



Unlocking Public and Private
Finance for the Poor

An abstract graphic on the left side of the page consists of several concentric, curved lines in a light blue color. These lines are interspersed with small circles and dots, creating a sense of movement and connectivity, reminiscent of a network or data flow.

ETHIOPIA
REMITTANCE REVIEW:
ASSESSMENT OF PAYMENT
AND FINANCIAL MARKETS
INFRASTRUCTURES

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ACRONYMS AND ABBREVIATIONS

ACH	automated clearing house
ATM	automated teller machine
BIS	Bank for International Settlements
COMESA	Common Market for Eastern and Southern Africa
COVID-19	coronavirus disease 2019
CPMI	Committee on Payments and Market Infrastructures (formerly CPSS)
DMS	dual message system
EATS	Ethiopian Automated Transfer System
ECA	Ethiopian Communication Authority
e-KYC	know your customer
ETB	Ethiopian birr
ETS	EthSwitch
FSB	Financial Stability Board
GCC	Gulf Cooperation Council
GDP	gross domestic product
ICT	information and communications technology
MFI	microfinance institution
MNO	mobile network operator
MTO	money transfer operator
NPS	National Payment System
NBE	National Bank of Ethiopia
POS	point of sale
PSO	payment systems operator
PSP	payment service provider
QR	quick response
RSP	remittance service provider
RTGS	real-time gross settlement system
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UNCDF	United Nations Capital Development Fund

ABOUT THIS REPORT

At the request of the National Bank of Ethiopia (NBE), the United Nations Capital Development Fund (UNCDF) has been working with the NBE and other stakeholders from the Government of Ethiopia to build capacity among policymakers and regulators as well as to adapt the existing policy and regulatory frameworks to meet the NBE's objectives – lower remittance costs, improve cross-border remittance flows through formal channels and expand the use of digital channels to receive remittances – all of which create opportunities for a broader suite of migrant-centric financial products that can be linked to remittances.¹ Such services include, but are not limited to, insurance, pension, credit, savings and payments.

In the context of UNCDF support to the NBE, this report was prepared to address the NBE's ongoing efforts to modernize its payments and financial markets infrastructures in line with the aforementioned objectives. The report builds on UNCDF's foundational analysis conducted in the diagnostic for policy, legal and regulatory framework for remittances in Ethiopia. Additionally, for information and reference purposes, the report also uses several key documents created by UNCDF, Better than Cash Alliance and the World Bank for guidance on modernization of payments and remittance services in Ethiopia, as well as standards and principles encapsulated in the Financial Stability Board (FSB), Bank of International Settlements Committee on Payments and Market Infrastructures (BIS CPMI), the World Bank and other standard-setting bodies on retail payment systems, cross-border remittances and digital financial inclusion.

The scope of this report draws from the collaborative document developed by the NBE and UNCDF in 2020 – *Proposals for Enhancing Remittance Flows to Ethiopia* – which identifies key areas that require attention to enhance the remittance flows to Ethiopia, including modernization of payment system infrastructures. In this context, four key challenges have been identified that impede the development of modern and efficient payment system infrastructures to enhance remittance flows using digital payment channels.

- Low availability of access points for sending and receiving remittances, including automated teller machines (ATMs), merchant point of sale (POS) and cash-in/cash-out agents.
- Limited access to the National Payment System (NPS) infrastructures by non-bank remittance service providers (RSPs), including mobile network operators (MNOs), money transfer operators (MTOs) and fintech. Currently, only banks, the national switch, premium switches (established by six banks) and Ethiopian Commodity Exchange are connected to the NPS infrastructures.

¹ The recently launched National Digital Payments Strategy (NDPS) Action 14 emphasizes the digitalization of remittances.

- Limited interoperability for key retail payment systems and instruments including POS, mobile money services and agents. In fact, agent interoperability is currently not available.
- Low levels of connectivity with local, regional and international hubs and gateways as well as multilateral payment platforms.

The report assesses the progress made in the last five years under each of the four priority areas identified by the NBE for modernization and upgrade of the NPS infrastructures and provides guidance for future action by the NBE in coordination with industry stakeholders to improve the NPS infrastructures for increased remittance flows through monitored and regulated digital channels.

Summary of recommendations

	Retail payments access points for sending and receiving remittances	Access to NPS infrastructures by non-bank RSPs	Interoperability and interconnectivity of domestic and regional payment infrastructures	Interconnectivity with local, regional and international hubs, gateways and multilateral payment platforms
Priorities and targets	<ul style="list-style-type: none"> • Establish specific targets for increasing the number of access points for remittances. • Increase the number of digital payments use cases by improving coverage and availability. 	<ul style="list-style-type: none"> • Build resilience in critical retail NPS infrastructures such as ETS. • Implement digital ID, e-KYC and credit-scoring infrastructures to facilitate digitalization of remittance services. 	The NBE should prioritize completion of POS and mobile money interoperability in 2021 over the launch of the RTRP platform to ensure that the payments ecosystem is fully ready for deployment of digital remittance products.	The NBE should consider implementing a fintech regulatory sandbox approach to promote long-term innovation in digital payments, financial and banking services.
Standardization			Provide clear and early guidance to the market on a standardization and interoperability framework for QR codes.	

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Supervision and oversight		<ul style="list-style-type: none"> • Upgrade its supervision and oversight framework for monitoring ETS and address any additional operational risks arising because of its heightened role in providing access to non-bank PSPs to the NPS. • In parallel to the development of the RTRP platform for ETS, the NBE should enhance its oversight capacity for new types of payment services. 		
Licensing	Speeding up the licensing process by adopting automated tools/processes for the non-bank PSPs would expedite the mobilization of agents by entities such as HelloCash.			The NBE should expedite the licensing process for non-bank PSPs and PSOs to create more efficiencies in the market.
Capacity-building			Capacity-building support to the NBE and ETS for faster integration of new technologies in retail payment services.	
Partnerships				Connectivity with international hubs, gateways and multilateral platforms should be encouraged for the NPS to allow greater access to digital channels for local banks and RSPs.

LANDSCAPE FOR CROSS-BORDER REMITTANCES IN ETHIOPIA

Remittance market overview

In 2020, Ethiopia had an overall population of 115 million people. As of 2020, there were an estimated 946,100 Ethiopian migrants globally: 46 percent were female migrants and a majority were in the United States of America, accounting for 26 percent of the total migrants (51 percent were women), 17 percent in Saudi Arabia (31 percent were women) and 8 percent in Israel (51 percent were women).² Ethiopian migrants sent about US\$5 billion back to Ethiopia, accounting for more than 5 percent of the country's gross domestic product (GDP) and about one quarter of its foreign exchange earnings. The United States, Saudi Arabia and Israel are the main send markets for Ethiopia, accounting for 65 percent of the total value of remittances received. Other markets of importance include the United Kingdom and Italy. The largest send markets highlight that migration trends from Ethiopia are generally skewed towards North America and Europe, with very few intra-African flows. This likely reflects the political climate of the region and socio-economic status of many of these countries, making them less attractive destinations of migration for Ethiopians. At the household level, remittances represent a vital source of income for many individual recipients. The size and scale of remittances also create the possibility of harnessing these flows for productive investment, thus contributing to Ethiopia's long-term development.

