bank of Tanzania

Wallet to Bank (W2B) involves the transfer of funds from a personal mobile wallet to a bank account reflecting a saving pattern. The volume and value were 6.62 million and

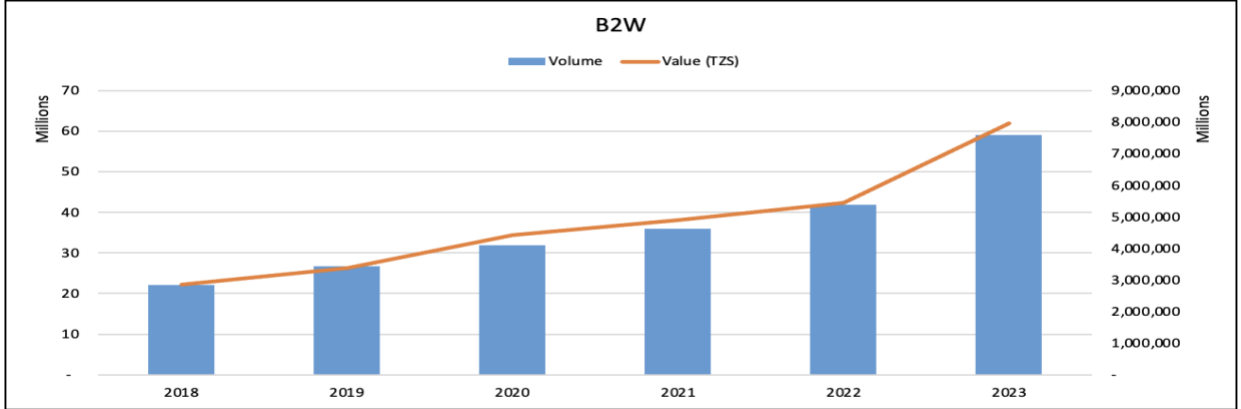
TZS 2,714.74 billion, reflecting an increase of 34.15 percent and 25.21 percent. However, the transfer of funds from bank accounts to wallets (B2W), recorded a significant growth in terms of volume and values. The volume of transfers from banks to wallets was 59.10 million while the value was TZS 7,963.13 billion for 2023, indicating a growth rate of 41.08 percent and 45.99 percent, respectively. Charts 14 and 15 indicate volume and value trend of W2B and B2W transactions, respectively.

Chart: 14 Wallet to Bank Transactions



Source: Bank of Tanzania

Chart 15: Bank to wallet Transactions



Source: Bank of Tanzania

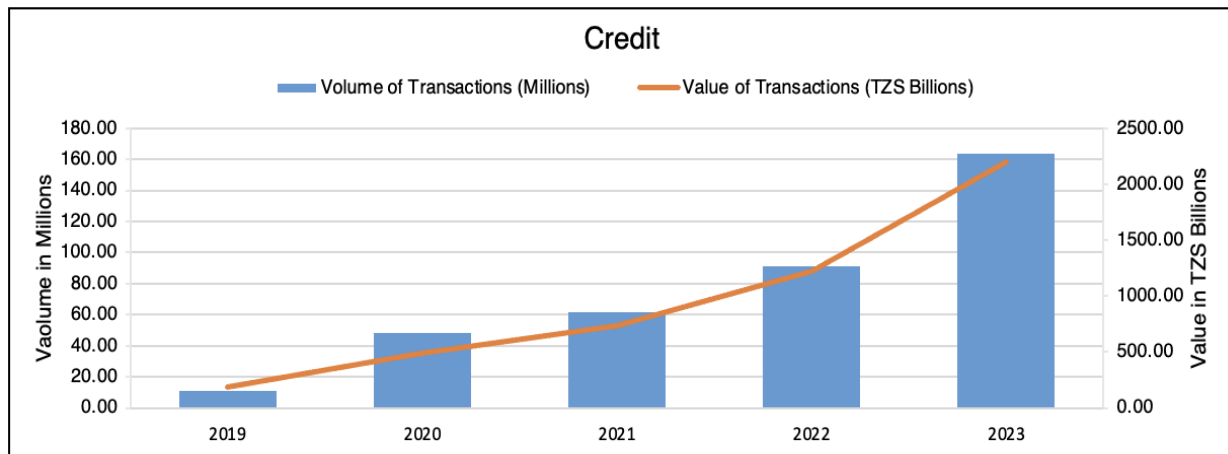
2.3.4.2 Digital financial services

Provision of financial services through digital channels recorded a remarkable achievement. Banks in collaboration with Fintech has introduced saving channels enabling Tanzanians to save and access credits using their digital wallets. These digital solutions helped cash collections thus digitizing social groups resource mobilization at a micro level. In the year 2023, the major digital solutions were Halo Yako, Kamilisha, Kibubu, Mgodu, Songesha, M-Koba, M-Pawa, Nivushe, Timiza, Bustisha, Changisha, Wezesha, Vikoba and Halal, all issued through co-partnerships between banks and non-banks as technology providers.

Digital savings: The number of digital saving transactions facilitated by banks in partnership with non-bank payment system providers increased to 47.28 million in 2023 from 24.12 million transactions, recorded in 2022, indicating a growth rate of 96.06 percent. The corresponding value of digital saving was TZS 1,097.62 billion, in 2023, indicating a growth of 57.62 percent, from TZS 696.36 billion, in 2022.

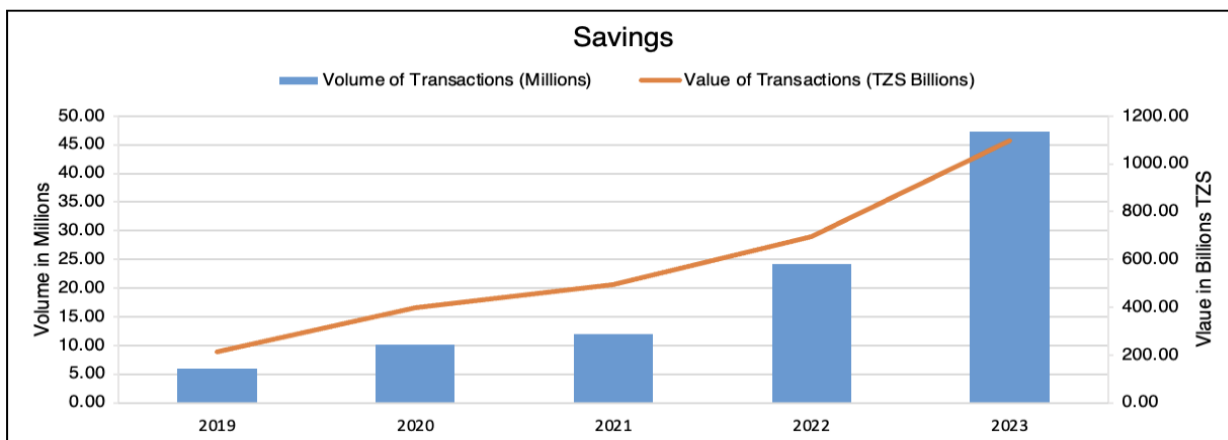
Digital Credit: The number of digital lending transactions conducted by banks in collaboration with non-bank payment system providers were 163.42 million in 2023, reflecting an increase of 79.74 percent, compared to 90.92 million transactions, recorded in 2022. The value of digital credits issued increased by 80.40 percent to TZS 2,201.81 billion, in 2023 from TZS 1,220.48 billion, recorded in 2022. Charts 16 and 17 indicate trends in digital saving and credit for the past five years.

Chart 16: Digital Credit



Source: Bank of Tanzania

Chart 17: Digital Saving



Source: Bank of Tanzania

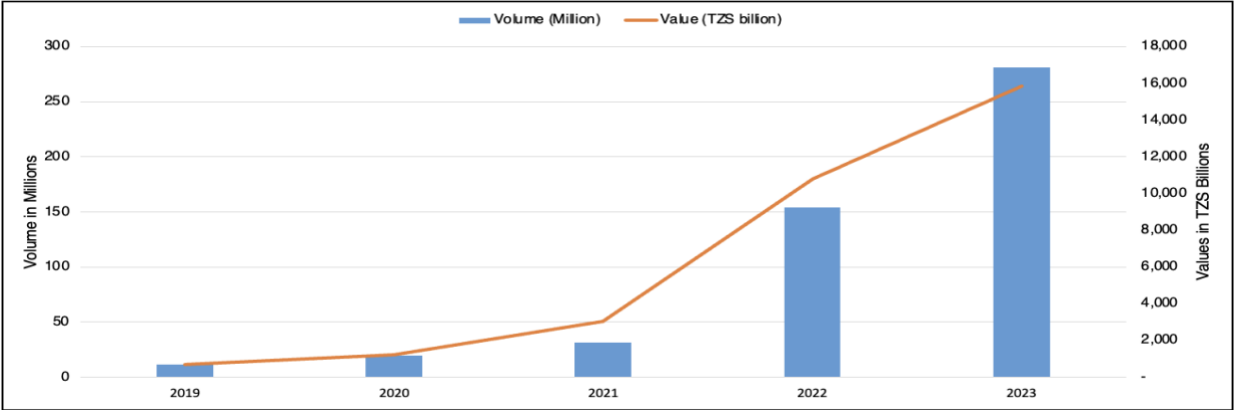
2.3.4.3 Merchant Transactions by EMIs

Merchant payments facilitated by electronic money issuers (EMIs) recorded a growth rate of 76 percent to 607,599 merchants in 2023, from 345,219 merchants at the end of 2022. The improvement in efficiency and safety for processing interoperability transactions are some of the underlying factors for the high uptake of merchant payments. Merchant transactions were also fueled by the emergence of merchant pay number “LIPA NAMBA”.

