



WORKING PAPER

Market System Assessment of Digital Financial Services in WAEMU



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EXECUTIVE SUMMARY

Globally, banks, microfinance institutions (MFIs), mobile network operators (MNOs), and other providers are using digital channels, such as mobile phones and point-of-sale (POS) devices, along with networks of small-scale agents, to offer basic financial services at greater convenience and lower cost than what is allowed by traditional banking. Mobile money (MM) in Kenya offers one example of how developing the market for digital financial services (DFS) can catalyze financial inclusion more broadly.

Since 2012 and with the support of the MasterCard Foundation, CGAP has been supporting the development of a DFS ecosystem in the West African Economic and Monetary Union (WAEMU), an organization established to promote economic integration among its eight West African member states. These countries share the CFA franc (FCFA) as a common currency and a single central bank, BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest).

The most recent data from BCEAO indicate that 34.5 percent of WAEMU's adult population (age 15 and over) held an account at a formal institution (banks, MFIs, banks savings, treasury, or post office) in 2014. When MM users are included, this proportion almost doubles to 61.7 percent. Other sources, however, are more conservative: the Global Findex places financial inclusion in the region at 13 percent of adults with an account at a formal financial institution and 18 percent when MM is included.

While uptake of DFS in WAEMU has been growing over the past few years, it is still relatively limited compared to its potential and MM activity rates remains relatively low. Moreover, most DFS products remain basic, with offers of second-generation products such as savings, credit, and insurance are still rare. Additionally, even if all WAEMU countries share the same regulation for e-money, the ecosystem is developing unevenly across the eight markets, with each market displaying different rates and modes of uptake, financial access infrastructure, partnerships, and market share distributions across different financial services providers (FSPs).

In 2015, BCEAO published guidelines for e-money that replace the 2006 framework and that will influence how DFS markets develop in WAEMU going forward.

These developments prompted CGAP to update its understanding of the market for DFS in WAEMU and share learnings with key stakeholders. Broadly, the study aimed to do the following:

- Map the market system for DFS in WAEMU, including key actors in supply and demand, rules (e.g., regulations for e-money, telecommunications, competition) and supporting functions (e.g., agent networks, information providers).
- Identify systemic constraints or root causes that explain why the DFS market is not fully meeting the needs of low-income populations.
- Identify opportunities for stimulating systems-level change.

Following a literature review, five countries were selected for further in-depth examination. Each of the five is at a different stage in the evolution of its DFS market and has followed a distinctive trajectory in reaching this stage:

1. Benin—a **nascent market** with the lowest MM transaction volumes in WAEMU after Togo and Guinea Bissau, DFS offers that are still relatively basic, and strategic partnerships between financial institutions and MNOs only recently starting to form. However, volumes of DFS transactions are rapidly growing.
2. Niger—**early-stage** DFS market with even lower mobile penetration (34 percent) as compared to Benin, but with significantly higher MM transaction volumes. The country is distinguished by the presence and use of national money transfer services. Second-generation DFS products are expected to be introduced this year.
3. Mali—an already **significant and growing** market for DFS with the second-highest MM transaction volume in WAEMU. The market is currently dominated by one MNO's MM offer, but financial institutions and other actors are starting to become more engaged in this domain.
4. Senegal—one of the oldest DFS markets in WAEMU with MM offers starting in 2010, but **strong competition from national over-the-counter (OTC)** money transfer operators has limited DFS uptake,¹ with approximately the same number of MM subscribers in Senegal as in Benin. The country is nonetheless very influential in the regional DFS market, being home to BCEAO headquarters and many technology companies focused on financial services (Fintech), and with OTC operators also starting to introduce DFS offers and expand regionally.
5. Côte d'Ivoire—a relatively **mature DFS market**, with MM available since 2008 and accounting for almost 50 percent of total MM transaction volumes and registered users in the region. There are several government initiatives that support DFS either as a specific goal or indirectly, and there are several growing e-commerce businesses that may also drive uptake. Some second-generation DFS products are already being piloted here.

Over 100 interviews were conducted from November 2015 to February 2016, in-person in three countries (Benin, Côte d'Ivoire, and Senegal) and via phone/skype with stakeholders in the other two (Mali, Niger). A range of market actors was interviewed, including MNOs and their e-money issuing subsidiaries, banks, MFIs, money transfer operators, OTC providers, BCEAO, telecom authorities, and technology companies. BCEAO and several development partners active in WAEMU and in the DFS space reviewed the analysis and provided feedback. In addition, CGAP facilitated a workshop in Cote d'Ivoire to receive feedback from key stakeholders and organized a working session with BCEAO both in June 2016 to discuss recommendations.

¹ This report does not consider the money transfer services offered by OTC providers to fall within the realm of DFS, since in such transactions, clients do not need to have their own electronic wallet (a key component of DFS). However, as discussed later in the report, in some countries, they compete directly with DFS providers on similar services, and they are also starting to enter the DFS sector by partnering with financial institutions to offer products such as e-wallets, prepaid Visa/GIM cards, etc.

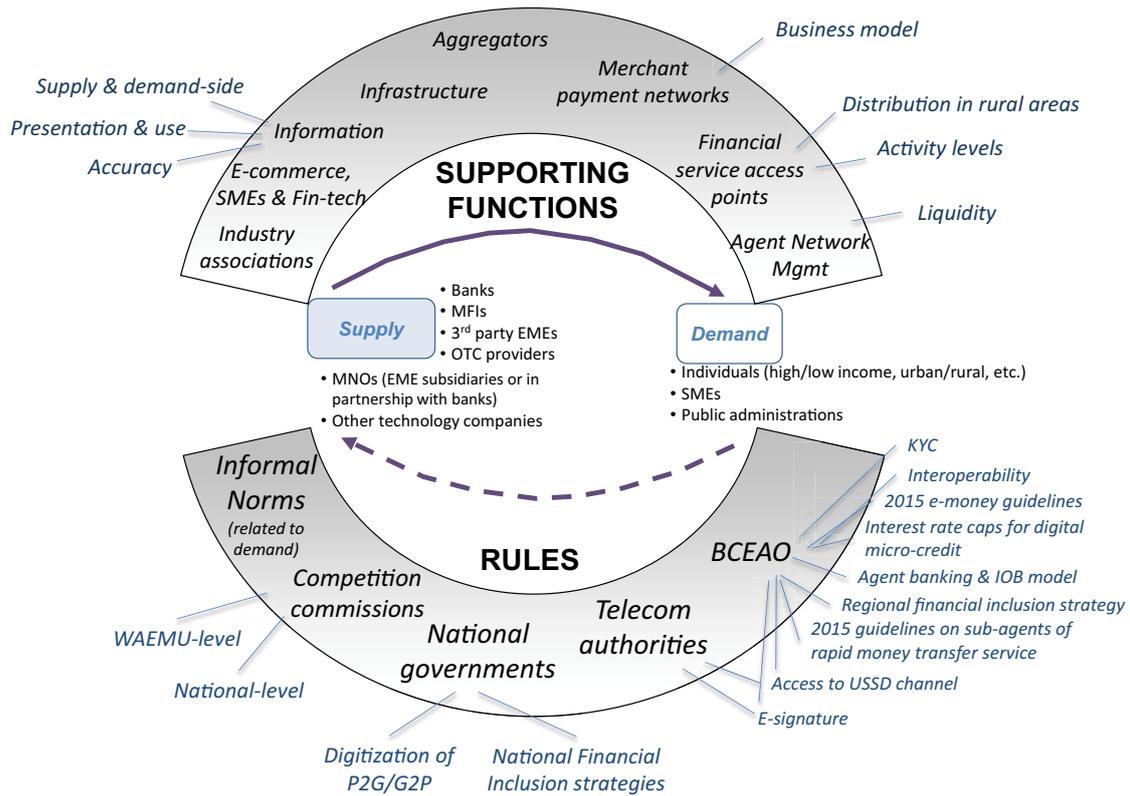


FIGURE 1. DFS Market System Map

Figure 1 summarizes our understanding of the DFS market system in WAEMU, including identifying key functions, actors, and emerging issues.

The supply of DFS

MNOs in partnership with financial institutions are the key actors in the supply of DFS in WAEMU. While their offers are currently dominated by first-generation products, such as cash-in/cash-out transactions, airtime top-ups, and person-to-person (P2P) domestic transfers, some are beginning to innovate with second-generation products, such as savings, digital credit, and insurance. With the 2015 e-money guidelines clarifying the pathway for MNOs to create e-money issuing subsidiaries, MNOs are expected to become more independent of their bank partners, and more flexible and reactive in developing their DFS offer. The new guidelines are also likely to encourage a shift in the nature of partnerships between financial institutions and MNOs to focus further on developing second-generation DFS.

Banks in WAEMU are yet to prioritize the Bottom of the Pyramid, but certain pan-African banks are prioritizing developing alternative distribution channels, including DFS in partnership with MNOs. Only one bank in WAEMU has attempted an agent banking model, with the only possibility for such a structure under current regulations being the Intermédiaires en Opérations de Banque (IOB) model offered by BCEAO's guidelines n°015-12/2010/RB.

In general, third-party (nonbank non-MNO) e-money issuers have not had much success in the face of tough competition from MNOs and money transfer (OTC) providers and lack of adequate resources and capacity to develop their offers,

information systems, marketing, and distribution networks. MFIs have faced similar challenges in this realm, often lacking a clear vision for developing their DFS offer, financial and human resource capacity, adequate management information systems (MIS), and hesitation to partner with MNOs, which are seen as potential competitors for clients. However, some examples of innovation from MFIs are starting to emerge, including an agent banking pilot, linkages between MM e-wallets and MFI accounts, and authorization to become e-money issuers themselves.

Money transfer operators with their OTC offer that specialize in domestic money transfer, such as Wari and Joni-Joni, are very popular in some countries, including Senegal and Niger. The success of these companies in certain markets can be attributed to several factors: (i) well-developed agent networks; (ii) cash use already ingrained in the populations' money management practices; (iii) a more simplified customer journey thanks to the central role that the agent plays in transactions; and (iv) for some, strong marketing campaigns before MM offers were well-established in the market. OTC providers have also recently started to enter the DFS market by partnering with financial institutions to offer prepaid cards, e-wallets, and links between e-wallets and bank accounts.

Rules shaping the market system

BCEAO is the main institution regulating financial sector activities in the region including e-money. This implies that the regulatory framework for e-money is the same across the eight member states of WAEMU.

As a promoter of financial inclusion and financial sector development more broadly, BCEAO has set a target of 75 percent of adults to be formally included in the financial sector by 2020 and has recently developed a regional financial inclusion strategy to meet this goal. It has also supported the development of a regional switch for cards, the GIM-UEMOA, in 2003.

As mentioned, BCEAO's 2015 e-money guidelines (n°008-05-2015) offer a much-needed update from the previous framework by clarifying the roles and obligations of different stakeholders in the e-money value chain, particularly those of the banks' vis-à-vis technical operators (e.g., MNOs). To accompany these new guidelines, BCEAO has developed and adopted a specific supervisory framework for monitoring e-money issuance and distribution.

The regulatory framework for agent banking in WAEMU is complicated to navigate and could be made more enabling. BCEAO's guidelines n°015-12/2010/RB for IOBs allows banks to delegate to authorized intermediaries certain operations, such as opening accounts, offering credit, etc. However, it is not deployed often, likely because of a lack of awareness of the model and guidelines that need clarification. In addition, IOB is applicable only to banks, excluding de facto MFIs. It appears that MFIs may ask BCEAO for a special authorization to pilot an agent banking model but criteria to receive the authorization are not clearly defined or unknown to the rest of the market actors. BCEAO's November 2015 guidelines n°013-11-2015 on rapid money transfer services for subagents is positively clarifying the roles and responsibilities between financial institutions and agents for the OTC activity of money transfer services. Yet, it also makes it impossible for banks to deploy agent banking outside of the IOB model to capitalize on OTC providers' vast agent networks.

While national telecom authorities in WAEMU have generally not yet intervened in DFS or MM regulation, there is a growing consensus that they need to be more involved, and that coordination and communication between these authorities and BCEAO needs to be strengthened and formalized on aspects such as interoperability, USSD access, agent and geographic network coverage, etc.

National governments can also play a key role in catalyzing DFS, although this potential is only starting to be realized in some markets in WAEMU. For example, not all WAEMU countries have national financial inclusion strategies in place, and only a few governments in the region are starting to digitize P2G payments.

Supporting functions and actors

Each market system relies on a range of services that inform, support, and shape the quality of the core services within the system, as well as the system's ability to develop, learn, and grow. Table 1 shows the functions that were identified as key to the DFS ecosystem in WAEMU.

Key constraints and recommendations for DFS market development

Table 2 summarizes the underlying systemic reasons identified by the study that help to explain why digital channels have not yet brought about deeper financial inclusion in WAEMU and presents some actions that could be taken to address these barriers.

TABLE 1. Key Functions

Supporting function	Key Observations
Financial service access points, including banks and MFI branches, automatic teller machines (ATMs), money transfer/OTC agents as well as MM agents, small shops, and postal network branches	<ul style="list-style-type: none"> ■ MNOs and, in some countries, OTC providers consistently have a far higher number and distribution of agents as compared to other FSPs. ■ The majority of these points (across the different FSPs) are still concentrated in urban centers, meaning there is much work to be done to develop agent networks and access points to serve nonurban areas.
Agent network management—the ongoing process of identifying, training, monitoring and managing agents, including ensuring their liquidity, risk management, and compliance with regulatory and customer service standards	<ul style="list-style-type: none"> ■ Although bank partners are technically responsible for ensuring liquidity and risk management systems of agents, in practice, MNOs and OTC providers tend to manage their own agent networks. ■ Master agents who then manage subnetworks of other agents in return for a percentage of their commissions, often play a key role. ■ Independent agents and master agents face liquidity challenges, especially in rural areas. They could also benefit from more support from their MNOs or OTC providers in the form of ongoing training, technical support, and access to credit.
Merchant networks—widespread acceptance and use of digital payment options are essential, including for daily purchases offered by merchants	<ul style="list-style-type: none"> ■ Certain merchant networks are supporting DFS provision. ■ Development of business models that motivate merchant partners to consistently accept and encourage clients to pay by digital means has been challenging.
Aggregators allow payment providers such as MNOs and banks to easily integrate their services with entities that want to send money to or receive money from end customers (e.g., utility companies that want to receive payments, businesses who want to pay salaries)	<ul style="list-style-type: none"> ■ Aggregators in WAEMU vary in terms of market positioning, services offered, and engagement with the end customer. ■ MNOs may also open their application programming interfaces (APIs), the technology that allows two software programs to communicate with each other. Open APIs can spur innovation in products and services using mobile wallets as payment platforms and reduce the need for aggregators.
E-commerce businesses, crowdfunding have the potential to help digitization of the economy	<ul style="list-style-type: none"> ■ While the majority of target clients remains mid- to high-income groups, some e-commerce businesses are also starting to target lower-income groups. ■ Recognizing potential to transform cash purchases into purchases made by MM, some MNOs have invested in e-commerce businesses in WAEMU. However, heavy incentives are often needed to drive MM payments (e.g., usually taking the form of discounts on purchases, free airtime or data). ■ Orange’s recent introduction of Orange Collecte, an online/mobile crowdfunding product, in Côte d’Ivoire may eventually help to facilitate the start-up or expansion of small and medium enterprises (SMEs).

Table 1. Key Functions (Continued)

Supporting function	Key Observations
Market information	<ul style="list-style-type: none"> ■ Up-to-date, publicly available information on both demand and supply of DFS in WAEMU is relatively limited. ■ Even when such information is available, it may not always be widely communicated or presented in forms that are useful for decision-makers. ■ BCEAO's annual report on the state of financial services via the mobile channel in WAEMU is key to understanding the evolution of the sector. ■ Once launched, the regional credit bureau will be an important information source on borrowers' credit history and will allow credit scoring of even nonbanked clients (who can be assessed on the basis of their bill payment history).
Industry associations—represent the interests of their members and offer activities to strengthen member capacity	<ul style="list-style-type: none"> ■ All WAEMU countries have national professional associations representing banks, as well as associations representing the countries' MFIs. MNOs are represented by their global association—GSMA. ■ In several countries, members and other actors reported that the associations were not sufficiently proactive or forward-thinking enough in educating their members and leading strategy development on new areas of work, such as DFS. This may be partially due to the associations lacking financial and human resource capacity.

TABLE 2. Barriers and Recommendations

Constraint	Lead actors	Recommendation
1. Certain aspects of the overall regulatory framework for DFS remain unclear or incomplete:	BCEAO, telecommunications authorities, national governments	<ul style="list-style-type: none"> ■ Regulatory authorities will need to ensure a collaborative approach that considers the opportunities and risks posed by DFS from multiple perspectives, including payment systems, OTC providers, high-volume payments (e.g., B2B/G2P/P2G), financial inclusion, etc. ■ Build capacity and secure resources to adequately supervise and monitor the diverse actors in the ecosystem. ■ Regulators could prioritize: <ul style="list-style-type: none"> ■ frequent and ongoing consultation with market actors ■ ensuring adequate resources and data mining tools to analyze reported data ■ ensuring availability of IT tools and teams responsible for technical audits
a. KYC requirements and identification	BCEAO, national identification offices	<ul style="list-style-type: none"> ■ Introduce risk-based, know-your-customer (KYC) requirements for both accounts at financial institutions and with e-money issuers ■ Engage with identification efforts both at the regional and national levels to understand how adequate they are for financial inclusion ■ Advance accessible, secure, and verifiable ID systems
b. Interest rate caps on loans	BCEAO	<ul style="list-style-type: none"> ■ Develop specific rules for digital credit involving small amounts that could justify a higher cost (i.e., that surpasses current interest caps on credit) in return for other benefits offered to customers (e.g., no transport or time costs, immediate availability, automatic renewal)
c. Agent banking regulation	BCEAO	<ul style="list-style-type: none"> ■ Clarify and adapt the IOB regulation, extending it to MFIs ■ Harmonize the regulatory framework for agents both of financial institutions and nonbank providers such as e-money establishments based on type of products rather than the type of providers
d. Recruitment criteria for nonbank agents	BCEAO	<ul style="list-style-type: none"> ■ Allow for more flexibility in the criteria that agents of MM and OTC services and merchants accepting MM payment must meet, especially in rural areas.

<p>e. Access to USSD channels</p>	<p>MNOs, BCEAO, telecommunications authorities, national competition authorities</p>	<ul style="list-style-type: none"> ■ Encourage agreements among market players ■ Establish a dispute settlement mechanism ■ Increase coordination among relevant regulatory bodies to assess the problem of USSD access ■ Consult with stakeholders to discuss the conditions of access, process, and design of appropriate business models
<p>f. Interoperability</p>	<p>Providers, BCEAO</p>	<ul style="list-style-type: none"> ■ Articulate a clear vision for interoperability in the near future; a broader one that encompasses several payment schemes (such as MIM accounts at financial institutions,) might be more beneficial for financial inclusion ■ Ensure a market-specific approach (as the need for different types of interoperability is highly market-specific) that includes close consultation with market actors ■ Clarify the role and capacity of the <i>comprendre la consultation étroite avec les acteurs du marché.</i> ■ Clarifier le rôle et la capacité du <i>Groupeement interbancaire de monétique de l'UEMOA (GIM-UEMOA) moving forward</i>
<p>g. Use of e-signature</p>	<p>BCEAO, telecommunications authorities</p>	<ul style="list-style-type: none"> ■ Collaborate to clarify the verification and use of e-signature for offering DFS on a country-by-country basis
<p>h. Framework for business-to-business (B2B) and bulk payments</p>	<p>BCEAO</p>	<ul style="list-style-type: none"> ■ Adapt regulatory framework to: <ul style="list-style-type: none"> ■ address risks posed by large amounts and high volumes involved in B2B and bulk payments ■ encourage the digitization of these money flows, especially from or to government actors ■ encourage these payments be provided in a manner that promotes financial inclusion (i.e., by not requiring beneficiaries to withdraw all of their funds at once or offering them a low-cost savings account in which to store the funds)

(Continued)

TABLE 2. Barriers and Recommendations

Constraint	Lead actors	Recommendation
2. Distrust between MNOs and financial institutions	MNOs, banks, MFIs National governments, donors, development actors	<ul style="list-style-type: none"> ■ Prioritize long-term partnerships that focus on second-generation DFS ■ Facilitate partnerships through supportive policies, awareness-raising of potential partnership models, technical support to pilot innovative partner projects, etc.
3. Vision and capacity of the private sector	MNOs, MFIs, banks, other private sector actors	<ul style="list-style-type: none"> ■ Adopt a long-term approach to developing DFS that sees potential beyond short- to medium-term profitability
4. Agent network development	Regulators, policy makers, donors	<ul style="list-style-type: none"> ■ Encourage providers to develop DFS products suited for lower-income populations until the use case for such services has been better established in WAEMU. This could be done, for example, through supporting providers who have shown a commitment to using alternative digital channels, “buying down risk” of testing new DFS models through co-financing or technical support, and supporting initiatives that fill information gaps in the market
5. Information to facilitate decision-making	BCEAO, MNOs, industry associations, national governments, donors, development actors	<ul style="list-style-type: none"> ■ Consolidate and publish the numbers and locations of active financial service access points (ATMs, bank and MFI branches, MM and OTC agents), including a geospatial mapping of these points ■ Increase research capacity to conduct and publish: <ul style="list-style-type: none"> ■ Segmentation of populations according to financial service needs (i.e., what they consider to be valuable in a new product or service) and insight on how to frame and communicate financial products in a way that “speaks” to target consumers’ needs ■ Case studies of collaboration between different regulators and policy makers (e.g., central banks, national government departments, telecom authorities) to build a holistic framework for the DFS market ■ Studies identifying key success factors for DFS from other similar contexts ■ Consider presentation and communication aspects as early on as possible. Tracking use of the final product should also be prioritized.

6. Merchant payment models	MNOs, other digital payment services providers, donors, development actors	<ul style="list-style-type: none"> ■ Invest in further exploring/piloting emerging business models/ solutions to incentivize both merchants and customers to use digital payment channels
7. Political will and capacity	National governments	<ul style="list-style-type: none"> ■ Prioritize and develop needed infrastructure to: <ul style="list-style-type: none"> ■ Ensure a minimum level of financial literacy across the population ■ Design, resource, and implement a national financial inclusion strategy (based on BCEAO's regional strategy) <ul style="list-style-type: none"> ■ Incentivize digital payments versus payment in cash (e.g., by exempting digital payments from taxes) ■ Digitize P2G and G2P payments to the maximum extent possible
	BCEAO, donors, development actors	<ul style="list-style-type: none"> ■ Ensure implementation of regional financial inclusion strategy and advocating national governments for their active participation

ACRONYMS

AML/CFT	Anti-money laundering/combating the financing of terrorism
ARPU	Average revenue per user
BCEAO	Banque Centrale des Etats de l’Afrique de l’Ouest (Central Bank of West African States)
BIC	Bureau d’Information sur le Crédit (Credit Information Bureau)
BNIF AFUWA	Bureau Nigérien d’Intermédiation Financière AFUWA
CENTIF	Cellule Nationale de Traitement des Informations Financières
CGAP	Consultative Group to Assist the Poor
DFS	Digital financial services
ECOWAS	Economic Community of West African States
EME	Etablissement de monnaie électronique (e-money establishment)
FCFA	Franc CFA (Communauté Financière Africaine)
FRAED	Facilité Régionale d’Accès à l’Energie Durable
G2P	Government-to-person
GIM-UEMOA	Groupement interbancaire monétique de l’Union économique et monétaire ouest-africaine
GSMA	GSM Association
IFC	International Finance Corporation
IOB	Intermédiaires en Opérations de Banques (Intermediary in Banking Operations)
KYC	Know-your-customer requirements
MFI	Microfinance institution
MIS	Management information system
MM	Mobile money
MM4P	Mobile Money for the Poor (UNCDF program)
MNO	Mobile network operator
OQSF	Observatoire de la qualité des services financiers (Observatory on Financial Services Quality)
OTC	Over-the-counter (money transfer)
P2G	Person-to-government payments, including taxes and school fees
P2P	Person-to-person payments, including both domestic and international remittances
P2B	Person-to-business payments, including payments for the purchase of goods and services
G2P	Government-to-person payment, including government benefits (pensions, social protection) and salary payments
POS	Point of sale
SGBS	Société Générale de Banques au Sénégal
SIB	Société Ivoirienne de Banque
SME	Small and medium-sized enterprise
UNCDF	UN Capital Development Fund
USSD	Unstructured supplementary service data
WAEMU	West African Economic and Monetary Union
PSP	Payment service provider

DEFINITIONS

Agent	Any third party acting on behalf of a bank, a mobile network operator, or other financial services provider to deal directly with customers.
Agent banking	The delivery of financial services outside conventional bank branches, using nonbank-employee retail agents (frequently, postal and retail outlets, including “corner shops,” grocery stores, pharmacies, seed and fertilizer retailers, and gas stations) and relying on information and communications technologies to transmit transaction details—typically card-reading point-of-sale terminals or mobile phones.
Aggregator	Technology providers that enable payment instrument providers (such as mobile network operators offering mobile money services or banks offering mobile banking) to easily integrate with entities that want to send money to or receive money from end customers. At any given point, an aggregator is integrating at least three types of actors: <ol style="list-style-type: none"> 1. The payer (one who pays, such as an end customer who wants to pay an electricity bill or donor who wants to send payments to recipients). 2. The payee or recipient of payments (to whom a payment is made, such as an electric company or recipient of a donor payment). 3. The payment instrument provider (such as an MNO or bank).
Application program interface (API)	APIs are a set of software requirements that govern how one application speaks to another. APIs are what make it possible to share information between programs.
Cash-in/cash out	Cash-in is the exchange of cash for electronic value (e-money); cash-out is the exchange of electronic value (e-money) for cash.
Digital financial services (DFS)	There is no common widely used definition of DFS. This report defines DFS broadly as the delivery of financial services through a digital channel (usually mobile, cards, or internet) with limited use of traditional branch infrastructure.
Electronic money (e-money)	A monetary value represented by a claim on the issuer that is stored in electronic form, including magnetic; issued immediately against delivery of funds of an amount not less than the monetary value issued; and accepted as means of payment by persons or entities other than the issuing institution.
Electronic wallet (e-wallet)	Electronic accounts that clients can manipulate directly to send payments to other wallets or merchants.

E-money establishment (EME)	Any legal entity, other than banks, financial institutions, and microfinance institutions, authorized to issue payment in the form of electronic money and whose activities are limited to the issuance of electronic money and distribution of electronic money.
E-money issuer	Banks, financial institutions specialized in payments (or payment institutions), authorized microfinance institutions, and other authorized nonfinancial institutions that have been authorized by BCEAO as EMEs.
Financial inclusion	A state where both individuals and businesses have opportunities to access and the ability to use a range of appropriate financial services that are responsibly and sustainably provided by formal financial institutions.
Financial service provider (FSP)	FSPs are institutions offering one or more of a range of financial services, such as savings, credit, and insurance. These are principally banks, microfinance institutions, and mobile network operators, and may also include nonbank e-money issuers and other institutions.
Fintech	A business sector focused on developing and using technology to offer financial service solutions. Companies in this sector are generally start-ups that may either act as a service provider to other financial service providers, or compete with them by offering financial services themselves.
Float	The balance of e-money, or physical cash, or money in a bank account that an agent can immediately access to meet customer demands to purchase (cash in) or sell (cash out) electronic money.
Interoperability	A situation in which payment instruments belonging to a given scheme may be used 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. ²
Know your customer (KYC)	A set of due diligence measures undertaken by a financial institution, including policies and procedures, to identify a customer and the motivations behind his or her financial activities. KYC is a key component of anti-money laundering/combating the financing of terrorism efforts.
Mobile banking	Refers to a platform or suite of services that allows customers to use their mobile phone as another channel to conduct transactions on their bank account, such as deposits, withdrawals, account transfer, bill payment, and balance inquiry. Most mobile banking applications are additive in that they provide a new delivery channel to existing bank customers.

² Adapted from BIS (2003).

Mobile network operator (MNO)	A company that has a government-issued license to provide telecommunications services through mobile devices.
Mobile penetration rate	Measured by the number of SIMs in circulation as a percentage of the total national population number.
Over-the-counter (OTC) transactions	An OTC transaction occurs when clients hand cash to or receive cash from agents, who execute transfers electronically on behalf of senders and receivers. In such transactions, clients do not need to have their own e-wallets.
Over-the-counter (OTC) operator/provider	An OTC provider/operator is a company whose core business consists of offering OTC transaction services to customers. From a regulatory point of view in WAEMU, it is banks and microfinance institutions (MFIs) that are considered to offer these services through the technical operator, whom they back. From the consumer and marketing points of view, the involvement of the banks and MFIs in these services is not prominent.
Point of sale (POS)	A retail location where payments are made for goods or services. A POS device denotes a specialized device that is used to accept the payment, e.g., a card reader.
Value added service (VAS)	A popular telecommunications industry terminology for noncore services of mobile network operators.

1. INTRODUCTION

1.1 CGAP's work in WAEMU to date

Since 2012 and with the support of the MasterCard Foundation, CGAP has been working toward the development of a digital financial services (DFS) ecosystem in the West African Economic and Monetary Union (WAEMU), a monetary and customs union established to promote economic integration among eight West African member states. The Union includes Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo. These countries share the CFA franc (FCFA) as a common currency and a single central bank, BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest).