According to the World Bank's 2017 Global Findex Database, 34.8 percent of adults had an account at a formal financial institution in 2017. Although the financial sector has expanded significantly in the last decade, most of the progress has been made in urban areas where approximately 20 percent of the population lives. With most bank branches and financial services available in the capital city and a majority of the population living in rural parts of the country, the access to formal financial services is very limited in rural areas. Most of the account ownership is in the urban areas, with 33 percent of the population holding a bank account – an increase of 11 percent since 2014. The lack of countrywide mobile money programmes, coupled with a low penetration of banking and remittances services outside the cities, is one of the main reasons for high levels of informal inflows in the country. Moreover, inward remittances are not leveraged to improve financial inclusion in the domestic economy. The international remittances market is yet to be fully harnessed as a means to encourage financial inclusion. When remittances beneficiaries withdraw cash, this may be an entry point for other financial services, providing banks with an opportunity to cross-sell digital financial services to them.

² United Nations, International Migrant Stock (2020), www.un.org/development/desa/pd/content/international-migrant-stock.

In March 2020, there was an initial decline in remittance flows throughout sub-Saharan Africa including Ethiopia, mainly as a result of loss of wages of migrant workers in send countries during the COVID-19 pandemic. However, many countries saw resilience in the flow of remittance after the initial decline.³ While country-specific data are not available for Ethiopia, it was observed within sub-Saharan Africa that the overall costs of sending remittances did not increase during the pandemic; however, the volumes of remittance inflows were severely affected throughout the region, especially for cash-based remittances. On the other hand, wherever adoption of digital channels⁴ was high, the remittance flows have increased since the pandemic, bringing down the associated costs.^{5,6} The use of digital channels is heavily dependent on access to transaction accounts as well as the ability of the RSPs to provide digital solutions to participate in the NPS infrastructures as an extension to the traditional cash-based access point network. Countries that had low financial inclusion rates and low levels of digitalization suffered the most, especially populations in rural areas.

According to the World Bank's Remittance Prices Worldwide database,⁷ compared to the other countries in sub-Saharan Africa with an average cost of sending remittances above 8 percent and a global average of 6.5 percent, Ethiopia is one of the cheapest remittance markets in Africa. When compared to other large receiving markets in Africa, Ethiopia is relatively competitive – cheaper than Nigeria but more expensive than Egypt. The cost of sending money to Ethiopia varies according to the sending country; however, as all the banks offer the services of multiple MTOs on an open and competitive basis and with no exclusivity arrangements, this tends towards lower costs. The cost of sending remittances to Ethiopia from Europe, the Middle East and North America averages 7 percent, 4 percent and 5 percent, respectively, of the transaction value.

Although there have been improvements made in recent years to increase the flow of remittances through regulated channels, evidence suggests that informal networks remain a prominent way for Ethiopians to send money home. The primary reason is that there is a spread of 12–13 Ethiopian birr (ETB) per US\$ between the parallel market and the official foreign exchange rates. Senders and receivers prefer informal channels to take advantage of the higher parallel market rate, and this prevents the uptake of digital products for remittances despite their growing availability. Direct account to account transfers are not fully available for remittances because of limited interoperability. Further policy and regulatory interventions may be needed to provide adequate tax and financial incentives in conjunction with enabling interoperability in retail payment systems. Interventions may also have to be considered to address the existing gap between official foreign exchange rates and those

³ A recent International Monetary Fund (IMF) research paper published in July 2021, *Defying the Odds: Remittances during the COVID-19 pandemic*, documents a strong resilience in remittance flows. Despite an unprecedented global recession triggered by the pandemic, the paper notes “remittances have proved to be an automatic stabilizer during the pandemic.” The analysis is based on the remittances data from 52 countries covering the period January to December 2020.

⁴ A digital remittance must be sent via a payment instrument in an online or self-assisted manner and received into a transaction account, for example a bank account maintained at a non-bank deposit taking institution (such as a post office), mobile money account or e-money account.

⁵ According to the World Bank's Remittance Prices Worldwide database, the average cost of remittance for sending US\$200 to sub-Saharan Africa was 8.94 through cash channels versus 6.44 through digital channels.

⁶ Remittance Community Task Force, *Remittances in Crises: Response, recovery and resilience* (2020), https://gfrid.org/wp-content/uploads/2020/12/Blueprint-for-Action_FINAL.pdf.

⁷ World Bank, Remittance Prices Worldwide, <https://remittanceprices.worldbank.org/en>.

in parallel markets, to revisit the foreign exchange holding limitations currently in place, to address regulatory barriers for undocumented migrants in host countries and to enhance migrants' digital literacy pre-departure so they leave possessing the knowledge and skills they will need to send remittances through formal digital channels.

The Government of Ethiopia's efforts to improve remittance inflows

Over the last decade, the Government of Ethiopia has implemented several policy measures to improve the operations and flow of formal remittances, as well as to reduce the costs of transfers and increase access to international remittance services. These include reforms undertaken by the Ethiopian authorities such as the Homegrown Economic Reform Programme (HERP),⁸ launched in September 2019 to ease business constraints and foster private sector development through a set of sectoral and macroeconomic measures, including those targeted at breaking up monopolies and removing market distortions in the financial sector. Additionally, the National Foreign Affairs and Security Policy and Strategy recognized the role of the Ethiopian diaspora in promoting investments and trade ties and urged the government to improve the enabling environment to attract remittance flows from the diaspora.

Ethiopian authorities have also taken concrete actions to promote the country's digital economy by developing a comprehensive national-level digital strategy called Digital Ethiopia 2025.⁹ The strategy envisions an inclusive digital economy approach that will catalyse achievement of Ethiopia's broader development goals. However, for the strategy to be fully effective, the government must align and build on key pillars to benefit from economic liberalization and digitalization. These include establishing digital platforms that enhance use of digital financial services and e-commerce, passing relevant regulations and policies to restructure the telecommunications market, promote competition in the information and communications technology (ICT) and digital financial services sectors to enhance the social and economic development of the country, and promote adequate consumer protection for the ICT sector. Steps were also taken to establish the Ethiopian Communication Authority (ECA), the mandate of which is to develop high-quality, efficient, reliable and affordable communication services, promote a competitive market for the achievement of its goals, expand access and protect consumers' interests. To further unlock the transformational power of the digital economy, the government has decided to issue two new telecommunications service licences. Accordingly, the ECA has issued the final licence to Safaricom Telecommunications Ethiopia PLC following its incorporation as a local Telecommunications Operating Company in line with the prevailing legal and regulatory requirements.