In terms of merchant distribution, Dar es Salaam region accounted for 26.75 percent of all the merchants, followed by Mwanza region with 9.91 percent, Mbeya Region (6.98 percent) and Arusha region (5.11 percent). Other regions have a share of less than 5 percent each. Some key sectors with the highest segments of merchants served were microfinance institutions, hotels and restaurants, retail stores, pharmacies, supermarkets, and travel agents.

In terms of volume, a total of 280.79 million merchant transactions were processed by EMIs in 2023, reflecting an increase of 83 percent from 153.73 million transactions in 2022. The value of merchant transactions processed was TZS 15,846.11 billion or 47 percent increase from TZS 10,789.64 billion in 2022. Chart 18 indicates trends of merchant transactions conducted through electronic money issuers.

Chart 18: EMIs Merchant Transactions



Source: Bank of Tanzania

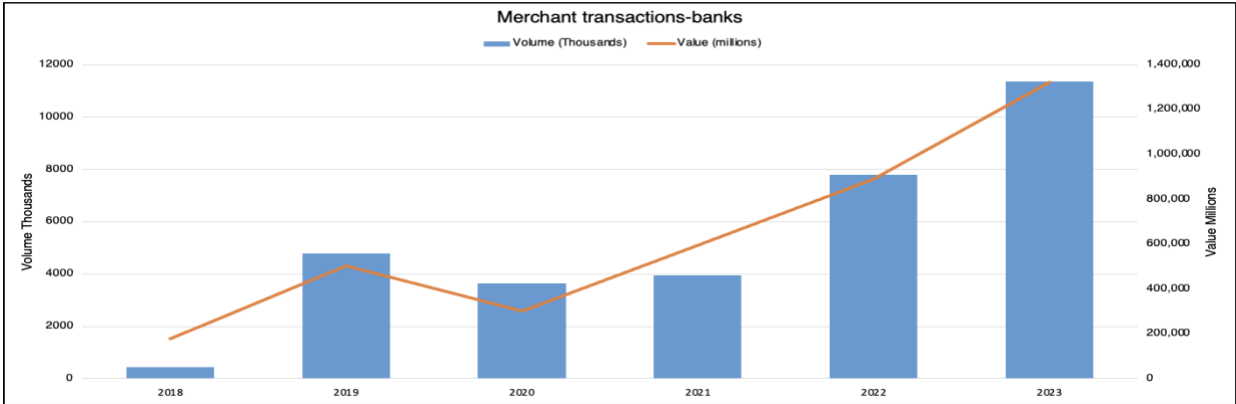
2.3.4.4 Merchant Transactions Facilitated by Banks

In 2023, there were 29,704 merchants facilitated by banks across the country. Dar es Salaam region accounted for 39.40 percent of the merchants followed by Mjini Magharibi (Zanzibar) 15.47 percent, Arusha region 14.07 percent, Kilimanjaro 6.47 percent and Mwanza regions 5.37 percent. Other regions accounted for less than 5 percent each. Major merchant facilitators were CRDB Bank PLC, National Microfinance Bank PLC, NBC Bank Limited, Azania Bank Plc, Amana Bank Limited, Diamond Trust Bank Tanzania

Limited, Ecobank Tanzania Limited, Equity Bank Tanzania Limited, Stanbic Bank Tanzania Limited, and United Bank for Africa Tanzania Limited. Commercial banks used a combination of payment channels including card and mobile to support merchant collections from their customers.

A total of 11,359,959 merchant transactions were processed in 2023, with a corresponding value of TZS 1,322.43 billion, indicating a growth rate of 46 percent and 49 percent, respectively. The adoption of merchant payment reflects the country’s efforts of attaining a cash-lite economy by putting in place a conducive environment for digital payments. The reduction of the minimum KYC for on-boarding merchants is among the factors for high uptake of merchant payments through banks. With the introduction of TANQR, merchants can collect from diverse customers thus eliminating the barriers posed by interoperable challenges. Chart 19 indicates merchant collection through banks.

Chart 19: Banks Merchant Transactions



Source: Bank of Tanzania

2.3.4.5 Merchant transaction processed by aggregators

In 2023, merchants facilitated by non-bank payment aggregators reached 20,043, national-wide. Aggregators who reported merchant facilitation were Selcom Paytech Limited, Pesapal Tanzania Limited, Tunzaa Digital Holdings Limited, Flutter Technology Tanzania Limited, and One Payments Tanzania Limited (PalmPay). The average volume of transactions conducted increased by 85 percent to 9,062,491 in the year 2023 from

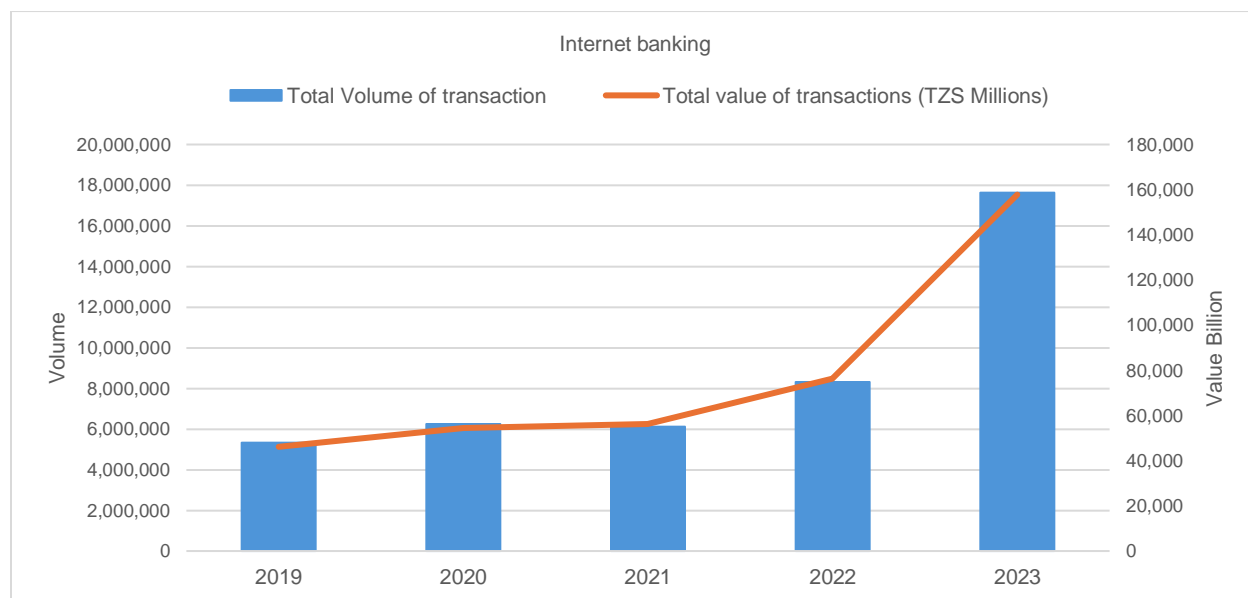
4,901,050 recorded in 2022. Non-bank aggregators facilitated transaction worth TZS 749.59 billion, reflecting an increase of 76 percent, compared to TZS 425.10 billion, in 2022.

2.3.5 Internet Banking

Internet banking allows customers to access their bank accounts and conduct transactions without visiting a bank branch. Internet banking can be accessed on computers, smartphones and tablet terminals using a web application.

The number of banks offering internet banking was 35 at the end of December 2023, having increased from 27 reported in 2022, while the number of registered internet banking users reached 276,145 up from 245,438 reported in 2022, reflecting an increase of 13.00 per cent and 21.14 percent, respectively. In 2023, the volume of internet banking transactions reached 17,626,628 worth TZS 157,809.86 billion, from 8,307,636 transactions worth TZS 76,269.73 billion, in 2022. Chart 20 indicates the trend of Internet banking transactions.

Chart 20: Internet Banking



Source: Bank of Tanzania

2.3.6 Cross-border Payments and Remittances

Cross-border payments encompass the transfer of money between individuals and businesses located in different countries. In contrast, entails “send back”. In terms of money remittance, it is the sending of money to a recipient who lives abroad. Remittance excludes cross-border transfer of funds for settlement of business transactions. Remittance is composed of household incomes from foreign economies arising from temporary or permanent movement of people to those economies. In Tanzania, remittances are facilitated by banks, electronic money issuers, aggregators and payment hubs in collaboration with Money Transfer Operators (MTOs). Money Transfer Operators (MTOs) partner with local FSPs for incoming and outgoing remittances. The common MTO partnered with local financial service providers were Money Gram, Western Union, World Remit, NALA Incorporation, and Terra Payment Services Limited.

In 2023, inflow remittances facilitated by banks increased by 67.66 percent to 839,734 and the value was TZS 1,405.41 billion, reflecting an increase of 4.56 percent. In contrast volume of outgoing slightly decreased by 3.98 percent to 127,457 while the value increased by 40.55 percent to TZS 899.70 billion.

Incoming remittances facilitated by EMIs recorded a negative growth rate for both volume and value of 10.50 percent and 6.39 percent, respectively. The incoming remittances volume was 3,601,794 worth TZS 980.46 billion.