Globally, banks, microfinance institutions (MFIs), mobile network operators (MNOs), third-party e-money issuers, and other providers are using digital channels such as mobile phones and point-of-sale (POS) devices, along with networks of small-scale agents, to offer basic financial services at greater convenience and lower cost than traditional banking allows. The Kenya case provides a concrete example of how developing the market for DFS can catalyze financial inclusion in a broader sense (i.e., the availability and use of financial services by low-income segments, which also provide access to a range of other services). When Kenya started its journey toward building an inclusive payment ecosystem eight years ago, less than one in five adults were formally financially included. Today more than two-thirds of Kenyans are included, driven in large part by the mobile money (MM) service M-Pesa, which has served as a platform for a diverse range of financial services, including M-Shwari, a digital savings and credit product launched by the Commercial Bank of Africa in 2012 that already has 10 million clients.

CGAP's work in WAEMU has aimed to facilitate this type of financial inclusion via the development of the DFS ecosystem and has been guided by three objectives:

1. Develop the market infrastructure for broader financial services by supporting three complementary approaches to branchless banking among MNOs, banks, and technology providers.
2. Inform the broader industry through research, workshops, and shared learning.
3. Foster an enabling regulatory environment.

1.2 Study background

In 2006, BCEAO issued its first regulation specifically addressing e-money and became one of the first regulators in the world to allow issuance of e-money by non-bank institutions. The market subsequently developed, with nonbank institutions leading the way: primarily with mobile network operators (MNOs) in partnership with banks developing their MM offers, as well as several other nonbank institutions that also have an e-money issuer license. As of September 2015, 33 e-money deployments were registered, including 29 partnerships between MNOs and banks, two MFIs, and two nonbank e-money institutions (BCEAO 2015c).

While all WAEMU countries share the same regulation for e-money, and most MM services in the zone were launched close to 2010, the ecosystem is developing unevenly across the eight markets. Each market displays different dynamics, including telecom penetration rates, financial access structure, uptake of DFS, variety of DFS products

and providers, and customer needs. For example, the number of MM accounts in Cote d'Ivoire reached 9.8 million in September 2015, compared to 1.9 million in Niger.

In 2015, BCEAO issued new guidelines (Instruction n°008-05-2015) governing e-money issuance and distribution that highlight the possibility—already existing under the previous framework—for MNOs to issue e-money themselves by creating a separate entity for e-money issuance. Although under the new framework, they must continue to partner with financial institutions for second-generation DFS products, such as savings, insurance, or credit, it will most likely shift the nature of the partnership between MNOs and banks in their MM activities, and MNOs will come more directly under BCEAO's supervision.

Given these developments, CGAP sought to update its understanding of the market for DFS in WAEMU and share learnings with key stakeholders. Broadly, the study aimed to do the following:

- Map the market system for DFS in WAEMU, including key actors in supply and demand, rules (e.g., regulations for e-money, telecommunications, competition), and supporting functions (e.g., agent networks, information providers).
- Identify systemic constraints or root causes that explain why the DFS market is currently not serving the needs of low-income populations.
- Identify opportunities for triggering systems-level change.

1.3 Methodology

Following a literature review, five countries were selected for further in-depth examination, each of which is at a different stage in the evolution of its DFS market and has followed a distinctive trajectory in reaching this stage:

1. Benin—a **nascent market** with the lowest MM transaction volumes in WAEMU after Togo and Guinea Bissau, DFS offers are still relatively basic, and strategic partnerships between financial institutions and MNOs only recently starting to form. However, volumes of DFS transactions are rapidly growing.
2. Niger—**early-stage** DFS market with even lower mobile penetration (34 percent) as compared to Benin, but with significantly higher MM transaction volumes. The country is distinguished by presence and use of national money transfer services such as BNIF AFUWA and AL LIZA. Second-generation DFS products are expected to be introduced this year.
3. Mali—an already **significant and growing** market for DFS, with the second-highest MM transaction volumes in WAEMU. The market is currently dominated by one MNO's MM offer in partnership with banks, but financial institutions and other actors are starting to become more engaged in this domain.
4. Senegal—one of the oldest DFS markets in WAEMU, with MM offers starting in 2010, but **strong competition from national over-the-counter (OTC)** money transfer operators has limited DFS uptake,³ with approximately the same number

³ This report does not consider the money transfer services offered by OTC providers to fall within the realm of DFS, since in such transactions, clients do not need to have their own electronic wallet (a key component of DFS). However, as discussed later in the report, in some WAEMU countries, OTC providers compete directly with DFS providers on similar services, and they are also starting to enter the DFS sector by partnering with financial institutions to offer products such as e-wallets, prepaid Visa/GIM cards, etc.

of MM subscribers in Senegal as in Benin. The country is nonetheless very influential in the regional DFS market, being home to BCEAO headquarters and many technology companies focused on financial services (Fintech) and with OTC operators also starting to introduce DFS offers and expand regionally.

5. Côte d'Ivoire—a relatively **mature DFS market**, with MM available since 2008 and accounting for almost 50 percent of total MM transaction volumes and registered users in the zone. There are several government initiatives that support DFS either as a specific goal or indirectly; presence of several growing e-commerce businesses may also drive uptake. Some second-generation DFS products are already being piloted here.

Over 100 interviews were conducted from November 2015 until February 2016, in-person with key stakeholders in three countries (Benin, Côte d'Ivoire, and Senegal) and via phone/skype with stakeholders in the other two (Mali and Niger). A range of market actors was interviewed, including MNOs and their e-money issuing subsidiaries, banks, MFIs, money transfer operators, OTC providers, BCEAO, national telecom authorities, and technology companies. Information from other CGAP research projects in Burkina Faso was incorporated into our overall research to provide a more complete picture of regional market dynamics. A full list of stakeholders interviewed is in Annex III.

BCEAO and several development partners active in WAEMU and in the DFS space reviewed our analysis and provided feedback. In addition, in June 2016 CGAP facilitated a workshop in Cote d'Ivoire to receive feedback from key stakeholders and organized a working session with BCEAO to discuss recommendations.

2. FINANCIAL INCLUSION AND DEMAND FOR DFS IN WAEMU

The most recent data from BCEAO estimates that in 2014 34.5 percent of WAEMU's adult population (aged 15 and over) held an account at a formal institution (banks, MFIs, Banks savings, treasury, or post Office). When MM users are included, this proportion almost doubles to reach 61.7 percent. Other sources, however, are more conservative: the Global Findex places formal and total financial inclusion in the zone at 13 percent and 18 percent, respectively of the adult population. Some reasons for these different estimates are explored in Box 1.

In response to either an increasing availability or accessibility of DFS and/or a better understanding of existing DFS products, uptake appears to be growing in WAEMU. The volume and value of MM transactions increased by 33 percent and 36 percent, respectively, in the first nine months of 2015, as compared to the year before (BCEAO 2015c). This growth, of course, varies from country to country. Figure 2 offers an indication of market size and rate of growth by country.

As of September 2015, 76 percent of the total value of all MM transactions consisted of cash-in/cash-out transactions, with person-to-person (P2P) transfers (16 percent) and bill/merchant payments making up most of the remainder. Airtime top-ups constituted more than a third of total MM transaction volumes, but accounted for less than 2 percent of the total value of MM transactions.⁴

⁴ There are no publicly available statistics yet on OTC transaction volumes or values in WAEMU.

BOX 1. Data Sources on Financial Inclusion and DFS in WAEMU

Two primary sources of data inform our understanding of financial inclusion and DFS use in WAEMU. The first is BCEAO statistics, and specifically its annual report on mobile financial services in the zone; the latest report was issued in September 2015. The second is the World Bank's 2014 Global Findex survey, a global survey on financial inclusion that is based on interviews with randomly selected, nationally representative samples.

One of the BCEAO statistics used reflect the total number of accounts opened as a percentage of the total population number, leaving room for double or triple counting of accounts when individuals subscribe to MM services from multiple providers. On the other hand, the Findex data are based on nationally representative surveys of the population and on asking participants whether they have an account, which would therefore reduce the chances of double counting. Additionally, for the MM account indicator, Findex takes into consideration the notion of use by asking whether participants used an MM account in the past 12 months.

Therefore, in the report, Findex data are used to estimate financial inclusion and DFS activity rates, whereas BCEAO data are used to understand evolutions in MM transactions values and volumes.

P2P transfers grew impressively, with the value of funds transferred nearly doubling from 457 billion FCFA in 2014 to 807 billion FCFA by September 2015. Côte d'Ivoire, Mali, and Burkina Faso accounted for the majority of this growth, partially due to strong cross-border remittance flows between these countries.

Similarly, the value of payments⁵ via the mobile channel saw an impressive increase of 34 percent in the first nine months of 2015 compared to the year before, indicating that users are starting to integrate the e-wallet into their payment habits

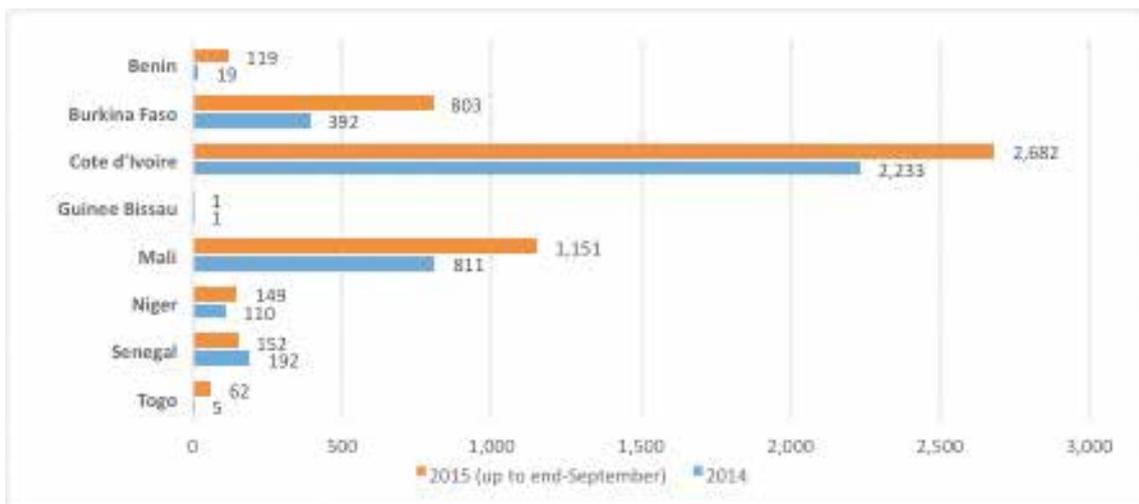


FIGURE 2. Value of transactions by country (billions FCFA)

Source: BCEAO (2015c).

⁵ Including utility bills, merchant payments, transfers to enterprises, microfinance, and public administration payments.

where possible. The value of digital salary payments via MM grew from 8 billion FCFA in 2014 to 127 billion FCFA in September 2015, with 75 percent of this growth realized in Côte d'Ivoire and Burkina Faso, indicating that institutions there are increasingly making use of alternative digital channels (BCEAO 2015c).

In spite of impressive growth, across WAEMU, **uptake of DFS has been relatively limited compared to its potential, and MM activity remains relatively low.** The Global Findex estimates that in 2014, only 7.5 percent of WAEMU's adult population had an active MM account (Global Findex 2014).⁶ In addition, only 13 percent of WAEMU's population had an active account at a formal financial institution, and this figure rises to only 18 percent when active MM users are included.⁷

Even in Côte d'Ivoire, which is considered to be the most mature market for DFS in the zone, only 24.3 percent of the adult population had active MM accounts. In contrast, 58 percent of Kenya's adult population had an active MM account over the same period (Global Findex 2014).⁸

The reasons for limited uptake of DFS vary across countries, and certainly between urban and rural areas. However, demand-side research in Cote d'Ivoire and Senegal has identified some common reasons for not using DFS⁹:

- **Insufficient or irregular incomes**—low-income individuals commonly feel that their revenues are either too small or irregular to convert them into e-money, which is also not viewed as practical for daily payment needs. This reason is key to understanding why many people register for, but do not regularly use, MM accounts: they may open them only to send, deposit, or receive a single payment, and when that need is exhausted, they may not return to that account for a while.
- **Lack of perceived need**—people also cite lacking a compelling reason to regularly use DFS rather than cash or other traditional forms of financial services. This may be due to a combination of low awareness of the benefits of DFS, and the still-limited range of DFS products available.
- **Transaction costs**—Fees associated with DFS use are reported to be expensive in some countries, such as Côte d'Ivoire and Mali.
- **Customer understanding**—A lack of trust in phones to conduct financial transactions or discomfort with conducting transactions independently are other common reasons. These may be related to low levels of literacy, but also due to insufficient communication on how the technology works and recourse mechanisms in case of problems.
- **Adapted products**—Most DFS products available in WAEMU aim to address “basic” needs of large swathes of the population. However, as we start to see the development of second-generation DFS products, confirming the suitability of these products to different clients' needs becomes increasingly important. For example,

⁶ Active accounts refer to those on which at least one transaction has been conducted over the past 12 months.

⁷ Average based on country data from Global Findex (2014).

⁸ Active accounts refer to those on which at least one transaction has been conducted over the past 12 months.

⁹ See, for example, IFC (2015); Rotman Parker, Chevalier, and Veyssiere (2013a); and Rotman Parker, Chevalier, and Veyssiere (2013b).

the majority of un/underserved are rural, agricultural populations with irregular incomes. The question of how products can be adapted to serve these populations while still being profitable and of manageable risk for FSPs is a critical one.

- **Lack of conveniently located, active, knowledgeable, and liquid agents**—nearby agents who are open at times convenient for customers and can advise customers on the use of the service, and who have enough cash to conduct cash-out/money reception transactions, are critical to DFS uptake. However, poor agent services are usually also driven by customer inactivity (i.e., agents are less likely to be prepared to serve irregular or infrequent customer flows) and face particular challenges in areas where their services are perhaps most needed (e.g., liquidity is especially problematic in rural areas where there are no nearby bank branches).

3. KEY ACTORS SHAPING THE SUPPLY OF DFS

This section introduces some of the key DFS providers in WAEMU and briefly presents their main products and strategies.

3.1 Mobile network operators

To date, MNOs have led the development of DFS with their MM products in partnership with banks, who acted as the e-money issuers and ensured compliance with regulations and reporting standards. MNOs' active participation builds off their successful experiences serving the mass market with airtime micropayments and their vast distribution networks (EIB and UNCDF 2014). In addition, MNOs have a competitive advantage in that they are able to offer incentives and promotions for MM use to their large networks of users in the form of free or discounted airtime and mobile data.

Orange, MTN, Moov, and Airtel are the most dominant MM players in the WAEMU market. They have a presence in several countries and have the most diverse DFS product offers. According to BCEAO, Orange has the largest presence in the MM market, with its Orange Money available in four WAEMU countries (Senegal, Mali, Cote d'Ivoire, and Niger) and its 38 percent of the market share in WAEMU (BCEAO 2015c).¹⁰

MNOs' offers are currently dominated by first-generation products, such as cash-in/cash-out transactions, airtime top-ups, and P2P domestic transfers (see Annex I for a detailed description). Most are prioritizing developing their agent network and their networks of merchant acceptors. Some MNOs have also developed services that are more innovative and adapted to the WAEMU populations' needs, such as regional cross-border transfer by MM (see Box 2).

In addition, some MNOs are starting to introduce second-generation services in partnership with financial institutions:

- **Savings:** Discussions ongoing between MNOs and financial institutions in Senegal and Côte d'Ivoire, to collect savings via digital channels. In Côte d'Ivoire, the MFI Advans has partnered with MTN to link clients' MFI accounts with their MTN MM e-wallets (further discussed in Section 3.4).

¹⁰ Market share measured by number of MM subscribers.

BOX 2. Growth of Regional Cross-Border Remittance Services

One in seven Africans receives remittances from friends and family abroad, while one in three remittances is sent from within Africa. However, Africans pay the world's highest fees for money transfer. The cost of sending money to Africa reaches 12.4 percent of the face value of the transaction on average, while the global average is only 8.6 percent. The 10 most expensive remittance corridors in the world are all intra-African. If remittance fees across Africa were brought down to 5 percent (the average rate for G8 countries), Africans would save about US\$4 billion. These high fees help to explain the popularity of informal transfer solutions, particularly for regional and domestic remittances (Scharwatt and Williamson 2015).

In response to this need, the number of low-cost, regional cross-border money transfer services has grown quickly in WAEMU over the past few years. OTC providers such as Wari and Joni-Joni are expanding regionally, and MNOs have launched MM cross-border transfer between certain markets and providers (Scharwatt and Williamson 2015), including the following:

- Orange Côte d'Ivoire, Orange Mali, and Orange Senegal (with reception from Orange France also possible in Côte d'Ivoire, Mali, and Senegal)
- Orange Côte d'Ivoire and Airtel Burkina Faso (now acquired by Orange)
- MTN Côte d'Ivoire and MTN Benin
- MTN Côte d'Ivoire and Airtel Burkina Faso
- Moov Côte d'Ivoire, Moov Benin, Moov Niger, and Moov Togo

Orange, MTN, and Airtel have all reported success with this offering. Orange Mali reports that since launching its cross-border transfer service in 2013, volumes and values have doubled every six months, and with transfer values averaging at US\$86—twice the average domestic P2P transfer value. The MTN/Airtel collaboration saw transaction values growing 10-fold from June 2014 to February 2015, to reach an average of US\$150. In addition, BCEAO estimates that, as of September 2015, cross-border transfers within the WAEMU zone via MM represented 2.5 percent of the value of all MM transactions, and 26 percent of the value of all P2P MM transfers. Such transfers are especially significant in Côte d'Ivoire (57 billion FCFA), Mali (36 billion FCFA), and Burkina Faso (27 billion FCFA) (BCEAO 2016).

Sources: Scharwatt and Williamson (2015) and BCEAO (2015c).

- **Credit:** In Senegal, Niger, and Côte d'Ivoire, providers reported that they would soon pilot either disbursement/reimbursement of “traditional” credit via the digital channel or **digital credit** that relies on automated credit-scoring algorithms that uses the client's transaction history on their mobile accounts to make instantaneous loan decisions. However, **the annual interest rate caps on credit offered by banks and MFIs of 15 percent and 24 percent, respectively, may hinder the development of such products.** In Kenya, in contrast, an M-Shwari loan has an annual interest rate of approximately 90 percent (flat rate of 7.5 percent times 12), which is about double the average annual interest rate charged by MFIs in the country (Cook and McKay 2015).

- **Insurance:** Tigo Senegal launched a life insurance product in 2012 called Tigo Kiiray, in partnership with mobile microinsurance specialist Bima. The product is based on a “freemium” approach whereby customers who spend a minimum amount on Tigo’s GSM network are given a modest level of free life insurance coverage, but can opt into a paid version with additional coverage. The premium is collected via the customer’s airtime account (no MM account required) in small daily installments (Levin 2014). Orange is also piloting a savings and insurance product in Mali targeted at women with support from GSMA. MTN Benin has also developed an insurance product for motorcyclists in partnership with NSIA, whereby the premium is collected directly from subscriber’s MM account and payouts are also done via MM.

MNOs are expected to continue leading the development of DFS products, especially with the 2015 e-money guidelines clarifying the division of responsibilities between banks and MNOs, and the pathway for MNOs to create e-money issuing subsidiaries—a possibility that was available before but rarely capitalized on. This transition is facilitated by the fact that MNOs are already collecting the necessary reporting data needed by BCEAO (which they currently transmit to their bank partner who then reconcile it with their own data and submit to BCEAO) and, in many cases, taking much of the responsibility for agent management (which has technically been the responsibility of the banks as the e-money issuers). By obtaining this status and thereby becoming more independent of their bank partners, MNOs can be expected to be more flexible and reactive in developing their DFS offer and going to market with new MM services. The new guidelines will also likely encourage a shift in the nature of partnerships between financial institutions and MNOs to focus more on partnerships to offer second-generation services (that MNOs cannot develop alone even if they have created authorized e-money issuing subsidiaries).

Tigo in Senegal was the first MNO in the region to obtain an e-money issuer license in 2014 with its subsidiary MobiCash. Since then, Orange has created separate entities that are authorized as e-money establishments (EMEs) in Senegal in December 2015 and in Côte d’Ivoire and Mali in early 2016.¹¹

3.2 Other third-party e-money issuers

Since 2006, nonfinancial institutions authorized by BCEAO have been able to issue e-money in WAEMU, thus opening the door for various companies to offer DFS. The market has seen the emergence of start-up companies, such as Ferlo, Inova, CelPaid, and Qash Services, with an e-money offering.

However, in general, third-party **(nonbank, non-MNO) e-money issuers have not experienced much success in the face of tough competition from MNOs and OTC providers. This is mainly due to a lack of assets and capital to leverage, which are needed to build a distribution network, build adequate information technology systems and deploy marketing efforts needed to successfully launch**

¹¹ In this report, unless otherwise stated, when we refer to MNOs, we refer to them in the context of their MM activities either in partnership with financial institutions who act as their e-money issuers, or to their EME subsidiary.

consumer-facing products. Inova and Ferlo, two of the first such issuers, have gone out of business.

Others such as Qash Services and CelPaid in Côte d'Ivoire are both struggling to compete against MNOs. Their MM services function via SMS and smart phone applications, both of which have several drawbacks compared to a USSD channel (see Box 3), and they do not have a well-developed agent network (compared to MNOs), making the value proposition for customers unattractive. CelPaid recently became an MFI to expand its services to include savings and credit products and, therefore, also be more competitive against such threats.

In addition, some interviewees also questioned whether these companies should have received the license in the first place, as well as whether the levels of oversight, monitoring and support received were adequate. Following the issuance of the 2015 guidelines, BCEAO adopted a monitoring and supervision framework specifically for e-money activity and should address some of these concerns (see Section 4.1.1 on e-money guidelines); however, it also raises the question of whether it has sufficient capacity to conduct monitoring and supervision of e-money issuers (especially nonfinancial institutions).

BOX 3. The Benefits of Accessing the USSD Channel for Financial Inclusion

Unstructured supplementary service data (USSD) is a communications service accorded by telecom regulatory authorities to MNOs, is believed to be critical for offering DFS to low-income populations, the majority of whom still rely on basic phones with little or no internet access. Most providers agree that when all factors are considered, USSD is the best available option to serve low-income customers today. This is because USSD works on the vast majority of phones, it does not require changes to the SIM or a new SIM (either of which can be complex and often costly steps), and it has important usability and security advantages over SMS (Hanouch and Chen 2015). Experience in WAEMU also shows that SMS-based offers may be challenging for clients to understand and use (e.g., Manko's experience with Yoban'tel). As well, CGAP's research suggests that smartphone applications that connect users with DFS providers through the internet still exclude the vast majority of the poor (Hanouch, 2015).

Each telecom authority in the region exercises its authority at a national level and regulations on USSD access may therefore vary between countries. However, currently in WAEMU, MNOs are generally not required to offer access to USSD channels to other DFS providers or support services. It is also not uncommon for MNOs to refuse or restrict access to this channel to limit competition, and/or to minimize potential network congestion. Some MNOs have also claimed that since the USSD channel was not created to be commercialized, they lack a trialled business model for doing so.

However, with MNOs in the region increasingly creating EME subsidiaries that are technically legally distinct from the MNO, but which access the MNO's USSD channel, the arguments of MNOs against granting such access to other companies appear to be weakened.

Sources: Hanouch and Chen (2015) and Hanouch (2015).

BOX 4. Some Examples of Technology Companies Focused on Digital Payment Solutions

In WAEMU, here are also several technology companies focused on payments that are not e-money issuers. Their positioning in the market vis-à-vis MNOs and OTC providers has not been easy, with mixed success to date.

eMoney Solutions, a technology provider offering a platform and POS devices, has been contracted by the postal services in Benin and Niger to offer domestic and cross-border money transfer and bill payment services. While these deployments have seen some success, eMoney Solutions has found it challenging to sell its solution to other actors.

LemonWay, a French payment services provider operating in Mali since 2013, offers personal identification number (PIN)-based P2P payment delivered via any mobile carrier, as well as money transfer between Mali and the 28 European Union countries. It is not an e-money establishment (EME) itself, but rather partners with the Banque Internationale pour le Mali (BIM). LemonWay is reported to be doing well in Mali with 1 million accounts registered as of March 2016.

Source: <https://twitter.com/lemonway?lang=en>

3.3 Banks

In general, banks in WAEMU have yet to prioritize the Bottom of the Pyramid (BoP)—i.e., lower-income, and particularly rural segments—meaning that their offer of DFS adapted to these segments has been very limited. In 2014, BCEAO issued guidelines¹² aimed at increasing financial inclusion by requiring banks to offer a basic bank account with a package of free services (without any condition for a minimum regular income). However, marketing and communication around these products has been limited since there is little incentive for banks to serve this client segment, resulting in low awareness.

With internal pressure to reduce costs and pressure from BCEAO to contribute to financial inclusion, along with the realization that the presence of MNOs in this sector will only continue to grow, **most banks in the region are starting to explore alternative distribution channels.** However, to date, new offerings have largely consisted of SMS banking, online banking, and prepaid cards, which tend to target either banks' existing clientele or clientele in urban zones.

Certain African banks, such as NSIA, Ecobank, Banque Atlantique, Bank of Africa (BOA), and the West-African based subsidiaries of BNP Paribas and Société Générale,¹³ have made the decision at the regional or group level to prioritize partnerships with MNOs (both as their e-money issuers and agents). This decision is usually aimed at (i) generating additional revenues/diversifying revenue

¹² Guidelines n° 004-06-2014 « Gratuité des services bancaires dans l'espace UEMOA ». The very first set of regulation relative to the right to a bank account based on a minimum regular income is derived from the 2002 Law « Le Règlement 15, 19 septembre 2002 relatif aux systèmes de paiement de l'UEMOA ».

¹³ According to BCEAO (2015c), these are the banks that are the most involved in e-money emission in partnership with MNOs.

BOX 5. Examples of Pan-African Banks' DFS Strategies

For the growth of its network, UBA Group is optimizing new channels and the development of partnerships. For its retail banking, UBA is focusing on developing its prepaid card offer to reach segments that are not yet formally banked.

UBA has also developed several partnerships with OTC providers and MFIs to commercialize prepaid co-branded cards (partner/UBA/GIM), including Joni Joni, Wari, and the MFI Crédit Mutuel du Sénégal.

NSIA bank is present in more than 20 African countries and holds “no exclusivity” and “partnerships with everyone who serves the mass market” as guiding principles in developing its DFS offerings. In Côte d’Ivoire, NSIA offers a prepaid GIM-Visa card, which has 100,000 users so far. It also has a co-branded card with MicroCred and with Abidjan.net to enable even nonbanked individuals to make e-commerce purchases.

NSIA Côte d’Ivoire is already partnering with two MNOs to act as its agent and is negotiating a similar partnership with a third MNO. NSIA’s mass market strategy also prioritizes increasing its number of ATMs. Lastly, the insurance arm of NSIA has partnered with several MNOs in developing microinsurance products offered via the MM platform.

streams, *(ii)* offering additional services to existing clientele, and *(iii)* eventually recruiting new (direct) clientele by, for example, offering MM clients an expanded range of financial services. However, in general, they have not yet exploited the potential opportunity of converting MNO partners’ MM clients into clients of the bank with a relevant offer.

Currently, some pan-African banks seem to be the most proactive in developing their DFS strategies to reach new customers previously excluded from their services. Some examples of their strategies are described in Box 5.

No bank in WAEMU has attempted the agent banking model to the extent that is seen in Kenya, Brazil, India, or the Philippines.¹⁴ The only possibility for such a model under current regulations is the “Intermédiaires en Opérations de Banque” (IOB) model offered by BCEAO’s guidelines n°15-12/2010/RB (13 December 2010). This model allows banks to delegate to authorized intermediaries certain operations, such as opening accounts, accepting deposits, and offering credit and payment services to clients.

Currently, **only Société Générale is deploying the IOB model for the explicit purpose of advancing financial inclusion**¹⁵ (see Box 6). From the interviews conducted with banks for this study, it appears that the IOB model hasn’t caught their attention, and it is not generally seen as an opportunity to extend the reach of affordable services and reach new client segments. The regulation could also be further clarified; for example, in the instance of a bank looking to deploy a large-scale agent

¹⁴ See, for example, Tarazi and Breloff (2011).

¹⁵ As of January 2016, four IOBs have been approved and registered by BCEAO (see <http://www.bceao.int/Intermediaires-en-Operations-de-2653.html>): two in Mali, one in Senegal, and one in Côte d’Ivoire.

BOX 6. Manko: Société Générale's IOB Pilot in Senegal

Manko is an IOB of the Société Générale group, which holds 100 percent of its shares. Created in Senegal in 2013, the entity aims to test offers to the mass market that the group recognized could not be done within its existing structures, and also to overcome perceptions of lower-income segments that traditional banks are "not for them." Targeting salaried staff, microentrepreneurs, and small and medium-sized enterprises (SMEs), it offers these segments several types of checking accounts, two longer-term credit products, and remunerated savings accounts.

Manko is subject to the same rules and regulations as a bank, and a Manko account is also a Société Générale de Banques au Sénégal (SGBS) bank account (to the extent that a Manko client could also conduct transactions in a SGBS branch). However, the IOB model permits the bank via agents to be geographically closer to its customers, and also to serve new customer profiles, supported by points of service that are (i) located close to target clientele service points, (ii) authorized to operate basic services on behalf of the bank, and (iii) have set-up and management costs far less than those associated with a bank.