⁸ The government has launched the Homegrown Economic Reform agenda, which aims to transform Ethiopia from a largely agrarian low-income country to an industrialized lower-middle-income country by 2030.

⁹ Federal Democratic Republic of Ethiopia, *Digital Ethiopia 2025: A strategy for Ethiopia inclusive prosperity* (2021), https://drive.google.com/file/d/18Kb1fd65E_5AS6u9HTn6s_SC8j1wS17z/view.

KEY STAKEHOLDERS IN THE PAYMENTS AND REMITTANCE MARKET

The National Bank of Ethiopia

As the central bank, the NBE is responsible for licensing and supervising banks to provide remittance services, including approval of partnerships with various RSPs. The NBE is also the overseer of the payment system in which the keynotes, guidelines and principles related to the payment settlement systems are established, and developments in the existing and planned systems are monitored and assessed against determined objectives. Lastly, as noted in the section below, the NBE plays the role of owner/operator of critical NPS infrastructures, including the Ethiopian Automated Transfer System (EATS) and automated clearing house (ACH).

Banks

There are 18 banks in Ethiopia (including the two state-owned banks), collectively holding about 92 percent of total financial sector assets. The state-owned Commercial Bank of Ethiopia (CBE) holds a disproportionate share of the market, with 59 percent of total banking assets and 60 percent of total deposits. By June 2020, there were 6,508 bank branches across the country, and 34.1 percent of the branches were located in Addis Ababa. As noted above, banks mostly offer remittance services through MTOs. Banks also offer transfers via correspondent banking relationships (CBRs) using the Society for Worldwide Interbank Financial Telecommunication (SWIFT) messaging system. This is generally expensive for small amounts, and it is unsuitable for those who do not have bank accounts. Correspondent banks/SWIFT-based international remittances are used for larger business-to-business/organizational transfers that do not facilitate a cash pickup (non-governmental organizations, aid organizations, companies, etc.).

Remittance service providers

Ethiopia requires that all non-bank RSPs partner with banks to provide cross-border remittances services. A large majority of cross-border remittances are sent through the MTO channels, especially for person-to-person remittances. Banks use the correspondent banking relationships leveraging the SWIFT network for business-to-business or organizational inflows. There are eight MTOs operating in Ethiopia – Western Union, Money Gram, Ria Financial, Xpress Money, Transfast, WorldRemit, Dahabshiil and one other smaller MTO. More than 50 percent of remittances coming through MTO channels are through Western Union. Since 2009, to improve flows through regulated channels, the NBE regulations prohibit exclusive partnership agreements with MTOs, and this provides good options for both banked and non-banked recipients to go to any bank branch and cash out remittances. Of remittances

sent through the MTO channels, 80 percent are picked up in cash, and the remaining are deposited into bank accounts, indicating that there is room for improvement in terms of converting cash remittances to digital payment instruments. However, the trend is shifting in the right direction for promoting digital remittances using international fintech platforms. In 2019, two leading banks, the Bank of Abyssinia and Wegagen Bank, announced partnership with WorldRemit to enable digital money transfers. For each bank, the partnership means that Ethiopians living abroad in over 50 countries, including the United States, United Kingdom and Canada, can send money digitally to the Bank of Abyssinia and Wegagen Bank accounts and more than 300 cash pickup locations across Ethiopia.

Microfinance institutions

Thirty-eight microfinance institutions (MFIs) in Ethiopia collectively hold 6 percent of all financial sector assets. The five largest MFIs are also state-owned. As of June 2020, there were 2,007 MFI branches across the country. None of the MFIs are integrated into the national switch as they are lagging behind banks in technological terms. MFIs are permitted to engage in international remittance business if they become electronic money issuers. Given that a large section of the population lives in rural areas and does not have proper access to banking, MFIs could serve as an important channel for remittances if they had the opportunity to partner with some of the emerging payment service providers (PSPs) and fintech.

Payment service providers

With the passing of the recent NBE Directive on Licensing and Authorization of Payment Instruments Issuers and Payment System Operators, domestic non-bank PSPs can issue electronic money instruments and can get a payment systems operator (PSO) licence to provide payment and remittances services. There are four types of designations under the PSO licence – payment switch, ATM operator, POS operator and payment gateway operator. A PSP can choose one or more of these designations under a single licence. Ten switch operators and three mobile money operators have applied for licences since the NBE Directive was passed and are awaiting approval.

Some examples of new developments under this directive include development of the HelloCash payment processing platform, which provides different types of payment services to small banks and MFIs with limited technology resources and know-how. Payment services include merchant aggregation services for small and medium-size merchants to develop POS and e-commerce acceptance and for pay-as-you-go services. HelloCash is also partnering with Visa to leverage their Visa Direct platform to enable cross-border remittances in Ethiopia. In another example, Kifiya, through its subsidiary Melapay, is offering its payment processing in combination with the clearing and settlement services for the banks interested in using its platform. Melapay has essentially become the local processing hub for different types of payment services for banks that do not have the capacity to develop in-house processing systems. They are also leveraging the Visa Direct platform to enable international transfers in key corridors including the United States, Europe, Gulf Cooperation Council (GCC) and Israel.

Agents

The NBE recently issued a Use of Agents Directive No. FIS/02/2020. The directive defines activities that can be carried out by an agent, provides a framework to offer agency business services and sets minimum standards of customer protection and risk management to which agents must adhere. The directive applies to banks, MFIs, payment instrument issuers and their agents (including super and sub-agents) that provide agent services in Ethiopia. Several banks have agents' networks that are equipped with POS and allow users to send and receive remittances. Banks that have agent banking networks operate on an exclusivity basis. HelloCash also provides a network of agents for its mobile money wallet (estimated around 10,000), but the capacity for delivering remittances is dependent on the partner banks.

NATIONAL PAYMENT SYSTEMS INFRASTRUCTURES

Starting in 2011, the NBE has taken several important steps to modernize its payments and financial markets infrastructures after signing the Maya Declaration, including the implementation of the EATS and the ACH. The EATS is a modern digital clearing and settlement system that is owned and operated by the NBE. The EATS includes a real-time gross settlement system (RTGS) for the final settlement of payments between financial institutions. The system also integrates automated processing of transactions for the Ministry of Finance, Ethiopian Revenues and Customs Authority and Ethiopian Commodities Exchange. The ACH was recently operationalized and plays a critical role in fostering development of retail payments services in Ethiopia, increasing the efficiency, interoperability and cost-effectiveness of ACH-based payments for both the private and public sectors.