Cross-border payments processed through SWIFT recorded a negative growth for both incomings and outgoings. Inflow volume went down by 53.03 percent to 223,065 transactions worth TZS 24,121.51 billion. The value also recorded a slump by 44.73 percent. Outgoing cross-border payments recorded a decrease of 46.99 percent and 37.90 percent in terms of volume and value, to the level of 178,829 and TZS 62,247.20 billion, respectively.

EMIs facilitate cross-border payment in the East African Community (EAC) and SADC – Regions. During the year 2023, incoming cross-border payments from the region

increased by 68.03 percent to TZS 364.73 billion, compared to TZS 217.07 billion, recorded in 2022. The outgoing cross-border payments also increased by 78.92 percent to TZS 257.95 billion in 2023 from TZS 144.17 billion in 2022.

CHAPTER THREE

3.0 MARKET ANALYSIS & INTERVENTION

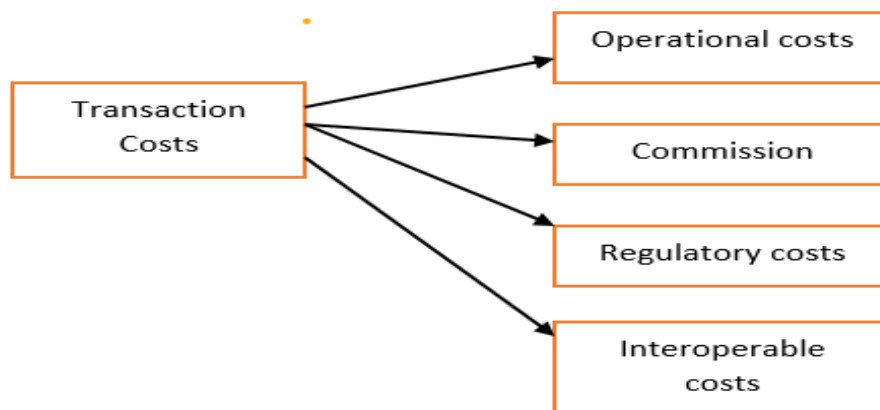
3.1 Introduction

Transaction costs have been cited as among the factors obstructing the usage of digital payment systems. The increase in cost to consumers deters not only the adoption of digital payments but also the actual usage. This limitation obstructs the importance and uptake of digital payments in facilitating financial transactions in comparison to other payment channels.

Bank of Tanzania advocates for the affordability of payment system products and services to consumers to attain the cash-lite agenda by promoting the adoption and usage of digital payments.

The Bank in collaboration with stakeholders, conducted a market study to explore the pricing structure of digital products encompassing operational, regulatory, commission, interoperable cost elements and the policy compliance in order to tackle the prevalent challenge of high transaction fees on money transfer to banks and mobile money operators.

Figure 2: Cost Model



3.2 Study Findings

3.2.1 Interoperable costs

The study observed that the cost of sending money within the same service provider was cheaper than sending to a different service provider. The indicators for interoperability costs included in the study were interchange fees, switch fees and operator fees. For personal to personal (P2P) transfer within the same service provider, costs accounted for 1.61 percent of a transaction cost compared to 5.24 percent for sending to a different service provider. The average costs paid for conducting an interoperable transaction using a digital banking channel was 3.82 percent, while using digital mobile channel was 2.68 percent.

3.2.2 Regulatory costs

Regulatory cost indicators were fees to operate a payment solution, transaction levy, city levies, Value Added Taxes (VAT), cost of compliance, and excise duty. The regulatory fees were observed to pose low influence on cost of transaction. In average the regulatory costs to transaction costs was approximately 2.44 percent in MMO while in banks the average contribution to costs was 5.85 percent.

3.2.3 Operational costs

Operational costs had a significant influence on transaction costs. Elements of operational cost were technology infrastructure costs, float management costs, administrative expenses, customer services expenses, finance costs, management fees, marketing and publicity, personnel expenses, professional and legal fees, sales and distribution expenses. The average contribution of operational costs to the total transaction costs in banks was 82.69 percent and 68.39 percent in MMO.

3.2.4 Commission

The study observed that commission paid to agents and business partners has a significant influence on pricing. The average commission paid for conducting digital

banking transactions accounted for 28.02 percent of the total transaction cost, and 26.49 percent of the costs when a digital mobile money channel is used.

3.3 Recommendations

The study recommended that all financial service providers and policy makers to take appropriate measures to reduce transaction costs to make the digital services affordable to consumers.

3.4 Policy Intervention

Bank of Tanzania issued guidance on transaction fees for both large values payments processed through TISS, EFT, TACH and TIPS. Table 2:1 indicates the revised interbank transfer fees. The policy response was in the tune of addressing the cost challenges in the market with a view of enhancing usage of banking services, that was reported in the Fins-cope Survey 2023 to have only 22% usage by adult population in Tanzania, with cost being one of the major barriers.

Table 2: EFT interbank transfer fees

S/no	Transaction Category	Transaction Size (TZS)	Charges (TZS)
1	Incoming Transfer	All amounts	Zero
2	Outgoing Transfer	TZS 1-50,000	TZS 0-500
		50,001-500,000	0 – 1,000
		500,001 – 5,000,000	0 – 1,500
		5,000,001– 20,000,000	0 - 2000

Source: Bank of Tanzania

Table 3: TISS Transactions charges

S/no	Transaction Category	Transaction Size (TZS)	Charges (TZS)
1	Incoming Transfer	All amounts	Zero
2	Outgoing Transfer	TZS 1-10 million	0-2000
		Above TZS 10-50 million	0 – 5,000

		Above 50 million	0 – 10,000
3	EAPS Outgoing Transfer	Any amount	0 – 10,000

CHAPTER FOUR

4.0 OVERSIGHT ACTIVITIES

4.1 Introduction

The objective of payment systems oversight is to ensure the national payments system operates safely and efficiently with fair and transparent business conduct in alignment with international best practices. The role involves putting in place laws and regulations, and instituting policies and procedures to monitor existing and emerging payment systems, services and instruments as well as payment service providers.

In broad terms, the oversight function fosters robust risk management that mitigate shocks transmission across the financial system and economy. It supports building resilient payments systems with the capacity to continue operating even in the event of major disruptions to systems or service providers. In addition, the oversight role enabled to achieve the level of technological and institutional development necessary to meet the payment needs of a growing, open, regional, and internationally integrated economy.

4.2 Payment System Licensing Procedures

The licensing procedure provides a framework for comprehensive, timely and fairly application assessment, with the goal of mitigating payment system risks at the entry point.

4.3 Procedures for Approval of Payment System Instruments

Licensed payment system providers can issue products in line with their business models. The approval needs to be sought from the Bank before any product launch. Procedures to follow in requesting approval for payment system instruments are provided under *Regulations 22 and 30 of the Payment Systems Licensing Approval Regulations 2015*, applicable for banks and non-banks, respectively.

4.4 Payment System Providers

In 2023, nineteen new payment system licenses were issued raising the number of licensed PSPs to 92 from 71, reported in 2022. Out of the licensed PSPs, 44 were banks and 48 non-banks. Despite the large number of licenses, similarities of payment system products issued to the public are expected to intensify competition. These new licensed providers were mostly merchant facilitators and Money Transfer Operators (MTOs).

To ensure sustainability of these providers, policy intervention to promote merchant acquiring and cross-border remittance is necessary. Also, collaborative efforts between the regulator and providers are key to ensure the design of payment solutions addresses the existing payment infrastructure gap and needs in the country.

4.5 Electronic Money Issuers

The issuance of Electronic Money remains restricted to banks and Mobile Network Operators (MNOs). These measures aim to safeguard the integrity and safety of the payment systems in Tanzania. In 2023, the number of EMIs was six (6), the same as reported in 2022. Fintech solutions continued to innovate solutions capable of creating electronic values and soliciting contribution and deposits from customers.

4.6 Offsite Surveillance

In 2023, the Bank conducted both onsite and offsite surveillance activities of payment systems and providers. A few products were approved including Sharia Based Trust Account, merchant payments, cross border money transfer, card payments, mobile banking, and Internet Banking.

4.7 Onsite Oversight Activities

In 2023, the Bank conducted onsite oversight activities for DataVision International Limited, Airtel Money Tanzania Limited, Cellulant Tanzania Limited, Honora Tanzania Mobile Solutions Limited, DLT CP Tanzania Limited T/A Click Pesa and One Payment

Tanzania Limited. The onsite review aims at ensuring payment systems and their governance operate in a safe and efficient manner in-line with regulations. The onsite inspection unveiled weaknesses in governance arrangements, internal controls, financial performance, risk management systems and regulatory compliance.

4.8 Public Awareness on Payment System

In 2023, the Bank of Tanzania implemented measures to create public awareness of payment systems in Tanzania. These measures include conducting radio and television programs, participation in trade fairs like Saba-Saba and Nane-Nane, involvement in Financial Services Week, and actively engaged on social media. These initiatives aimed to demonstrate a strategic effort to provide consumer awareness and empowerment to a broad audience, by utilizing both physical interaction and digital communication mediums.

The use of radio and television programs is an effective means to reach geographically dispersed populations, while participation in trade fairs facilitates direct interactions with the public, fostering a deeper understanding of payment systems. The Bank's engagement on social media aligns with modern communication trends, ensuring accessibility to a younger and tech-savvy community. Additionally, strategic alignment with industry events, such as Financial Service Week, is part of the Bank's commitment to integrating awareness initiatives into broader financial service narratives.