The advantage from a client perspective is that an IOB can target the same clientele as MFIs (lower-income, informal sector), but is required to offer the same lending rate as banks capped at 15 percent rather than the higher, capped 24 percent rate MFIs can (and usually do) charge. Unlike regular bank staff, Manko agents are also mobile, moving to where current and potential clients are to open new client accounts, collect credit reimbursements and deposits, and collect the information needed for loan applications. All agents are equipped with tablets, reducing the need for paper documents and facilitating analysis by managers when considering loan applications (since most of the client information will already be on the server).

Manko was originally launched with SGBS' Yoban'tel e-money platform, whereby each Manko account was linked to the Yobantel MM e-wallet, allowing clients to conduct money transfer, bill payment, and airtime top-up transactions on their Manko account from their phones. However, the partnership with Yoban'tel will be discontinued in 2016 because the service failed to gain traction, reportedly because users found the SMS-based platform challenging to operate.

Instead, Manko will offer clients a new mobile phone-based payment system at Manko's merchant partner networks, using the TagPay platform, which uses contactless technology or Near Sound Data Transfer (NSDT). Merchant partners will be equipped with POS devices that will enable them to offer cash in and out services to customers on both their savings and checking accounts and to make purchases from the account. With NSDT, clients need only have their phone handy, and enter their PIN when making withdrawals.

Other challenges foreseen include building and monitoring the network of merchant partners and operating in a flexible "pilot mode" while also meeting the strict compliance standards and process of a traditional bank.

Currently, Manko has a branch in a Dakar suburb and will open three more branches in the city in 2016. If successful and profitable within the next two years, Manko plans to expand to other cities in Senegal and to implement the model in other African countries where Société Générale is present. Société Générale has also recently launched an Innovation Lab in Dakar to work with local start-ups and also allow Manko to test new products.

network, it is unclear whether the regulation requires that each agent becomes an IOB or whether one IOB can recruit and deploy subagents. If the former, each IOB agent would be required to pay a guarantee ranging from 5–15 million FCFA based on the type of operations,¹⁶ which would be costly for independent retail shops. If the latter, the regulatory requirements and process to recruit agents are not clearly articulated.

Some banks also question the relevance of the agent banking model in WAEMU, citing concerns such as the following:

- Agent management and insurance: how to ensure that agents in rural areas are both sufficiently liquid to conduct transactions, and also minimize risk of robbery and theft? Are there companies willing to insure these agents?
- Customer protection, KYC requirements and AML/CFT compliance: can banks be compliant with KYC requirements and AML/CFT regulations with agents handling most interactions with the customer?
- Quality of service: can agents deliver a sufficient quality of service to customers, in line with bank standards and to ensure client retention? Can they be motivated to acquire new clients?
- Are bank branches congested enough to warrant a shift to agency banking?

In addition to pan-African banks, some national banks that were created to advance financial inclusion are also exploring DFS to improve their services to existing clients and reach new clientele. For example, BNDA Mali is currently piloting a mobile/branchless banking project that will enable clients to make transactions at Western Union and MoneyGram subagents locations on their BNDA account and to pay from their BNDA account via their mobile phones at various merchant partners. While concerned about maintaining liquidity of agents and managing the risk of fraud, BNDA sees significant potential for the project to decongest its branches and reduce transportation costs for clients.

3.4 MFIs

Many MFIs partner with MNOs, some OTC providers, and traditional money transfer operators to act as their agents. But similarly to banks, **MFIs in WAEMU have been generally slow to develop DFS**, either alone or in partnership with MNOs or e-money issuers, in spite of recognizing that MNOs are targeting some of the same clientele that the MFIs serve—particularly, lower-income and rural populations. In addition, some evidence suggests that MFI customers would value the time and cost savings of mobile banking for loan repayments and that one of the biggest determinants of the customer repayment choice is agent proximity (compared to branch proximity) (Hanouch and Rotman 2013).

Several factors have contributed to this situation: *(i)* the difficulty of developing a **strong business case** to create win-win partnerships between MNOs and MFIs; *(ii)* **mistrust and hesitation** to share client data with MNOs who are sometimes seen as potential competitors for clients; and *(iii)* lack of **financial and human resource**

¹⁶ The guarantee amounts to 5 million FCFA if the IOB doesn't collect deposits and 15 million FCFA to collect deposits.

capacity to form and implement a DFS strategy. MFIs have also **perceived the microfinance regulations as discouraging** them from venturing into other types of services. In particular, MFIs' revenues from nonsavings and credit-related services cannot surpass 5 percent of their total revenues. While this limitation can be surpassed with permission from the Minister of Finance and BCEAO, the Central Bank wishes to keep MFIs focused on their core business and ensure that those that start to specialize in nontraditional activities have the adequate knowledge and resources to do so.

Many MFIs also believe that, to offer DFS, their best strategy is to become e-money issuers. As a result, several MFIs requested authorization to become e-money issuers, but in most cases, BCEAO either considered these insufficient to meet regulatory requirements or requested additional information to finalize the application (pending submission or review). Yet, the **advantages for MFIs to become e-money issuers are not clear**. Compared to MNOs and other payment providers that aggregate payment flows at the national level, MFIs do not usually have a large enough customer base and a wide enough transaction pool to achieve the scale needed to make it financially viable (Hanouch and Rotman 2013). Many MFIs also lack a strong core banking IT infrastructure. In addition, MFIs are likely to face challenges similar to those of other third-party e-money issuers, such as limited agent networks and costly to build, and lack of access to USSD channels (see Section 3.2).

Despite these challenges, some MFIs are beginning to innovate with DFS by trying to leverage the channels MNOs or OTC providers offer, or by developing their own solutions:

Agent banking. With funding from IFC and the MasterCard Foundation, **MicroCred Senegal** launched an agent/branchless banking pilot in 2014. The model uses a biometric platform whereby clients register in a physical branch, but following that, can make deposits, withdrawals, and account-to-account transfers at any of MicroCred's 520-plus agent locations simply by using their fingerprint.

The pilot started with 24 agents, most of whom were shop owners or merchants and were also already MM or OTC agents to ensure sufficient liquidity. Participating agents can be recognized by their Baobab brand signage. Each MicroCred branch manages agents in its zone, visiting them once a week.

According to the current regulatory framework, only employees of financial institutions are allowed to open accounts, collect deposits, and make withdrawals on client accounts. However, MicroCred was able to gain permission from BCEAO to pilot this model because the money stays within the MicroCred system. The agents are a way to allow clients to interact on their own accounts, using secure biometrics to withdraw money. In addition, all agents have MicroCred accounts for purposes of float management and are therefore known to the MFI.

In Mali, **SORO YIRIWASO**, with a consortium led by NGO Mercy Corps, is planning to pilot agent banking in partnership with bank/merchant networks. The aim is to expand the rural client base without opening new branches and by decongesting their existing branches.

The details are not yet clear as the consortium will first conduct baselines to understand the demand-side needs. It will likely develop a commitment savings product into which deposits can be made by MM. Based on individuals' and groups' savings

histories, credit may also be extended. The possibility to reimburse credit via MM accounts will also be explored.

Challenges SORO YIRIWASO foresees include developing a management information system (MIS) compatible with the MNO's system and ensuring agents are sufficiently liquid and well-located to be accessible to clients.

MM e-wallet to MFI account link. In Niger, **ASUSU** is piloting an account-to-Orange e-wallet link. The MFI has signed a contract with the Ministry of Education for its staff payments: salaries of staff who are ASUSU clients will be paid into their ASUSU accounts, which will be linked to their Orange e-money wallets. This means that the salaries can be withdrawn at an Orange service point, thereby saving time and transport costs for staff who do not live close to banks.

In Côte d'Ivoire, the MFI **Advans** offers a fee-based service that allows clients to deposit money into their Advans savings accounts via MTN MM for more than a year. Advans is also executing a pilot in the cocoa sector in partnership with MTN, in which the client's Advans account and his/her e-wallet are directly linked via the USSD channel, and whereby he/she can deposit savings. In addition, MTN agreed to give Advans access to its USSD channel so that cooperatives can use their mobile phone to pay cocoa farmers on their Advans accounts from cooperatives' Advans accounts.

MFIs could also partner with third-party e-money issuers to develop DFS solutions but there are no examples of such a partnership in WAEMU.

Become e-money issuers. **ASMAB** in Benin was the first MFI to obtain an e-money issuer license in WAEMU to date. This has enabled ASMAB to develop the CARMES platform, allowing clients to conduct several types of transactions (savings, transfer, credit imbursement, bill payment, etc.) via their phone. It expects to partner with the MFI professional association in Benin (the Alafia Consortium) to allow the network's members to offer the same mobile banking services to their clients. The success of this platform remains to be seen.

Several initiatives are underway to increase MFIs' capacity to develop and roll out DFS offerings. In Senegal and Benin, UNCDF's MM4P program is investing resources in building capacity of MFIs via trainings, organizational assessments, and technical assistance for a few select ones ready to launch their DFS models. In Senegal, the Deputy Ministry of Microfinance and Solidarity Economy is considering relaunching a project that will help MFIs re-think their business models and IT platforms in the face of new DFS actors and services. The African Development Bank also plans to launch (board approval pending at the time of report writing) a two-year project in collaboration with BCEAO and GIM-UEMOA that will aim at strengthening DFS strategy and capacity within MFIs in WAEMU.

3.5 Money transfer operators

Money transfer operators and DFS. Money transfer operators and their OTC¹⁷ services have had an important influence on the DFS market, especially in markets

¹⁷ In this report, OTC providers refer to those national money transfer companies that specialize in domestic money transfer, such as Wari and Joni-Joni, while "traditional" money transfer operators refers to those, such as Western Union, MoneyGram, and MoneyExpress, that have been present for a longer period of time and specialize in international transfers.

where their offer was deployed before MM (e.g., Senegal). **OTC services to send and receive money domestically are very popular in some countries such as Senegal, Niger, and Burkina Faso (see Figure 3), and come in direct competition with MM offers.** For example, the OTC provider Wari entered the Senegalese market before MM offers were available, and others like Joni Joni followed. Today, evidence suggests that customers prefer OTC services limiting the adoption of MM.

The success of these companies in certain markets can be attributed to several factors: (i) well-developed agent networks; (ii) cash use already ingrained in the populations' money management practices; (iii) a more simplified customer journey due to the central role the agent plays in transactions; and (iv) for some, the launch of strong marketing campaigns before MM offers were well-established in the market.

In other markets, such as Côte d'Ivoire and Mali, however, OTC services have not limited the expansion of MM, possibly also because the MM offers were in place before the OTC services in those countries. However, as these companies continue to grow in these markets, and compete on similar offerings, they may pose a threat to MM providers.

In addition, OTC providers have recently started to enter the DFS market by partnering with financial institutions to offer prepaid cards, e-wallets, and e-wallet-to-bank-account links. Their motivations for entering the realm of DFS are three-fold: (i) diversifying their services/revenue streams; (ii) "up-scaling" to target a more high-end clientele; and (iii) getting to know their clients and develop products that will appeal to them.

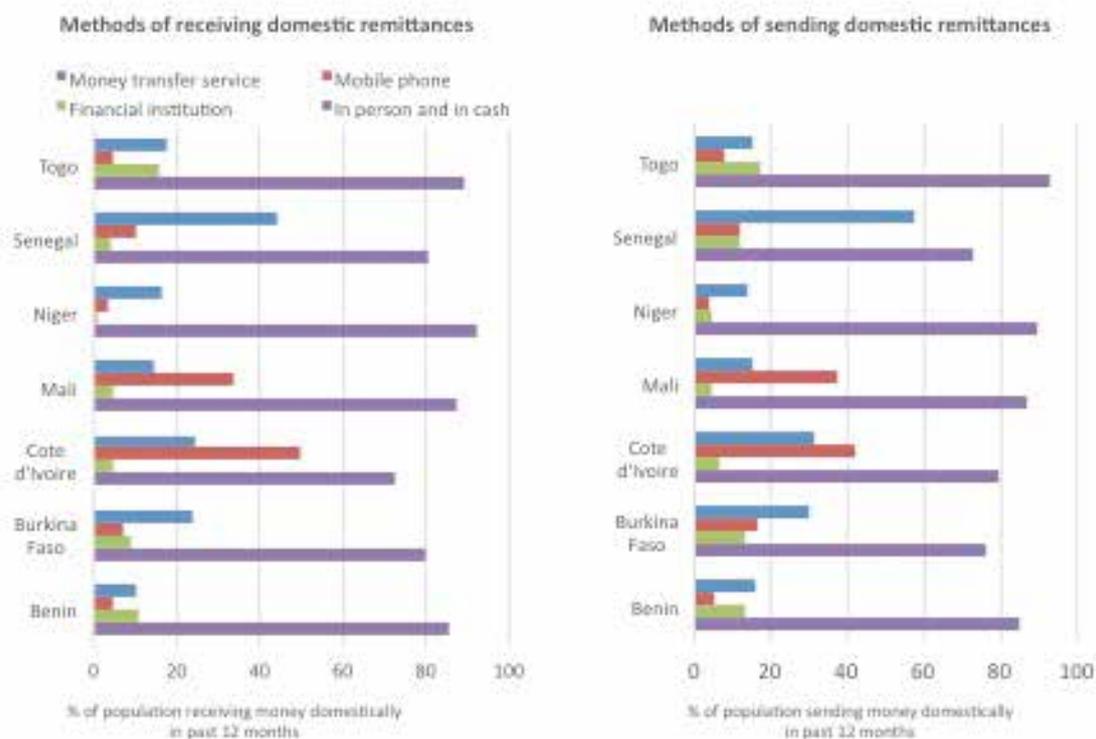


FIGURE 3. Use of different domestic money transfer methods
Source: Global Findex (2014). "In person and in cash" refers to handing cash to the recipient directly or sending it through someone that the sender knows.

From a regulatory point of view in WAEMU, banks and MFIs can offer money transfer OTC services through the technical operator (i.e., the OTC provider) that provides a payment platform. From a business model point of view, however, the involvement of banks and MFIs in these services is not prominent. OTC providers manage the marketing, customer acquisition, agent networks, and pricing models. **As such, OTC providers are not required to obtain a license from BCEAO for offering this new suite of services. Their bank partners need to receive BCEAO's authorization to partner with OTC providers to offer DFS even if they are already authorized to issue e-money.**

Annex II provides a summary of the offerings and positioning of Wari and Joni Joni, the two main OTC operators in WAEMU.

Money transfer operators and agent banking. The vast (and growing) agent networks of OTCs in some WAEMU markets represent an attractive opportunity for financial inclusion if financial institutions use them as an alternative channel for the delivery of financial services beyond payments. However, as mentioned previously, the regulatory framework for banks to use agents is not sufficiently clear and precise with the IOB regulation; there is no regulation on agent banking for MFIs. (See Sections 3.3 and 3.4). Additionally, BCEAO's November 2015 guidelines (N° 013-11-2015) on rapid money transfers seem to add another layer of complexity to this issue. The regulation was developed to better supervise money transfer activities and strengthen compliance with anti-money laundering/combating the financing of terrorism (AML/CFT) rules. Banks and MFIs can indeed use nonfinancial institution agents to offer such services; these agents can conduct only money transfer operations but cannot collect deposits or perform credit disbursement/reimbursement even if a partnership with a financial institution already exists. It is unclear what financial institutions can do to use the agent networks of OTC providers to collect deposits and reimburse/disburse credit. The only resort seems to be for OTC providers or their agents to become IOBs if the financial institution is a bank, but MFIs cannot leverage these large networks.

Even if the agent networks of OTC providers remain an untapped opportunity, some concerns have been identified with how banks ensure compliance with regulatory requirements of money transfers activities for which they have the responsibilities:

- While agents of OTC providers must be approved by their bank partners, this is not always the case in practice.¹⁸
- Problems with the IT systems of the OTC providers have been reported in some cases by bank partners. Specifically, they do not consistently and frequently update the list of blacklisted customers. This poses the risk of inadvertently allowing terrorism financing/money laundering and, for banks, the threat of having their license revoked.

BCEAO's November 2015 guidelines (N°013-11-2015) seek to address these concerns. Overall, it seems that BCEAO might wish to increase its oversight of such operators and to ensure that all market actors are subject to the same regulations and conditions to create a fair and competitive market.

¹⁸ See, for example, <http://www.rts.sn/articles-de-presse/economie-et-finances/finances/des-operateurs-de-transfert-dargent-invitent-letat-a-assainir-le-secteur.html> and <http://www.osiris.sn/Transfert-d-argent-Des-operateurs.html>

BOX 7. Smallworld: Bringing Together International Money Transfer Options

With its African headquarters in Côte d'Ivoire, Smallworld is a payment service provider offering money transfers between 160 countries, with 200,000 locations worldwide. It conducts 6 million operations per year, equating to US\$4 billion transferred through the platform. Started by HSBC 10 years ago, Smallworld's strategy is usually to buy smaller money transfer companies, consolidate them, and install their money transfer platform (OMNIX). They offer multichannel transactions, including cash, mobile, bank account, and prepaid cards.

Options for sending and receiving depend on partnerships between Smallworld and other FSPs in the sending and receiving countries. For example, in Côte d'Ivoire with currently 300 service points (mostly in bank branches), Smallworld has established partnerships with MTN and Moov to send money on their respective wallet, but not yet with Orange. Smallworld also reported to plan to apply for the e-money issuer license to also offer mobile/online transactions.

4. RULES SHAPING THE MARKET SYSTEM: THE REGULATORY ENVIRONMENT

The rules that define a market system typically include both formal rules, such as laws and regulations, as well as informal norms and customs, such as the tendency to use cash rather than other payment means. This section focuses on formal rules shaping the DFS market in WAEMU.

4.1 The role of BCEAO

As mentioned, WAEMU's Central Bank, BCEAO, is the main institution regulating financial sector activities in the region including e-money transactions. This implies that the regulatory framework for e-money is the same across member states. BCEAO has its headquarters in Dakar and has National Directorates in each of the eight member countries of WAEMU.

It promotes financial inclusion and has set a target of 75 percent of adults to be formally included in the financial sector by 2020. To achieve this goal, it has developed a regional financial inclusion strategy (see Section 4.1.5) that is in the process of being adopted by the end of June 2016. It has also released various regulations governing e-money issuance, payment systems, agent networks, know-your-customer (KYC), consumer protection, and AML/CFT. BCEAO has also supported the development of a regional clearing house and switch, the GIM-UEMOA.

Last year, BCEAO issued new guidelines governing e-money issuance and distribution that will significantly influence the evolution of the DFS market.

4.1.1 2015 e-money guidelines

Overall, BCEAO's 2015 e-money guidelines (n°008-05-2015) offer a much needed update from the previous framework by clarifying the roles and obligations of different stakeholders in the e-money value chain, particularly those of the banks'

vis-à-vis technical operators (e.g., MNOs). Drafted using a participatory approach, including a broad consultation with various stakeholders (banks, MFIs, third-party e-money issuers, MNOs, and public administrations), the new framework was developed primarily to allow BCEAO to further regulate and more closely supervise the riskier operational aspects of e-money. It applies to banks, MFIs, financial payment institutions, and authorized e-money institutions; any other entity (e.g., MNO) that wants to issue e-money must create a separate legal entity to seek authorization.

Under the previous regulations, MNOs and other nonbank providers already had the option to either become e-money issuers (through creating a subsidiary dedicated to e-money issuance and distribution), or partner with banks who acted as the e-money issuers and focused on compliance issues, leaving the e-money distributors (i.e., MNOs and other nonbank institutions) to concentrate on developing and distributing the product offer. The latter is the option that the majority of providers selected, in particular MNOs. However, with the development of MM, BCEAO became uncomfortable with this model as it does not allow it to directly supervise MNOs, even though MNOs are the main actors under this type of arrangement. In parallel, MNOs have been increasingly complaining about the rigidity of banks as partners, and banks have voiced concerns about MNOs' increasing presence in the financial sector without direct oversight by BCEAO.

The 2015 guidelines reinforce and clarify the opportunity already offered in the previous guidelines for MNOs to issue e-money (through creating a dedicated subsidiary). As a result, many MNOs through their dedicated subsidiary are planning to or have already applied to be authorized as e-money issuers.

Nonbank e-money issuers continue to be required to partner with registered financial institutions to offer second-generation financial services, such as credit or savings, particularly, to ensure that no new money is being created.

Other key positive developments from a financial inclusion perspective offered by the 2015 framework include the following:

- Clear prohibition of agent exclusivity: all “independent” agents (i.e., not employees of the e-money issuer) have the right to also act as agents for other operators.
- Client protection: e-money issuers have clear obligations in terms of pricing transparency, personal data protection, and recourse mechanisms for MM clients.
- Clarification of the scope of activity of MM by setting ceilings on money held in e-accounts and transaction values.
- Lightening the requirement for e-money issuers to have equity equal to at least 3 percent (formerly 8 percent under the previous guidelines) of the value of e-money it has issued.
- Distribution: introduction of guidelines for issuers to freely contract with individuals or legal entities registered in the Registry of Trade and Property Credit, or other registry in lieu.

According to the 2015 guidelines, issuers are responsible for the first level of monitoring of e-money distributors' activity; the robustness of a monitoring system is one of the elements considered by BCEAO when an entity applies to for an e-money

license. In addition, BCEAO developed and adopted a specific supervisory framework for monitoring e-money issuance and distribution, which is based on three pillars:

- i. **Self-discipline of e-money issuers and managers** (i.e., good governance of institutions involved in the issuance and management of e-money): the management of these institutions is entrusted to establish an internal control and risk management system. This increased responsibility is meant to encourage all actors in the governance chain to themselves establish effective mechanisms of prevention and management of risks related to e-money.
- ii. **Discipline of the market:** monitoring of e-money payment services aims to reduce the asymmetry of information, and thereby enable users to make better-informed decisions. Thus, it requires issuers to make pricing information available to their customers. In addition, special attention is paid to marketing practices (exclusivity clauses, anti-competitive agreements) as well as clearing and settlement of internetwork operations to ensure that service providers are operating in a secure and efficient manner.
- iii. **Regulatory requirements:** imposition of minimum requirements to safeguard the security of electronic payments, which are essentially paperless and highly technological. These relate to the financial strength of the issuer with regard to the financial and operational risks incurred; the integrity of the technical infrastructure deployed; and the robustness of the organizational system.

To implement this framework, BCEAO plans to reinforce staff capacity in this respect and to develop an MIS adapted to monitoring issuing institutions. These actions will be important since market actors interviewed for this study noted that the effectiveness of e-money issuers' monitoring systems vary: onsite monitoring of MM agents, for example, does not seem to happen in a systematic way, neither by e-money issuers themselves nor by BCEAO. This lack of oversight could pose some risks, especially in terms of customer protection, where, for example, nonregistered agents occasionally pose as "official" MM agents.

4.1.2 KYC and identification

The 2015 e-money guidelines also increased the threshold of transactions not requiring the identification of users from 10,000 FCFA per transaction and 100,000 FCFA per account to 200,000 FCFA for all transactions per month on an account. It is also possible to open an account without presenting a valid identification if transactions stay limited to this new monthly threshold.

This is an encouraging step for financial inclusion, with a few caveats. In practice and to date, providers do not offer customers the possibility to open an account and transact up to 200,000 FCFA a month without identification. It is unclear whether it is an option that they do not wish to implement or they are not aware of the possibility the new guidelines offer. Also, **to purchase a SIM card—a key prerequisite to subscribe to MM—clients must present valid identification, which can be problematic for many people who do not possess such identification.** For example, in Niger, unique GSM connections is quite low, representing 38 percent of the adult population in 2013 according to GSMA. One of the reasons that could explain this situation is that the National Telecommunications Regulator requires each phone number to be identified and not many people have valid identification. Additionally, each

member State has the possibility to determine the type of identification required by financial institutions and e-money issuers to open an account; what is authorized is often more restrictive than the type of identification required by national telecom regulators to purchase a SIM card.

The issue of identification and other KYC requirements is even more heightened for opening an account at a financial institution: requirements are indeed stricter with not only the need to show a valid photo identification (e.g., national identification card, passport) but also as a valid proof of address or business registration. A majority of the financially excluded population cannot meet all of these requirements.

As the DFS market evolves and we start seeing the introduction of second-generation products, such as savings or credit through the digital channel, these KYC requirements if not adapted will continue to be a barrier. For example, to provide a service such as credit or savings using the MM wallet, EMEs and financial institutions are required to partner, resulting in the need for a customer to become an account holder of a financial institution and thus needing to meet KYC requirements.

The issue of identification is also linked with national efforts to provide robust unique identification; accessible, secure, and verifiable ID systems can help expand the use of financial services. Some efforts are underway in several WAEMU countries that may have ripple effects on financial inclusion. For example in Cote d'Ivoire, a process is ongoing to distribute the national identity card. The National Identification Office (ONI) recorded 7 million Ivorian 16 years old and over who now possess a national identity card, and ONI continues its efforts for those who are not yet identified. In parallel, ONI is also working on developing a national registry with a unique ID number for each citizen or resident.

4.1.3 Agent banking: IOB model and 2015 guidelines on agents of rapid money transfer services

A key aspect that remains unaddressed in the framework of current regulations is the agent banking model, which has the potential to have a transformative effect on financial inclusion. BCEAO is currently debating whether to issue further regulations on this topic.

Currently, the regulation doesn't offer an entryway into agent banking for MFIs; only banks can leverage alternative delivery channels through the IOB model defined by BCEAO's guidelines n°15-12/2010/RB of 13 December 2010. However, the majority of banks have not demonstrated any particular interest in the model, and the regulation is not sufficiently clear or precise. Section 3.3 provides more details.

As introduced in Section 3.5, the November 2015 guidelines (N° 013-11-2015) aim to clarify the responsibilities of subagents of rapid money transfer services (e.g., OTC agents) and banks and MFIs. These guidelines also remind that subagents are not authorized to collect deposits and loan repayments under these partnerships; the banking law indeed authorize only financial institutions to carry out these operations. As such, with these guidelines, it is not possible to leverage these large networks of agents outside of the IOB model for banks and exclude de facto MFIs. Indeed, banks can still contract OTC operators to act as their IOBs. However, as previously discussed, this model lacks precision and clarity and can be costly—elements that affect banks' uptake of the model.

On the other hand, it appears that MFIs may ask for special authorization from BCEAO to pilot an agent banking model, but criteria to receive the authorization are not clearly defined or are unknown to the rest of the market actors. MicroCred is currently the only known example (see Section 3.4). It is not clear if banks would also be allowed to pilot such a model, or if they are restricted to the IOB structure.

Overall, the framework for agent banking for banks in WAEMU lacks precision and clarity and can potentially be costly; for MFIs it doesn't exist. This contrasts with the e-money guidelines, which provides a clearer and enabling framework for e-money issuers to deploy and use nonbank agents. As such, there is a risk to create an uneven playing field that could stifle competition between banks and nonbanks, and a situation where an agent providing services to both a bank and a nonbank is subject to two very different frameworks, even if the services it provides on behalf of the bank and the nonbank are similar or the same (Dias, Staschen, and Noor 2015).

4.1.4 Interoperability

A robust environment of interoperability in payments systems benefits all participants in the payments ecosystem and can be a means to an end toward financial inclusion. On one hand, consumers, agents, merchants, and governments find it easier to make and accept payments. On the other hand, financial institutions, MNOs, and other providers can gain revenue from payments in interoperable systems that they may not be able to achieve otherwise (Benson and Loftesness 2012).

In WAEMU, there are a few examples of interoperability. MNOs have reached platform-level interoperability for cross-border remittances with their MM services (see Box 2). Early experiences are also emerging with MM providers and financial institutions linking wallets and accounts. These experiences are taking place through bilateral agreements between providers. A sector-wide interoperability example in the financial sector relates to cards. In 1999, BCEAO initiated a project to modernize payment systems. One of its priorities was to establish an interbank payment system in all eight WAEMU countries. As a result, GIM-UEMOA (Groupement interbancaire monétique de l'Union économique et monétaire ouest-africaine) was created in 2003 to act as a regional "switch" for cards, allowing registered financial institutions to offer cards that can be used at other participating financial institutions across the WAEMU zone (see Box 8). In 2009, BCEAO became GIM-UEMOA's majority shareholder.

Interoperability rarely happens on its own. Some research suggests that it is unlikely to emerge without regulatory intervention (Kumar 2013). However, in Tanzania, for example, interoperability among MM services has emerged "organically," driven largely by the MNOs themselves, and facilitated by IFC, Financial Sector Deepening Trust (FSDT), and the Bank of Tanzania.¹⁹ In the United States, ATM interoperability was led by banks themselves when they realized the benefit of sharing infrastructure.

It is expected that interoperability will become increasingly important in the most mature markets of WAEMU, where there is a diversity of DFS providers/operators, with meaningful market shares, a well-defined framework, or set of guidelines for interoperability can help facilitate the customer experience without slowing the positive market dynamic created by the presence of several important DFS actors.

¹⁹ <http://allafrica.com/stories/201602180528.html>

BOX 8. The Role of GIM-UEMOA in Promoting Interoperability

Since its creation in 2003, GIM-UEMOA has more than 100 members and 7,000 interconnected service points, with BCEAO being the main shareholder (51 percent). GIM-UEMOA proposes payment solutions (connections, cards, POS, ATMs, etc.) to banks and MFIs instead of building their own payment infrastructure, leveraging the interoperability of its offerings with Visa, MasterCard, and the GIM Card. In 2014, 300 billion FCFA passed through the GIM system. However, its fees are considered high in relation to the revenues that its solution generates for member financial institutions, discouraging these actors' buy-in into the GIM-UEMOA model.

