

Introduction

Payment system modernization and its regulation is taking place in Ethiopia at a sweeping pace. Though the National Bank of Ethiopia (NBE) embarked on this project lately, new changes are being introduced very rapidly. The reforms seem to have the objective of realizing the double goals of financial inclusion and modernization. To this end, an assessment of the last few decades of comparative research shows that higher levels of financial development are significantly and robustly correlated with faster current and future rates of economic growth, physical capital accumulation and economic efficiency improvements.

Financial inclusion and financial sector modernization are vital goals that reinforce each other. This is truer in the payments services than anywhere else. Indeed, in the last two decades, payments have moved away from cash, paper checks, and other relatively slow and expensive mechanisms to incrementally faster and cheaper digital payment services enhancing the goals of inclusion and modernization. While the modernization and inclusion are most sought after objectives, implementation of these objectives requires close governmental regulation.

Payments system regulation has three main objectives. The first objective is the protection of individual consumers from unfair business practices or losses due to unauthorized transactions or errors. Rules relating to protection of customer funds are motivated by this consumer protection rationale. Secondly, payments system regulation aims at preventing criminals and terrorists from using payment services to further their illegal activities. This relates to the anti-money laundering and countering of terrorist financing (AML/CTF) policies. The rules pertaining to customer due diligence (KYC) are primarily concerned with this objectives. These two objectives of payment system regulation digress into other subfields of consumer protection law and criminal and anti-terrorism laws, respectively.

The third objective of payment service regulation is ensuring the safety and soundness of individual payment providers and payment networks, and the stability of the overall financial system. Though monitoring the earlier two objectives can be the exclusive or shared mandate of

other agencies, ensuring this third objective is a purely central bank function. This financial stability objective aims to tackle specific risks such as the risk of the service provider being unable to meet its current liabilities- liquidity risk; the risk of the service provider being unable to meet future liabilities or credit risk and the risk of failures, disruptions and errors in the systems, software and hardware, i.e., operational risk. A payments system regulation should address these three broad objectives.

This legal update examines the newly issued payment instrument issuer directive in light of these three objectives.

The digital payments ecosystem in Ethiopia

A digital financial service requires multiplicity of players as opposed to the traditional brick and mortar banking which starts and ends in a two party relationship between the banker and the customer. The digital banking service however requires the cooperation of plurality of actors. Unlike other markets where multiplication of intermediaries, results in reduced efficiency, the multiplicity of intermediaries in digital financial services results in ultimate customer convenience or better value proposition. This is because, full digital financial inclusion requires cooperation among all of the players involved such as banks, non-bank digital finance providers, mobile network operators, internet platform providers and other agents, and requires each player to operate in accordance with laws and professional standards and in good faith. Below, the major players in the digital financial services system will be explained.

Before that characterizing the typology of the Ethiopia's mobile money system is next in order.

Ethiopia's Digital Banking Model

E-money or mobile money can be defined as a digital representation of sovereign currency distributed by a private entity, which is under state regulation. The record of funds or value is stored on an electronic payment device such as chip, prepaid cards or mobile phones as a non-traditional account with a banking or non-banking entity. There are two main alternative models of operating a mobile money system; namely, a bank led model, non-bank led model. A bank-based model is one in which:

- i. the customer has a contractual relationship with the bank; and

- ii. the bank is licensed or otherwise permitted by the regulator to provide financial services(s)

On the contrary, in non-bank led model, entities such as mobile network operators provide mobile money services exclusively or side by side with banks. Accordingly, in the case of non-bank-based providers, customers do not have a direct relationship with a bank, and thus do not need a bank account to make financial transactions. Users buy SIM card with the mobile money application for their phone, which has an electronic account associated to it. The Provider issues electronic value that customers purchase with legal tender, which the Provider will often store in a bank account. Customers can use this mechanism to deposit money into their account ('cash in') or withdraw money from their account ('cash out'). They can normally do so through specific access points such as agents of the Provider or Automated Teller Machines (ATMs).