The Bank's proactive engagement with government officials, payment system providers, financial service providers, and journalists further strengthens the effectiveness of its awareness campaign, contributing to a more informed and financial literacy ecosystem around payment systems.

4.9 Risk-Based Oversight Framework

Risk Based Oversight Framework (RBOF) is among the initiatives taken by the Bank to implement the National Payment Systems Policy Framework and align with the risk management practices of non-bank payment system providers with internationally

accepted standards. In 2023, the Bank developed a Risk-Based Oversight Framework (RBOF) that guide on risk-based oversight in supervising non-bank payment system providers. The RBOF requires non-bank payment system providers to define minimum risks per the framework and attain an acceptable level of quality of risk management through the enhancement of their board and Senior Management oversight; policies, procedures and limits; procedures for risk identification, monitoring and reporting; and also enhancing internal control activities. During the year 2023, the onsite activities were conducted using the RBOF approach.

To support the implementation of RBOF, the Bank developed a guideline for identifying SIPS. The measure aims at minimizing the regulatory burden for PSPs by imposing relevant supervisory measures in accordance with the nature, risk and size of the payment system provider. The minimum criteria in ranking PSPs include geographical coverage, transaction volume, dependability, security and reliability, level of interoperability, and market share.

CHAPTER FIVE

5.0 EMERGING TECHNOLOGIES

5.1 Introduction

Payment systems, Financial Market Infrastructures (FMIs), and Digital Financial Services (DFS) have been key instruments for expanding financial inclusion, fostering economic development and growth, enabling the digital economy, and supporting financial stability. These infrastructures promote safe, reliable, and efficient domestic and cross-border payments. The most recent developments in payment systems include the emergence of crypto assets, CBDC, open banking, and cloud computing.

5.1 Cryptocurrencies and Central Bank Digital Currency

The Tanzania payment system is affected by emerging technologies in both domestic and global developments including cryptocurrencies and CBDCs. In respect of cryptocurrencies, the Bank issued a public notice in November 2019 cautioning the public against participation in cryptocurrency operations due to its risks and unregulated since the existing foreign exchange regulations do not provide for virtual currencies¹.

In 2023, the Bank of Tanzania continued with research to explore the potentiality of the issuance of its CBDC. The Bank was exploring the practical aspects of CBDC through engagement with its stakeholders such as banks, government agencies, international organizations and regional partners. In January 2023 the Bank issued a public notice regarding the development of the research work on CBDC². The public notice also informed the public that the research is aimed at identifying suitable approach to CBDCs aligned to the Tanzania context.

¹ Public Notice is available online at <https://www.bot.go.tz/Adverts/PressRelease/sw/2020031307240424208.pdf>

² Public Notice on CBDC is available online at <https://www.bot.go.tz/Adverts/PressRelease/en/2023011413181519.pdf>

5.2 Supervisory Technologies (SupTech)

In 2023 the Bank continued with development of a SupTech solution for real-time data collection and analysis. The solutions will enable the collection of real-time granular data using Application Programming Interfaces (API) technologies. The new solution will reduce costs and time savings in reporting by eliminating manual data processing. In addition, the solution will improve risk management processes and payment system compliance assessments.

5.3 Cloud Computing

On 21st December 2023, the Bank issued the Cloud Computing Guidelines that apply to all licensed FSPs intending to adopt cloud computing solutions for their peripheral systems. The guidelines provide guidance for orderly adoption of cloud computing, managing outsourcing contracts for cloud computing, training programs, and the implementation of tools for managing risks associated with cloud computing.

5.2 5G Internet Services

Financial Service Providers continued to leverage the use of the 5G internet network to improve the efficiency and reliability of payment system services in Tanzania. The Bank continues to encourage service providers to adopt 5G internet networks in the provision of services.

5.4 Digital Identity

Digital identity intends to reduce the number of identifications issued to individuals. Establishing a single identity is a cornerstone for accessing financial services. Digital identity is crucial in various online activities, including authentication, access control, privacy protection and secure communication. The Government is at the initial stage of developing a digital identity and the Bank is participating in the initiative.

5.5 Regulatory Standards

Regulatory Standards for payment systems refer to the rules, guidelines and requirements set forth by regulatory authorities to ensure payment systems' safety, efficiency, transparency and integrity. These standards aim to establish a secure and reliable infrastructure for financial transactions and protect the interests of participants, consumers and the overall financial system. Some of the standards include Principles for PFMIs, Communication, Security and Payment Card Standards (CSPCS), and the Anti-Money Laundering and Combating of Financing of Terrorism Standards (AML-CFTS).

5.6 Distributed Ledgers Technologies

Distributed Ledger Technologies (DLT) are decentralized database systems enabling multiple participants to maintain a shared and secure record of transactions without the need for central authority. The Bank has not yet adopted Distributed ledger technologies (DLTs) but has allowed some products that use DLT to be used in the market. The Bank shall continue to explore the possibilities of adopting DLTs in the supervision of payment systems in Tanzania.

6.0 ANNEXURES

Annexure A. TISS transactions

Table A1: TISS Transactions Denominated in Tanzanian Shillings (TZS)

Particulars	2019	2020	2021	2022	2023
Volume of transaction (Million)	2.12	2.48	3.26	3.83	4.11
Value of transaction (TZS billion)	193,728	186,369	174,309	207,503	256,028
%Increase/Decrease in Volume	8.58	17.04	31.37	17.68	7.28
% Increase/Decrease in Value	5.68	(3.80)	(6.47)	19.04	23.39

Table A2: TISS Transactions Denominated in United States Dollars (USD)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	275,936	227,894	289,979	415,752	545,161
Value of transaction (USD million)	18,090	16,440	25,210	25,210	27,502
% Increase/Decrease in Volume	14.66	(17.41)	27.24	43.37	31.13
% Increase/Decrease in Value	0.67	(9.12)	29.43	18.48	9.09

Annex B: TIPS Data

Particulars	2021	2022	2023
Number of participants	5	34	45
Volume of transactions	74,348	16,528,789	235,037,452
Value in (TZS Millions)	51,052	2,843,204	12,270,470

Annex C: TACH Transactions

Table C1: Electronic Fund Transfers (EFT)

Particulars	2019	2020	2021	2022	2023
Volume of transactions	9,485,638	14,569,721	15,579,905	16,810,872	19,054,529
Value of transactions (TZS Billion)	6,055.59	9,479.10	10,694.45	12,079.17	14,422.41
% Increase/decrease of Volume	(24)	54	7	8	13
% Increase/decrease of Value	(14)	57	13	13	19

Table C2: Trend of TZS Cheque Transactions

Particulars	2019	2020	2021	2022	2023
Volume of TZS Cheque processed	554,684	651,829	604,367	546,620	485,972
Value of TZS Cheque (TZS Billion)	1,676.90	2,118.08	2,025.61	1,977.71	1,893.47
% Increase/decrease of Volume	(50.00)	18.00	(7.00)	(10.00)	(11.00)
% Increase/decrease of Value	(48.00)	26.00	(4.00)	(2.00)	(4.00)

Table C3: USD Cheque Transactions

Particulars	2019	2020	2021	2022	2023
Volume of USD Cheque processed	195,285	113,643	97,545	107,497	88,041
Value of USD Cheque (USD Million)	416.47	238.22	219.24	238.96	192.41
% Increase/decrease of Volume	(14)	(42)	(14)	10	(18)
% Increase/decrease of Value	(19)	(43)	(8)	9	(19)

Annex D: Regional Transactions**Table D1: EAPS Transactions (TZS)**

Particulars	2019	2020	2021	2022	2023
Volume of transaction	3,059	3,607	9,884	13,730	5,571
Value of transaction (TZS Million)	112,097	167,108	126,238	191,778	394,427
% Increase/Decrease in Volume	27.19	17.91	174.02	38.91	105.67
% Increase/Decrease in Value	(1.95)	49.07	(24.46)	51.92	(59.42)

Table D2: EAPS Transactions (KES)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	2,831	3,149	4,554	3,745	5,493
Value of transaction (TZS Million)	4,820	5,084	7,433	8,982	38,643
% Increase/(Decrease) in Volume	(3.48)	11.23	44.62	(17.76)	46.68
% Increase/(Decrease) in Value	5.16	5.47	46.21	20.84	310.21

Table D3: EAPS Transactions (UGX)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	399	395	483	434	584
Value of transaction (UGX Million)	13,819	17,539	29,087	32,441	53,609
% Increase/(Decrease) in Volume	29.97	(1.00)	22.28	(10.14)	34.56
% Increase/(Decrease) in Value	(34.88)	26.93	65.84	11.53	65.25

Table D4: SADC RTGS Transactions

Particulars	2019	2020	2021	2022	2023
Regional Volume	347,850	345,503	370,341	435,569	493,805
Tanzania Volume	3,861	3,917	3,935	3,818	3,429
Regional Value (ZAR Billion)	1,229	1,260	1,321	1,702	2,229
Tanzania Value (ZAR Billion)	1.18	3.01	0.85	0.79	3.04
% Volume Contributed by Tanzania	1.11	1.13	1.06	0.88	0.69
% Value Contributed by Tanzania	0.10	0.24	0.06	0.05	0.14
% growth of Tanzania RTGS volume	(8.70)	1.45	0.46	(2.97)	(10.19)
% growth of Tanzania RTGS Value	2.04	156.05	(71.83)	(7.38)	287.00