Since 2013, the "GIM Prepaid" solution allows GIM members to offer prepaid, Visa and/or MasterCard cards to individuals and enterprises, including nonbanked clientele. The cards allow users to conduct top-ups, transfers from card to card, withdrawals, cash advance, purchases, and payments from its network of interconnected service points and merchants accepting GIM, Visa, or MasterCard payments.

GIM also offers its members payment solutions, such as GIM-Mobile, a product that allows clients of financial institutions to access and conduct transactions on their bank accounts from their mobile phone. This has caused some confusion about its positioning vis-à-vis its members, some of whom also offer or are developing similar solutions in partnership with MNOs and other providers. As a result, adoption of the GIM-Mobile solution among GIM members remains relatively low.

BCEAO is currently considering its role in facilitating interoperability in the region particularly to develop a framework to support the process.

4.1.5 Regional financial inclusion strategy

BCEAO has developed a regional financial inclusion strategy that targets, over a five-year horizon (2016–2020), financial inclusion of 75 percent of WAEMU's adult population through emphasizing development of the ecosystem of electronic payments and the entry of MFIs into the DFS sector.

This strategy is meant to offer a coherent basis for developing national financial inclusion strategies, and to bring together donors and other financial and technical partners to agree on objectives and actions to take with the goal of increasing financial inclusion in WAEMU.

The strategy has been finalized; it should be adopted by WAEMU's Council of Ministers by the end of June 2016 and is not yet financed. A preliminary meeting of donors was organized in early 2016 to assess interest and prepare for future roundtable meetings of committed donors.

4.2 Telecom authorities

Telecom authorities in WAEMU have generally not intervened on DFS or MM regulations. It is not usually part of their mandates, which are generally oriented toward ensuring availability, access and quality of networks, security, respect of anti-competition guidelines, and client data protection. MM is typically considered a value-added

BOX 9. Models of Regulating USSD Access

As mentioned, currently in WAEMU, MNOs are generally not required to offer access to USSD channels to other DFS providers or supporting services. Some have negotiated agreements with MNOs, and others have gone through the telecommunications authorities to try to gain such access. GIM, for example, has requested telecom authorities throughout the region to reserve a certain set of USSD codes.

While USSD access may fall within the jurisdiction of financial and competition regulators, past experience from other countries has shown that the telecommunications regulator is usually best placed to lead such interventions (Hanouch and Chen 2015).

The type of intervention required to ensure a competitive market that benefits consumers and the goal of financial inclusion, without overly penalizing MNOs who have (implicitly) paid for the right to provide USSD services as part of their telecommunication licenses, will vary depending on the market. It may range from a “light touch” approach whereby regulators articulate a preference for MNOs to provide access to USSD, to putting in place a dispute resolution mechanism or mandating MNOs to provide USSD access to non-MNOs. Regulators may also need to address issues of price and quality standards in such agreements, which can also impact access to USSD.

service (VAS) by telecom authorities, whereby MNOs are required simply to notify the telecom authority of the offering and to confirm to it that the MM service meets the central bank’s requirements. However, **there is a growing sense among these regulators that they need to be more involved in the development of the MM market, specifically the service quality and data confidentiality aspects.**

To date, there has generally been limited coordination between these regulators and BCEAO, but the situation looks set to change: telecom authorities interviewed agreed that such communication needs to be strengthened and formalized, especially on topics such as **interoperability, USSD access (see Box 9), agent and geographic network coverage, and the certification of e-signatures.**

Telecom authorities in more mature DFS markets, such as Senegal and Côte d’Ivoire, are more advanced in their thinking and strategy on most of these subjects. In addition, in Côte d’Ivoire, a series of laws passed in 2012/13 mandate Agence de Régulation des Télécommunications de Côte d’Ivoire (ARTCI) to regulate several aspects that may affect DFS, including all money transfer operations, which the law considers to fall within the domain of postal operations (see Côte d’Ivoire country summary in Section 8.2).

4.3 WAEMU and National Competition Commissions

Since 2002, anti-competitive practices are mostly examined and decisions are taken at the WAEMU level, particularly on issues related to abuse of dominant position, antitrust, and state aid.²⁰ The WAEMU Commission’s Department of Regional Market,

²⁰ <http://globalcompetitionreview.com/reviews/77/sections/290/chapters/3139/senegal-competition-commission/>

Trade, Competition and Cooperation also supervises, directs, and coordinates the common policies of the Union in several areas, including stimulating competition to reduce prices, expand consumer choice, and manage the anti-dumping code.²¹

In addition, national competition authorities can still exercise their powers in issues related to market transparency, organization of competition, discriminatory conditions of sale (such as refusal to sell), and continuing investigations.²²

In the case of the DFS sector, it is not clear whether national regulators (e.g., national telecom authority), BCEAO, or anti-competition authorities at either the national and/or regional levels would monitor and make decisions on anti-competitive practices.

4.4 National governments

Although regulations and monitoring of DFS and e-money are largely the domain of BCEAO, national governments are implicated in monitoring e-money flow through their Financial Intelligence Units, called CENTIF, which focuses on AML/CFT issues. Each unit collects and analyzes data at the national level to establish the origin of transactions and keep track of those reported as suspicious by reporting entities. Based on this information, it will issue recommendations on the implementation of AML/CFT policies and propose reforms. In addition, national financial inclusion strategies and the initiatives of governments to digitize their own payments from or to their citizens can influence the development of DFS markets.

4.4.1 National financial inclusion strategies

Only Côte d'Ivoire and Niger currently have national financial inclusion strategies. National financial inclusion strategies are still being developed in the other WAEMU states. Even where they exist, the development of the DFS ecosystem may not be a priority of the strategy, or the strategy may face challenges in securing the needed resources and human capacity for effective implementation. Some possible exceptions exist, such as in Côte d'Ivoire where the government is starting to implement a financial sector reform plan that includes DFS development through various means (see Côte d'Ivoire country summary in Section 8.2).

4.4.2 Digitization of government payments

Government-related bulk payments—either to the population (government to population [G2P]), such as pensions or social security, or by the population to government agencies (P2G), such as taxes, school fees, and utilities (where these agencies are public), can help to catalyze DFS uptake. Digitizing such payments also helps to increase traceability, thereby reducing lost payments, fraud, and theft.

In WAEMU, some governments have digitized certain P2G payments. For example, in Côte d'Ivoire, secondary school fees now have to be paid digitally via one of the three MNOs. In Benin, Burkina Faso, and Mali, MNOs are pushing the government to approve digitization of bill payments for water and electricity as a way to catalyze DFS market growth.

²¹ http://www.uemoa.int/Pages/UEMOA/Commission%20de%20L_UEMOA/commissaires_dmrc.aspx

²² <http://globalcompetitionreview.com/reviews/77/sections/290/chapters/3139/senegal-competition-commission/>

The payment of water and electricity bills can drive important volumes; even occasional payments, such as yearly school fees that do not constitute a significant part of the MM product mix,²³ can help to reactivate inactive MM users and attract new customers. That said, given the relatively recent global experience on digitization of government payments, the extent to which they contribute to sustained DFS uptake as measured by ongoing use (i.e., user activity rates) is not well known yet.

In addition, the digitization of such payments requires strong commitment by governmental authorities (or private utility providers, depending on the case) and investment by MNOs to set up the required systems. Public administrations must also have or acquire the capacity for their information system to be compatible with MNO's MM platforms and create mechanisms to control and confirm and ensure the traceability of information to prevent the risks of fraud; this is not systematically the case in WAEMU countries where the digitization of government payments has happened.

4.4.3 Other government initiatives

This section lists some of the initiatives that national governments in WAEMU have undertaken that could help to build the DFS ecosystem. This is not meant to be an exhaustive list.

In addition to its financial sector reform initiative, Côte d'Ivoire's recent exemption of smartphones and laptops from value-added tax (VAT) and customs taxes,²⁴ as well as the Minister of Finance's ambitions to set up a MM working group with key stakeholders (see Côte d'Ivoire profile in Section 8.2 for more details) could also help to scale DFS in country. In Senegal, the United Nations Capital Development Fund's (UNCDF's) MM4P program has also facilitated the establishment of such a working group.

In Mali, the national government's Mali Numérique 2020 initiative aims to promote socioeconomic development via Information and Communications Technologies (ICT), specifically through large-scale deployment of digital infrastructure, including 4,500 km of fiberoptic cable, digitizing several government services, developing human capital in the ICT sector through training programs, and strengthening security frameworks of IT systems, including through legislation. Other national governments within WAEMU have launched similar initiatives in particular to develop fiberoptic internet.

In addition, spearheaded by the Prime Minister's office (Office de la Primature), the previous government of Benin was involved in trying to facilitate the market for solar products, including supporting the establishment of a large-scale access-to-finance program, a mass distribution of 20,000 low-wattage solar lamps in schools as a way to raise awareness and build market demand, and piloting a pay-as-you-go model with GSMA and several solar companies. SNV Netherlands Development Organisation (SNV) has been leading this effort since 2015, focusing on linking Greenlight Planet pay-as-you-go (PAYG) products with a ready-made solar supply chain.²⁵

²³ In Côte d'Ivoire, school fee payments accounted for about 1 percent of Orange's total annual transactions in 2014, for example (Frydrych, Scharwatt, and Vonthron 2015).

²⁴ See <http://news.abidjan.net/h/574022.html>

²⁵ <http://www.gsma.com/mobilefordevelopment/grantee/snv>

The project builds on a successful 18-month partnership between SNV and MTN to develop a solar distribution network. Benefiting from some seed funding from GSMA, the government of Benin has also agreed to provide a tax exemption on all products imported under the project. If the project is successful and support from the new government continues, this initiative would not only allow, for example, mobile users to charge their phones more easily, but could also drive DFS uptake if a prepaid mobile model is used, much like M-Kopa in Kenya, which has connected over 300,000 homes to solar energy²⁶ using a PAYG system that relies on Safaricom's M-Pesa.

Benin's initiative is in line with WAEMU's target of achieving an energy mix of 82 percent from renewable energy sources and subsequent launch of the US\$100 million Facilité Régionale d'Accès à l'Energie Durable (FRAED) to support Member States deliver the required regulation and infrastructure. Under this program, WAEMU launched a tender for bids to develop and operate on-grid solar photovoltaic projects for WAEMU Member States in late 2015.

5. SUPPORTING FUNCTIONS AND ACTORS

Each market system relies on a range of services that inform, support, and shape the quality of the core services within the system, as well as the system's ability to develop, learn, and grow. Typically, these supporting functions include infrastructure, research/information, supporting technology, skill-building services, education, industry and professional associations, donors and development actors, and other third-party service providers. The analysis of supporting functions for DFS in WAEMU is, however, not exhaustive.

5.1 Financial service access points

There is a diversity of access points for financial services in WAEMU: banks and MFI branches, ATMs, money transfer/OTC agents as well as MM agents, small shops, and postal network branches (see Box 10 for more information on postal networks). While comprehensive data in terms of number and location is not available, some efforts are ongoing²⁷ that begin to show the magnitude of access points in WAEMU. Unfortunately, no data are available on activity levels of these access points.

MNOs and, in some countries, OTC providers consistently have a far higher number and distribution of agents as compared to other FSPs. For example, in Benin and Cote d'Ivoire, MNOs have a far higher number and distribution of agents as compared to financial institutions. In Senegal, the majority of access points come from money transfer companies/OTC providers that have been successful in developing large-scale agent networks. Figure 4 provides a partial breakdown of access points per provider type in these three countries.

The majority of access points (across the different FSPs) are still concentrated in urban centres and more work needs to be done to develop agent networks to serve nonurban areas. MIX Finclusion Lab's data on number and locations of different

²⁶ <http://solar.m-kopa.com/about/our-impact/>

²⁷ BCEAO, through its annual overview of mobile financial services, collects self-reported data on agents of MM, ATMs, and POS devices. MIX with its Finclusion Lab collects self-reported data on branches of banks, MFIs, the Post Office, and MM agents in a few selected WAEMU countries, such as Benin, Cote d'Ivoire, and Senegal.

BOX 10. Examples of Postal Networks DFS' Strategies

Although the number of postal networks' branches is not significant compared to MNO MM or OTC agents, several networks have indicated their objective of offering or strengthening their current offer of financial services. However, their success to date in this domain has been limited, mainly because they usually lack: (i) sufficient human and financial resources; (ii) a convincing, unique product offer; and (iii) the organizational mindset and culture needed to compete against private-sector actors.

La Poste Niger has ambitions to become a bank, but does not have the financial, technical, or human resources needed to make this transition. It is actively seeking financial support for this and, in the meantime, is requesting permission from BCEAO to offer savings products. It is also in discussions with a technical service provider to develop a MM transfer solution, based on the MNO P2P model, but also capitalizing on La Poste's physical network of 80-plus branches across the country.

In Benin, the **Agence Béninoise du Service Universel des Communications Electroniques et de la Poste (ABSU-CEP)** plans to transform La Poste agencies into multimedia centers that have diverse service offerings, such as insurance, online shopping, and other DFS. It has already piloted this in certain Poste offices close to national borders and is awaiting expressions of interest from potential partners before moving forward with this project. In addition, La Poste in Bénin has offered a savings product called "épargne-tontine," which had about 6,000 accounts in 2015. With support from the Swiss Capacity Building Facility, it is currently piloting a mobile application that enables collecting savings digitally, and has also deployed field officers to collect savings directly from market stalls. La Poste targets reaching 15,000 clients by the end of the support period (March 2017) and reaching 100,000-plus microentrepreneurs in the next five years.

financial service provider (FSP) access points, including postal networks and MM agents (but not OTC points), confirm this trend in Benin, Senegal, and Côte d'Ivoire.

5.2 Agent network management²⁸

The existence of a nearby financial service access point—either in the form of a financial institution or MNO/OTC agent—is not enough to guarantee that services will necessarily be available or accessible to potential clients. Agents must be motivated, knowledgeable, available at times that are convenient for customers, and sufficiently liquid to provide a good customer experience. **Agent network management—the ongoing process of identifying, training, monitoring, and managing agents, including ensuring their liquidity, risk management, and compliance with regulatory and customer service standards—is therefore a critical supporting function of DFS.**

²⁸ This section does not cover agents of financial institutions because of it is not yet a prominent practice and because of some of the regulatory constraints discussed in sections xx, yy, xxx [provide missing information]. However, challenges highlighted in this section would most likely be similar for agents of financial institutions.

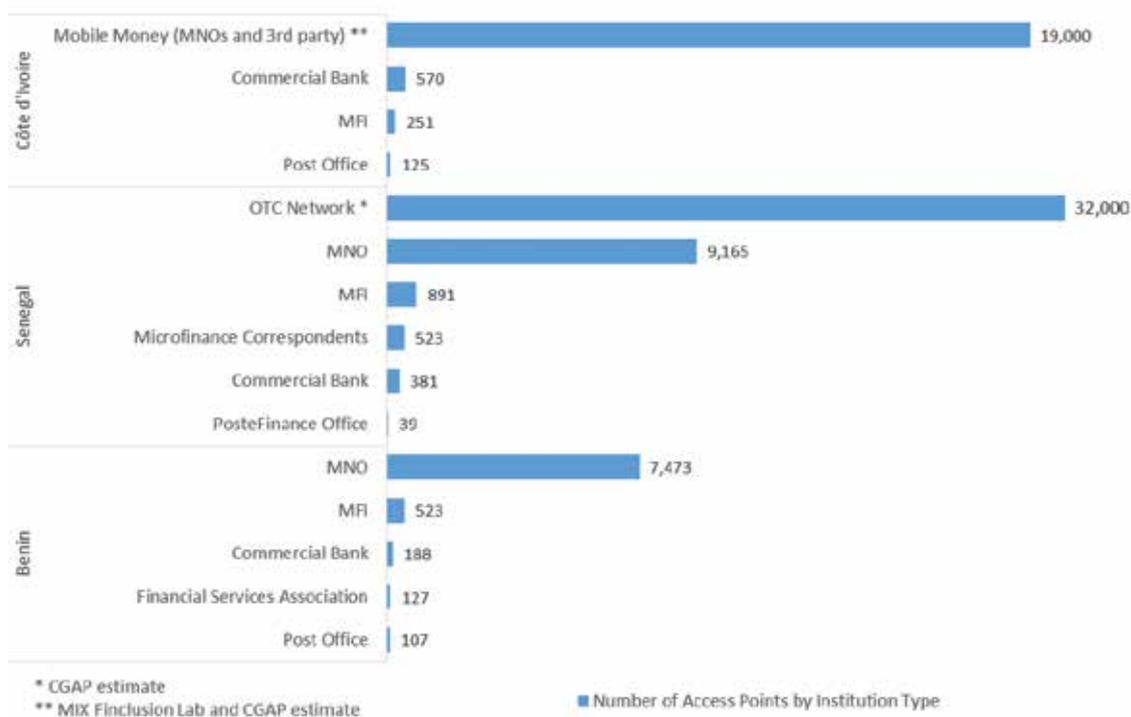


FIGURE 4. FSP access points by institution type in Benin, Senegal, and Côte d'Ivoire in 2015
Sources: MIX Finclusion Lab, CGAP.

Data presented on access point is for 2015, with an exception for a couple of providers that reported data for early 2016.

In WAEMU, under the rapid money transfer regulation, contracts are signed between financial institutions and subagents; financial institutions are responsible for ensuring that each agent is in compliance. It is unclear, however, whether the regulation enables financial institutions to outsource agent management to an external service provider. Yet, in practice, it is often OTC providers that manage agent networks once the initial financial institution partner approved the agents to be registered.

Under the e-money regulation, issuers have the responsibility to ensure the integrity, reliability, security, confidentiality, and traceability of transactions carried out by each agent. Issuers can either carry out this function themselves or outsource it to external service providers.²⁹ As such, some MNOs are working with companies that specialize in agent network management or “**master agents.**” Top Image is one example of a firm that has worked with MTN in Côte d'Ivoire; reportedly, outsourcing the management of its distribution channel to Top Image helped MTN Côte d'Ivoire develop stronger recruitment criteria for agents, manage agent performance more closely, and increase support for agent liquidity, all leading to a significant increase in the activity levels of its agents (Pénicaud 2014). Another third-party agent network manager has designed “MM banks,” resembling bank branches with secured cash desks, more visibility, and 24/7 access for MM customers; its three MM banks represent a significant portion of its total business, with a lot of transactions made during the night (when most other agent service points are closed).

²⁹ Under the responsibility of the e-money issuer [please clarify—perhaps add to text].

Interviews suggest that **independent agents and master agents face liquidity challenges especially in rural areas**. Even though the e-money regulation allows for MFIs, post offices, and insurance companies to be master agents as a way to remedy to this challenge and allow agents access to liquidity, this measure cannot resolve the issue alone. As highlighted in Section 5.1, these types of institutions still have a limited footprint, especially in rural areas, and being a master agent requires expertise and the dedicated skills MFIs, post offices, and insurance companies do not have yet.

It is important that MNOs or OTC providers support independent agents and master agents in the form of ongoing trainings, technical support, and access to credit to strengthen liquidity. The latter could be in the form of credit from the MNO/OTC provider itself, or the MNO/OTC provider acting as a guarantor for master agents when they try to obtain credit from financial institutions.

In some instances, agents and master agents have also formed associations to help each other with liquidity issues, to meet to discuss common concerns and share solutions, and in some cases to mobilize against operators when they feel they have been unfairly treated.

5.3 Merchant payments and networks

Certain merchant networks are playing an important role supporting DFS provision. For example, with more than 165 gas stations across the country, Total Senegal acts as a master agent for Orange. It helps to ensure liquidity of Orange agents close to its stations. Total has also developed its own money transfer and gift certificate service called Wizall,³⁰ which is available at all of its stations across the country and at all TigoCash service points. In addition, Total's platform, Total Club, enables clients to pay via various MM options (Orange, TigoCash, and Wizall).

Convincing smaller merchants (e.g., small shop owners) of the business case for consistently encouraging customers to use digital payments is bound to be more challenging, but is needed. **For DFS to take off, widespread acceptance and use of digital payment options are essential, including for daily purchases.** P2P and bill payment for most customers account for only a few transactions per month and a small portion of cash use. Everyday payments for retail purchases and transport, on the other hand, are high-volume but continue to be conducted in cash in most WAEMU markets. Therefore, digital "payments offerings need to not only be as good as cash, but decidedly better in at least one respect (and preferably more than one)" (Zetterli 2015) and both merchants and clients must be convinced of this.

However, **developing business models for partnership between DFS providers and merchant networks has been challenging.** Motivating merchant partners to consistently accept and encourage clients to pay by digital means requires sufficient financial incentives for merchant partners, which dilutes the profits of DFS providers.

5.4 Aggregators

Aggregators allow payment providers such as MNOs or banks offering mobile payment to easily integrate their services with entities that want to send money

³⁰ With Wizall, money can be transferred as well as "gifts" (certificates) for food, petrol, books, and other items.

to or receive money from end customers. For example, if an aggregator has access to the USSD channels of MNOs, it could facilitate the integration of services between financial institutions and MNOs avoiding bilateral arrangements, which can be time consuming. These entities can be utility companies that want to receive payments, businesses that want to pay salaries, or donors that want to pay recipients, for example. They, therefore, facilitate the roll out of digital bill pay, bulk pay, retail payments, and other services. Aggregators may also provide value-added services such as notification of successful payments and reconciliation (McKay and Pillai 2016).

Aggregators vary in terms of market positioning, services offered, and engagement with the end customer. Some examples of aggregators operating in WAEMU are described in the following:

- Supernet Technologies, based in Côte d'Ivoire, has been developing the GIM-UEMOA mobile banking solution³¹ since 2011 and is now piloting it with MTN and the savings bank Caisse Nationale des Caisses d'Épargne (CNCE), which links the CNCE bank account and e-wallet and also allows MTN MM customers to make withdrawals on CNCE ATMs. Supernet is working on a similar integration in Senegal between TIGO and Bank of Africa. It is focused on marketing the mobile banking solution to the 47 banks that already use the GIM-UEMOA platform.
- In Touch SA, a Senegalese company that has developed a payment platform for Total that integrates several different payment options, is planning to expand by partnering with boutiques in Senegal that will also offer its payment platform.
- Digital Afrique Telecom is an Ivorian company, present in 25 countries in Africa, that acts as an aggregator for institutions wishing to deploy mobile payment solutions. It has developed the Digihub platform that allows interconnection between banks/bank accounts, institutions wishing to accept digital payments, and MNO MM platforms. It currently has a pilot underway in Côte d'Ivoire that enables cocoa producers to reimburse and receive credit via the mobile e-wallet.
- MFS Africa claims to be the largest aggregator of mobile wallets in Africa. In July 2015, the company enabled cross-border transfers between Airtel Niger, MTN Benin, and MTN Côte d'Ivoire MM customers. MFS also connects money transfer operators to mobile wallets.

Not all payment service providers use aggregators. They may instead develop internally the operational and technical capability to connect directly to a variety of third parties, thereby eliminating any need for revenue splits with intermediaries.

MNOs may also open their application programming interfaces (APIs), the technology that allow two software programs to communicate with each other. This would allow, for example, applications such as those of Uber or Amazon to seamlessly link directly to a mobile wallet. Open APIs can spur innovation in products and services using mobile wallets as payment platforms and reduce the need for aggregators.

In WAEMU, Orange has opened up APIs via Orange, its online hub for developers, and businesses working in countries where Orange is present (Tellez-Merchan 2015).

³¹ See <http://www.gim-uemoa.org/fr/solutions-services/gim-mobile> for more details.

APIs available via Orange for developers and businesses working in Africa and the Middle-East include the following:³²

- Billing solutions to facilitate purchase of services.
- Orange Money online payment.
- SMS bundle, including in Cote d'Ivoire, Senegal, and Niger.
- USSD service (soon to be available in Cote d'Ivoire and Senegal).

5.5 E-commerce, crowdfunding, and Fintech

E-commerce businesses can also help to digitize purchases usually made in cash. While the majority of target clients remain mid-to-high-income groups, some e-commerce businesses are also starting to target lower-income groups, seeing the potential at the BoP. MNOs have also recognized this potential to transform cash purchases into purchases made by MM, with both MTN and Orange investing in e-commerce businesses operating in WAEMU. However, heavy incentives are often needed to drive this digitization of payments, usually taking the form of discounts on purchases, free airtime or data, etc.

Jumia, a leading e-commerce business in Africa that offers a wide range of household and fashion items, is present in 11 countries including Côte d'Ivoire. In addition to ordering via the online site, customers can shop from a smartphone app. Currently, Ivorian customers can either pay cash upon delivery or via MTN MM when placing the order. Although a majority of purchases are still paid in cash, paying via MTN MM is incentivized through regular promotions and discounts. Jumia is trying to promote MM payments both because MTN is a shareholder of Jumia, and because it wants to encourage prepayment habits among customers.

Cdiscount, a leading French e-commerce retailer, is also present in Côte d'Ivoire and Senegal. Clients can pay either cash-on-order (at a pick-up location of Cdiscount in Abidjan), cash on delivery (both countries), with Orange Money via the USSD channel (both countries), at a bank partner (BICIS in Senegal), or by credit card online.

Both Cdiscount and Jumia in Côte d'Ivoire reported being interested in offering purchases on credit to their customers; however, neither had found a suitable bank partnership to offer this type of consumer credit that would be easily accessible for their customers (many of whom are not “banked”) and would also function with their own liquidity requirements (i.e., allow them to pay their suppliers without having received payment from the end customer).

Orange recently invested 1 million euros in Afrimarket,³³ which has mostly targeted West African diaspora living in Europe who wish to send goods to their relatives back home. Now, however, Afrimarket is also targeting West African residents, with an e-commerce site in Côte d'Ivoire³⁴ that has more than 3,000 goods available for delivery throughout the country and payable with Orange Money.

³² <https://developer.orange.com/apis?search=Africa>

³³ <http://www.telecompaper.com/news/orange-invests-eur-1-million-in-afrimarket—1062059>

³⁴ <http://www.jeuneafrique.com/mag/262378/economie/e-commerce-afrimarket-defie-jumia-a-abidjan/>

BOX 11. A Mobile Money Crowdfunding Platform in West Africa: Orange Collecte

Launched in September 2015, Orange Collecte in Côte d'Ivoire is a mobile crowdfunding platform that uses Orange Money. Developed in partnership with Hello-Asso, the French leader in crowdfunding for charities, the platform enables private individuals and charities to raise funds for their personal (e.g., weddings, birthdays) and charitable projects through their mobile network.

Any Orange Money client in Côte d'Ivoire can create a "fund" via a USSD shortcut on his or her phone or going to the Orange Collecte website. Clients can then invite their contacts to contribute to the fund, which is given a unique identifying number. Other Orange Money clients can then contribute to the fund from their e-wallets, either online or via their phone. Donors are charged no fees, whereas the fundraiser is charged 3 percent (for an individual) or 4 percent (for an association) of total funds raised. Fundraising progress for each fund can be viewed online. At the end of the collection, the amount raised is directly transferred to the user's Orange Money account.

As a relatively new offering, uptake and use cases remain to be seen. The platform is also not specifically tailored to raise funds for financing start-ups or SMEs (a popular use of crowdfunding in Europe and North America), but could potentially act as a source of SME financing.

Partnerships between MNOs and online payment companies may facilitate both e-commerce and MM use. For example, Skrill, a U.K.-based e-commerce business that allows payments and money transfers to be made online, has partnered with MTN in Côte d'Ivoire and Rwanda,³⁵ allowing MTN subscribers in these countries to use their MM accounts to make online purchases from any of Skrill's merchant partners. The partnership is planned to be extended to Benin and Uganda, with other African markets to follow soon thereafter.³⁶

Similarly, Orange's recent introduction of an **online/mobile crowdfunding product called Orange Collecte** in Côte d'Ivoire has the potential to drive further DFS uptake, and eventually perhaps facilitate the start-up or expansion of SMEs (see Box 11).

With especially Senegal's vibrant ICT sector and its ambition of becoming the "Silicon Valley of Africa,"³⁷ we also expect to see more technology companies offering or supporting DFS emerging in WAEMU. Orange has also made investments with the same expectation: it will create Mali's first digital incubator and has also supported the launch of CIPMEN, Niger's first ICT incubator.³⁸

³⁵ <http://www.itnewsafrika.com/2014/09/mtn-skrill-ink-mobile-money-partnership/>

³⁶ <https://www.mtn.com/Media/Pages/pressreleasedetail.aspx?pid5275&country5South%20Africa&year=2014>

³⁷ <http://mgafrica.com/article/2015-06-17-senegal-silicon-valley#.VYyBtgUxZM0.email>

³⁸ <http://www.orange.com/en/Press-and-medias/Thematic-features/2014/digital-Africa-s-dynamic-development/Folder/Mali>

5.6 Information

Up-to-date, publicly available information on both demand and supply of DFS in WAEMU is relatively limited, as is knowledge on what DFS offers have worked, what has not, and reasons for uptake or failure. This holds true at both the regional WAEMU level and at the national country level, and is especially acute in less advanced DFS markets, such as Niger, Togo, and Benin.