The national e-payment switch EthSwitch (ETS) was launched in 2016 with the goal of allowing the interoperability of ATMs, mobile money services and POS networks. In addition to the banks, MFIs are also allowed to connect to ETS. The NBE plans to give non-bank RSPs access to the NPS infrastructures by establishing connectivity between ETS and the RSPs. ATM switching is currently functional, and both POS and mobile money switching capabilities are being piloted, with the pilot for POS in more advanced stages. ETS' Ethiopay platform has also launched a remit to "pay services" for the Ethiopian diaspora to pay for school fees, telecom, utility bills and other needs of family members. The platform is still new and has low volumes. As noted below, ETS is also being leveraged to further modernize the retail payment and remittance platforms through the anticipated launch of its RTRP in 2023. This system will include real-time clearing and settlement services among other types of payment services.

The existing personal identification (ID) infrastructure is basic in Ethiopia, with different *kebele* (the smallest administrative unit) offices issuing Kebele Cards that serve as ID cards for citizens. The cards contain a standard set of information but do not follow a standard format. Coverage appears to be very high for both men and women, although there is no centralized database that allows for an accurate count of how many individuals hold Kebele Cards. These cards are used for many private and public sector transactions. However, Kebele Cards lack any security features and are therefore vulnerable to forgery. There is also usually a cost associated with procuring these cards.

The Digital Ethiopia Strategy 2025 recommends adoption of the ten Principles on Identification for Sustainable Development drawn around inclusion, design and governance. Implementation of the recommendation will provide another impetus on flow of remittances through digital channels. In June 2020, the National ID Pilot Project was launched with the objective of upgrading the existing ID cards to digital IDs with support from the World Bank ID for Development (ID4D) Programme. The project is expected to be completed by the end of 2021 and is likely to greatly benefit digital financial services as it will be interoperable with

other digital platforms and financial infrastructures. Currently, there are no stated plans to incorporate credit-scoring systems or to develop electronic know your customer (e-KYC) platforms. However, with an envisaged digital economy, such key infrastructures will be important in further harnessing the market potential to expand the credit market and allow smarter customer onboarding and e-KYC capabilities.

REMITTANCE PRODUCTS AND SERVICES

Although the NPS has undergone significant modernization, its usage is still low, and most remittances are cashed out immediately. Consumer preferences for cash and low levels of financial inclusion and literacy may explain why inward remittances continue predominantly to be terminated as cash after beneficiaries collect their funds at bank branches or agent locations. RSPs are legally required to handle foreign exchange transactions through commercial banks, which are required to pay out cash to the recipients in local currency. This is another reason for the thriving informal market for remittances as the exchange rates are lower than what the informal market provides. For those who do not cash out immediately and leave the remittances in the bank accounts, the options to convert the remittances into digital products are limited – they can only either withdraw funds at an ATM or at a POS of one of the agents.

As many of the new digital products and services are not yet fully launched, opportunities to convert international remittances into bank deposits and/or digital channels depend on availability of full spectrum of digital products offered by banks and non-bank RSPs. There are a few active schemes for domestic person-to-person transfers using mobile money wallets. The HelloCash solution is offered by integrating its services with the core banking system of the partner bank, and the money can be instantly credited to the recipient if they choose. Regulations in Ethiopia allow use of mobile wallets for inbound remittances (MTOs can credit funds to a customer's HelloCash account); however, outbound international remittances initiated through a mobile wallet are not permitted. HelloCash also offers utility payments and merchant payments as use cases for its customers. Despite these services, international transfers are limited to pilot programmes involving banks' proprietary wallets, M-birr or HelloCash, working with WorldRemit and Visa Direct. Some transactions have been successful, but the service has not been actively promoted and volumes are currently very low.

In terms of domestic remittances or person-to-person transfers, the 2017 World Bank Findex reports that 24 percent of adults sent or received domestic remittances. Most of these remittances were processed via a bank or MFI (59 percent of senders), followed by in-person or cash (40 percent of senders). Less than 1 percent of senders stated that they had sent or received remittances using a mobile wallet. This implies that essentially all remittances services, both cross-border and domestic, are conducted via over-the-counter services or in person.

As for cross-border remittances, the fee to send the equivalent of a US\$200 transaction to Ethiopia averages around 7.2 percent depending on the country: from Saudi Arabia, 5.1 percent; from the United States, 5 percent; from Italy, 9.3 percent; and from the United Kingdom, 9.4 percent. Non-over-the-counter remittances – that is, those where the

transaction originates and terminates in a bank account or mobile wallet – cost considerably less, at an average of 3 percent.

As noted earlier, digital remittance models that partner with domestic financial institutions have been gradually emerging, but significant efforts are still required to expand the digital channels sufficiently to increase adoption and usage and thereby drive costs down. Both the supply side (the expansion of reliable network coverage via the liberalization of the telecom sector) and the demand side (the enhanced digital literacy of migrants and recipients) among other interventions will be key to the success of these efforts.

ASSESSMENT OF THE PAYMENT SYSTEMS INFRASTRUCTURE FOR DIGITAL REMITTANCES

This section assesses progress made by the NBE and market stakeholders in the four key areas identified in the scope of the study to address the NPS infrastructure gaps and remaining challenges.

Retail payments access points for sending and receiving remittances

Context

The usefulness of transaction accounts for payments or remittance services is augmented by a broad network of access points with wide geographical coverage and by offering a variety of interoperable access channels.¹⁰ The existence of a national-level retail payment infrastructure including ACH, payment card and mobile money switches can effectively increase the network of access points (e.g. ATMs, POS, branches or agent networks) for individual customers. Such centralized infrastructures act as hubs for processing interbank transactions and consequently improve interoperability and exhibit positive network externalities for all system participants. Any branch of a bank or other PSP participating in the ACH or switch can be used to initiate a funds transfer to a customer of another ACH or switch participant. This supports countrywide reachability, even if a particular bank does not have access points deployed in specific regions. The success of digital remittance services that use the rails of retail payment systems depends critically on the availability, quality and reliability of customer service and access points.

Situation in Ethiopia

In Ethiopia, bank branches, ATMs and agent-based POS terminals are important access points to disburse remittances. Of remittances sent through the MTO channels, 80 percent are picked up in cash at bank branches or agents, and the remaining 20 percent are credited to bank accounts that can be accessed through ATMs or used for payment of goods/services using debit cards and, in some instances, mobile wallets. As of June 2020, there are 18 banks operating, with approximately 6,508 branches across the country. As per NBE statistics, there are more than 2,700 operational ATMs and 8,800 POS terminals, owned by both the state-owned and private sector banks. Overall, 34 percent of bank branches and 50 percent of ATMs are in Addis Ababa where only 3 percent of the population lives. The POS terminal network in the country is much less extensive compared to other countries in sub-Saharan Africa.

¹⁰ World Bank, *Payment Aspects of Financial Inclusion (PAFI)* (2017), www.worldbank.org/en/topic/financialinclusion/brief/pafi-task-force-and-report.

Several banks operate their own agent networks; however, these agents operate on an exclusivity basis. Agents have POS machines, and these can be used for cash withdrawals including remittances. The overall number of agents provided by the fintech platform HelloCash is estimated to be around 10,000, but their capacity of delivering remittances is limited to the scheme to which the banks belong. Considering the large population of Ethiopia and the flow of remittances, the number, availability and distribution of agent-based service points is low.