Annex E: Card Records**Table E1: Card Transactions**

Particulars	2019	2020	2021	2022	2023
Live local brand cards (Million)	5.15	3.58	3.25	2.88	2.40
Active local brand cards (Million)	0.41	0.27	0.2	0.35	0.16
Live international brand cards issued locally (Million)	3.65	5.57	6.52	9.01	10.43
Active international brand cards (Million)	1.25	1.58	1.71	2.03	1.94
Number of card transactions (Million)	69.2	67.05	68.73	82.9	81.1
Value of card transactions (TZS Billion)	10,309	10,337	11,129	10,263	14,547.18
Local Volume by foreign issued cards (Million)	4.45	5.08	2.58	3.52	4.57
Local value by foreign issued cards (TZS billions)	1,019	1,082	687	1,005	1,250.96
Volume of Cross border transactions by locally issued cards	1.42	1.42	1.74	2.58	4.50
Value of cross border transactions by locally issued cards	290	251	245	378	752.30
Number of Registered Virtual Cards	235,833	550,683	441,803	309,006	511,826
Volume of Virtual transactions	151,079	343,198	798,935	1,070,095	1,980,135
Value of Virtual card transactions	6.25	12.73	32.30	51.90	84.38
Number of Co-branded cards	1,976	2,837	4,120	6,015	17,690

Table E2: ATM Transactions

Particulars	2019	2020	2021	2022	2023
Number of ATMs	1,423	1,462	1,441	1,885	1,981
Number of transactions	47,561,363	45,647,737	53,248,780	57,770,101	75,012,703
Value of transactions (TZS Billion)	7,409.37	7,255.26	8,838.50	9,810.70	13,896.00
% changes of number of ATMs	0.78	2.74	(1.44)	30.81	5.09
% changes in number of transactions	4.48	(4.02)	16.65	8.49	29.85
% Changes in values of transactions	6.86	(2.08)	21.82	11.00	41.64

Annex F: Money Remittance

Table F1: Remittance Facilitated by Banks

Particulars	2019	2020	2021	2022	2023
Inflow Volume	559,688	629,606	415,960	500,849	839,734
Inflow Value (TZS Billion)	917.67	894.08	837.33	1,344.12	1,405.41
Outflow Volume	146,893	168,061	129,651	132,740	127,457
Outflow Value (TZS Billion)	529.57	439.88	480.86	640.14	899.70
% In inflow volume	(1.70)	12.49	(33.93)	20.41	67.66
% Increase/(Decrease) Inflow Value	(29.21)	(2.57)	(6.35)	60.52	4.56
% Increase/(Decrease) outflow volume	3.02	14.41	(22.85)	2.38	(3.98)
% Increase/(Decrease) outflow value	(32.89)	(16.94)	9.32	33.12	40.55

Table F2: Remittance Facilitated by Mobile Money Operators

Remittance by mobile money operators	2019	2020	2021	2022	2023
Inflow Volume	431,270	1,745,569	3,265,693	4,024,519	3,601,794
Inflow Value (TZS Billion)	112.30	483.80	996.55	1,047.35	980.46
% Increase/(Decrease) inflow volume	57.01	304.75	87.08	23.24	(10.50)
% Increase/Decrease Inflow Value	49.16	330.82	105.98	5.10	(6.39)

Annex G: Cross-Border Fund Transfer

Table G1: Cross Border Fund Transfers by Banks

Particulars	2019	2020	2021	2022	2023
Inflow Volume	385,055	258,084	389,145	474,890	223,065
Outflow Volume	305,641	220,910	301,421	337,324	178,829
Inflow Value (TZS Billion)	39,677.45	23,977.37	33,863.11	43,644.42	24,121.51
Outflow Value (TZS Billion)	101,894.27	55,884.84	125,068.28	100,233.38	62,247.20
% Increase/(Decrease) inflow volume	(1.70)	(32.97)	50.78	22.03	(53.03)
% Increase/(Decrease) outflow volume	3.02	(27.72)	36.45	11.91	(46.99)
% Increase/(Decrease) Inflow Value	(29.21)	(39.57)	41.23	28.88	(44.73)
% Increase/(Decrease) outflow value	(32.89)	(45.15)	123.80	(19.86)	(37.90)

Table G2: Cross-border fund transfers by MMO

Particulars	2019	2020	2021	2022	2023
Inflow Volume	1,164,111	1,588,642	1,800,757	2,087,639	2,968,091
Outflow Volume	450,232	611,630	835,034	986,913	1,594,630
Inflow Value (TZS Billion)	115.90	183.79	186.59	217.07	364.73
Outflow Value (TZS Billion)	49.53	80.80	117.55	144.17	257.95
% Increase/(Decrease) inflow volume	63.53	36.47	13.35	15.93	42.17
% Increase/Decrease - outflow volume	42.08	35.85	36.53	18.19	61.58
% Increase/(Decrease)- inflow Value	93.03	58.58	1.52	16.33	68.03
% Increase/Decrease - outflow value	52.98	63.12	45.48	22.65	78.92

Annex H: Mobile Money Indicators**Table H1: Mobile Payments**

Particulars	2019	2020	2021	2022	2023
Mobile money users (Active)	24,379,804	30,325,019	33,142,118	38,338,776	51,715,462
Volume (million)	2,844.74	2,917.35	3,158.48	3,595.04	5,061.20
Value (TZS Billion)	94,597.64	109,214.30	115,228.42	114,315.99	154,705.77
Number of agents	569,187	702,284	838,759	1,038,874	1,240,052
% Increase/(Decrease) in active users	4.63	24.39	9.29	15.68	34.89
% Increase/(Decrease) in volume	5.96	2.55	8.27	13.82	40.78
% Increase/(Decrease) in value	16.24	15.45	5.51	(0.79)	35.33

Table H2: Person to Person Transfer (P2P)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	262,025,121	252,235,638	221,023,229	235,480,981	364,357,883
Value of transaction (TZS Billion)	10,869.33	10,894.16	8,937.40	7,369.27	11,323.78
% Increase/(Decrease) in Volume	(1.29)	(3.74)	(12.37)	6.54	54.73
% Increase/(Decrease) in Value	(3.96)	0.23	(17.96)	(17.55)	53.66

Table H3: Bank to Wallet (B2W)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	26,682,832	31,949,446	35,982,310	41,893,065	59,104,136
Value of transaction (TZS Billion)	3,372.47	4,426.91	4,900.29	5,454.55	7,963.13
% Increase/Decrease in Volume	20.71	19.74	12.62	16.43	41.08
% Increase/Decrease in Value	17.97	31.27	10.69	11.31	45.99

Table H4: Wallet to Bank (W2B)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	5,814,561	5,126,316	5,015,738	4,932,624	6,617,320
Value of transaction (TZS Billion)	1,846.47	1,709.05	2,380.79	2,168.23	2,714.74
% Increase/(Decrease) in Volume	(0.54)	(11.84)	(2.16)	(1.66)	34.15
% Increase/(Decrease) in Value	(4.86)	(7.44)	39.30	(8.93)	25.21

Table H5: Personal to Business (P2B)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	399,180,048	454,783,318	620,645,796	788,088,856	1,350,844,314
Value of transaction (TZS Billion)	3,744.47	3,315.70	5,621.99	10,819.72	18,250.33
% Increase/(Decrease)- Volume	5.23	13.93	36.47	26.98	71.41
% Increase/(Decrease) - Value	(23.08)	(11.45)	69.56	92.45	68.68

Table H6: Payment to Government (P2G)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	3,562,962	4,694,454	6,907,271	9,498,824	10,540,762
Value of transaction (TZS Billion)	125.76	171.59	355.23	357.19	426.28
% Increase/(Decrease) - Volume	224.55	31.76	47.14	37.52	10.97
% Increase/(Decrease) - Value	202.78	36.44	107.02	0.55	19.34

Table H7: Business to Person (B2P)

Particulars	2019	2020	2021	2022	2023
Volume of transaction	121,733,287	98,956,746	97,477,939	100,336,788	174,344,405
Value of transaction (TZS Billion)	2,831.71	2,859.98	2,964.59	3,538.93	5,814.13
% Increase/(Decrease)- Volume	43.88	(18.71)	(1.49)	2.93	73.76
% Increase/(Decrease)- Value	19.40	1.00	3.66	19.37	64.29

Table H8: Cash-in-Transactions

Particulars	2019	2020	2021	2022	2023
Volume of transaction	626,333,091	686,139,628	767,544,960	915,894,559	1,163,751,711
Value of transaction (TZS Billion)	23,306.72	25,484.56	26,690.92	28,951.02	36,282.37
% Increase/(Decrease)- Volume	14.16	9.55	11.86	19.33	27.06
% Increase/(Decrease)- Value	9.33	9.34	4.73	8.47	25.32

Table H9: Cash-Out-Transactions

Cash Out Transactions	2019	2020	2021	2022	2023
Volume of transaction	351,462,158	384,702,473	390,147,709	376,016,679	375,453,927
Value of transaction (TZS Billion)	20,354.34	23,941.38	25,747.09	23,919.52	27,900.24
% Increase/(Decrease) - Volume	2.65	9.46	1.42	(3.62)	(0.15)
% Increase/(Decrease) - Value	4.89	17.62	7.54	(7.10)	16.64