Ethiopia followed a bank-led system up until the issuance of the Issuer directive. Under the previous directive, i.e., Mobile and Agent Banking Services Directive No.FIS/01/2012, only banks and MFIs can offer mobile and agent banking services. However, the passage of the new Directive marked the shift from bank-led to non-bank model of digital financial services. This change was made due to the recognition of the limitation of the bank-led model to roll out financial inclusion in a manner that can satisfy the national policy ambitions expressed in the National Financial Inclusion Strategy (NFIS) of 2017. Hence, Article 4.2 of the ONPS directive declares that 'a person other than licensed financial institutions shall submit ...application to the National Bank to get a license to issue a payment instrument.'

Main players in Digital Finance Ecosystem

Though 'modem payment cards began in the mid-twentieth century as end-to-end services, with one company acting as the sole intermediary between a consumer and a merchant in a payment transaction' this gradually gave way to the participation of multiple actors. Hence, at the most basic level, a typical payment card transaction involves two account service providers. The first provider, an issuer, provides consumers with a physical card or other payment device and commits to withdraw funds from the purchaser's account (in the case of a debit or prepaid card) or to otherwise pay for the transaction (in the case of a credit card). The second provider, an acquirer, acting on behalf of the merchant, collects payments from the issuer. The modern payments industry ecosystem however, involves more actors than issuers and acquirers.

There are also various types of payment network operators that provide valuable services of interconnectivity and inter-operability among different issuers and acquirers. The following is the examination of the major participants in a modern payments market place.

Payment instrument issuers: banks and/or non-banks

The payment instrument issuer, also known simply as 'issuer' is a bank or a non-bank institution such as an MFI or a mobile network operator that has a contractual relationship with the consumer. The payment instrument contains payment authorization data that allows the consumer to access either a line of credit with the issuer (for a credit card,) or a demand deposit account (for a debit card) or a prepaid balance for mobile wallet or e-wallet. Thus, in a traditional payment card transaction the cardholder transmits her payment authorization data, including her primary account number (PAN) to the merchant, which relays the information to the acquirer bank and thence through the card network to the issuer for authorization. If the transaction is authorized, the issuer will remit funds to the network, which will send them on to the acquirer bank and thence to the merchant; however should the transaction be rejected, say for instance, because the issuer suspects fraud the purchase cannot be completed.

The payment instrument issuer issues electronic value that customers purchase with legal tender, which the Provider will often store in a bank account. Customers can use to deposit money into ('cash in') or withdraw money from ('cash out') their account. They will generally do so through specific access points such as agents of the Provider or Automated Teller Machines (ATMs). Customers can also use their mobile phone applications to send money to or receive money from other service users.

Acquirer

The acquirer is the merchant's banker with a contractual relationship broad enough with the latter to facilitate the merchant's sales. The contract between the acquirer and the merchant contains a promise by the acquirer to pay the merchant for transactions that comply with various criteria concerning authorization, merchant limits and so forth. The contract will also detail other services provided by the acquirer relating to processing the transactions and specify the fee payable by the merchant for the services provided.

In a way the issuer and the acquirer can both be banks, or non-banks at the same time; or one may be a bank and the other a non-bank depending on the regulatory system in a jurisdiction. Under the draft payment system operator directive, acquirer is defined as ‘an entity that owns and operates payment channels and enters into agreement with the financial institutions, merchants, switch processors and providers of card schemes. Since, acquirer is any financial institution (a bank, MFI or a non-bank), there is no separate regulation for acquirer. In other words, the term ‘acquirer’ is a functional term assigned to a financial institution facilitating the payments from the merchant’s side.

Agents

Agents are small businesses of various forms that perform agent business service that is defined in the Use of Agent Directive of 2020 as ‘the provision of financial services to customers by an agent in the name and on behalf of a financial institution.’ In modern payments industry agents are crucial participants for issuers and have been vital to the growth of the industry over the last decade. The use of agents in the financial services industry is motivated primarily with financial inclusion considerations. Naturally, both banks and non banks are often hesitant over the large fixed-cost investments of setting up and maintaining branches in remote rural areas where operating costs may exceed operating profits. From the customer’s perspective, the ability to cash in and cash out within proximity to where customers live and work is vital and modern payment services like mobile money can easily build agent networks to succeed. During the early stages of mobile money, for examples, customers require agent outlets to exchange their conventional money for e-money and recipients of mobile money transactions require agent outlets to liquidate their e-money for conventional money. Agents also play a critical role in registering new customers to the mobile money service.