An aspect that works well in Ethiopia is that all banks openly serve customers of other banks to cash out remittances or request ACH-based transfer to their bank accounts. Even unbanked individuals can walk up to any bank branch and cash out their remittances. However, low levels of financial inclusion and the concentration of domestic banking infrastructure in urban areas limit opportunities to use options other than cash out. In rural and remote areas where a large majority of the population lives, the banking sector has very limited coverage, and ICT connectivity challenges can prevent development of digital alternatives.

MTOs can offer their services only through banks or other financial institutions licensed by the NBE, which act as the distribution network for the MTOs. MTOs are restricted from offering their services directly, through a proprietary network of agencies or from establishing franchised services in retail stores, supermarkets and other outlets. MFIs are also important players in the retail payments ecosystem and, despite having a connectivity with the ETS, they do not have an extensive number of outlets that can be used for remittances, especially in the rural areas where they would prove to be most useful given the lack of banking options. Consequently, in rural areas where the majority of population lives, a lack of physical proximity of the banks and RSPs as well as the access points/channels affects the attitude and behaviour towards remittances offered through regulated channels. Limited access to physical access points reduces the usability of transaction accounts, even if these were available to the rural populations. Digital channels offer the promise to bridge the physical divide without necessarily expanding the (physical) branch network.

Recommendations

The following recommendations could be considered to improve access points for remittances.

1. **The NBE should establish concrete targets for increasing the number of access points for remittances** (e.g. additional 50,000 access points within the next two to three years). Expanding the geographic reach of access points, particularly in rural and remote areas where coverage is low, will improve the last mile distribution channels, as well as encourage consumers to send and receive remittances through regulated channels. For this purpose, in addition to targeting growth of bank branches, the NBE should establish concrete, time-bound targets for increasing the number of ATMs, POS and agent-based cash-in cash-out agent locations. This effort should be taken in partnership and consultation with the industry.
2. Related to the above recommendation, **the NBE should consider developing an incentive structure for RSPs to expand distribution of access points beyond urban areas, as well as to enable ATMs and POS to be leveraged for cross-border remittances.** In addition to

establishing concrete targets, in coordination with industry stakeholders, the NBE could propose the adoption of an incentive plan to increase uptake of digital payments in the value chain and to mobilize deployment and activation of POS and ATMs.¹¹ Although it is not recommended that these are funded by the government, such incentives could be implemented through an agreement between acquiring and issuing banks who agree to reduce fees or similar measures. The NBE and payment networks could also participate in covering the costs associated with the incentives. The financial incentives to acquiring banks to promote POS usage could be a tax break equivalent to a certain percentage of the value (e.g. 0.5 percent or 1 percent) of the total transactions processed via their POS over a 3-, 6-, 9- or 12-month period. Banks, in turn, could provide a financial incentive to the merchants to conduct a payment transaction (a fixed amount or proportion of the transaction value). The acquiring bank could be required to split that incentive equally with the issuing bank of the consumer who initiated the transaction. Incentive programmes must be done in coordination with both issuing and acquiring sides to maximize the impact. UNCDF can assist the NBE to come up with a timebound execution plan for improving the access points for remittance as well as an appropriate framework for incentive structure for the retail payments ecosystem to mobile access points.

- 3. As part of its Digital Strategy 2025, the NBE should target an increase in the number of use cases for digital financial services by improving availability and coverage, including use cases for women.** Bill payments as well as POS and quick response (QR) code-based acceptance for card-based purchase transactions are limited to a small number of consumers who have access to banking services. Remittance recipients still need to visit a bank branch or an agent to withdraw the funds in cash so they can use those funds to pay for the goods and services they need. Further, the exchange rate spread between formal and regulated channels versus informal channels remains wide and is a disincentive for recipients to use formal channels. There have been several efforts made to drive usage of formal and regulated digital channels, including the Ethiopay bill payments platform. However, usage is low as few banks are connected to the platform, and the services are available on only a limited basis for the United States–Ethiopia remittance corridor. In addition to providing interoperability (as discussed below), a wider development of the POS and QR code infrastructure at the merchant and the bank agent levels could increase the number of distribution points for remittances and improve banking services for remittance recipients by providing them with access to low-cost electronic payments and by eliminating the need to withdraw cash. Use of QR-code technology for growing merchant acceptance can be cost-effective and quick as it requires little or no technical knowledge by merchants and consumers. To improve its effectiveness, QR code structure should however be standardized to promote interoperability and usage. Standardization and its enforcement can be mandated by the NBE or the government. In consultation with the RSPs, the government could develop a comprehensive plan to incentivize recipients to use formal and regulated channels, receiving their money directly into bank accounts or mobile wallets, and to encourage development of different use cases for digital payments that can be offered to customers at a low cost directly from their accounts (e.g. bill payments, payment of government services, etc.). As part of incentivization efforts, inward

¹¹ As an example, the Central Bank of Egypt implemented financial incentives related to POS terminalization in 2019–2020 to reach a milestone of 100,000 POS terminals in that time frame.

remittances to bank accounts could be allowed to earn a marginally higher interest rate (e.g. 0.5 percent), which may be an incentive to retain part of the money in the bank account. This, in turn, would improve interaction between low-income remittance recipients and regulated financial institutions. UNCDF can help the NBE to develop an appropriate incentive framework for recipients to utilize formal channels, including proposals for initial use cases that could be piloted to start the process.

Access to national payment infrastructures by non-bank remittance service providers

Context

According to the FSB Stage 2 report,¹² “there are clear advantages to promoting direct access to the national payment infrastructures by non-bank PSPs as this reduces the costs for remittances transfers and time it takes to settle these transactions. Lowering barriers to access improves the possibility for PSPs and infrastructures to become direct members of multiple payment systems across different jurisdictions. Similar access requirements in different payment systems can encourage PSPs to become global players in payments, serving many jurisdictions. Lower cost and higher speed in cross-border payments with lower credit and liquidity risks would be the targeted outcome.”

Situation in Ethiopia

In Ethiopia, under the recently passed NBE PSO Directive, non-bank PSPs, such as mobile money operators, switch and ATM operators, and payment gateway operators can obtain a licence and connect to the NPS infrastructure. Ten switch operators and three mobile money operators have applied for licences, but the applications are still being processed – none have yet been approved. According to the NBE plans, non-bank players will not have direct access to the NPS infrastructure through the EATS but will have access through a settlement bank or ETS who would act as a settlement agent to carry out the clearing function and use the EATS platform for final settlement.¹³

As several new PSPs are processors and payment platforms themselves (e.g. Kifiya and HelloCash), gaining access to NPS infrastructure through ETS makes ETS a critical payment infrastructure as it acts as the “switch of switches”.¹⁴ ETS is connected to the EATS for interbank clearing and settlement purposes. Direct participants (mainly banks) have a settlement account with the NBE using the central bank money. Indirect participants can participate but through a settlement bank. Given the important role played by ETS in the

¹² Building Block 10 describes the importance of direct access. Committee on Payments and Market Infrastructures, *Enhancing Cross-Border Payments: Building blocks of a global roadmap* (2020), www.bis.org/cpmi/publ/d193.pdf.