Table H10: Agent Cash Deposit at Banks

Particulars	2019	2020	2021	2022	2023
Volume of transaction	8,374,641	11,667,295	14,939,407	12,059,137	16,475,871
Value of transaction (TZS Billion)	9,285.47	14,222.69	14,219.40	10,587.67	14,023.99
% Increase/(Decrease)- Volume	69.86	39.32	28.05	(19.28)	36.63
% Increase/(Decrease)- Value	69.32	53.17	(0.02)	(25.54)	32.46

Table H11: Agent Cash Withdrawals at Banks

Particulars	2019	2020	2021	2022	2023
Volume of transaction	9,982,638	11,443,035	12,303,685	10,047,364	12,504,070
Value of transaction (TZS Billion)	10,553.19	14,308.37	14,347.21	11,063.57	14,353.74
% Increase/Decrease - Volume	36.12	14.63	7.52	(18.34)	24.45
% Increase/Decrease - Value	54.52	35.58	0.27	(22.89)	29.74

Table H12: Digital Financial Services³

Particulars	2019	2020	2021	2022	2023
Digital Savings					
Volume of Transactions (Millions)	5.93	10.21	11.91	24.12	47.28
Value of Transactions (TZS Billions)	211.48	396.76	494.82	696.36	1,097.62
Digital Credit					
Volume of Transactions (Millions)	11.17	48.50	61.46	90.92	163.42
Value of Transactions (TZS Billions)	183.49	490.28	737.49	1,220.48	2,201.81
Digital Insurance					
Volume of Transactions (Millions)	0.45	0.68	0.60	1.01	23.18
Value of Transactions (TZS Billions)	1.88	3.07	3.66	7.64	15.43

³ Songesha, Kibubu, Halal, M-pawa, M-Koba, Bustisha, Wezesha, Mgodhi, Halo Yako, Kamilisha, Nivushe and Timiza

Annex I: Point of Sales (POS) Machines

Particulars	2019	2020	2021	2022	2023
No. of POS (Restated)	4,287	4,428	6,523	7,317	8,652
Local transaction volume	1,768,521	2,968,661	5,567,979	6,746,967	9,914,727
Foreign transaction volume	581,997	495,808	585,807	752,153	1,081,015
Local Value (TZS Billion)	286.09	490.96	1,053.52	1,343.89	1,922.23
Foreign value (TZS Billion)	437.68	244.61	386.59	537.50	662.28
% Increase/(Decrease) in POS (Restated)	34.68	3.29	47.31	12.17	18.25
% Increase/(Decrease) local volume	93.71	67.86	87.56	21.17	46.95
% Increase/(Decrease) foreign volume	4.20	(14.81)	18.15	28.40	43.72
% Increase/(Decrease) local value	96.76	71.61	114.58	27.56	43.04
% Increase/(Decrease) foreign value	22.69	(44.11)	58.04	39.03	23.22

Annex J: Internet Banking Transactions

Particulars	2019	2020	2021	2022	2023
Number of banks	20	21	24	27	35
Customers					
Registered Live	217,425	262,795	185,617	245,438	313,586
Active	31,706	46,347	52,666	110,692	134,091
Volume					
Local transactions	5,296,748	6,220,700	5,827,000	7,999,034	16,140,348
International transaction	20,021	21,068	275,682	308,602	1,486,280
Value					
Local transactions (TZS Billions)	43,225.77	51,583.40	46,276.69	66,470.33	142,610.39
International transactions (TZS Billions)	2,927.67	2,750.26	10,012.49	9,799.40	15,199.47
% Increase/(Decrease) of registered customer	12.69	20.87	(29.37)	32.23	27.77
% Increase/(Decrease) of active customers	(4.86)	46.18	13.63	110.18	21.14

Annex K: Merchant Statistics

Table K1: Merchant Distribution

Region	2019	2020	2021	2022	2023
Arusha	3,175	2,973	7,785	18,278	36,673
Dar es Salaam	23,579	13,164	36,109	105,306	180,165
Dodoma	893	1,313	6,309	15,402	30,631
Geita	512	454	2,770	9,759	19,179
Iringa	553	559	4,060	8,483	15,215
Kagera	502	378	6,998	12,101	21,464
Kaskazini Pemba	3	8	34	999	368
Kaskazini Unguja	107	111	235	2,098	1,061
Katavi	248	326	987	2,925	4,563
Kigoma	877	444	5,179	13,839	14,940
Kilimanjaro	1,688	1,642	8,320	12,911	19,926
Kusini Pemba	95	41	169	1,101	415
Kusini Unguja	35	40	123	1,160	559
Lindi	132	153	1,393	3,770	4,140
Manyara	134	114	1,504	4,436	9,887
Mara	933	413	2,236	8,988	13,927
Mbeya	2,466	1,883	10,674	23,077	44,175
Mjini Magharibi	2,920	2,343	4,003	18,532	10,209
Morogoro	1,575	1,338	6,002	16,277	28,367
Mtwara	184	246	2,114	5,302	8,902
Mwanza	2,117	1,587	7,944	36,877	63,074
Njombe	305	329	1,931	3,841	10,831
Pwani	409	413	2,618	10,026	17,091
Rukwa	288	296	1,883	3,296	7,189
Ruvuma	425	384	2,592	4,530	9,320
Shinyanga	428	380	2,176	10,203	20,398
Simiyu	89	114	1,402	5,161	7,004
Singida	179	162	968	4,946	10,846
Songwe	21	164	2,087	1,170	838
Tabora	328	197	2,198	11,895	24,411
Tanga	315	1,068	9,309	17,288	21,578
Total merchants	45,515	33,037	142,112	393,977	657,346
Merchant by institution category					
Electronic Money Issuers (EMIs)	11,914	12,103	113,295	345,219	607,599
Banks and Financial Institutions	15,655	14,824	19,486	23,414	29,704
Non-banks (Aggregators)	17,946	6,110	9,331	25,344	20,043

Table K2: Number of Merchant Transactions

Region	2019	2020	2021	2022	2023
Arusha	761,103	753,592	1,372,266	4,190,860	8,055,971
Dar es Salaam	2,736,367	3,506,577	7,841,631	48,847,682	98,355,252
Dodoma	286,435	359,252	1,367,740	5,727,773	10,083,117
Geita	645,695	1,341,507	1,477,261	5,041,646	7,398,425
Iringa	296,749	328,085	632,438	3,290,352	6,375,907
Kagera	1,103,312	1,960,009	1,797,822	5,198,968	8,708,176
Kaskazini Pemba	769	509	4,848	84,295	193,785
Kaskazini Unguja	17,336	13,620	56,457	116,212	196,986
Katavi	216,262	327,275	328,708	1,375,839	2,339,450
Kigoma	1,625,358	2,651,407	3,265,263	6,490,992	10,216,392
Kilimanjaro	850,208	841,781	1,303,565	4,885,181	7,230,172
Kusini Pemba	514	301	5,112	79,169	140,037
Kusini Unguja	12,438	5,820	32,884	58,581	120,413
Lindi	14,033	71,529	122,142	790,572	1,207,869
Manyara	240,446	209,330	425,019	1,512,516	1,972,918
Mara	519,975	606,858	670,091	4,403,273	9,109,000
Mbeya	2,547,563	4,223,663	4,756,927	14,990,053	23,902,598
Mjini Magharibi	344,534	188,599	389,743	939,759	2,005,487
Morogoro	229,743	205,806	879,617	6,360,838	12,434,834
Mtwara	121,604	119,030	200,286	1,228,535	2,094,016
Mwanza	2,216,269	3,312,505	3,714,814	17,815,125	34,106,218
Njombe	211,923	417,781	474,377	1,818,647	4,090,512
Pwani	48,616	95,379	362,931	3,388,673	7,228,063
Rukwa	215,619	355,672	924,688	2,097,902	3,287,536
Ruvuma	381,559	314,043	414,833	1,820,285	3,172,653
Shinyanga	494,279	856,215	813,025	3,895,992	7,648,313
Simiyu	168,421	250,187	301,991	1,642,873	2,804,911
Singida	150,261	146,978	310,184	1,485,720	2,711,412
Songwe	14,044	27,582	159,725	571,494	796,188
Tabora	285,073	365,245	467,329	4,094,214	6,679,444
Tanga	165,282	159,005	1,965,165	12,191,987	16,546,162
Total number of transactions	16,921,790	24,015,142	36,838,882	166,436,008	301,212,217
Merchant transaction volume					
Electronic Money Issuers (EMIs)	11,597,471	19,576,590	31,193,043	153,731,756	280,789,767
Banks and Financial Institution	4,784,851	3,643,068	3,947,329	7,803,202	11,359,959
Non-banks (Aggregators)	539,468	795,484	1,698,510	4,901,050	9,062,491

Table K3 : Merchant Transaction Values (TZS Billion)