This lack of recent, relevant information can be attributed to a rapidly evolving market, as well as unwillingness by some actors to disclose their strategies. Resources and the capacity of actors needed to conduct, analyze, and publish such research are also limited. Furthermore, **even when such information is available, it may not always be widely communicated or presented in forms that are useful for decision-makers.**

5.6.1 BCEAO

In addition to being a key regulatory actor, BCEAO is also a principal source of supply-side data by regularly publishing a range of information, including economic and financial indicators, studies and commentary on various topics (e.g., monetary and fiscal policies, the state of different sectors), and a directory of registered financial institutions by country. Its annual report on the state of financial services via the mobile channel in WAEMU is especially important for understanding the evolution of the sector.

Since 2014, it produces an annual report on the state of financial services via the mobile channel in WAEMU. This report is especially important for understanding the evolution of the sector and providing a benchmark to compare individual country progress. However, the data presented are sometimes problematic. For example, the number of DFS subscribers is likely to be overestimated due to double-counting of a single person with multiple DFS accounts. In addition, the risk of double-counting the number of e-money transactions when there is more than one bank issuer partnering with an MNO on its MM solution was identified, as the clearing is internally processed by the MNO before transmission of the reporting to the banks in charge of the issuance and compliance. The consequences of this situation might be overestimations of the volume of e-money flows in certain countries of the WAEMU Zone (not in the balance between the scriptural money in the trust accounts and the e-money in circulation, but rather in the reported flows of transactions).

BCEAO also collects information on the financial flows passing through OTC providers (as reported by their bank partners to BCEAO). Given the importance of these operators, it would be desirable for BCEAO to publish this information on an annual basis, as well as on flows via cards including prepaid cards. This will contribute to a more complete understanding of DFS and related markets.

5.6.2 Regional credit bureau (information)

The WAEMU regional credit bureau, Bureau d'Information sur le Crédit (BIC), has been recently launched, with more than 160 major financial institutions and bulk payment collectors (utility companies and MNOs) reporting to the bureau and consulting it every time they consider a new credit application. The credit bureau offers significant potential to expand access to credit to WAEMU populations and to

improve the effectiveness of financial institutions and bulk payment acceptors. The possibility to assign credit scoring to even nonbanked clients (who can be assessed on the basis of their bill payment history) is of particular interest for advancing financial inclusion.

BCEAO requires the participation of most financial institutions, apart from a few. In terms of MFIs, for example, only those whose outstanding deposits and loans amount to at least 2 billion FCFA for two consecutive years are required to report to BIC. This may limit the financial inclusion potential of the bureau to help lower-income segments build their credit-worthiness by excluding those who receive credit from small-to-medium-sized institutions.

MNOs and utility providers can also participate since both offer post-paid subscriptions (which are in essence a type of credit product), but it is not clear if such participation is required or optional.

The credit bureau will offer participating financial institutions and bulk payment acceptors the following products on a fee-for-service basis:³⁹

- Credit reports with detailed information on borrowers' credit histories.
- Scoring models for assigning ratings to borrowers, or specific scores given to clients by BIC, on the basis of an expanded scope of information.
- Automated loan management software for certain categories of loans or clients.
- Tools used to check the plausibility of certain data and detect fraud.

Institutions have been collecting data to report to this bureau since January 2015. Initially, data on about 250,000 borrowers will populate the database, which is expected to grow to 2.5 million by the end of 2016.

5.6.3 Observatory on Financial Services Quality

Senegal's Observatory on Financial Services Quality (Observatoire de la qualité des services financiers [OQSF]) is a consultative unit that focuses on examining the quality of financial services, particularly from a client satisfaction perspective. It is mandated to conduct research to assist in policy creation, addressing its recommendations to BCEAO, Senegal's Ministry of Finance and Economy, and the Banking Commission of WAEMU. OQSF also has a phone number that the public can call free-of-charge to report complaints on any financial services, including DFS/MM services (although it has yet to receive any complaints on this).

OQSF recently finished data collection for a study on scriptural money (non-cash money, including checks, cards, transfers) that will highlight the role of DFS. Issues revealed by the preliminary data analysis include cost, security, and liquidity of MM agents and transactions. The full analysis and report including recommendations will be available in 2016. Future studies on DFS will be based on the results of this study. OQSF is also working with MIX on mapping MM and OTC agents in-country.

³⁹ <http://www.bceao.int/FAQ-Bureaux-d-Information-sur-le.html>

From a service quality perspective, OQSF believes it would be prudent to close service points where agents are not active or have liquidity problems. Operators also have a responsibility to communicate clearly, educate, and motivate their agents to provide good customer service. OQSF plans to encourage BCEAO to address these issues.

Building off the experience of OQSF in Senegal, BCEAO's regional financial inclusion strategy includes the extension of other observatories to all WAEMU countries; the World Bank plans to support the creation of an OQSF in Cote d'Ivoire.

5.7 Industry associations

Several industry associations that represent the interests of their members, and offer activities to strengthen member capacity, are important in the DFS market to varying degrees. These are briefly outlined in the following.

5.7.1 GSMA

The GSM Association (GSMA, or Groupe Speciale Mobile Association), formed in 1995, is an association of mobile operators and related companies focused on promoting the standardization, deployment, and promotion of the GSM mobile telephone system. GSMA represents nearly 800 mobile operators and more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers, and internet companies.

GSMA's Mobile for Development program brings together its mobile operator members, the wider mobile industry, and the development community to deliver mobile services to underserved people in predominantly emerging markets. Since its establishment, GSMA has partnered with 50 mobile operators to roll out 104 initiatives in 49 countries.

Within this umbrella program, the MM component works with mobile operators and industry stakeholders to create a robust MM ecosystem. It provides the mobile industry with tools and insights to help deployments scale; it also supports the creation of enabling regulatory environments to facilitate digital financial inclusion. The program supports MM operators to implement interoperability of MM services and to further develop the digital ecosystem by facilitating the integration of third parties to MM schemes. Its annual Mobile Money Adoption Survey uses information submitted by all MM providers, including MNOs, financial institutions, and third-party companies to offer MM providers a source of benchmark data. The full results of the survey are therefore not public but the aggregated analysis that is published publicly offers a snapshot of the MM industry every year on a global and regional basis. Participating MM providers also receive a customized benchmarking report that allows them to compare their performance to that of their peers.

In West Africa, including WAEMU, GSMA is engaging with market actors to enable the successful development of MM by developing and sharing data, case studies,⁴⁰

⁴⁰ See, for example, Frydrych, Scharwatt, and Vonthron (2015), which looks at the cooperation between DFS providers and the government in digitizing school fee payments; Scharwatt and Williamson (2015), which looks at two early cross-border MM service models: (1) Orange Money between Côte d'Ivoire, Mali, and Senegal and (2) MTN MM in Côte d'Ivoire to Airtel Money in Burkina Faso; Gilman et al. (2015), which looks at the key factors driving successful rural MM agents in two predominantly rural markets: Mali and Chad; Pénicaud (2014), which examines the factors that drove rapid MM adoption between 2011 and 2013 in Côte d'Ivoire.

industry positions, research, and tools for comparative legal analysis, as well as by providing regulatory training directly to MNOs to help them engage with financial regulators more effectively.

5.7.2 Professional associations of banks and of MFIs

All WAEMU countries have national professional associations representing banks, as well as associations representing the countries' MFIs. Generally, these are mandated to communicate their members' concerns and standpoints on various issues to BCEAO and national ministries of finance and microfinance and to build member capacities in priority areas. Microfinance associations also tend to act as a key entry point for donors and other development actors intervening in financial inclusion (Développement international Desjardins 2010).

Fédération des Associations des Banques et Établissements Financiers de l'Union Économique et Monétaire Ouest-Africaine (FAPBEF-UEMOA) brings all the national associations of banks and financial institutions together at a regional level, to formulate positions and strategies of concern to all members.

The activities and dynamism of these associations vary widely from country to country. However, in several countries, members and other actors reported that the associations were not sufficiently proactive or forward-thinking enough in educating their members and leading strategy development on new areas of work, such as DFS. Some members also felt that the organizations could do more to lobby regulators and policy makers for what they saw as needed changes to the current regulatory framework, and build a dialogue with newer actors in the financial services ecosystem, such as MNOs, OTC providers, etc. However, several associations reported being under-resourced in terms of both finances and human resources to carry out their mandates. Indeed, as highlighted by a 2010 study, the strength and viability of the associations is directly tied to the strength and viability of its members (Développement international Desjardins 2010).

6. DONORS AND DEVELOPMENT ACTORS

While East Africa has to date received the most attention from donors and development actors for advancing financial inclusion, West Africa has recently also seen a convergence of such actors with financial inclusion goals and specifically with the intention to develop the DFS ecosystem. Among these are **UNCDF's Mobile Money for the Poor (MM4P)** five-year (2014–19) program, which is active in eight countries worldwide, including Benin and Senegal in WAEMU. It aims to scale up sustainable branchless and mobile financial services that reach the poor in these countries through a mix of the following:

- Financial and technical support to service providers and financial service agents
- Market research to develop products and services that serve low-income and rural households
- Encouragement of bulk payment makers and accepters to digitize payments
- Assistance of central banks to create an enabling environment for DFS.⁴¹

⁴¹ <http://www.uncdf.org/en/mm4p>

In Senegal and Benin, MM4P has already had a series of meetings with a variety of stakeholders to raise awareness of the program and build support for it; it has also organized a training on agent network management and a learning visit to South Africa with key government personnel to study the G2P/P2G ecosystem there. In 2015 and 2016, MM4P is also conducting market research to better understand the demand/needs for DFS and assess feasibility of integrating DFS into MFIs' platforms (among other topics). Outcomes of these studies will be used to determine activities for the remainder of the program.

The **Alliance for Financial Inclusion** (AFI) has created the African Mobile Phone Financial Services Policy Initiative (AMPI) as a platform for its member institutions in Africa to share learning and provide leadership in the development of mobile financial services policy and regulatory frameworks. Its annual leaders' meeting brings together policy makers, regulators, private sector players, development partners, and research institutions to drive uptake of mobile financial services in Africa and contribute to mutual learning and best practices. The last meeting was held in February 2016 in Dakar and included topics such as cooperation between regulators in promoting cross-border financial services and remittances, the interoperability of platforms, and the integration of DFS in the microfinance sector.⁴² The Governor of BCEAO was the President of AMPI until recently.

The **African Development Bank**, headquartered in Côte d'Ivoire, has several programs that could support governments and financial institutions in developing their DFS offers. Of particular note is a 5.1 million euros MFI capacity-building fund (Fonds de Renforcement des Capacités de la MicroFinance [FRCM]) that is aimed at increasing transparency in the microfinance sector and at increasing access to finance in rural areas, through which innovative projects can be funded, including projects that try to develop DFS.

In February 2016, the Bank, in partnership with AFI's AMPI initiative, announced⁴³ the establishment of a Digital Finance Fund of approximately US\$30 million, financed principally by the Gates Foundation. The Fund will support innovations that would promote financial inclusion via digital channels.

Also in Côte d'Ivoire, **IFC** is implementing a program that seeks to increase DFS uptake through offering advisory services to private sector actors and research. IFC has produced several reports sharing key insights on the Ivoirian DFS market such as a 2013 overview of e-money data and insights on inactivity of MM accounts. It also has a pilot project with Cargill, Orange Money, and the SIB bank (Société Ivoirienne de Banque) that digitizes Cargill's payments to approximately 300 cocoa farmers. IFC, through the Partnership for Financial Inclusion Program with the MasterCard Foundation, is also supporting Microcred Senegal's agent banking pilot.

As part of the **World Bank's** commitment to achieve universal financial access by 2020, the World Bank is focusing some of its efforts in Côte d'Ivoire,⁴⁴ including the design of a multi-year technical assistance program in collaboration with the government's Special Advisor on the national financial sector development program.

⁴² "Draft Agenda: 4th Annual Leaders' Roundtable of the African Mobile Phone Financial Services Policy Initiative (AMPI)" http://www.afi-global.org/sites/default/files/ampi_meetings_2016_draft_agenda_25_jan.pdf

⁴³ <http://news.abidjan.net/h/580613.html>

⁴⁴ <http://www.worldbank.org/en/topic/financialinclusion/brief/achieving-universal-financial-access-by-2020>

The program will address some key challenges to financial inclusion in Cote d'Ivoire, such as agent banking regulation; consumer protection, including an OQSF; microfinance regulation; digitization of tax payments; and data collection and monitoring to track financial inclusion progress.

The **MasterCard Foundation** supports several development actors in the zone, including IFC, UNCDF's MM4P, and CGAP; it also directly supports organizations with innovative DFS projects that can increase financial inclusion for rural populations, in line with its rural and agricultural finance priorities. It has provided funding, through the Partnership for Financial Inclusion Program, for MicroCred's agent banking pilots in Senegal and Madagascar, and is providing additional funding separately to Microcred for agent banking pilots in sub-Saharan Africa, including Senegal, Côte d'Ivoire, and Mali. In addition, three DFS projects supported by the Foundation's fund for rural prosperity are in Côte d'Ivoire.⁴⁵

CGAP, which has supported the development of the DFS ecosystem in WAEMU since 2012, is recognized in the zone for being neutral, research-based, and learning-driven, as well as for its collaboration with and technical assistance to BCEAO. Section 1.1 summarizes CGAP's work in WAEMU to date.

7. OTHER TRENDS TO MONITOR

This section summarizes other dynamics not previously discussed in-depth that could shape the evolution of the DFS market in WAEMU.

7.1 Improving access to the internet and smartphones

In 2014, an average of 8 percent of all individuals in WAEMU accessed the internet; Cote d'Ivoire and Senegal took the lead with 14.6 percent and 17.7 percent, respectively, of individuals accessing the internet (see Table 3). While the proportion of individuals accessing the internet remains low, this figure is growing; several initiatives at the national and regional levels are underway to expand the fiber-optic infrastructure in West Africa that should also increase access to internet in these countries.

In parallel, phone manufacturers are increasingly building low-cost smartphones aimed at emerging economies. GSMA estimates 525 million smartphone connections in sub-Saharan Africa by 2020 (up from only 72 million at the end of 2013), accounting for more than half of the total connection base at that date (GSMA 2015). Government initiatives are also underway to make these phones more affordable to consumers, such as Côte d'Ivoire's recent exemption of smartphones and laptops from value-added tax (VAT) and customs taxes.⁴⁶

In addition, MNOs are proactive in ensuring that subscribers can access smartphones: MTN Benin's procurement team, for example, has focused on acquiring 3G smartphones for its customers that retail at cheaper than average prices.⁴⁷ Likewise, other companies whose business depends on clients' access to the internet have gotten involved: Jumia, for example, sells basic smartphones preloaded with its own shopping application.

⁴⁵ <http://www.mastercardfdn.org/expanding-rural-and-agricultural-finance/>. The three projects selected in Côte d'Ivoire have been developed and will be piloted by Biopartenaire, Banque Atlantique, and Prepez Technology Limited.

⁴⁶ See <http://news.abidjan.net/h/574022.html>

TABLE 3. Internet Access Figures By Country (2014)

Country	% of individuals accessing internet
Benin	5.30
Burkina Faso	9.40
Côte d'Ivoire	14.60
Guinea-Bissau	3.32
Mali	7.00
Niger	1.95
Senegal	17.70
Togo	5.70
Average	8.12

Source: ITU (2015).

Greater access to the internet combined with improved access to data-enabled smartphones can help facilitate greater uptake of DFS and financial inclusion in several ways:⁴⁸

- Globally most MM schemes rely on USSD protocols for communication, which requires consent of MNOs. Using data bundles over smartphones may enable various non-MNO DFS providers to interact directly with consumers without the direct involvement of the mobile operator.
- By de-linking the SIM card from the MM service, smartphones can lower barriers to entry for a greater diversity of players to capitalize on the MM opportunity.
- Smart phone applications have the potential to offer more intuitive user interfaces that could be tailored to low-income and illiterate users.
- The expansion of users' "digital footprints" online can enable innovations in credit underwriting and new ways for assessing the creditworthiness of poorer individuals and those enterprises currently without access to finance.

7.2 Banking as a core service of MNOs

In March 2015, Orange confirmed the group's ambition to diversify its operations, in particular by concentrating on mobile banking, which is expected to generate 400 million euros in revenue in 2018. In early 2016, Orange announced⁴⁹ it was negotiating to acquire a majority stake in Groupama Banque, enabling it to benefit from an existing operational infrastructure for the launch of Orange Bank, which will be 100 percent mobile. The services offered will cover all standard banking services, including savings, loans, and insurance. It plans to compete with traditional banks mainly on pricing and on better "push" marketing.⁵⁰

⁴⁷<http://www.africanbusinessreview.co.za/MTN-Benin/profiles/64/MTN-Benin-stimulates-massive-growth-in-mobile-money-and-data-services>

⁴⁸ See, for example, Chen (2015) and Breloff (2013).

⁴⁹<http://www.orange.com/en/Press-and-medias/press-releases-2016/Groupama-and-Orange-enter-exclusive-negotiations-for-the-creation-of-Orange-Bank-an-innovative-100-mobile-bank>

⁵⁰ Ibid.

Although plans have been announced thus far to launch only in Europe, there is speculation that this model will eventually be introduced into Orange's African businesses, where it is already offering DFS. While MNOs must partner with financial institutions for offering second-generation products in WAEMU, the potential for MNOs to instead acquire financial institutions is an alternative strategy for nonbank actors to enter the realm of financial services and compete directly with banks and MFIs.

This strategy has already been attempted elsewhere. For example, in Pakistan, Telenor bought 51 percent of Tameer Microfinance Bank's shares in 2008, after which it started Easypaisa, a mobile financial service that now has 55 percent market share in the country and accounts for 10 percent of Telenor's revenues.⁵¹ The service is often credited with driving the adoption of mobile financial services/branchless banking in the country (McCarty and Bjaerum 2013). However, Telenor has also struggled to convert customers from using Easypaisa OTC services to migrating them to the mobile wallet, where the company can offer its customers a greater range of products and earn greater margins (McCarty and Bjaerum 2013).

8. KEY CONSTRAINTS AND RECOMMENDATIONS FOR DFS MARKET DEVELOPMENT

Since 2006, BCEAO's regulation on e-money has encouraged the development of MM in WAEMU including by allowing nonbank institutions to offer such services. DFS has a strong potential to contribute to financial inclusion but the opportunities remain largely untapped across the eight WAEMU countries. Even though there are some outstanding challenges with the regulatory framework for DFS that need further consideration, efforts by other market actors are also required. The private sector needs to step up its efforts and investments if financial inclusion is a priority; focus should not only relate to the supply of DFS but also with some of the supporting infrastructure needed to make the market more effective. Governments can also play a role in the development of the market for DFS. Ultimately, the DFS market should be as open as possible to allow a broad range of stakeholders to deliver innovative solutions for reaching excluded segments and offer services tailored to their needs while ensuring that it is working efficiently and responsibly toward customers.

This section summarizes the underlying systemic reasons identified by the study that help to explain why digital channels have not yet brought about deeper financial inclusion in WAEMU, and presents some actions that could be taken to address these barriers.

8.1 Regulatory and supervision framework, capacity, and approaches

While the 2015 e-money instructions and the expressed intentions of certain telecom authorities in the zone to intervene to ensure a competitive MM/DFS market are positive developments, **the overall regulatory framework (i.e., national and regional) remains unclear or incomplete on certain aspects**, which inhibit DFS market development.

Specific areas of the regulatory framework that need further clarity are described in the following. **Note that these "gaps" in the regulatory environment are the**

⁵¹ <http://propakistani.pk/2015/09/10/exclusive-telenor-is-close-to-buying-100-shares-in-tameer-bank/>

domain of BCEAO, regional and national telecom authorities, and national governments. Fiscal policies, plans for the deployment of national identifications and verification, the digitization of its bulk payments (either as receiver or sender), and the development of ICT sectors can all greatly influence the evolution of the DFS market. This requires, however, a shared vision and coordination across all departments of governments, beyond just the Ministries of Finance.

As mentioned earlier, the appearance of relatively “new” types of actors in the financial sector, such as technology companies and vast agent networks in rural areas, has made it complicated for regulators to create a regulatory framework that sufficiently minimizes risk to the financial system without sacrificing the potential for financial inclusion offered by these new actors and their services. **As the ecosystem for DFS continues to evolve in WAEMU, regulatory authorities will need to ensure a collaborative approach that considers the opportunities and risks posed by DFS from multiple perspectives, including payment systems, OTC providers, high-volume payments (e.g., B2B/G2P/P2G), financial inclusion, etc. Building the capacity and securing resources to adequately supervise and monitor the diverse actors in the ecosystem will be equally critical.**

The development of the DFS market and the likely increase in the number and type of EMEs will require adaptations within BCEAO—both at the headquarters and country level, as well as within the Banking Commission of WAEMU, which provides part of the supervision of MFIs. These actors will need to ensure that they have the capacity—both in terms of number and skills of personnel—to (i) analyze requests submitted and respond appropriately and in a harmonized manner across the eight countries, and (ii) supervise these actors and their operations and identify risks at all levels, particularly in regard to customer protection.

As mentioned, BCEAO has developed a specific monitoring and supervision framework for e-money issuance and distribution activities; it plans to reinforce staff capacity in this regard and deploy an adopted MIS for tracking these activities.

The study also noted uneven levels of awareness and understanding of BCEAO regulations, which sometimes resulted in confusion for market actors about what is truly allowed, at what cost, etc. More efforts to ensure that all actors possess the appropriate level of understanding would be beneficial for market development.

In general, regulators should continue to prioritize the following:

- Engaging in frequent and ongoing consultation with market actors.
- Ensuring adequate resources and data mining tools to analyze reported data are available.
- Ensuring availability of it tools and teams responsible for technical audits.

Specific areas of the regulatory framework that could benefit from further clarity are described in the following.

8.1.1 KYC and identification

While a positive step has been taken toward financial inclusion with higher limit for unidentified customers to transact on their e-money accounts (200,000 FCFA

per month), no provider is currently offering this possibility to customers. As such, BCEAO might consider engaging further with providers on this front to ensure that at a minimum they become aware of the opportunity; BCEAO might want to understand the reasons for EMEs not offering this option and create incentives accordingly.

Beyond the monthly threshold of 200,000 FCFA, a form of identification is, however, required and thus will continue to be a barrier for many potential customers. Similarly, barriers exist for opening accounts at financial institutions that have stricter KYC requirements, thus limiting the reach of innovative, generation products such as digital credit.

Introducing **risk-based KYC requirements** for both accounts at a financial institution and with e-money issuers could be useful to consider for future KYC guidelines. With an approach proportional to potential risks, whereby the level of KYC increases in accordance to higher transaction amounts as well as the nature of services/transactions, would address some of these barriers and advance financial inclusion. Several countries across the globe such as Pakistan, Mexico, Colombia have adopted different levels of KYC required for different services. For example, the Central Bank of Mexico introduced in 2011 a risk-based KYC requirements for opening requirements for low-value accounts. It incorporated several “levels” of simplified accounts – opening requirements increase progressively as such restrictions on transactions are eased. Evidence suggests that since implementation the market has responded positively with 9.1 million accounts opened in the two years that followed the introduction of tiered-KYC approach (Faz 2013).

In addition to adapting KYC requirements, **BCEAO may want to consider identification efforts at both the regional and national levels. Identification systems that are accessible, reliable and verifiable are key factors to advance financial inclusion.** As promoters of financial inclusion, financial regulators need to assess whether national ID strategies are adequate for this goal and what can be done to influence these efforts (Porteous and Bansal, 2016).⁵² This is especially important in the context of the regional financial inclusion strategy spearheaded by BCEAO.

A recent study from the Institute of International Finance (IIF) and the Center for Financial Inclusion (CFI) shows that one of the factors for banks to successfully serve the low-income segment is the ability to do remote customer acquisition; in particular, this is enabled when biometric national ID systems are combined with proportional KYC to ensure simple, flexible, and self-service account opening.⁵³

8.1.2 Agent banking regulation

Aside from the IOB model, there seems to be little possibility for financial institutions to reach new clientele without extending their network of expensive physical branches. Indeed, regulation currently doesn't offer an entryway into agent banking for MFIs; only banks can leverage alternative delivery channels through the

⁵² <https://blogs.afii-global.org/2016/05/28/the-case-for-financial-regulators-to-take-an-active-interest-in-national-identity-strategies/>

⁵³ http://www.centerforfinancialinclusion.org/storage/documents/IIF_CFI_Report_FINAL.pdf

IOB model. However, The IOB model has seen only a few deployments, and only one specifically intended to allow the bank to reach a new clientele closer to the BoP. This may be due to a lack of awareness of the benefits of this model or the regulatory framework not be adapted.

In addition, the November 2015 guidelines (N°013-11-2015) on money transfer agents' activities creates another challenge. Although it clarifies the responsibilities between financial institutions and subagents, it makes it impossible for banks to deploy agent banking outside the IOB model and excludes de facto MFIs given the absence of specific regulation.

BCEAO, in view of its goal of increasing financial inclusion, may wish to **clarify and adapt the IOB regulation, extending the regulation to MFIs**. In addition, it is important to **harmonize the regulatory framework for agents both for financial institutions and nonbank providers such as EMEs; risks can be considered based on the type of products offered not on the type of provider**. When the regulation is provider-neutral, the likelihood of having a more consistent supervisory approach across different provider types is greater. Discretion to be more or less strict in the supervision of each provider according to its risk profile can still be exercised. Provider neutrality in the regulation also reduces the risk of potential providers choosing an institutional type because of more lenient regulatory requirements and creates the foundation for a level playing field (Dias et al. 2015).

8.1.3 Nonbanks agent recruitment criteria

As described in Section 5.1, the majority of financial service access points of all types tend to be concentrated in urban centers. From a financial inclusion perspective, agent networks in WAEMU must grow in a sustainable manner (i.e., agents remain active after recruitment) to serve rural populations that still do not have access to any financial services aside from traditional savings groups, informal loans, etc.

Current BCEAO regulations require both MM and OTC agents to have businesses registered with the Registry of Trade and Property Credit, or another equivalent registry. The same requirements apply to merchants who accept MM payments. However, registered businesses are not always easy to find, especially in rural areas. **More flexibility in these requirements could help DFS providers expand their agent networks as well as network of merchant acceptors.**

8.1.4 Access to USSD channels

To enable competitive markets that also promote financial inclusion, **telecommunications authorities, competition authorities and the BCEAO could initiate a dialogue in consultation with market actors to better assesses the problem of access this channel, under what conditions, the process for requesting access.**

In particular, regulators may consider the following recommendations (Hanouch and Chen 2015):

- **Encourage agreements between market players** through light-touch moral suasion, communicating a preference for MNOs to provide access to USSD (together with reasoning for this preference).

- **Establish dispute settlement mechanism** to allow the regulator(s) to understand the considerations of all stakeholders and recommend ways forward without introducing a heavy hand of regulation.
- **Explore regulatory options** in case a dispute mechanism does not result in a mutually agreeable outcome, and the non-provision of USSD is found to seriously hamper competition.

8.1.5 Interest rate caps on loans

Maintaining relatively low interest rates on loans, especially to lower-income groups, can help advance financial inclusion in many ways. However, FSPs must also be incentivized to sustainably serve these groups and the BoP in general. Since both this consumer segment and DFS are relatively new for most FSPs in WAEMU, FSPs' aversion to risk must be balanced with sufficient incentives.

The type of digital microcredit offered by m-Shwari in Kenya, for example, would be a challenging model to replicate in WAEMU partly because of the interest rate caps on credit (15 percent for banks and 24 percent for MFIs). BCEAO could **develop specific rules for digital credit involving small amounts that could justify a higher cost in return for other benefits offered to customers** (e.g., no transport or time costs, immediate availability, automatic renewal, etc.).

8.1.6 Interoperability

BCEAO is currently considering its role in facilitating interoperability particularly to develop a framework to support the process. It would be desirable for BCEAO to **articulate a clear vision for interoperability** in the near future, which encompasses MM and other types of payment instruments (i.e., accounts at financial institutions, e-wallets, cards).

However, this vision for WAEMU as a whole will need to be **balanced with an approach that is also adapted to the DFS market of each country**. As the need for different types of interoperability is highly market-specific, the vision must be based on **close consultation with stakeholders**. The private sector should play a significant role in this process—and ideally be allowed to lead or determine significant portions of it. BCEAO could also use this opportunity to **clarify the role and capacity of the GIM-UEMOA** moving forward.

8.1.7 Use of e-signature

A signature is generally necessary for clients to open accounts, apply for loans, and conduct various other financial transactions. Currently, such transactions can be finalized only at a financial institution; however, **the use of electronic signatures could facilitate DFS sector development, especially the automating of account openings and loan approvals** (in the case of digital credit). The bank SIB in Côte d'Ivoire, for example, that is participating in a IFC/World Bank, Cargill, and Orange project to digitize payments to cocoa farmers was compelled to deploy its teams to register participating farmers for SIB accounts in-person. However, the bank would have saved time and resources if electronic signatures had been acceptable for account opening.

While the legal framework on payment systems in WAEMU allows the use of electronic signatures, an independent certifying organization approved by BCEAO to verify these signatures is a prerequisite,⁵⁴ and this is not yet in place. The WAEMU Commission previously had an initiative to respond to this need and harmonize certification standards across the eight WAEMU countries; the project was suspended but is reported to have recently been reactivated. Côte d'Ivoire is an exception: the telecom regulator ARTCI has recently approved three companies to verify e-signatures.