¹³ Globally, there is no clear precedent on whether access to the NPS infrastructure for non-bank financial institutions should be done directly or indirectly through settlement banks/agents. The NBE’s approach to use ETS as a settlement agent is consistent with the CPMI definition, which defines the role of a settlement agent as one that manages the settlement process for transfer systems or other arrangements that require settlement.

¹⁴ Of the 17 banks using ETS services, 5 are hosted member banks that have direct connectivity to ETS through their core banking system and use multiple services (ATM, POS, card issuing, card acquiring and other value add services), 6 have their own switch (for ATM and POS) and connect their switch to ETS for ATM (and in future POS) interoperability and the remaining 6 banks belong to the premium switching service consortium, which is interconnected with ETS for ATM/POS interoperability purposes as well (switch-to-switch connectivity).

NPS, the NBE does not appear to have a proper procedure in place to address the risks if the infrastructure was disrupted by information technology failures, cybersecurity threats or other risk factors.¹⁵

Some banks are integrated into ETS' Ethiopay bill payment platform along with direct billers Ethiopian Airlines, the Ministry of Transport and others. Some other banks have their own platforms for pension payments, whereas others focus on utilities, airlines, etc. (the most common ones).

ICT and power failures are frequent in Ethiopia and can cause frequent disruptions for ATM/ POS availability. With the increasing levels of participation by non-bank PSPs in the NPS infrastructure, there are serious capacity implications for ETS to handle increased transaction volumes. The ability of ETS to effectively service the growing number of access points is also something that should be monitored, and proper upgrades should be implemented to address this growth.

ETS is upgrading its payments and remittance platform (called the RTRP platform) to provide several new services to banks and non-banks. This is expected to go live in mid-2023 and will be a boost to national-level retail payments infrastructure. Services offered under the RTRP platform include real-time payment clearing and settlement services that will allow banks and non-bank RSPs to use different channels (mobile, web, bank teller and agents) to provide account-to-account remittance transfers and payment services. Additionally, the RTRP platform will provide value-added services such as fraud management, dispute management and directory services to enhance the capability of RSPs to extend different types of digital payment services to their customers. Once developed, ETS intends to deploy a 3D secure payment gateway and application programming interfaces (APIs) for participants to connect to its platform and other customizable tools for RSPs to develop their own customer-facing apps and solutions for payment initiation or receipt. For this purpose, ETS will deploy QR code technology and a shared wallet platform to enable unstructured supplementary service data (USSD)-based mobile payments.

Digital ID and e-KYC platforms are still to be developed in Ethiopia. However, as noted above, the digital ID project was recently launched and, once implemented, it is likely to improve efficiency in remittances services. In compliance with Financial Action Task Force (FATF) standards, both remittance senders and receivers should be identified by RSPs, and the remittance flows must be traceable. Facilitating this process using digital ID, e-KYC and credit-scoring platforms could help to promote financial access, reduce costs for RSPs and address issues related to de-risking. Incorporation of digital ID, e-KYC and credit-scoring platforms by bank and non-bank RSPs could help to facilitate account opening, authentication and development and issuance of alternative digital products and channels, which are much needed in the Ethiopian environment to promote digital remittances. For directory services to work (aliases) in support of instant payments, as envisioned in the ETS RTRP road map, an upgrade to a properly functioning ID platform or even digital ID is needed. Unlike countries where phone numbers can be used for this purpose, this is not possible in Ethiopia as many

¹⁵ It should be noted that ETS is Payment Card Industry Data Security Standard (PCI DSS)-certified and its security standards are comparable with international standards.

people do not have mobile phones. The roll-out of modern digital payment solutions will be interdependent on the roll-out of the digital ID project.

Recommendations

The following recommendations could be considered to improve the quality of access to NPS infrastructures.

1. As activities of ETS expand to provide switching and settlement services for non-bank PSPs and MFIs, **the NBE should upgrade its supervision and oversight framework for monitoring ETS and address any additional operational risks arising from its heightened role in the NPS.** As noted above, the NBE is leveraging ETS to expand access to NPS infrastructure to non-bank PSPs and MFIs. In this regard, in addition to providing direct ATM and POS switching services to the banks, ETS services would be considerably stretched to include switching and settlement services for MFIs and non-bank PSPs. The status of “switch of switches”, and as a gateway to the EATS, makes ETS a “critical payment infrastructure” that requires a more rigorous supervision and oversight framework to monitor operational, security and other risks that can be incurred in the financial system. Operational capacity issues should also be monitored in the light of expected growth resulting from implementation of the RTRP platform.
2. **Implement digital ID, e-KYC and credit-scoring infrastructures to speed up digitalization of remittance services.** Currently, Ethiopia has a basic ID system, and it lacks the necessary infrastructures such as digital ID, e-KYC platform and credit-scoring systems that facilitate account opening, authentication and development and issuance of alternative digital products and channels. These infrastructures can be promising solutions to enhance the efficiency in remittances services by promoting greater access to digital products and services, reducing costs for RSPs and addressing the potential challenges related to de-risking. As part of the evaluation process, in addition to the ease of access and management control, a cost-benefit analysis may be needed to determine if these systems are developed as stand-alone centralized systems or as systems with a common, centralized database to ensure authenticity and uniqueness and to avoid duplication of effort. UNCDF can provide assistance in conducting an initial assessment for implementation of e-KYC and credit-scoring platforms in conjunction with the Government of Ethiopia’s proposed digital ID system.
3. **Build resilience in critical retail NPS infrastructures such as ETS.** The impact of operational incidents could be mitigated, in principle, by building resilience that withstands service disruptions and supports effective business continuity plans. Related to recommendation 1 above, ETS could be required to: (i) adopt rigorous risk management procedures, in line with global best practices for the identification and mitigation of operational risk, including cyber resilience; (ii) incorporate appropriate redundancy and business continuity arrangements to ensure the timely recovery of the services in the event of a major disruption; and (iii) establish procedures for timely communication to stakeholders of operational incidents. In addition to ETS, the NBE could consider conducting periodic, regular disaster recovery drills (both announced and unannounced) to ensure effectiveness and resilience of the systems operated by the NBE and the other PSOs. Based on guidance developed by the Committee on Payments and Market Infrastructures (CPMI) on cyber

resilience¹⁶ and other global best practices, UNCDF can assist the NBE in developing a framework for monitoring such risks in the system and developing a framework for ETS and its system participants to enhance their resilience in the event of cyberattacks and operational failures.