Region	2019	2020	2021	2022	2023
Arusha	101.03	82.72	202.51	436.63	706.13
Dar es Salaam	339.24	435.01	1,070.68	4,081.32	5,973.45
Dodoma	11.09	18.45	126.55	374.61	556.11
Geita	23.66	47.87	64.62	225.79	351.92
Iringa	18.92	28.51	73.19	251.92	371.91
Kagera	45.42	88.70	127.83	336.50	531.71
Kaskazini Pemba	0.57	0.41	3.89	7.57	11.48
Kaskazini Unguja	8.73	6.65	22.03	39.89	60.63
Katavi	10.30	21.28	22.60	103.54	156.96
Kigoma	80.95	159.80	255.26	484.82	675.57
Kilimanjaro	64.77	59.07	207.34	408.48	535.70
Kusini Pemba	0.34	0.09	1.83	12.32	14.19
Kusini Unguja	6.49	3.03	14.85	21.30	37.92
Lindi	0.42	1.88	9.14	48.51	56.06
Manyara	8.49	8.58	27.20	105.02	127.03
Mara	25.38	30.99	39.46	229.60	441.90
Mbeya	111.98	199.22	365.02	909.69	1,395.64
Mjini Magharibi	181.92	74.67	169.92	257.21	485.73
Morogoro	13.48	14.86	103.38	420.76	579.48
Mtwara	2.60	4.00	21.89	75.09	97.26
Mwanza	109.00	155.53	238.82	968.97	1,734.45
Njombe	19.36	29.73	40.91	157.66	262.08
Pwani	10.05	17.54	66.60	311.17	427.35
Rukwa	8.87	14.36	77.31	119.35	192.31
Ruvuma	7.40	8.06	19.19	93.16	145.20
Shinyanga	30.12	51.53	61.41	242.09	451.36
Simiyu	8.05	16.36	21.99	110.46	170.43
Singida	9.27	12.00	65.16	121.67	189.73
Songwe	0.14	0.30	12.18	32.17	34.95
Tabora	17.73	25.54	45.68	365.11	449.19
Tanga	9.68	5.82	216.34	751.07	694.30
Total value	1,285.46	1,622.59	3,794.77	12,103.43	17,918.12
Value by institution type					
EMIs) – TZS Billion	684.61	1,233.17	3,043.40	10,789.64	15,846.11
Banks TZS Billion	502.41	300.71	593.39	888.74	1,322.43
Aggregators- TZS Billion	98.44	88.71	157.98	425.05	749.59

Annex L: Mobile Banking

Particulars	2019	2020	2021	2022	2023
Number of subscribers	5,043,023	5,864,708	4,822,448	7,923,053	8,990,468
Active users	1,270,364	1,482,544	1,241,357	1,623,386	2,449,886
Volume of transactions	55,745,503	59,234,494	71,454,334	92,129,365	81,995,270
Value of transactions (TZS Million)	9,475,389	15,227,413	24,973,344	30,651,581	25,507,860
% Increase/(Decrease) subscribers	23.30	16.29	(17.77)	64.30	13.47
% Increase/(Decrease)-active users	33.92	16.70	(16.27)	30.78	50.91
% Increase/(Decrease)volume	22.03	6.26	20.63	28.93	(11.00)
% Increase/(Decrease)-value	216.10	60.70	64.00	22.74	(16.78)

Annex M: Non-Bank Payment System Providers

S/no	Institution Name	Contact Person	Address
1	Airpay Tanzania Limited	Ms. Yasmin S. Chali Mob : +255 (0) 789 143566 E-Mail : yasmin@airpay.tz	2 nd Floor, Muzammil Centre, Mlandege Street, P. O Box 4880, ZANZIBAR
2	Airtel Tanzania Public Limited Company	Mr. Andrew Rugamba Mob: +255 (0) 784 670 908 E-mail: andrew.rugamba@ug.airtel.com	Block 41, Kinondoni Corner of Ali Hassan Mwinyi & Kawawa Roads P. O. Box 9623 DAR ES SALAAM
3	Aron Group Tanzania Limited	Ms. Elizabeth Mtaka E-mail: elizabeth@arongroup.net Mob: +255 (0) 713 055 195	TanESCO, Bonde la Mpunga Mikocheni Area P. O. Box 13902, DAR ES SALAAM
5	Azampay Tanzania Limited	Mr. Ibrahim Malando Mob: +255 (0) 784670590 E-mail: ibrahim@azampay.com	Haile Selassie Rd, Plot No. 208, Po Box 2517, DAR ES SALAAM
6	Beyonic Limited	Ms. Doreen Lukandwa Mob: +255 (0) 765 724891 E-mail: dlukandwa@mfsafrica.com	Beyonic Limited, P.O. Box 14107, Tanzanite Park 38, New Bagamoyo Road DAR ES SALAAM
7	Breakthrough Technologies Africa Limited (BTAL)	Ms. Victoria Mwakoyo Ag. General Manager Mob : +255 (0) 753 640 390 E-mail: victoria@btalafrica.com	Breakthrough Technologies Africa Limited Umoja House Msasani Road P.O Box 72838 DAR ES SALAAM
8	Brij Fintech Tanzania Limited	Mr. Charles Aggrey Mob: +255 (0) 753 640 390 Or Ms. Joyce Maina Mob : +254 720643921 E-mail: jmaina@brij.africa Beatus Lyamba Mob: +255 (0) 767561234 E-mail: blyamba@brij.africa	Acacia Estate Office, 1 st Floor, Plot No.84 Kinondoni Road P.O Box 38568 DAR ES SALAAM
9	Business Connexion Tanzania Limited (UBX)	Mr. Seronga Wangwe Mob: +255 (0) 754310358 or +255 (0) 754310359 E-mail: Seronga.Wangwe@ubx.co.tz	UBX (Tanzania) Limited Plot No. 6, Lucy Lameck Street Mikocheni P.O Box 76384 DAR ES SALAAM
10	Cellulant Tanzania Limited	Mr. Adam Senkoro Mob: +255 (0) 769 359399 Adam.senkoro@cellulant.io	Cellulant Tanzania PLC 4 th Floor, Jangid Plaza Ali Hassan Mwinyi Road P. O. Box 31333 DAR ES SALAAM

S/no	Institution Name	Contact Person	Address
11	Craft Silicon	Mili Sanjay Rughani E-mail: mili.rughani@craftsilicon.co.tz Mob: +255 (0) 687 726 529 cc info@craftsilicon.co.tz	Plot No.172 Ada Estate P. O Box 4318 DAR ES SALAAM
12	Digicash (T) Limited	Dr. Alfred Msemu Mob: +255 (0) 716063997	Ada Estate, Kilimani Road P.O Box 6189 DAR ES SALAAM
13	DLT CP Tanzania Company Limited T/A Clickpesa	Mr. Rick L. Groothuizen E-mail: r.groothuizen@clickpesa.com Mob: +31652373832 Or Richard Lema E-mail: r.lema@clickpesa.com Mob: +255 (0) 744759111 / 788828044	P.O. Box 23440 102 Victoria Place, New Bagamoyo DAR ES SALAAM
14	ELIPA Tanzania Limited	Mr. Phillip Nyamwaya E-mail: philip@elipa.global Mob: +254 (0) 722 636 299 Mr. Arthur Seme Director E-mail: arthur@tz.elipa.global Mob: +255 (0) 754271155	2 nd Floor, Chole Plaza, Chole Road P. O Box 106190 DAR ES SALAAM
15	EvMak (T) Limited	Mr. Evans Expery Makundi Mob: +255 (0) 716400001 E-mail : happyglory@evmak.com	Street Mtwara Crescent, Off Guba Road, Plot 235 Oysterbay P. O. Box 71485 DAR ES SALAAM
16	E-Wallet Africa Limited	Mr. Josephat Kyando Mob: +255 (0) 754 710183/0713 076547 E-mail: joseph.maneno@gmail.com	Quality Center Mall, Ground Floor Smart Office Wing, Nyerere Road P.O. Box 78843 DAR ES SALAAM
17	FastHub Solutions Limited	Mr. Daniel Buchafwe Mob: +255 (0) 754088816 E-mail: daniel.buchafwe@fasthub.co.tz	Plot No.473, NHC Street, Off Mwai Kibaki Road P. O. Box 31206 DAR ES SALAAM
18	Flutter Technology Limited	Mrs. Aisha Said Manager, Country Compliance Mob : +255 (0) 772883388/715000180 E-mail : aisha.said@flutterwavego.com	7 th Floor, Amani Place P. O. Box 38568 DAR ES SALAAM
19	HONORA Tanzania Public Limited Company	Mr. Jerome Albou Mob: +255 (0) 713 123844 E-mail: jerome.albou@tigo.co.tz jerome.albou@tigo.co.tz	30 th Floor, PSSSF Commercial Complex, House No. 24, Plot No. 3 Sam Nujoma Road,16102, Sinza C Street P.O. Box 2929, DAR ES SALAAM
20	Instant Payment Solutions Limited	Mr. Anwary Issa Mob: +255 (0) 754013109/765514685	City Mall Office G1 P.O Box 32776