Since the mandates and scope of telecom authorities vary across countries, the e-signature may or may not fall within their jurisdiction or current priorities. **It would therefore be desirable for national telecommunications authorities and BCEAO to collaborate to clarify the recognition, the verification and use of e-signatures for offering DFS on a country-by-country basis.**

8.1.8 Framework for B2B and bulk payments

The current e-money regulations are largely geared toward small-value, low-volume transactions and do not sufficiently account for the very large amounts and high volumes involved in business-to-business (B2B) and bulk payments. The current regulatory framework could be adapted to also address risks associated with such payments, while simultaneously encouraging the digitization of these money flows, especially from or to government actors. Regulations can also encourage actors to provide these payments in a manner that promotes financial inclusion (i.e., by not requiring beneficiaries to withdraw all of their funds at once or offering them a low-cost savings account in which to store the funds) (UNCDF/MM4P 2015).

8.2 Distrust between MNOs and financial institutions

Distrust between the two key sets of DFS providers—namely, MNOs and financial institutions (banks and MFIs)—is a principal reason why we have not seen more “deeper” partnerships that offer DFS beyond cash-in/cash-out, P2P transfer, and bill payments. While these are starting to develop in some of the more advanced WAEMU markets, it is still rare for financial institutions and MNOs to view each other as valued partners whom they trust and prioritize in their future growth strategies. Even those co-developing new products with MNOs tended to view such partnerships on a “product” or transactional basis, rather than a long-term partnership (the exceptions to this are the pan-African banks that made the decision to partner with MNOs at the group level).

Although the lack of strategic partnerships is also due to other important reasons, such as a lack of capacity and strategic vision on DFS within certain institutions, there also seems to be a fear among financial institutions—particularly MFIs—that MNOs will soon directly compete with them for the same clientele, especially with news of Orange building a mobile bank in Europe. Banks seem to be more confident of their market position, claiming that MNOs cannot do a banker’s job, with all the administrative and fiduciary obligations that come with it.

From a financial inclusion perspective, partnerships between MNOs and financial institutions in the region will hopefully grow, enabling the development of an

⁵⁴ Abdourahmane Niang, Juriste à la Direction des Affaires Juridiques, BCEAO. « LA PREUVE ELECTRONIQUE DANS L'UEMOA ». 27-30 avril 2011. http://www.ajbef.org/Evenements/La_preuve_electronique_dans_l_UEMOA.pdf

expanded range of second-generation DFS, such as what we see in Kenya. This a stage can be characterized as “co-opetition” (EIB and UNCDF 2014):

*“Co-opetition,” a combination of cooperation and competition, becomes increasingly prominent as markets develop and move into the expansion and consolidation phase. At a minimum for DFS to begin, MNOs require banks to hold their float and banks require MNOs to issue a “short-code” (e.g., *123#) for their customers to access their account over a mobile phone. As the market progresses, more advanced forms of partnerships develop and the MNOs and banks, as well as third parties, may start to provide more integrated services, while at the same time compete for the same customers. Partnerships begin to develop in order to be able to offer things like agent management, liquidity management, and second-generation products such as savings, loans, and insurance, and to share agent networks and achieve direct interoperability between wallets and accounts.*

8.3 Vision and capacity of the private sector

As in most markets, senior management of key actors play a critical role in prioritizing the company’s or institution’s development and marketing of new products. A key constraint identified by this study is that **the management of many banks, MFIs, and even some MNOs are simply not convinced of the “business case” of growing their DFS offering**—they view it as too risky, not profitable enough, and/or they are not aware of the potential solutions from other contexts that digital channels could provide. Many actors are instead taking a wait-and-see approach.

In the case of MNOs specifically, voice/airtime continues to account for the majority of MNO revenues: in Côte d’Ivoire for example, MM accounts for only 5.4 percent of total MNO revenues.⁵⁵ Even in Kenya, Safaricom’s voice services contribute more than half of its total revenues, with M-Pesa making up 20 percent of total sales.⁵⁶ Other services such as internet/data may be driving MNO growth: this is the case, for example, with MTN in Côte d’Ivoire,⁵⁷ and this explains why most MNOs are prioritizing investment in building 2G and 3G (and in more advanced markets, even 4G)⁵⁸ network infrastructure. Even though internet access can help to facilitate distribution of DFS products, operators appear to be counting on driving data consumption through entertainment offers (e.g., online music, video streaming) instead.

The relative importance of other revenue streams helps to explain why MNOs are not prioritizing DFS, especially second-generation products. Indeed, even in Safaricom’s case, significant donor funding served as an incentive for Safaricom to pilot the M-Pesa service.

In the case of MFIs specifically, a lack of capacity and resources—in terms of finances, human resources, and MIS—pose major challenges. Business models and strategies that have been successfully adopted by MFIs in the zone to offer such

⁵⁵ ARTCI. “Breakdown of revenues by service, 4th quarter 2015.” <http://www.artci.ci/index.php/Telephonie-mobile/chiffre-daffaires-service-mobile.html>

⁵⁶ Safaricom Annual Report 2015. http://www.safaricom.co.ke/images/Downloads/Resources_Downloads/annual_report_2015.pdf

⁵⁷ MTN Group. “Results presentation for the period ended 30 June 2015.” Slide 38. https://www.mtn.com/Investors/MoreinInvestors/Documents/Presentations/2015/IR-Presentation_2015.pdf

⁵⁸ <http://www.jeuneafrique.com/mag/235254/economie/les-operateurs-telecoms-africains-se-tiennent-pret-a-surfer/>

services also remain rare, contributing to the hesitation of already under-resourced MFIs to enter this new sector.

What is clear, however, is that where actors are innovating to grow their DFS offering, it is because of a strategic decision made by top that sees potential for DFS beyond short-to-medium term profitability.

Regulators, policy makers, and donors may therefore need to play a stronger role in encouraging providers to develop DFS products suited for lower-income populations until the use case for such services has been better established in WAEMU. This could be done, for example, through supporting providers who have shown a commitment to using alternative digital channels, “buying down risk” of testing new DFS models through co-financing or technical support, and supporting initiatives that fill the information gaps discussed (see Section 7.5).

8.4 Agent network development

A core pillar of DFS market development is the robustness of the agent network. Current networks without doubt need to be expanded not just in number, but also location (i.e., in rural zones)—objectives that most DFS providers seemed to share. However, this growth needs to be sustainable to ensure that agents remain active, provide good quality of service, and are sufficiently liquid, which implies that supporting infrastructure such as telecom network coverage, and partnerships between DFS providers, actors that can provide credit to agents/master agents to ensure liquidity will also need to be developed. **Ongoing support in terms of marketing advice/training to help agents grow their businesses (and remain active) and monitoring to ensure their compliance with KYC and AML/CFT requirements are also critical.**

8.5 Information to facilitate decision-making

As mentioned in Section 5.6, **up-to-date, relevant information on supply and especially demand for DFS continues to be limited, particularly for less mature DFS markets in the zone such as Benin, Niger, and Togo. This also means that market actors cannot estimate the potential revenue of the BoP.**

Table 4 highlights examples of information that could help to complete our understanding of the DFS market in WAEMU and enable decision-makers to make better-informed choices.

Beyond the availability of such information, little is known about **different actors’ capacities to independently seek out, access, and use the information in their decision-making.** Much of the information that is available today is presented in the form of statistical tables and reports, which may limit its user friendliness. **Future information collection and knowledge sharing initiatives should consider presentation and communication aspects as early on as possible, and as being equally important to the actual content.** Tracking use of the final product should also be prioritized.

8.6 Merchant payment models

As mentioned in Section 5.3 on merchant payments and networks, finding a business model that sufficiently incentivizes both merchants and customers to use digital

TABLE 4. Examples of Information Gaps of the DFS Market

Supply-side Information	Demand-side Information	Other Market Information
<ul style="list-style-type: none"> Number and locations of active financial service access points (ATMs, bank and MFI branches, MM and OTC agents), taking care not to double-count points that offer multiple DFS products 	<ul style="list-style-type: none"> Segmentation of populations according to financial service needs (i.e., what they consider to be valuable in a new product or service), and also taking into account their current money management habits, access to financial services (both formal and informal), net worth/assets, etc. 	<ul style="list-style-type: none"> Case studies of collaboration among different regulators (e.g., central banks, national government departments, telecom authorities) to build a holistic framework for the DFS market.
<ul style="list-style-type: none"> Better and deeper understanding of current offering of DFS, understanding quality issues, what works and doesn't work for serve BoP. 	<ul style="list-style-type: none"> Insight on how to frame and communicate financial products in a way that "speaks" to target consumers' needs. 	<ul style="list-style-type: none"> Studies identifying key success factors for DFS from other similar contexts.

payment channels is challenging even in advanced DFS markets. However, some solutions are starting to emerge in the form of providers building into their payment tools a suite of value-added services to merchants using digital payment channels, including "tools that provide simple records, reports and analytics on their business; basic customer relationship management, including offers and loyalty schemes; management of store credit; supervision of staff; payment of suppliers; inventory management; and credit scoring for formal working capital, to which most of them have little access" (Zetterli and Lyon 2015).

However, these solutions are yet to be proven and DFS providers will need to invest in further exploration and pilots.

8.7 Political will and capacity

Lack of sufficient infrastructure, education in general, and financial literacy specifically, is the most commonly cited constraint to greater DFS uptake. However, the root cause of many of these seems to be national political will and capacity: to build the needed infrastructure (and to incentivize MNOs to deploy telecommunications infrastructure in rural areas where population density and per capita income is low, and transmission and power costs would be high); to operate an educational system that ensures at least a minimum level of schooling and literacy of the entire population; to design, resource, and implement a financial inclusion strategy that prioritizes financial education; to incentivize digital payments versus payment in cash (e.g., by exempting digital payments from taxes⁵⁹); and to digitize P2G and G2P payments to the maximum extent possible.

The key recommendation here is for national governments, in collaboration with BCEAO and telecom authorities, to prioritize these issues. The regional financial inclusion

⁵⁹ For example, in Côte d'Ivoire for a cash-in operation you have to pay a tax of 100 FCFA.

strategy developed by BCEAO offers a good framework for such efforts. Donors and development actors can support the implementation of this strategy through funding, technical assistance, and encouragement to government partners to prioritize this work.

9. COUNTRY SUMMARIES

This section summarizes the learnings from interviews held with key stakeholders in each of the selected countries and from relevant literature. The profiles are not meant to be exhaustive, rather they aim to provide a deeper look at the dynamics of the DFS sector in each of the selected countries, which represent different stages and pathways of DFS market evolution. Some key demographic and financial inclusion indicators for each country from various sources are included. Both BCEAO and Findex data on financial inclusion and DFS activity rates are included; there is occasionally some dissonance between the two sources that can be attributed to different methodologies and timing of data collection (see Box 1 in Section 2).

This section also offers a more detailed look at the different strategies that certain market actors are adopting, and their reasons for doing so.

9.1 Benin

With an economy still based largely on subsistence agriculture, but growing steadily based on cotton exports, the GDP per capita for the population of almost 11 million⁶⁰ grew from US\$690 in 2008 to US\$903⁶¹ in 2014. For 2015, growth was projected at 5.6 percent, again due to the expected increase in agricultural production, specifically cotton production, which was estimated to grow by about 10 percent compared to 2014 (African Development Bank 2015d).

It also appears to be one of the youngest but highest potential markets for DFS in WAEMU, with the third highest number of MM subscribers in WAEMU (2.3 million) after Côte d'Ivoire and Mali. Value of MM transactions also grew six-fold between year-end 2014 and September 2015 (BCEAO 2015c).

In spite of this potential, significant obstacles still remain, namely infrastructure: the telecom regulator, ARCEP, rated the quality of 2G voice services across the country at 39 percent with some parts of the country having less than 5 percent coverage (SFM Telecom 2016).

Agent networks also remain underdeveloped especially in rural areas: data from MIX Finclusion Lab show that rural, inland communes typically have five or fewer FSP access points per 10,000 people, as compared to 35 for Cotonou and 15–20 for the other main cities. As illustrated in Figure 5, some of the communes with limited access also have the highest population growth rates, setting the stage for access to financial services in these areas to deteriorate even further.

It is perhaps not surprising then that, according to the Global Findex (2014), only 2 percent of the adult population had used a MM account in the 12 months preceding the survey in spite of mobile penetration rates of more than 80 percent.

⁶⁰ UN World Population Prospects, 2015.

⁶¹ World Development Indicators, 2014.

TABLE 5. Financial Inclusion Indicators—Benin

Indicator	Value	Notes
Estimated total population (millions)	10.88	United Nations (World Population Prospects, 2015)
Adults as % of total population estimate	58%	United Nations (World Population Prospects, 2015)
Estimated adult population (millions)	6.3	United Nations (World Population Prospects, 2015)
GDP per capita (USD)	903	World Bank World Development Indicators. Data from 2014.
% of population below poverty line	53.1%	Defined as the % of total population living on less than \$1.90 a day. Data as of 2010. Source: Poverty & Equity Databank and PovcalNet
Internet users (per 100 people)	5.3	Internet users are individuals who have used the Internet (from any location) in the past 12 months. Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. Source: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates (2014)
Access to electricity (% of population)	38%	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys, and international sources. 2012 estimates. Source: World Bank, Sustainable Energy for All (SE4ALL) database from World Bank, Global Electrification database.
% of population in rural areas	56%	World Bank staff (2014) estimates based on United Nations, World Urbanization Prospects.
Estimated literacy rate (% of adult population)	38.4%	2015 estimate. Adult literacy rate is the percentage of people age 15 and over who can read and write. Source: CIA World Factbook.
Mobile penetration rate (% of population)	85%	As of Q4 2015. Measured by the number of SIMs in circulation versus total population so there is a risk of double/triple counting since a number of people have multiple SIMs. Source: GSMA Intelligence 2016.
Total financial inclusion (% of adult population, including MFIs, Poste, MM)	17%	Denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months (% age 15+). Source: Global Findex 2014

(Continued)

TABLE 5. Financial Inclusion Indicators—Benin (Continued)

Indicator	Value	Notes
Formal financial inclusion not including MFI accounts (% of adult population with bank accounts)	17.05%	BCEAO. Information note, Number 44. 4th trimester 2015.
Number of MM subscribers (millions)	2.3	BCEAO, September 2015
% of active MM subscribers (BCEAO)	40.8%	BCEAO, September 2015. However, this data point is higher than what is reported by the MNOs themselves and is therefore suspected to be an over-estimation; CGAP estimates put the proportion of active MM clients between 6% and 20%.
% of population age 15+ with an active MM account (Global Findex)	2%	Denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). Source: Global Findex 2014
MM transaction values in 2015 (billions FCFA)	119	BCEAO, September 2015. This figure represents values only up to September 2015.
MM transaction values 2014 (billions FCFA)	19	BCEAO, 2014. This figure represents 2014 transaction values.
Volume of remittances received (\$USD millions)	204	2014 estimates. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
Volume of remittances sent (USD millions)	88	2012 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data

9.1.1 MNOs

Five MNOs are present in the country, but two dominate in the voice market (MTN and Moov), and these are also the only two that have MM offers. The MM service offer largely consists of airtime top-up, cash in/out, and domestic and regional transfer. Bill payment is offered only for TV (canal +).

MTN has seen impressive growth recently thanks to significant investment in marketing and extension its agent network: MM transaction values grew from 1.6 million FCFA in January 2014 to an estimated 80 million FCFA by July 2015.⁶² And since 2009, it has grown from having 140 agents and 30,000 registered subscribers to having

⁶² <http://www.africanbusinessreview.co.za/MTN-Benin/profiles/64/MTN-Benin-stimulates-massive-growth-in-mobile-money-and-data-services>

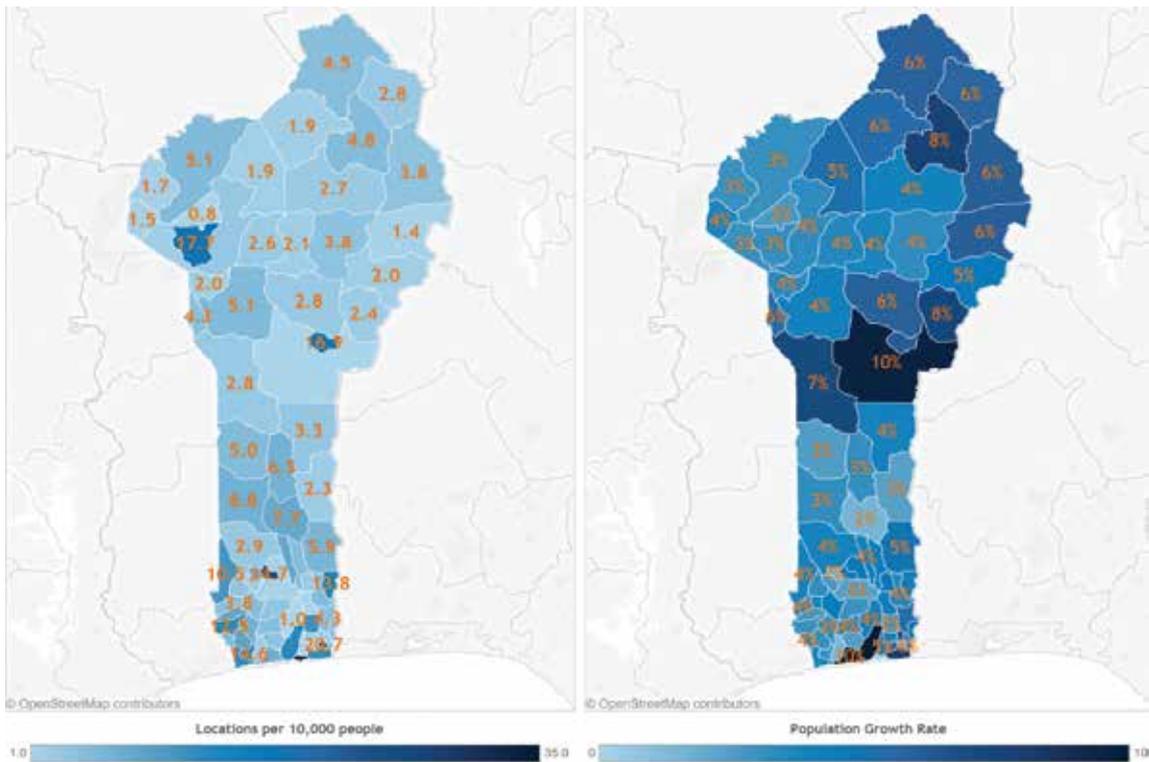


FIGURE 5. FSP distribution relative to demand

Source: MIX Finclusion Lab

over 7,000 agents and 1 million MM wallet holders as of November 2015.⁶³ It has also developed some innovative products such as an insurance service for motorcyclists, whereby the fees and payouts are done via MM. In addition, MTN has signed a partnership with Western Union in 21 countries, including Benin, that allows money transfers to occur without a bank account and put directly into the MTN MM e-wallet.

MTN's main competitor, **Moov**, has the remaining 1.3 million MM subscribers.⁶⁴

Both MNOs' priorities for the short-term seem to be building their merchant acceptance networks and encouraging salary payments to be made directly into the mobile wallets of staff. In addition, addressing high rates of inactivity among existing agents and improving the client use experience/client journey to improve client activity rates were recognized as important. Second-generation products, however, were not yet clearly identified as priorities.

Both MNOs have also put much effort in encouraging government agencies to digitize bill payments for water, electricity, and school fees. As of May 2016, Moov and MTN are in discussions with the government-owned electricity and water companies to launch a bill payment pilot in partnership with MFS Africa.

Relative to more mature markets, in Benin, partnerships seem to be quite challenging to develop between MNOs and other structures such as enterprises, merchants, and financial institutions, particularly MFIs.

⁶³ Ibid.

⁶⁴ September BCEAO 2015 statistics estimate 2.3 million accounts in Benin.

TABLE 6. MNO MM Offers in Benin

MNO MM offer	Products				Total number of MM accounts (rate of activity) ^a	Estimated agent network
	Bill payments ^b	Bank account-MM link	Cross-border transfer within WAEMU	Other products		
	X (TV)		X (with Flooz Côte d'Ivoire, Niger, Togo)		2.3 million (41% active)	9,000 agents
	X (TV)		X (with MTN Côte d'Ivoire & Airtel Niger)	<ul style="list-style-type: none"> ■ Insurance product for motorcyclists in partnership with NSIA. Fee (5,000 FCFA per year) collected directly from MM account and payouts also done via MM.^c ■ Group-level agreement with Western Union that allows money transfers to be made directly into MTN MM wallets in 21 countries, including Benin 		

a. Unless indicated otherwise, figures are from BCEAO (2015c). Activity rate is over 90 days.

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. <http://www.mtn.bj/fr/mobile-money/les-services-mobile-money/Pages/assur-zem.aspx>

Wari has also been in Benin since 2012. It currently offers P2P transfers, domestic and international (to 12 countries) transfers, and like the MNOs, it hopes to offer P2G bill payments. Eventually, it would also like to offer airtime sales, salary payments (withdrawals), and the GIM card, which it is piloting in Senegal. It would also like to partner with MFIs to offer cash in/out from MFI client accounts at Wari service points. Wari sees itself as a direct competitor to MNOs' MM offerings, claiming to have a maximum transaction amount that is larger than MNOs' MM transfer limits and cheaper rates.

9.1.2 Banks

Principally serving an urban clientele, Benin had 15 registered banks as of September 2015. In general, banks here did not show a strong interest in serving the BoP, as confirmed by the report of one MNO, for example, that banks did not seem interested in developing a credit product delivered via MM. MIX Finclusion Lab data confirm that commercial banks remain extremely concentrated in Cotonou (Figure 6)

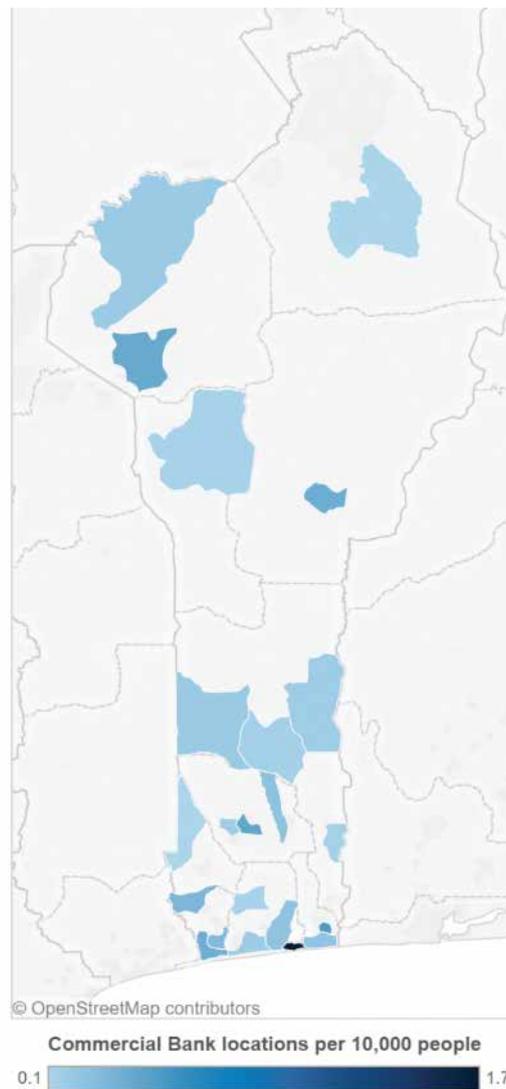


FIGURE 6. Commercial bank locations in Benin
Source: MIX Finclusion Lab

As in the rest of the region, it is principally pan-African banks who are partnering with MNOs as their e-money issuing partners and developing some digital products such as prepaid cards, SMS banking, and account-to-cash,⁶⁵ although these largely target existing clientele. Some banks such as Orabank have a “meso” finance pole and are therefore attentive to opportunities and channels that allow them to target “low-end” segments. In addition, other banks are in discussion with operators on opportunities to launch specific DFS products, as part of a strategic partnership.

9.1.3 MFIs

MFIs have a strong presence in the country, they are present in all 12 departments and are prioritized by the government in its poverty reduction strategy. As of June 2015, there were 54 registered MFIs; however, only a few dominate the sector: FECECAM, PADME, and Vital Finance.

Hundreds of unauthorized and unregistered MFIs are also known to be operating in the country, and the sector has suffered from severe governance scandals that have weakened the public’s trust in it. In addition, many MFIs are reported to have MIS that are not capable of adequately tracking client data or performing advanced real-time portfolio analysis. The microfinance development policy (updated in 2013) therefore prioritizes a “clean up” of the sector by reducing the number of unauthorized MFIs operating, increasing consolidation (mergers) among existing MFIs and professionalization of the sector.

MFIs here generally seem reluctant to invest in DFS. They often express a fear of sharing client information with MNOs, whom they view as a competitive threat and as treading in a domain that is not theirs. Perhaps due to existing challenges with their MIS, they seem reluctant to migrate their services to digital channels. Partnerships among MFIs, MNOs, and OTC providers therefore remain rather basic, with MFIs acting only as MM/OTC agents. They also do not appear to place much value in these partnerships since the revenue generated from them is marginal compared to their earnings from other services.

However, this positioning appears to be starting to change: some are discussing DFS opportunities directly with operators and others are working on independent projects, often with the support of donors.

TABLE 7. Top MFIs in Benin, By Amount of Loans Outstanding

MFI's - most recent data	Report Date	178.3m Loans (USD)	302,839 Borrowers	146.8m Deposits (USD)	648,713 Depositors
FECECAM	2013	66,223,275	—	97,321,181	—
PADME	2014	34,156,734	22,887	9,673,926	63,100
Vital Finance	2013	15,590,460	16,700	3,693,202	29,095
CPEC	2015-09-30	13,750,751	55,633	3,680,056	21,839
PEBCO	2014	10,296,956	67,358	9,485,485	278,549
ALIDé	2014	5,802,472	26,894	3,210,749	41,653

Source: MIX Market. <http://www.mixmarket.org/mfi/country/benin>. Accessed 4 February 2016. Data do not include ASMAB as it does not report to MIX Market.

⁶⁵ This allows bank clients to send money to a nonclient.

9.1.4 Regulators and government agencies

Like other telecommunication authorities in the zone, **ARCEP**, Benin's telecommunications and postal regulatory authority (l'Autorité de régulation des communications électroniques et de la poste) considers MM a "value-added service" rather than a core offering of MNOs. To date, monitoring this service has not been a focus for ARCEP; rather, it has prioritized ensuring quality of service overall (voice/SMS/data) and customer confidence in this quality.

No coordination or cooperation framework has been defined yet between ARCEP and BCEAO. However, ARCEP conducted a study in 2015 to get a better understanding of the roles that each should play in regulating MM: this study recommended that a dialogue between the two regulators should commence, as well as discussions between the Ministries of Finance and Communication to clarify roles.

While not playing a regulatory role per se, **the Agency for Universal Service of Electronic Communications and Post** (Agence Béninoise du Service Universel des Communications Electroniques et de la Poste [**ABSU-CEP**]) was created in 2013 with a mandate to make telecom/phone, internet, and postal service more accessible to the public, including the financial services offered by these actors. Endowed with a starting budget of 15 million euro and over 20 staff, ABSU-CEP has several projects underway that could accelerate connectivity and access to DFS in the country, including the following:

- A universal mobile coverage/service project launched in January 2015 with the aim of ensuring "full coverage of the national territory" by extending cellular infrastructure to as-yet unserved areas. As of November 2015, ABSU-CEP planned to build infrastructure in 41 out of 283 sites identified.
- Growth of La Poste and transformation of La Poste agencies into multimedia centers to enable diverse service offerings such as insurance, online shopping, DFS, etc. ABSU-CEP had already piloted this in certain Poste offices close to national borders in 2015 and is awaiting to see interest expressed by MFIs and other potential partners to redevelop La Poste offices together.

9.1.5 Other actors and developments to monitor

The study also identified other key actors and dynamics in Benin that could influence the development of the DFS sector in the country and potentially influence the greater zone:

- Several DFS providers have been requesting government agreement to offer payment solutions for P2G bulk bill payments (electricity, water, school fees, taxes). As of May 2016, Moov and MTN are in discussions with the government-owned electricity and water companies to launch a bill payment pilot in partnership with MFS Africa.
- **UNCDF's MM4P program** has a mandate to increase active use of DFS by the adult population in the country to 12 percent within five years. Among other activities, it is conducting institutional diagnostics and providing technical assistance to several MFIs to identify ways to integrate DFS in their business model, which may change the nature of MFI/MNO relationships in the country. In addition, they have carried out demand-side research similar to that of the Financial Inclusion Insights (FII) program that is present in other African countries, which combines

a nationally representative consumer survey with qualitative research on consumers, MM agents, and other market actors.

- Facing challenges in finding sufficient clientele for its products, a technology company partnering with payment providers to offer money transfer and bill payment services may soon undergo a strategic change to start developing its own network of agents/service points. However, the company had not yet found investment for this expansion. The outcome and success of its planned transformation could affect DFS in the WAEMU zone as it is present in several WAEMU countries.
- Benin’s Prime Minister’s office (**Office de la Primature**) had an ambitious initiative underway at the end of 2015 to facilitate the market for solar products, including establishing a large-scale access-to-finance program; piloting a pay-as-you-go via MM model with GSMA and several solar companies; and undertaking a mass distribution of solar lamps in schools as a way to raise awareness and build market demand. Kenya’s experience with M-Kopa shows that the solar products sector can catalyze DFS development, and vice-versa. However, the results of the 2016 presidential election may change the office’s priorities.
- For several years, **La Poste** in Bénin has offered a savings product called “épargne-tontine,” which had about 6,000 accounts in 2015. With support from the Swiss Capacity Building Facility,⁶⁶ it is currently piloting a mobile application that enables collection of these savings digitally, and has also deployed field officers on the streets to collect savings directly from market stalls. La Poste targets reaching 15,000 clients by the end of the support period (March 2017) and reaching 100,000+ microentrepreneurs in the next five years. In parallel, the “Agence Béninoise du Service Universel des Communications Electroniques et de la Poste” (ABSU-CEP) plans to transform La Poste agencies into multimedia centers that have diverse service offerings such as insurance, online shopping, and other DFS. It has already piloted this in certain Poste offices close to national borders and is awaiting expressions of interest from potential partners before moving forward with this project.