- 4. In parallel to the development of the RTRP platform for ETS, the NBE should enhance its oversight capacity for new types of payment services.** With the imminent roll-out of payment services through the RTRP platform (e.g. real-time clearing and settlement, use of aliases, etc.), Ethiopia will have a basic instant payment system operational in the market. This has oversight implications for the NBE and should be handled in accordance with new developments in the market.

Interoperability and interconnectivity of domestic and regional payment infrastructures

Context

Interoperability is one of the most desirable characteristics of payments and financial markets infrastructures to ensure infrastructure sharing and widespread availability of digital financial services access points. Whereas the widespread availability of digital solutions for remittances, payments, savings and credit provides people with access to financial services, payments interoperability enables these targeted people to transfer their money to any other individual, without a requirement for multiple transaction accounts, thereby increasing the importance of transaction accounts and their usability.

Situation in Ethiopia

In Ethiopia, ATM interoperability has been fully achieved at the domestic level; however, it is not fully reliable as there are technical connectivity problems between the banks and ETS, according to the NBE. The POS interoperability project is currently in pilot. It was launched in February 2020, and there is a dedicated task force overseeing the project. So far, 16 banks have joined the pilot for POS interoperability and one other bank is in the testing phase. During the pilot phase, ETS is observing 13,000 transactions monthly.

Despite the progress made, some critical challenges remain in making POS interoperability fully operational, and this has an impact on adoption of retail payments at the merchant and consumer levels. First, the messaging format used for debit cards is a dual message system (DMS), which generates a clearing file followed by settlement of the amount dues two to three days after the transaction date. Merchants often have ICT connectivity issues with POS because of power failures and other reasons, impacting their ability to send clearing files to ETS on time, which in turn results in delays in settlement processes and final payments from consumer to merchant. During the entire lifecycle of the transaction, the consumer's account has an authorization hold. As Ethiopia is a predominantly debit card environment, an authorization hold prevents consumers spending funds elsewhere. ETS is looking to replace this DMS with a single message system (SMS), such as the ATM environment, which allows

¹⁶ Bank for International Settlements and International Organization of Securities Commissions, *Guidance on Cyber Resilience for Financial Market Infrastructures* (2016), www.bis.org/cpmi/publ/d146.pdf.

trading +1-day settlement for POS transactions. Second, ICT issues can impact the authorization holds causing transactions to be dropped entirely, creating a bad user experience for both consumers and merchants. Lastly, low levels of merchant awareness on how to handle such issues creates an environment in which, despite availability, there is no desire to use the POS terminals.

Mobile money interoperability is the next priority after completion of the POS interoperability project. The mobile money interoperability project has had a preliminary launch, with a few banks allowing customers to carry out domestic person-to-person transactions between mobile money accounts. At the banking agent level, however, there is no interoperability between bank agents, with each having their own exclusive agents to service their customers. Reform of the agent access network was included as part of Ethiopia's National Financial Inclusion Strategy (NFIS); however, little progress has been made to address this major constraint. According to ETS, the issue of banking agent interoperability will be resolved when full POS interoperability is achieved countrywide. The NBE should monitor this aspect over time and take necessary actions. As for merchant locations, many have multiple POS machines (e.g. supermarkets, large retailers). Customers/cardholders of a bank must use the POS terminals from the same bank.

Different banks and switches are also introducing QR codes and are following their own standards. However, these are closed-loop systems, that is, QR codes developed and deployed by these providers can be scanned and paid using their consumer apps only; therefore, these are non-interoperable. If a customer wants to use their phone to pay at different merchants, who are acquired by different providers, they need to download and manage separate apps, an inconvenience to the customer. As the NPS ecosystem matures and the number of payments systems operators/providers proliferate, there is an increasing threat of an imbalance in the ecosystem, which could create the same types of inefficiencies as previously seen in the POS environment. It therefore becomes necessary to develop standards to bring in uniformity and provide equal opportunity for all players in the NPS ecosystem. With the roll-out of the RTRP platform, a QR code standardization framework would improve interoperability and uptake of digital channels. According to the NBE, QR code standardization and interoperability are part of its digital strategy; however, no firm timeline has been given on when such a standardization framework will be implemented.

At the regional level, limited regional payment systems interoperability and lack of uniformity in codes for cross-border remittances contribute to the high cost for conducting low-value, high-volume payments, and to delays in payment processing times. However, integration between these systems is under way, and the NBE is an active participant including other regional central banks to establish interconnectivity with regional payment systems.

The NBE is a member of the working group of the African Central Bank Association and the Common Market for Eastern and Southern Africa (COMESA) Business Council. They have participated in regional integration efforts for mobile money as well as other payments infrastructure. Under the COMESA, the NBE also participated in the recently concluded survey in nine countries on regional integration efforts of an NPS, mobile money platforms and cross-border trade for small and medium enterprises. The survey is the preceding step to the process that outlines the integration efforts.

Work on regional integration is in its early stages but has been presented to the respective central bank governors. The next step will be to draft regulations for regional integration of payment systems, which could take three to five years. No definite timeline has been made available. The survey will help COMESA members to determine to what extent the existing payments and financial markets infrastructures can be used or whether customizations will be needed for integration efforts. Thus far, no action has been taken to partner with foreign banks in the main sending countries on infrastructure or remittance services development. To date, the regional payment systems created via the COMESA Clearing House have not had very valuable input to the remittances market.

Recommendations

The following recommendations could be considered to improve the interoperability environment.

- 1. The NBE should prioritize completion of POS and mobile money interoperability by 2022 over the launch of the RTRP platform to ensure that the NPS ecosystem is fully ready for deployment of digital remittance products.** Establishing a fully interoperable environment for POS and mobile money is critical for a well-functioning retail payment ecosystem, which is the basis for an efficient environment for digitally enabled remittance inflows. ATM interoperability has not been finalized as there are existing technical challenges between banks and ETS. POS and mobile money interoperability are in different stages of pilots. The NBE should establish a clear timeline of when full interoperability will be achieved (for ATM, POS and mobile money), including roles and responsibilities of various stakeholders, and communicate this to industry stakeholders who have the responsibility to resolve their infrastructure and connectivity issues based on timeline and expectations established by the NBE. To streamline this process, the NBE could also consider establishing a working group of banks and ETS to monitor key milestones related to full interoperability. Lastly, using the stakeholder coordination mechanism as the basis, the NBE should encourage banks to develop appropriate financial literacy campaigns or measures to address their pain points to accept digital payments. UNCDF can assist the NBE to develop stakeholder coordination and monitoring and evaluation plans to establish full interoperability, including measures that can be taken by the acquiring banks to assist merchants with education and deployment of POS.
- 2. Provide clear guidance to the market on the NBE's future plans for standardization and interoperability framework for QR codes.** While the NBE has included the standardization as part of the Digital Strategy 2025, the individual players in the market are already developing their QR code standards. It is recommended that clear guidance to the banks, PSOs and PSPs (entities responsible for developing their proprietary QR code standards) is provided on what they should be doing now in terms of harmonization efforts. This communication should be issued either in the form of a NBE guidance note or through bilateral conversations with the providers. This process will lay out the importance of establishing interoperability and will outline the intended framework for the standardization process¹⁷ for QR codes to bring uniformity and provide equal opportunity for all players in the payment space. UNCDF can use examples from South Asia and

¹⁷ Based on EMVCo and international standards.

other countries that have used similar processes to help create the initial standardization framework, which would then be further developed under the Digital Strategy 2025.