S/no	Institution Name	Contact Person	Address
		E-mail: anurroug67@gmail.com or anwar@instantpay.co.tz	DAR ES SALAAM
21	Kuda Tanzania Limited	Rwebugisa Rwabyo Mutahaba Mob: +255 (0) 785670981 E-mail: rwebugisa.mutahaba@kuda.com	Msasani, Street Slipway, Road Slipway Plot No. 1829/4 Block D P.O. Box 34202 DAR ES SALAAM
22	Madina-Tech Group Limited	Mr. Shalom Msakyi Mob: +255 (0) 765 724 891 E-mail: shalom.msakyi@pawapay.co.uk	570/571 Mindu Street P.O Box 6121 DAR ES SALAAM
23	Mahali Sokoni Trading Company Limited	Mr. Emmanuel. A. Nko Mob: +255 622 600 700 E-mail : info@mahalisokoni.com	Tarangire Street Mbezi Beach 'B', Kawe Kinondoni P.O. Box 79146 DAR ES SALAAM
24	Maxcom Africa PLC	Mr. Jameson Kasati Mob: +255 764 700200 E-mail: info@maxcomafrika.com	First Floor, Suit 3-4 Millennium Towers Makumbusho Area P.O. Box 31211 Kinondoni DAER ES SALAAM
25	Mytalu Tanzania Limited	Mr. Dan Edoma Mob: +256 (0) 774 144 131 E-mail: hello@mytalu.io	1 st Floor, Acacia Estate Offices Plot No.84, Kinondoni Road P. O. Box 38568 DAR ES SALAAM
26	NALA Incorporation Company Limited	Mr. Benjamin Fernandes Mob: +255 692 000407/+15104581392 E-mail: caroline.cheptoo@nala.money	Plot No. 95, Mbezi Beach Jogoo, Kinondoni DAR ES SALAAM
27	NLOLO Company Limited	Dr. Shirumisha Clement Kwayu Mob: +255 (0) 627 606865 E-mail : nlololtd@gmail.com	Postal code 25101, Mawenzi Street, Market Road, Plot no. 10, Block A, House number 10, Moshi, KILIMANJARO
28	OMA Emirates Tanzania Limited	Mr. Ansel Missango Mob: +255 (0) 683 369996 E-mail: ansel@omaemirates.com	400 Toure Drive De Ocean Plaza P.O Box 21773 DAR ES SALAAM
29	One Payment Tanzania Limited T/A DPO Pay	Ms. Ramadhani Mohammed Bakar Mob: +255 (0) 713 525452 E-mail: ramadhani.bakari@netwrok.global	Acacia Estate, 1 st Floor, 84 Kinondoni Road P. O. Box 23197 DAR ES SALAAM
30	Oya Fintech Limited	Mr. Rahul Sahni Mob: +255 (0) 788 949 496 E-mail: rahul@oya.co.tz	Hamza Aziz Road, Masaki P.O. Box 2332, DAR ES SALAAM
31	Pay By Click Limited	Mr. Baraka Munisi Mob: +255 745 111 095 E-mail: info@paybyclick.co.tz	Oasis Office Park, Masaki, P. O. Box 656 DAR ES SALAAM
32	Payguard Limited	Mr. Frederick Constantine Kilasara Mob: +255 624 402 131	1 st Floor, GdB House, New Bagamoyo Road, Tegeta, P. O Box 65184,

S/no	Institution Name	Contact Person	Address
		E-mail: payguard@gmail.com	DAR ES SALAAM
33	Paylon Tanzania Limited	Ms. Sophia Mwaniwa Chamzingo Mob: +255 (0) 784 355555 E-mail: paylonpsp@outlook.com	Tanzanite Park 5 th Floor Plot no. 14113 South Ursino, New Bagamoyo Road, Victoria, P.O Box 105646 DAR ES SALAAM
34	Pesapal Tanzania Limited	Bupe Mwakalundwa Mob: +255 (0) 756 399718 Mob: +255 (0) 768 858415 bupe@pesapal.com	Kahama Road, CCM street, House No. 13. Masaki P.O Box 11986 DAR ES SALAAM
35	Selcom Paytech Limited	Sameer Hirji Mob: +255 786 455 554 E-mail: sameer@selcom.net	Uhuru Heights 8 th Floor Bibi Titi Mohamed Road 11102 Upanga East P.O. Box 20656 DAR ES SALAAM
36	Simba Money Tanzania Limited	Mr. George Kusila Mob: +255 754 269 992 E-mail: george.kusila@simbamoney.co.tz	Simba Money Tanzania Limited Plot No.71, Siwa Road P.O. Box 40451 DAR ES SALAAM
37	Smartx Limited	Tanveer Dawood Karbelkar Mob: +255 (0) 746963904 E-Mail: tanveerd@itl.co.tz	Smartx Limited Uhuru Heights, Ground Showroom 2 Plot No.63/27, Bibi Titi Road P. O. Box 5192 DAR ES SALAAM
38	Tanzania Telecommunications Company Limited	Ms. Lulu Mkudde Head Mobile Money Mob : +255 (0) 738 261 030 E-mail : lulu.mkudde@tcl.co.tz	Extelecoms House 32 Samora Avenue P.O Box 9070 11950 DAR ES SALAAM
39	TemboPlus Company Limited	Victor Joseph Mnyawami. Mob: +255 (0) 659 96 6692 E-mail: victor@temboplus.com ;	204 Abla Complex 2 nd Floor, Garden Road off Mwai Kibaki Road Mikocheni, DAR ES SALAAM
40	Terra Payment Services (Tanzania) Limited	Ms. Doreen Ngallo Mob: +255 (0) 658 123 741 E-mail: doreen@terrapay.com	11 th Floor, Mwanga Tower Plot No 1&50-Block 45A New Bagamoyo Road P.O Box 11133 DAR ES SALAAM
41	Transsnet Financial Tanzania Limited	Mr. Yan Wang Mob: +255 758 210482	8 th Floor, Unit 808; Victoria Noble Centre, Plot No.89, Block 45B, Kijitonyama, Kinondoni, Municipality P. O. Box 32080 DAR ES SALAAM
42	Tunzaa Digital Holdings Limited	Ng'winula Peter Kingamkono Mob : +255 (0) 712 277 631 E-mail : nk@tunzaa.co.tz	P.O Box 13416, Posta Mpya Plot 275 Block No.42 Gemeapande, Kinondoni DAR ES SALAAM
43	Unlimint TZ limited	Mr. Peter Francis Mlay Mob: +255 (0) 769 124 909 E-Mail: p.mlay@unlimit.com	Unlimint TZ Limited Plot 34/1, 6 th Floor, Tanhouse

S/no	Institution Name	Contact Person	Address
			14108 Victoria Area, New Bagamoyo Road Kinondoni P. O. Box 60605, DAR ES SALAAM
44	UOB Global Capital Finance Limited	Hassan Swaleh Mansur Mob: +255 (0) 683 934705 E-mail : hassan@uobglobalcapital.com	Office No.1003/2, 10 th Floor, Block B Plot No.123/50 Samora Avenue P.O Box 2168 DAR ES SALAAM
45	Viettel Tanzania PLC T/A Halotel	Mr. Nguyen Tien Dung Mob: +255 (0) 622 919 999 E-mail : dungnt@viettel.com.vn	10 th Floor, Tanzanite Park Building Plot No.38, South Ursino, New Bagamoyo Road P.O Box 34716 DAR ES SALAAM
46	Virtual Pay (TZ) Limited	Ms. Mary Paul Mng'hwani Mob: +255(0)764 061470 E-mail : Miriam.nghwani@virtualpay.io	Wing B, Second Floor, Golden Jubilee Towers, Ohio Street, P. O. Box 9104 DAR ES SALAAM
47	Vodacom Tanzania Public Limited Company	Mr. Phillip Besiimire Mob: +255 754 100100 E-mail: info@vodacom.co.tz	15 th Floor, Vodacom Tower, Regent Estate Bagamoyo Road P.O Box 2369 DAR ES SALAAM
48	Wakandi Tanzania Ltd	Mr. Espen Kvelland Mob: +255 (0) 629 444 290 E-mail: kvelland@wakandi.com	Wakandi Tanzania Limited Golden Height Building, Chole Road Masaki P.O. Box 105343 DAR ES SALAAM

Annex N: Electronic Money Issuers

S/NO	Name of Licensed Institution	Contact Person	Address

S/NO	Name of Licensed Institution	Contact Person	Address
1	Airtel Money Tanzania Limited	Mr. Andrew Rugamba Mob: +255 785 670 407 E-mail: andrew.rugamba@ug.airtel.com	Block 41 Kinondoni, Airtel House Po Box 9623 DAR ES SALAAM
2	AzamPesa Tanzania Limited	Mr. Ibrahim Malongo Malando Mob: +255 784 670 590 E-mail: ibrahim@azampay.com	Haile Selassie Road, Plot No. 208 P.O. Box 2517 DAR ES SALAAM
3	HONORA Tanzania Mobile Solutions Limited T/A Tigo Pesa	Ms. Angelica Pesha Mob: +255 713 123568 E-mail: Angelica.Pesha@tigo.co.tz	30 th Floor, PSSF Commercial Complex Sam Nujoma Road, 16102 Sinza C Street P.O. Box 2929 DAR ES SALAAM
4	M-Pesa Limited	Mr. Epimack Mbeteni Mob: +255 754 712 183 E-mail: Epimack.Mbeteni@m-pesa.co.tz	15 th Floor, Vodacom Tower, Regent Estate Bagamoyo Road P.O Box 2369 DAR ES SALAAM
5	TTCL Pesa Limited T/A T-Pesa	Ms. Lulu Mkudde Mob : +255 738 261 030 E-mail : lulu.mkudde@ttcl.co.tz	Extelecoms House 32 Samora Avenue P.O Box 9070 11950 DAR ES SALAAM
6	Viettel Ecommerce Limited T/A Halopesa	Mr. Dong Xuan Minh Mob: +255 62 118 9999 E- mail: minhdx@viettel.com.vn	9 th Floor, Tanzanite Park Building P.O Box 34716 DAR ES SALAAM