9.2 Côte d’Ivoire

WAEMU’s population is estimated at 22.7 million,⁶⁷ and it has a GDP per capita of US\$1,546.⁶⁸ Côte d’Ivoire represents the zone’s strongest economy. Economic growth for 2015 was forecast at 7.9 percent, building on the momentum of previous years (8.3 percent in 2014) thanks to revenue growth, improved fiscal management, and continued implementation of the National Development Plan (2012–2015). Growth is expected to remain steady for in 2016 and 2017 (African Development Bank 2015d). With its strong economy, the country is an important destination for migrants from across the region and therefore a key source of cross-border remittances (US\$726 million in 2010), which several DFS providers have capitalized on in their product development.

The Ivoirian market also represent the best “success story” of MM in WAEMU, with the zone’s highest number of MM subscribers, MM account activity rate, and

⁶⁶ http://scbf.ch/wp-content/uploads/2015/05/SCBF_ApplicationForm_PUW_EXAMPLE_05.2015.pdf

⁶⁷ UN World Population Prospects, 2015.

⁶⁸ World Development Indicators, 2014.

TABLE 8. Financial Inclusion Indicators—Cote d'Ivoire

Indicator	Value	Notes
Estimated total population (millions)	22.7	United Nations (World Population Prospects 2015)
Adults as % of total population estimate	58%	United Nations (World Population Prospects 2015)
Estimated adult population (millions)	13.1	United Nations (World Population Prospects 2015)
GDP per capita (USD)	\$1,546	World Bank World Development Indicators. Data from 2014.
% of population below poverty line	29%	Defined as the % of total population living on less than \$1.90 a day. Data as of 2008. Source: Poverty & Equity Databank and PovcalNet
Internet users (per 100 people)	14.6	Internet users are individuals who have used the Internet (from any location) in the past 12 months. Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. Source: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates (2014)
Access to electricity (% of population)	56%	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys, and international sources. 2012 estimates. Source: World Bank, SE4ALL database from World Bank, Global Electrification database.
% of population in rural areas	47%	World Bank Staff (2014) estimates based on United Nations, World Urbanization Prospects.
Estimated literacy rate (% of adult population)*	43.1%	2015 estimate. Adult literacy rate is the percentage of people age 15 and over who can read and write. Source: CIA World Factbook.
Mobile penetration rate (% of population)	113%	As of Q4 2015. Measured by the number of SIMs in circulation versus total population so there is a risk of double/triple counting since a number of people have multiple SIMs. Source: GSMA Intelligence 2016.
Total financial inclusion (% of adult population, including MFIs, Poste & MM)	34%	Denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months (% age 15 \leq). Source: Global Findex 2014

(Continued)

TABLE 8. Financial Inclusion Indicators—Cote d'Ivoire (Continued)

Indicator	Value	Notes
Formal financial inclusion not including MFI accounts (% of adult population with bank accounts)	20.36%	BCEAO. Information note, Number 44. 4th trimester 2015.
Number of MM subscribers (millions)	9.8	BCEAO, September 2015
% of active MM subscribers (BCEAO)	41.8%	BCEAO, September 2015
% of population age 15≤ with an active MM account (Global Findex)	24%	Denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). Source: Global Findex 2014
MM transaction values in 2015 (billions FCFA)	2,682	BCEAO, September 2015. This figure only represents values up to September 2015.
MM transaction values 2014 (billions FCFA)	2,233	BCEAO, 2014. This figure represents 2014 transaction values.
Volume of remittances received (USD millions)	\$373	2014 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
Volume of remittances sent (USD millions)	\$726	2010 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data

transactions value. Not only are a variety of MM products available here, the provider landscape is also diverse, including several nonbank e-money issuers and some partnerships that go beyond the relatively “basic” agent/distributor relationships.

However, even in this case, success is limited with only 34 percent of adults considered to be financially included (according to the Global Findex), including through MM.

Given the maturity of its market, the lack of interoperability, access to USSD channels, a proportionate-to-risk approach to customer identification, and a framework for agent banking regulations clearly emerged here as constraints impeding DFS market development.

9.2.1 MNOs and OTC providers

In spite of MM offers being introduced in Côte d'Ivoire in 2008 and 2009 by Orange and MTN, respectively, MM use soared only in 2012 after the country returned to peace after a period of civil conflict, and the economic recovery commenced (Pénicaud 2014). Orange, MTN, and Moov are all present in the country with MM offers, with Orange

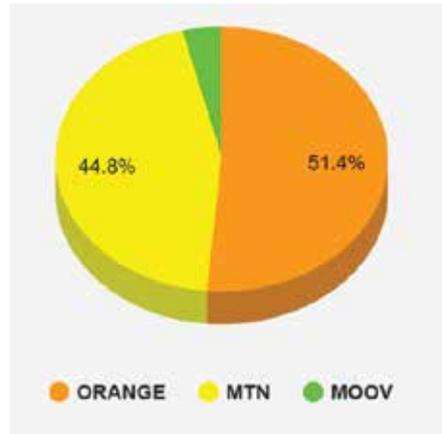


FIGURE 7. MNO MM MARKET SHARE in Côte d'Ivoire, by number of MM accounts registered (2015)
 Source: ARTCI

being the leader in the MM market followed closely by MTN. Since February 2016, Orange Côte d'Ivoire has created a separate entity that is an authorized e-money issuer.

All three MM offers include the standard services (e.g., cash in/out, P2P, bill payment) and several bank-to-MM e-wallet services and cross-border transfer, which has been very popular. For example, the value of cross-border remittances via Orange Money accounted for almost a quarter of all remittances reported by the World Bank among Côte d'Ivoire, Mali, and Senegal in 2014 (Scharwatt and Williamson 2015). Recently, Orange introduced “Collecte,” an online/MM crowdfunding product that can be used by individuals and associations with an Orange Money wallet (see Section 5.5 on E-commerce and SMEs/Fintech).

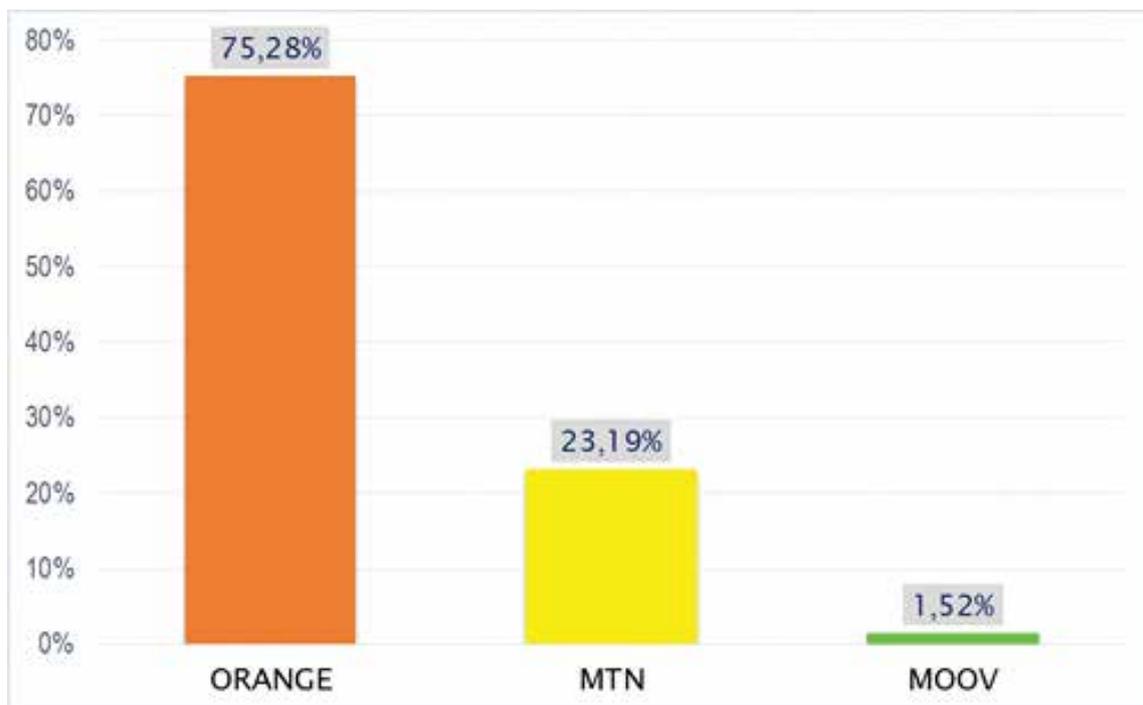


FIGURE 8. Proportions of all revenues earned from MM services in 4th quarter 2015
 Source: ARTCI

TABLE 8. MNO MM Offers in Côte d'Ivoire

MNO MM offer	Products				Total number of MM accounts ^a	Estimated agent network
	Bill payments ^b	Bank account-MM link	Cross-border transfer within WAEMU	Other products		
	X (school fees, water, electricity, TV, bridge tolls)	X (BICICI, la SIB, Ecobank)	X (Mali, Senegal; re-ception from France, Burkina Faso in partnership with Airtel BF)	<ul style="list-style-type: none"> ■ Orange Collecte (crowdfunding) ■ Life insurance product in partnership with SUNU ASSURANCES 	10,000 agents ^b	
	X (school fees, water, electricity, TV, bridge tolls)	X (SGBCI)	X (with MTN Benin, Airtel Burkina Faso & Airtel Niger)	<ul style="list-style-type: none"> ■ Life insurance products with NSIA & Allianz ■ Western Union to MTN MM account international transfer ■ Partnering with MFI Advans to pilot digital savings product for small-scale cocoa producers 	6,000 agents (in 2014) ^c	9.8 million (42% active)
	X (school fees, water, electricity, TV, bridge tolls)		X (with Flooz Benin, Niger, Togo, Burkina Faso to come with Mobicash)		3,000 agents ^d	

a. BCEAO (2015c).

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/04/2015_MMU_Mobile-money-crosses-borders_New-remittance-models-in-West-Africa.pdf

d. As reported to MIX Finclusion, June 2015.

All three MNOs are prioritizing developing their agent networks and their network of merchant acceptors. One MNO is planning to pilot a deployment of POS in Abidjan with selected merchant partners to this end. It is also developing a digital microcredit product in partnership with a bank. Another MNO is not prioritizing second-generation products for the moment; rather, it is focusing on encouraging bulk payment-makers, such as coffee and cocoa buyers, public administrations to use MM (B2P). It is also working to disassociate the flows of payments by categories of customers (farmers or employees) to offer different segments adapted price points.

While its presence is not as strong as in Senegal, **Wari** should nevertheless compete with MNOs in Côte d'Ivoire, especially in international transfer to countries where the Wari network is well-developed such as Senegal. They are aided by the fact that in spite of Côte d'Ivoire having the highest MM use rates in the zone, **prices for MM are reported to be high compared to neighboring countries**. Wari is also planning to launch in early 2016 in Côte d'Ivoire the prepaid GIM Visa cards that it is currently piloting in Dakar, in partnership with UBA. Joni Joni has also reported plans to expand to Côte d'Ivoire in partnership with UBA.

With its African headquarters in Côte d'Ivoire, **Smallworld** is a payment service provider offering money transfer between 160 countries, comprising of 200,000 locations. It conducts 6 million operations worldwide per year, equating to US\$4 billion transferred through the platform. Started by HSBC 10 years ago, Smallworld's strategy is to buy smaller money transfer companies, consolidate them, and install its money transfer platform (OMNIX). It offers multi-channel transactions, including cash, mobile, bank account, and prepaid cards. Options for sending and receiving depend on partnerships between Smallworld and other actors in the receiving country. For example, in Côte d'Ivoire with currently 300 service points (mostly in bank branches), Smallworld has established partnerships with MTN and Flooz, but not yet with Orange, meaning that it is not yet possible to make a transfer to someone's Orange Money account in Côte d'Ivoire. However, it claims to offer better prices than MM and banks for international transfer.

9.2.2 Other e-money issuers

Qash Services has been a (nonbank) e-money issuer since 2013, with over 130 branches and 20 subbranches/distributors, most of which are in rural areas. Qash's mobile e-wallet is linked to the user's telephone and is agnostic of network (i.e., it works across operators). It offers diverse services including P2P, salary payments and MM-to-bank account links, airtime sales, bill payments, and will soon offer prepaid Visa cards. Most transactions are P2P transfers (domestic and regional—many of their users are expats who send money to neighboring countries) in the form of cash-to-cash, followed by bill payments. Qash considers its prices competitive with that of other DFS providers on certain segments of transactions and prides itself on good agent network distribution and management.

The lack of access to the USSD channel is a constraining factor for Qash. It claims that it could offer more competitive prices and a better user experience if MNOs opened their USSD channels to it—this is the case in Cameroon where it also operates and where the regulator requires this. Qash has tried to negotiate with MNOs on this but it could not come to any agreement.

Qash is also pursuing partnerships with various MFIs and banks to increase competitiveness.

Qash has considered becoming an MFI or offering credit services itself since its clients trust it, it has good geographic distribution, and some of its clients tend to already view it as a financial institution. However, Qash sees BCEAO's requirement of MFIs to not generate more than 5 percent of total revenues from noncredit and savings-related activities to be limiting, as Qash would like to continue offering its current services.

CelPaid is another e-money issuer that obtained MFI status in October 2015.

CelPaid became an MFI to better compete against MNOs' MM services, which have lower prices and a much wider agent network. (CelPaid currently only has one branch in Abidjan, but it plans to expand in the city and open branches in the interior of the country.) As with Qash Services, clients already saw CelPaid as being an MFI and request credit and savings services from it.

Since becoming an MFI, it has systematically asked its existing clients to become microfinance clients. Eventually, clients with a smartphone and an internet connection can reimburse CelPaid loans from their mobile e-wallet, for which CelPaid is developing an Android app.

9.2.3 Banks

Côte d'Ivoire had 25 registered banks as of September 2015, including all the major pan-African and European banks present in West Africa. As in the rest of the zone, most banks still concentrate on serving their current clientele, but for one of the more mature financial sectors in the region, this appears to be changing with several banks piloting mass market services.

One of the smaller banks in the country in terms of clients and branches has a regional objective to find innovative ways of reaching new clientele—a goal that is of special importance in Côte d'Ivoire, where it does not have a significant presence.

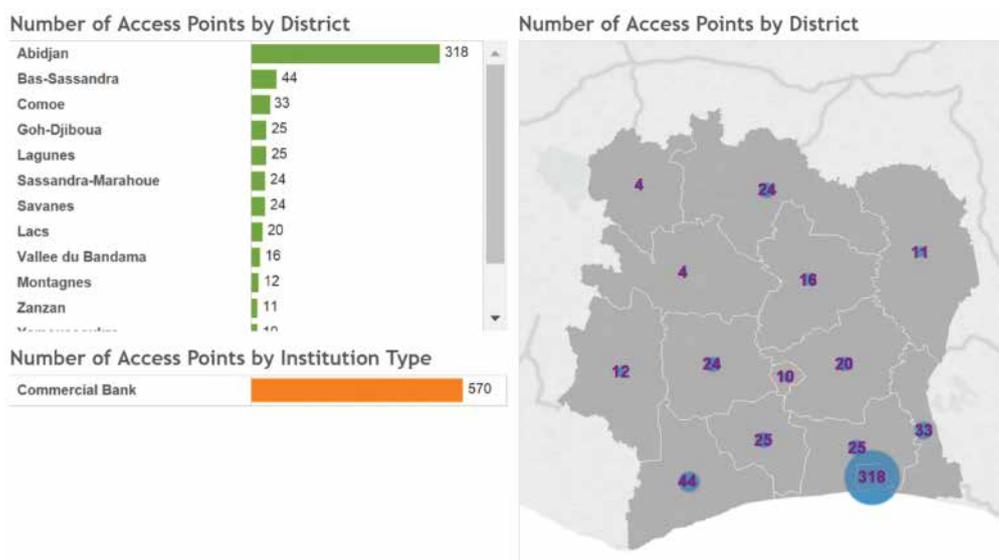


FIGURE 9. Locations of commercial bank branches in Côte d'Ivoire
Source: MIX Finclusion Lab, 2015

In addition to offering an online banking platform and plans to offer a full-service mobile application, the bank is also planning an agent banking pilot for 2016 in Abidjan. Agents will be given POS devices and/or a mobile application charged with a certain amount of money beforehand to conduct withdrawals, deposits, and bill payments on behalf of clients. Agents will, however, not be “full” agents (i.e., they will not open bank accounts or approve credit applications). The bank currently manages almost 300 subagents for its money transfer partners, whom it could use for the pilot, as well as potentially a network of gas stations with whom it is in discussions. After that, the bank will target networks of merchant partners who already have some internal management and control structures (e.g., supermarkets, petrol stations).

Another bank that is among the five largest banks in-country acts as the agent of an MNO MM offer and also offers bank account-to-MM e-wallet linkages. This service is very popular with government employees/civil servants outside of urban areas, who can now receive their salaries into their bank accounts but then withdraw the money from a nearby MM agent. The bank is also a partner of Wari, acting as a “master agent” to manage other networks of Wari agents (e.g., Microcred, Total, OilLibya, supermarkets).

Another pan-African bank is very interested in developing win-win partnerships that can move DFS transactions beyond cash in/out. It also sees potential to convert MNO clients into its own clients via such partnerships. It has recently received funding from the MasterCard Foundation for a two-year mobile banking project that encompasses transfers, microsavings, and insurance for rural clients in various agricultural value chains, with the pilot to be conducted in Côte d’Ivoire. For this project, the bank account-to-mobile e-wallet link will be made and it plans to eventually offer credit, which is the main demand of targeted clients.

The professional association of banks, APBEF, is aware of the need for its members to develop DFS strategies given the increasing dominance of MNOs in financial services, as well as pressure from BCEAO for banks to contribute to financial inclusion. To that end, it organized a workshop, “Digital Banking: Accelerating Factor of Financial Inclusion in Côte d’Ivoire,” in December 2015, which was presided over by the Prime Minister and attended by representatives of all banks present in the country. It was announced during this workshop that the Minister of Finance who was also present would set up a MM working group with all stakeholders to define a strategy for advancing financial inclusion through the use of new technologies.

9.2.4 MFIs

Like banks, most MFIs in Côte d’Ivoire tend to be concentrated in or close to the capital:

The financial sector, especially MFIs, was significantly weakened during the civil conflict and are still struggling to recover. The MFI sector in the country is nonetheless dynamic, with institutions at diverse stages of maturity.

UNACOOPEC was created in 1976 and dominates the microfinance market today; however, its current financial situation is poor and it is, therefore, under provisional administration.

Second place in the microfinance sector is **MicroCred**, present in the country only since 2010. It experienced strong growth in 2014 but slowed in 2015. MicroCred

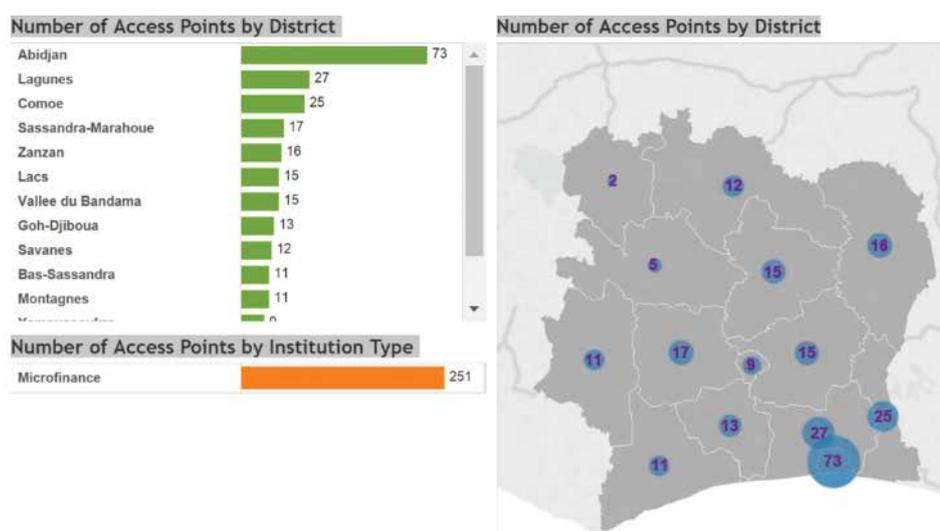


FIGURE 10. MFI branches in Côte d'Ivoire

Source: MIX Finclusion Lab, 2015

Côte d'Ivoire will also implement the agent banking model already trialled in Senegal and Madagascar: the recently hired agent network manager will help to open agent branches in 2016.

Advans, present in several African countries, launched a mobile payment solution in Côte d'Ivoire in partnership with an MNO in 2015 adapted to cocoa cooperatives and farmers, with the goal of reducing risks associated with cash flows (e.g., theft, loss) and to link farmers to other financial services offered by the MFI. Farmers targeted by this project can deposit savings into the MFI savings account via the USSD channel. The MFI also offers its urban clients the possibility to make deposits from their MM accounts into their MFI savings accounts through a USSD-based service, for a fee of between 150 to 3,000 FCFA, depending on the amount deposited (the service is

TABLE 9. Top MFIs in Côte d'Ivoire, By Amount of Loans Outstanding

MFI's - most recent data	Report Date	199.6m Loans (USD)	115,341 Borrowers	282.3m Deposits (USD)	684,758 Depositors
UNACOOPEC - CI	2012	65,746,016	53,293	179,393,680	448,740
MicroCred - CIV	2014	63,752,347	17,695	35,927,516	57,233
Advans - CI	2015-09-30	31,246,898	7,537	18,534,685	33,679
FIDRA	2014	9,884,002	15,675	18,806,904	32,328
GES - CI	2012	5,886,179	1,892	8,128,365	10,462
REMUCI	2012	2,751,686	2,103	2,805,129	10,240
CICE	2011	2,645,209	2,049	4,520,076	4,024
CMCI	2010	2,631,595	—	629,053	—
MA2E	2012	2,342,971	2,174	604,447	915

Source: MIX Market. <http://www.mixmarket.org/mfi/country/Cote%20d%27Ivoire%20%28Ivory%20Coast%29>. Accessed 4 February 2016.

free for cocoa farmers). In addition, the MFI partners with a bank to offer a GIM card that clients can use to make withdrawals from their savings accounts. The bank partner also sees this partnership as a pathway for the MFI clients to eventually become the bank's clients once these MFI clients reach a certain income threshold.

Another MFI that serves mainly retirees from both the private and public sectors and has most of its branches in urban zones has recently started offering a GIM-Visa card as a way to reduce clients' time and money spent to reach the nearest branch, and to allow the MFI to grow without opening costly new physical branches. It plans to conduct a feasibility study on partnering with MNOs for offering MM transfer and linking MM e-wallets to MFI accounts.

Another smaller MFI that serves mostly women and groups of women partners with Wari to act as its agent and will soon introduce co-branded GIM-Visa cards. It also acts as agents for an MNO MM service and other money transfer operators, with money transfer transactions now accounting for 5 percent of total revenues. It intends to ask permission from the Minister of Finance to surpass the 5 percent revenue cap.

The MFI PAMF (Première Agence de Microfinance), in the three countries of WAEMU where it is present (Côte d'Ivoire, Mali, Burkina Faso), has a strategic objective of transitioning toward DFS.

9.2.5 Regulators and government

The financial sector development strategy (2014) has three pillars: clean-up/remediation of the sector, stabilization, and development. Financial education is also an important element. A Special Advisor, recruited to implement the recommendations, is also liaising with the World Bank to define the multi-year technical assistance it will deliver to strengthen the Ivorian financial sector, starting in 2016.

There appears to be **support from the highest levels of government to advance DFS**, with the Prime Minister recently asking the Minister of Finance to set up a MM working group as mentioned earlier. There is also a "Committee for Monitoring the Implementation of the Action Plan for Financial Inclusion and Usage of Cashless Instruments" (COSMOPA) established in 2009, which was relaunched in 2015.⁶⁹ In 2016, it is expected to enact a plan of action, which will likely include some elements to promote the DFS market.

The Ministry of National and Technical Education's move to partner with Celpaid and MNOs in offering digital payment of secondary school fees free of charge to students/parents since 2011, as well as its decision to make such digital payments mandatory in 2014, has resulted in cost savings for the Ministry and has created a new sustainable revenue stream for providers, with 94 percent of secondary school fees paid via MM in 2014 (Frydrych, Scharwatt, and Vonthron 2015). In addition, the government has an initiative aimed at digitizing various administrative services and equipping the entire population with a computer and an internet connection. To that end, smartphones and laptops have also recently been exempted from VAT

⁶⁹ <http://sondage.tresor.gouv.ci/c/index.php/gallery/53-actualites/revue-de-presse/857-promotion-de-la-bancarisation-et-des-moyens-de-paiement-scripturaux-le-cosmopa-veut-redynamiser-ses-activites>

and customs taxes⁷⁰ to lower their costs. And finally, 2,000 kilometers of the planned 7,000 kilometers of fiber optic cable that is supposed to cover the entire national territory has already been built, offering an infrastructural “backbone” that DFS providers can exploit.

ARTCI, the telecom authority, is becoming deeply involved in DFS issues, especially since the passing of certain laws in 2012/2013⁷¹ that resulted in the following areas falling under its jurisdiction:

- Mobile banking as a VAS of MNOs (to be declared to the ARTCI as such).
- All DFS that involve the treatment of personal data, to be declared to and/or authorized (depending on a case-by-case basis) by ARTCI.
- All DFS that pose a risk of cyber-criminality.
- Issuing of e-money and money transfer operations as related to the Postal code.
- E-commerce, in that its IT systems have to be audited and certified by ARTCI or by an entity authorized by ARTCI.

ARTCI has undertaken a number of initiatives to fulfill its mandate under these laws, including the following:

- Review of the identification needed for SIM registration. Currently, several documents seem to be accepted (passport, national card, etc.), but this variety of identification is not always possible to reconcile.
- A process of identifying all institutions offering money transfer services, to ensure that they are authorized by ARTCI (and to notify them to request such authorization in case they are not).
- Definition of conditions to be met by service providers who wish to certify electronic signatures. ARTCI has subsequently authorized three such providers to offer this service.
- Collaboration with the Competition Commission to monitor the development of the telecom sector, including DFS. They are currently drafting the Terms of Reference for this partnership.
- A study on the status of Côte d’Ivoire as an “information society,” including several questions on the use (and nonuse) of MM.

In addition, ARTCI has indicated other initiatives that it is planning for the short-to-medium term future:

- Formal collaboration with BCEAO on issues related to DFS.
- Decisions on interoperability/interconnectivity among MNOs and e-wallets.

⁷⁰ See <http://news.abidjan.net/h/574022.html>

⁷¹ Including Ordonnance No. 2012-293 of 21 March 2012 on Telecommunications/ICT; law No. 2013-450 of 19 June 2013 on protection of personal data; law No. 2013-546 of 30 July 2013 on electronic transactions; law No. 2013-702 of 10 October 2013 on the Postal Code; law No. 2013-451 of 19 June 2013 on cyber-criminality.

- The laws passed in 2012/13 give ARTCI an expansive mandate and authority over several institutions and issues that are also regulated by BCEAO. Collaboration between BCEAO and ARTCI to clarify jurisdiction and the vision of the DFS market to be developed is therefore crucial.

9.2.6 Technology companies and e-commerce

Côte d’Ivoire is home to several technology companies that support the development of DFS. For example, **Supernet Technologies** has been developing the GIM-UEMOA mobile banking solution⁷² since 2011 and is now piloting it with MTN and CNCE. It is focusing on selling the mobile banking solution to the 47 banks that already use the GIM-UEMOA platform. The success of the pilot could shape adoption of this solution by other banks.

In addition, aggregators such as Digital Afrique, based in Abidjan but present in more than 20 African countries, act as aggregators for institutions that wish to deploy mobile payment solutions by interconnecting banks/bank accounts, institutions wishing to accept digital payments and MNO MM platforms.

As mentioned in Section 5.5 on E-commerce, several **e-commerce businesses** such as Jumia and Cdiscount that target a wide range of clients, including lower-income segments, are present in Côte d’Ivoire. By encouraging payment by MM and other digital channels, as well as perhaps eventually offering purchases on credit, it could drive DFS and financial inclusion in the country.

9.2.7 Other actors and developments to monitor

La Poste Côte d’Ivoire, which has good geographic presence in the country with approximately 125–135 operational branches, had originally offered financial services, but the state then separated the financial services arm into a bank, which is now La Caisse Nationale de Caisses d’Epargne (CNCE). La Poste now wishes to again start offering financial services, with the ambition to become La Banque Postale. It has been working on this strategy since 2013 but does not yet have BCEAO’s authorization to become a bank. In a similar vein, it has contacted a range of banks and MFIs to ask them to act as its agents (i.e., have the bank’s service counter in their branches). Several institutions are interested, but no agreements have been finalized.

La Poste is also piloting a prepaid card in Abidjan in partnership with BHCI bank and is developing an online shopping website in its quest to be a “supermarket of services.” It has also developed a partnership with the solar co-op Stations Energy whereby it will sell lease-to-own solar products in their branches and also use the products to power certain Poste branches/ kiosks.