Ethiopia introduced agent banking regulation in 2012 right after the promulgation of the National Payment System proclamation (NPS Proclamation). However, a more elaborate and complete agent business service directive was issued in 2020. This directive elaborated what agents can do, agent categories into ordinary agents, super-agents, and sub-agents, agent due diligence, requirements to be agent, and many other aspects that streamline agent banking services.

Payments system operators

Payments system operators facilitate the works of issuers, acquirers, customers and merchants. As shown above, the problem with this early model of payments system was that cardholders and merchants were required to be customers of the same bank/issuer. Thus, when the customer and the merchant use different banks, the chief function of the payment system operator became 'and still is-to transfer information about a transaction between the cardholder's issuing bank and the merchant's acquiring bank.

Payment system operators provide two key functions in payment card transactions, namely, switching/interconnecting different financial institutions and facilitating clearing and settlement: Their first role is to facilitate the authorization of a payment card transaction. When a purchaser uses a payment card to pay, the merchant platform initiates payment submission by sending a message to the merchant's bank or a processing service provider, which then routes the transaction information to a payment network. The payment network contacts the consumer's bank and assists that bank in verifying the cardholder's information, conducting fraud detection analyses, and determining whether the cardholder has sufficient funds or credit. If the transaction is approved, the network sends an approval message back to the merchant's bank or the processing provider.

The second function of the payment system operators is to facilitate the clearing and settlement steps of a transaction through a separate series of messages. At the end of each day, a merchant submits a batch of its approved authorizations to an account service provider or a processing service provider. The account provider or processor then routes the batch to the payment card network, which sorts the transactions attributed to each consumer bank and merchant bank, and provides summaries of the net financial positions to each participant. The network does not itself settle the transaction but submits a fund transfer order to a settlement system.

To make their services more efficient, system operators often establish scheme rules governing all participants namely, the issuer, the acquirer, the merchant and the customer.

Payment system operators are of various sizes and forms. These mainly include payment network operators such as switch system operators, payment aggregators and payment

gateways. Payment aggregators are the entities that facilitate e-commerce sites and merchants so as to enable them to accept various payment instruments from customers for completion of their payment obligations without the requirement for merchants to create a separate payment integration system of their own. Payment Aggregators facilitate merchants to connect with acquirers. In the process, they receive payments from customers, pool and transfer them on to the merchants.

On the other hand, payment gateways are the entities that provide technology infrastructure to route and facilitate processing of an online payment transaction. Often, they do not have any involvement in handling of the funds.

Switch systems are platforms which interchange different payment instruments originating from different issuers into a single interoperable system. The scope of a switch system is a function of the level of development of mobile money system in a country. Therefore, more effective switch systems and broader interoperability is the result of regulatory and technological maturity. Creating highly efficient switch system takes time. It is the growth of the digital financial industry that enhances access to the national payments and settlement infrastructure and its increasing efficiency. This access includes the Central Bank allowing mobile money providers direct settlement by opening a settlement account at the central bank or allowing mobile money providers to settle through a settlement agent with access to a settlement account or integration to the national switching infrastructure, such as national switches and clearing houses.

Merchants

While the foregoing are participants on the supply side of payment services, merchants, along with cardholders are on the demand side of the service. Though payment services function in person-to-person (P2P) money transfers, they are predominantly relevant in the person-to-business (P2B) context. Businesses are one of the important members of the mobile money ecosystem. This is evident from the payment system related directives which always include a definition of the term ‘merchant.’ The later directive defines ‘merchant’ as a ‘commercial establishment which enters into an agreement with an acquirer, operator, financial institution, aggregator and payment instrument issuer; accepts payments using the payment instrument’ in selling goods and services.

While this definition does not mention payment gateways as one of the potential parties with which a merchant can have an engagement, the omission seems unintentional. On the other hand, the merchant may have to accede to a scheme overseen by the payment network operator instead of striking separate agreements with each participant in the ecosystem. Scheme rules are a set of rules issued to govern the payment system operator and its customers.

Card-holders/consumers

Cardholders are customers, i.e., the main end users of the payment system services. All the innovations in the payments industry is meant for cardholder convenience. Interestingly, the main regulatory drive is also the protection of cardholders/consumers. Cardholders are on the other hand, are the groups against which regulatory standards of know your customer (KYC)/or customer due diligence (CDD) applied with the view to combating money laundering and financing of terrorism.

Part two of this legal update examines the Issuer directive in light of these objectives.