3. **Provide capacity-building support to the NBE and ETS to scale retail payment services.**

With a number of critical technology intensive projects under way in Ethiopia, there is a need for capacity-building, both at the NBE and ETS. UNCDF can assist with development and implementation of a capacity-building plan using global best practices.

Interconnectivity with local, regional and international hubs, gateways and multilateral payment platforms

Context

Cross-border payments through the correspondent banking model often involve long transaction chains that lead to fragmented and truncated data standards, high costs of capital and weak competition, all of which negatively affect payment speed, cost and transparency. Interlinking of retail payment systems (including fast payment systems) and wholesale payment systems (such as RTGS) allows PSPs to interact directly through the linked infrastructures and reduces their reliance on traditional correspondent banking. Interlinking arrangements can range from simple agreements on cross-participation to full technical integration of systems.¹⁸

Situation in Ethiopia

In Ethiopia, several local processing platforms and switches have emerged. Through direct and indirect partnerships, these entities have also established connectivity with international payment companies and remittances hubs.

Kifiya, through its subsidiary Melapay, is a payment operator for POS terminalization and payment gateway and a local hub for payment switching, and has submitted the first business plan to obtain a licence for the remittance solution in partnership with Visa. HelloCash is also building a partnership with Visa using Visa Direct and CyberSource platforms. For this purpose, they need a sponsor bank for settlement purposes at the NBE. Melapay's mobile wallet-based remittance product is already deployed with the United States, Europe, GCC and Israel as key corridors on their platform. Currently, their volumes are very low, and they are witnessing only 300–400 transactions per day. The lack of full licences for remittances is preventing the solution of both platforms from properly scaling up.

Under their licence, Melapay intends to provide a remittance hub platform with multiple services as revenues from a stand-alone payment switch will not be sustainable because of competition from ETS. Visa is also looking at Melapay to be a gateway/aggregator of services for other providers in Ethiopia (role of a local hub for payment services for Visa to provide value-added services to Visa member banks). Melapay is looking at enhancing its platform for digital disbursement of salaries, government aid and other types of payment services.

¹⁸ Building Block 13 describes the importance of interlinking of different payment systems. Committee on Payments and Market Infrastructures, *Enhancing Cross-Border Payments: Building blocks of a global roadmap* (2020), www.bis.org/cpmi/publ/d193.pdf.

The use of international hubs is not common practice by Ethiopian banks, MTOs or non-banks. Outside of Visa partnership, some banks are working on a partnership with MFS Africa. Once the relationship goes live, they intend to use the hub for corridors in GCC, Europe and North America. Many banks are also pursuing different types of fintech relationships; however, they lack a full understanding of how these fintech services can be integrated into their core banking systems. When they buy their own solutions for mobile platform or QR code, they treat these like core banking solutions and fail in their integration efforts with other platforms.

Some fintechs such as Belcash (HelloCash's parent) are providing value-added services including enablement of small and medium-size merchants to become a digital payment acceptance point or e-commerce provider. In this sense, they are playing the role of merchant aggregator of small and medium-size merchants and pay-as-you-go service providers. Their services are useful for small banks and MFIs that cannot develop these services in-house because of resource constraints or capacity challenges.

Recommendations

The following recommendations could be considered to improve the interconnectivity with local and regional multilateral platforms.

- 1. The NBE should expedite the licensing process for non-bank PSPs and RSPs to create more efficiencies in the market.** Because of capacity limitations at the NBE, the current process for approval of licences can take several months, which jeopardizes the business partnerships that PSPs have established with their international and domestic partners. Moreover, a delay in implementing the planned technological solutions by several months can make them obsolete and can create an environment where international companies that are planning investments in Ethiopia withdraw or limit their investments because of a lack of progress. UNCDF can provide capacity-building assistance to the NBE that is aimed at creating a strategic plan to expedite the licensing process for new PSPs and PSOs, with a focus on streamlining and implementing a structured and transparent approach for the review and approval of new business plans submitted by PSPs/PSOs or for extension of services submitted by existing PSPs/PSOs. In both instances, transparency of process and clarity in communication are key to build trust in the system and for private sector entities to plan long-term investments.
- 2. The NBE should promote connectivity of the NPS with local, regional and international hubs and payment gateways.** Establishing connectivity with international hubs and gateways will facilitate greater access to digital payment channels. Such service aggregation platforms and remittance hubs allow RSPs to scale quicker and not incur disproportional operational and regulatory costs. These platforms and remittance hubs also have the potential to reduce the distance to access points and the cost of transaction by facilitating a high number of low-value/low-fee transactions through a large number of access points (or accessible remotely through the Internet or mobile networks). For this purpose, the NBE should streamline the licence/business plan approval process for PSPs and PSOs that are seeking specific partnerships to integrate with international platforms, such as Visa Direct and MFS Africa. Additionally, UNCDF can map out the process whereby the NBE can establish a road map to establish connectivity with preferred hubs and gateways.

3. **The NBE should consider implementing a fintech regulatory sandbox approach to promote long-term inclusive innovation in digital payments, financial and banking services.** While the regulatory environment for digital payments is still evolving in Ethiopia, and as part of the implementation of the Digital Strategy 2025, the NBE should consider implementing a fintech regulatory sandbox that will enable banks and emerging fintech players to experiment with innovative financial products or services in a live environment but within a well-defined space and duration. Depending on the experiment, the NBE could provide the appropriate regulatory support by relaxing specific legal and regulatory requirements prescribed by the NBE, to which the sandbox entity will otherwise be subjected, for the duration of the sandbox. The sandbox would include appropriate safeguards to contain the consequences of failure and maintain the overall safety and soundness of the financial system. Upon successful experimentation and on exiting the sandbox, the sandbox entity must fully comply with the relevant legal and regulatory requirements. UNCDF can provide an initial assessment and an approach paper for the development of the regulatory sandbox.



LEAVING NO ONE BEHIND IN THE DIGITAL ERA

The UNCDF Strategy 'Leaving no one behind in the digital era' is based on over a decade of experience in digital finance in Africa, Asia, and the Pacific. UNCDF recognizes that reaching the full potential of digital financial inclusion in support of the Sustainable Development Goals (SDGs) aligns with the vision of promoting digital economies that leave no one behind. The vision of UNCDF is to empower millions of people by 2024 to use services daily that leverage innovation and technology and contribute to the SDGs. UNCDF will apply a market development approach and continuously seek to address underlying market dysfunctions

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