However, like other La Poste networks in the region, they are seeking resources to implement their new strategy.

On another note, several **multinational corporations**, such as Nestle and Coca Cola, have regional offices in Côte d’Ivoire and have a significant influence on

⁷² See <http://www.gim-uemoa.org/fr/solutions-services/gim-mobile> for more details

several value chains in the country. One such corporation interviewed shared that it works directly with only large distributors who manage networks of shops, and that all payments that the corporation makes are strictly “formal” (i.e., bank transfer). However, this corporation indicated a willingness to encourage its partners to use alternative means of payment to reduce risks associated with cash (e.g., theft, loss, etc.). Similarly, on the production side, it works with five to six large cooperatives that deliver to its collection centers and are paid cash on delivery at a bank branch close to the collection center. However, due to attacks on such representatives that occur from time-to-time, they are willing to explore other options such as MM.

Côte d’Ivoire is also the focus of a range of donor-funded financial inclusion efforts (see Section 5.8 on Donors and Development Actors), including efforts by the World Bank; IFC; AFD (the French Development Agency), which has an MFI capacity-building project that potentially includes the development of DFS products for mid-sized MFIs; MasterCard Foundation via its grants through the Rural Prosperity Fund; CGAP with its regional representation based in Côte d’Ivoire; and the African Development Bank with its headquarters in Abidjan—all making the country a “market to watch” for DFS development.

9.3 Senegal

Senegal has an estimated population of just over 15 million,⁷³ a per capita income of US\$1,067,⁷⁴ and economic growth projected at 5.4 percent in 2015—higher than the estimated 4.7 percent seen in 2014. Senegal represents the second strongest economy in WAEMU after Côte d’Ivoire.

However, unlike Côte d’Ivoire, the dominance of OTC providers such as Wari and Joni Joni, both of which were founded in Senegal, have inhibited DFS uptake to date. MM had only 2.1 million subscribers in 2015, placing it fourth in WAEMU after Côte d’Ivoire, Mali, and Benin. Looking at the value of transactions via the mobile channel, it comes in at fourth again with 152 million FCFA, behind Côte d’Ivoire, Mali, and Burkina Faso, in that order (BCEAO 2015c).

Nonetheless, this situation is evolving with even OTC providers starting to offer certain DFS products. In addition, Senegal has the most well-known technology start-up sector (Fintech) and the highest internet use (with 17.7 out of every 100 people having internet access)⁷⁵ in WAEMU; it is also home to the headquarters of BCEAO and GIM-UEMOA. As such, the Senegalese market undoubtedly has a major influence on the broader WAEMU DFS market system. With a large diaspora abroad, it is by far the largest destination country for remittances in WAEMU, receiving US\$1.6 billion in 2014, which accounted for 11 percent of GDP.

According to the Global Findex (2014), only 6 percent of the adult population had an active MM account in spite of mobile penetration rates of more than 96 percent and MM available in the country since 2010.

⁷³ UN World Population Prospects, 2015.

⁷⁴ World Development Indicators, 2014.

⁷⁵ World Development Indicators. Estimate as of 2014.

TABLE 10. Financial Inclusion Indicators—Senegal

Indicator	Value	Notes
Estimated total population (millions)	15.1	United Nations (World Population Prospects, 2015)
Adults as % of total population estimate	56%	United Nations (World Population Prospects, 2015)
Estimated adult population (millions)	8.5	United Nations (World Population Prospects, 2015)
GDP per capita (USD)	1,067	World Bank World Development Indicators. Data from 2014.
% of population below poverty line	38%	Defined as the % of total population living on less than \$1.90 a day. Data as of 2011. Source: Poverty & Equity Databank and PovcalNet.
Internet users (per 100 people)	17.7	Internet users are individuals who have used the internet (from any location) in the past 12 months. Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. Source: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates (2014)
Access to electricity (% of population)	57%	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys, and international sources. 2012 estimates. Source: World Bank, SE4ALL database from World Bank, Global Electrification database.
% of population in rural areas	57%	World Bank staff (2014) estimates based on United Nations, World Urbanization Prospects.
Estimated literacy rate (% of adult population)	57.7%	2015 estimate. Adult literacy rate is the percentage of people age 15 and over who can read and write. Source: CIA World Factbook.
Mobile penetration rate (% of population)	>100%	As of 3 rd trimester 2015. Autorité de Régulation des Télécommunications et des Postes (ARTP), « Rapport Trimestriel du marché des Télécommunications T4 2015 ».
Total financial inclusion (% of adult population, including MFIs, Poste & MM)	15%	Denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months (% age 15+). Source: Global Findex 2014. However, CGAP estimates put this figure closer to 30%.

(Continued)

TABLE 10. Financial Inclusion Indicators—Senegal (Continued)

Indicator	Value	Notes
Formal financial inclusion not including MFI accounts (% of adult population with bank accounts)	16.33%	BCEAO. Information note, Number 44. 4th trimester 2015.
Number of MM subscribers (millions)	2.1	BCEAO, September 2015
% of active MM subscribers (BCEAO)	42.1%	BCEAO, 2014 (September 2015 report did not include this statistic for Senegal). However, CGAP estimates place this figure as being closer to 25%.
% of population age 15+ with an active MM account (Global Findex)	6%	Denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). Source: Global Findex 2014
MM transaction values in 2015 (billions FCFA)	152	BCEAO, September 2015. This figure represents only values up to September 2015.
MM transaction values 2014 (billions FCFA)	192	BCEAO, 2014. This figure represents 2014 transaction values.
Volume of remittances received (USD millions)	\$1,614	2014 estimates. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
Volume of remittances sent (USD millions)	209	2011 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data

9.3.1 OTC providers

The OTC providers **Wari** and **Joni-Joni** are people's preferred method for P2P domestic transfer (after direct in-person cash "transfer"): 44 percent of adults who received domestic remittances in 2014 did so through a money transfer service versus only 10 percent who received them through a mobile phone. Likewise, 58 percent of those who send domestic remittances did so through a money transfer operator versus 12 percent who did so through a mobile phone.⁷⁶

Detailed profiles of the two main OTC providers can be found in Section 3.5. With both of these actors expanding regionally as well as continuing to grow their domestic agent networks in Senegal, and also starting to offer services via the digital channel (in partnership with financial institutions) including prepaid cards, links with bank

⁷⁶ Global Findex, 2014.

accounts and a mobile e-wallet, their influence on the WAEMU DFS ecosystem, especially in Senegal, appears to be growing. At the same time, BCEAO's November 2015 guidelines which restrict the scope of their agents' activities to first-generation payment and transfer activities, might change this trajectory.

9.3.2 MNOs

Both Orange and Tigo offer MM services in the country. Tigo's Mobile Cash was the first MNO-founded entity to receive an e-money issuer license in WAEMU in 2014; Orange Senegal was granted the same status in December 2015. Both MNOs report prioritizing the development of their agent network, but in parallel, the development of second-generation DFS beyond P2P and bill payments, since in these two areas, competition with OTC providers is fierce. Products planned include microcredit and savings, a mobile crowdfunding service, and a card. Notably, one MNO has conducted a study on financial services use and behavior in Senegal and is using the needs-based segmentation emerging from this study to develop several second-generation DFS products.

Orange is thought to be the MM market leader in Senegal.

In the "challenger" position, **TigoCash** positions itself as the "affordable" MNO, being the first, for example, to introduce per second calling rates. While previously Tigo

TABLE 11. MNO MM Offers in Senegal

MNO MM offer	Products				Total number of MM accounts (activity rate) ^a	Estimated agent network
	Bill payments ^b	Bank account- MM link	Cross-border transfer within WAEMU	Other products		
	X (electricity, water, Sonatel, TV)	X (BICICI, EcoBank)	X (Côte d'Ivoire, Mali)	<ul style="list-style-type: none"> ■ Bank to wallet (BICICI, EcoBank) ■ Orange collecte to be launched 	2.2 million ^c (42% active ^d)	10,000 agents
	X (electricity, water, Sonatel, TV)	X (Link with Western Union, which al- lows WU transfer to TigoCash e-wallet)		<ul style="list-style-type: none"> ■ "Tigo matic" ATMs—3 in Dakar so far^e 		

a. BCEAO (2015c).

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. By CGAP estimates, this figure is thought to be an under-estimation.

d. The level of activity is from year-end 2014. September 2015 BCEAO statistics do not show this number.

e. <http://www.tigo.sn/tigo-cash/tigo-matic>

had focused on growing its internet/mobile data revenue stream, a 2015 review led it to focus on promoting the MM/e-wallet offer further.

9.3.3 Banks

Senegal had 23 registered banks as of September 2015. As seen in figure 11, like in the rest of WAEMU, most of the banks concentrate on higher-end, urban clientele.

There are some notable exceptions to commercial banks targeting only urban clientele in Senegal, namely, Groupe Société Générale’s Manko pilot and several pan-African banks (see Section 3.3 on Banks).

One of the pan-African banks interviewed in Senegal reported that at the regional group level, there is a big push to reduce physical branch operating costs, including by closing branches when feasible. Its strategy is based on a clear client segmentation: high net worth individuals and corporate clients are to be served by physical branches, while all others can and should be served via alternative means.

It considered the agent banking model seen in East Africa but found the current regulatory framework to be too restrictive. The bank cannot realistically manage a large network of agents itself, and agents of other networks (e.g., Wari, which has deployed one of the largest distribution networks in WAEMU) would not be allowed to open accounts, make deposits, and/or conduct other transactions for clients on the bank’s behalf.

Instead, the bank is planning to develop its own network of agents, targeting 3,000 points of service in two years for rapid transfer services (account-to-account, account-to-cash). However, even for this, the lack of e-signature recognition infrastructure is a major constraint, as it will prevent what agents can offer as services.

The bank has also discussed developing “nano-credit” products with one of the MNOs offering MM in the country. In addition, it is working with the Ministry of Education to link rural schools’ bank accounts (where they receive their subsidies from the state) to OTCs, so that the subsidies can be withdrawn at OTC points near the schools.

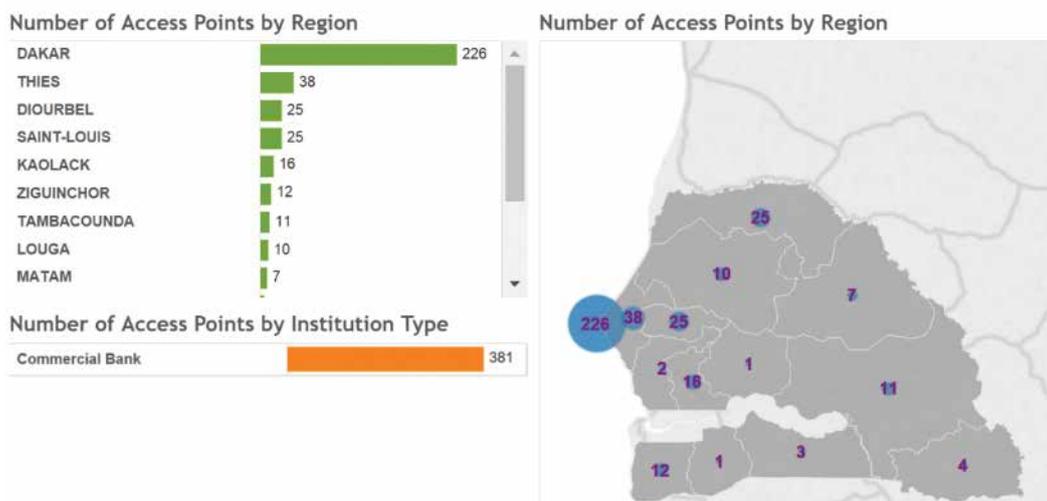


FIGURE 11. Number and locations of commercial bank branches in Senegal
 Source: MIX Finclusion Lab, October 2015.

TABLE 12. Top MFIs in Senegal, By Amount of Loans Outstanding

MFI's - most recent data	Report Date	508.9m Loans (USD)	282,745 Borrowers	434.9m Deposits (USD)	563,599 Depositors
CMS	2013	202,583,532	—	242,966,455	—
ACEP Senegal	2014	73,903,608	—	19,380,226	—
MicroCred - SEN	2015-09-30	71,484,171	41,475	38,062,808	162,178
PAMECAS	2015-12-31	57,173,503	82,741	56,789,527	—
U-IMCEC	2015-09-30	19,294,604	22,445	13,027,222	129,385
MECAP	2014	11,961,049	—	9,122,902	—

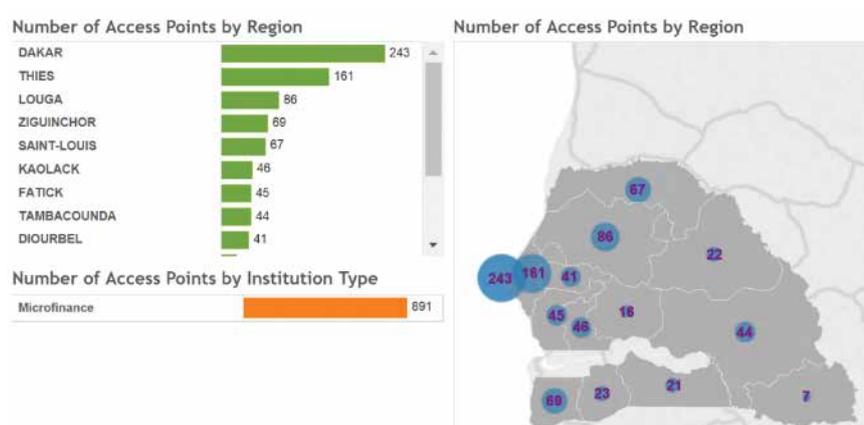
Source: MIX Market. <http://www.mixmarket.org/mfi/country/Senegal>. Accessed 4 February 2016.

9.3.4 MFIs

The Senegalese MFI market is characterized by cooperatives and “mutuelles,” the largest of which have a very extended physical network. The four largest of these (CMS, ACEP, PAMECAS, and to a lesser extent, U-IMCEC), along with MicroCred, dominate the sector.

Several of these MFIs are prioritizing DFS development as part of their growth strategy, but many are using different approaches. MicroCred is planning to scale up the agent banking model that it is currently piloting. Data collected by MIX Finclusion Lab show how MicroCred’s model can help to dramatically increase the number of MFI service points. Figure 12 illustrates only MFI branches, whereas Figure 13 maps these as well as MicroCred’s “correspondents” (agents).

One large MFI reported planning a similar project whereby its agents (initially, only employees) will be deployed at local markets to recruit new clients and collect deposits on savings accounts. The MFI also plans to eventually partner with external agents, who will be paid on a commission-basis. In addition, it plans to develop a partnership with a bank to act as its e-money issuer (so that the MFI itself does not have to go through the “heavy” e-money issuer application process), in order to link e-wallets to clients’ MFI accounts, thus allowing clients to conduct transactions from their mobile phone.

**FIGURE 12. MFI branches in Senegal**

Source: MIX Finclusion Lab, 2015.

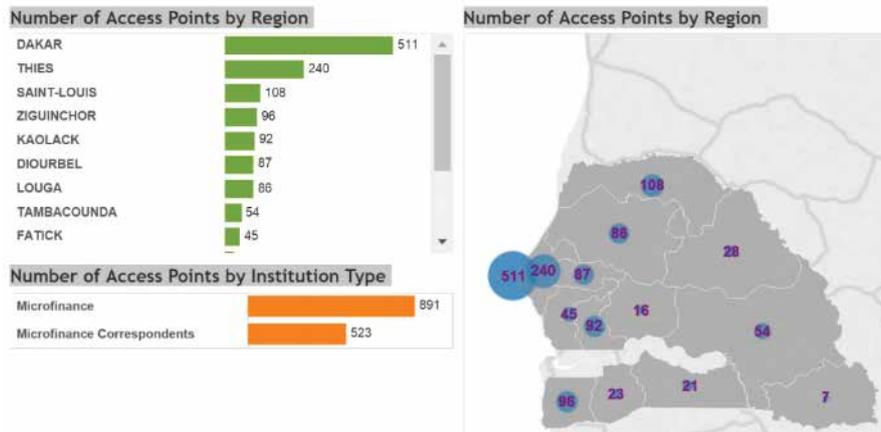


FIGURE 13. MFI branches in Senegal and MicroCred correspondents

Source: MIX Finclusion Lab, 2015.

Another large MFI reported plans to become a bank in 2016, with the objective of becoming a “digital bank.” It plans to hire external experts to help define the strategy to achieve this objective. One of the OTC providers present in-country has also expressed interest in partnering with this bank to offer credit and savings reimbursement/disbursement services at OTC service points. However, the MFI wishes to first clarify the implications from a regulatory perspective.

MicroCred entered Senegal in 2007 and currently has 37 branches and over 500 agents, almost half of whom are in Dakar. Of its 40,000 active borrowers, most borrow small amounts of 5,000 CFA and up. In Senegal, the MFI saw a 30 percent growth over the previous year, while maintaining a good percentage of portfolio at risk. All agents are active, and all branches are profitable—and the number of both will grow, in addition to scaling up the agent banking model (see Section 3.4) that it is currently piloting.

In addition, the Deputy Ministry of Microfinance and Solidarity Economy is planning to relaunch a project that will build an interoperable mobile banking platform for MFIs. Aimed at helping MFIs re-think their business models and IT platforms in the face of new DFS actors and services, the project was initially conceptualized a few years ago but then aborted. The Ministry is now mobilizing additional funding from outside the government for this project.

9.3.5 Technology companies

Among the numerous companies working in the Fintech sector in Senegal are **In Touch SA**, an aggregator of different digital payment solutions (see Section 5.4 on Aggregators), and **VoLo**, an IT company developing credit solutions for the financial and health sectors, which is deploying the regional credit bureau for WAEMU (see Section 5.6.2).

Furthermore, with the start-up incubator **CTIC Dakar**; **Jokkolabs**, a co-working space network; and **Teranga Capital**, one of WAEMU’s first venture capital funds targeting SMEs, Dakar is seen as a hub for start-up businesses and innovative technology-based enterprises. **Société Générale has recently launched** an Innovation Lab in Dakar that will work with local start-ups. This lab will be housed in

JokkoLabs and launched with a “hackathon” in February 2016, which challenged developers and start-ups from across sub-Saharan Africa to reinvent the client banking experience.⁷⁷

9.3.6 Regulators and government agencies

The **Authority of Regulation of Telecommunication and Posts (ARTP)** of Senegal is relatively advanced in its reflection on issues related to MM use and quality of service. For example, it is considering requiring MNOs to open the USSD channel to other companies offering VAS (same category as MM) to have a more competitive market. Interoperability between operators will also be a priority for 2016. ARTP also plans to set up regular meetings with BCEAO and other private sector actors (e.g., MNOs, banks) to have a platform for collaboration.

ARTP regulates one postal operator (**La Poste**) who is the “agreed/designated” operator, as well as 12–13 others. With 250 points across the country, the government’s vision is of the postal network acting as a vector for financial inclusion, in particular with money transfer. Poste 1 is a money transfer service that had worked well in the past, but now is facing challenges (financial issues, new entrants, funding of the Service Postal Universel, regulatory status of La Poste, etc.). However, Poste Finance, which offers savings, money orders, checks, and eventually perhaps credit, is profitable and cross-subsidizing La Poste’s other areas of work. La Poste is currently going through a restructuring, including introducing cost accounting processes that will allow it to attribute to products its full costs. This will be used as the basis for product (re)development.

Senegal’s **Observatory of Financial Services Quality (OQSF)** conducts research to formulate recommendations for policy creation. It recently finished data collection for a study on noncash money flows that highlights the role of DFS. Specific recommendations and future studies on DFS will be based on results of the current study (see Section 5.6.3).

9.3.7 Other actors

UNCDF’s MM4P program in Senegal aims to increase the proportion of active adult users of DFS to 20 percent of the total adult population by the end of 2019. Launched in 2015, the program is conducting studies on the following:

- Agent network to identify factors for success in agent network management and what the industry needs to focus on in the next stages of development.
- The demand-side focused on assessing how well clients understand DFS offers, and how the offers are adapted to clients’ needs.
- Integrating DFS into MFIs’ strategies and operations.

Workshops are planned in both Benin and Senegal in 2016 to present the findings of these studies and to serve as a forum for discussion among stakeholders. MM4P’s activities going forward will be based on the results of studies and reactions of stakeholders.

⁷⁷ <http://www.societegenerale.com/fr/content/societe-generale-accelere-sa-strategie-dinnovation-en-afrique-avec-louverture-dun-lab-daka-4>

9.4 Mali

In spite of recent internal conflict that has affected the entire economy, the recovery that began in 2013 produced 5.8 percent growth in 2014, with 5.4 percent expected in 2015 and 5.1 percent in 2016, driven mainly by agriculture and the services sectors, as well as by the large-scale return of technical and financial partners (African Development Bank 2015a).

The DFS market in Mali is also dynamic and growing, especially the MM market, with the second highest value of transactions and number of subscribers in the zone after Côte d'Ivoire (BCEAO 2015c). Total values of MM transactions grew by more than 40 percent between year-end 2014 and September 2015.

With a large diaspora abroad, it is also a significant destination country for remittances, receiving almost US\$900 million in 2014. The market is currently dominated by one MNO's MM offer, but financial institutions and other actors are starting to become more engaged in this domain.

9.4.1 MNOs

The MM market is dominated by **Orange Money**, which has approximately 18,000 agents. Operational since 2003, Orange Money offers airtime top-ups, P2P domestic and regional (Côte d'Ivoire and Senegal) transfer, bill payments, and other bulk payments (e.g., NGO-beneficiary payments). In 2015, in partnership with NSIA, and funded by GSMA, it also started piloting a savings product targeting women, with an associated life/disability and maternal health insurance component.

Orange in Mali has applied for and received the e-money issuer license in early 2016. Priorities going forward for the company include extending its agent network and developing other second-generation (savings/credit) products. Orange in Mali is also pushing the government to digitize more of its payments using the MM channel, especially salary payments of less than 50,000 FCFA that are currently paid in cash.

Malitel's Mobicash MM offering consists largely of P2P.

9.4.2 Banks

Mali had 14 registered banks as of September 2015. While many of them act as MNOs' MM agents, few seem to have prioritized DFS development beyond that. However, there are some notable exceptions: **Ecobank** and **BCIM** offer account-to-MM wallet links, with Ecobank partnering with Orange Money on its international remittance products at the regional level. BIM (Banque Internationale pour le Mali) also partners with Orange Money, Lemonway, and Mobicash (Malitel).

Another bank is piloting a **mobile banking project** whereby clients can make transactions at Western Union/MoneyGram points on their bank account, as well as pay from their bank account via their mobile phone at various merchant partners. This project is aimed at decongesting bank branches and reducing transport costs for clients. Although it reportedly was granted access to the USSD channel by both MNOs, the first version will work via SMS. The bank foresees liquidity and managing the risk of fraud and money laundering to be the biggest challenge with this project. It will receive implementation support from a third-party service provider, which is also developing the MIS for this project.

TABLE 13. Financial Inclusion Indicators – Mali

Indicator	Value	Notes
Estimated total population (millions)	18	United Nations (World Population Prospects, 2015)
Adults as % of total population estimate	53%	United Nations (World Population Prospects, 2015)
Estimated adult population (millions)	9.2	United Nations (World Population Prospects, 2015)
GDP per capita (USD)	705	World Bank World Development Indicators. Data from 2014.
% of population below poverty line	49.3%	Defined as the % of total population living on less than \$1.90 a day. Data as of 2009. Source: Poverty & Equity Databank and PovcalNet
Internet users (per 100 people)	7.0	Internet users are individuals who have used the internet (from any location) in the past 12 months. Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. Source: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates (2014)
Access to electricity (% of population)	26%	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys, and international sources. 2012 estimates. Source: World Bank, SE4ALL database from World Bank, Global Electrification database.
% of population in rural areas	61%	World Bank staff (2014) estimates based on United Nations, World Urbanization Prospects.
Estimated literacy rate (% of adult population)	38.7%	2015 estimate. Adult literacy rate is the percentage of people age 15 and over who can read and write. Source: CIA World Factbook.
Mobile penetration rate (% of population)	118%	As of Q4 2015. Measured by the number of SIMs in circulation versus total population so there is a risk of double/triple counting since a number of people have multiple SIMs. Source: GSMA Intelligence 2016.
Total financial inclusion (% of adult population, including MFIs, Poste & MM)	20%	Denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months (% age 15+). Source: Global Findex 2014

(Continued)

TABLE 13. Financial Inclusion Indicators – Mali (Continued)

Indicator	Value	Notes
Formal financial inclusion not including MFI accounts (% of adult population with bank accounts)	14.57%	BCEAO. Information note, Number 44. 4th trimester 2015.
Number of MM subscribers (millions)	2.7	BCEAO, September 2015. However, CGAP estimates put this figure at closer to 4 million MM subscribers at the end of 2015.
% of active MM subscribers (BCEAO)	50.8%	BCEAO, 2014 (September 2015 report did not include this statistic for Senegal)
% of population age 15+ with an active MM account (Global Findex)	12%	Denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). Source: Global Findex 2014
MM transaction values in 2015 (billions FCFA)	1,151	BCEAO, September 2015. This figure represents only values up to September 2015.
MM transaction values 2014 (billions FCFA)	811	BCEAO, 2014. This figure represents 2014 transaction values.
Volume of remittances received (USD millions)	895	2014 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
Volume of remittances sent (USD millions)	134	2013 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data . 2013.

9.4.3 MFIs

In Mali, there are 126 MFIs nationwide.⁷⁸ Like other countries in the region, a few large ones dominate the sector, including Kafo Jiginew, Nyesigiso, and MicroCred.

Despite the number of providers, the MFI sector is fragile, exposed to the same risks as MFIs in other WAEMU countries (governance, mismanagement). In March 2015, a remediation plan (“assainissement”) for the MFI sector was adopted and the government will also adopt a plan of action to strengthen the sector—both of these plans are oriented strongly toward DFS.

Most existing MNO/MFI partnerships see MFIs acting as the MNO’s MM agent, but a few go beyond this: one MFI is prioritizing mobile banking services as a way to (i) reduce operating costs, (ii) expand its rural client base without opening new branches,

⁷⁸ Direction Générale de la Stabilité et de l’Inclusion Financières, Direction de la Microfinance et de l’Inclusion Financière, Service des Activités de Microfinance, Principaux indicateurs des SFD de l’UMOA au 31/03/2015

TABLE 14. MNO MM Offers in Mali

MNO MM offer	Products				Total number of MM accounts ^a	Estimated agent network
	Bill payments ^b	Bank account-MM link	Cross-border transfer within WAEMU	Other products		
	X (water, electricity, TV, school fees, bulk payments from NGOs to beneficiaries)	X (Ecobank, BICIM)	X (Côte d'Ivoire, Senegal; reception from France)	■ Piloting savings product targeting women, with NSIA, a microinsurance company, the NGO PSI, and PlaNet Guarantee, and associated life/disability and maternal health insurance product	2.7 million (~51% active ^c)	18,000 agents ^d
	X ^e					

a. BCEAO (2015c).

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. The level of activity is from year-end 2014. September 2015 BCEAO statistics do not show this number.

d. <http://www.orange.com/en/About/Global-footprint/Orange/countries/Welcome-to-Orange-Mali>

e. Bill payments are reportedly possible via MobiCash (see <http://www.anpe-mali.org/news/signature-de-convention-malitel-anpe-vers-la-creation-de-2-000-auto-emplois-pour-un-mali-emergent>) but specific payment acceptors via this platform are unknown.

and (iii) decongest its existing branches. It is already undertaking a pilot with 2,500 of its clients in partnership with one of the MNOs offering MM in the country. It is partnering with some NGOs to offer a system whereby users can pay their drinking water and electricity bills through the MFI, in partnership with the government. It will work with one NGO on developing a savings product for rural populations to

TABLE 15. Top MFIs in Mali, By Amount of Loans Outstanding

MFI's - most recent data	Report Date	179.6m Loans (USD)	271,619 Borrowers	88.8m Deposits (USD)	388,254 Depositors
Kafo Jiginew	2013	48,946,531	59,979	—	—
Nyesigiso	2013	23,329,292	—	20,951,160	—
MicroCred – MLI	2015-09-30	20,564,680	7,425	7,846,872	13,387

Source: MIX Market. "Mali market profile." <http://www.mixmarket.org/mfi/country/Mali>.

be delivered via the digital channel, and potentially also offer the possibility to reimburse credit. While these developments are promising, there are some concerns about how long it will take the MFI to adapt its MIS systems for such DFS products.

With MM transactions conducted at its branches now accounting for more than 1 percent of its total revenues, another large MFI wishes to deepen its partnership with its MNO partner. It is considering an e-wallet-to-account link that enables clients to reimburse credit from their homes and to make deposits into their savings accounts, but it has yet to approach its MNO partner about this.

Also an agent of a MM solution, another MFI is considering the bank-to-MM wallet link, but before making any investments in this area, it wishes to better understand potential profits versus the costs of configuring its MIS to allow this service. Technology companies offering payment solutions

LemonWay, a French payment services provider operating in Mali since 2013, offers a PIN-based P2P payment platform delivered via any mobile carrier, as well as money transfer between Mali and the 28 EU countries. It offers customers the possibility to make payments and domestic and international transfers with their mobile phone via SMS or smartphone app, regardless of the telephone operator they use. With pricing that is more competitive than the already established MNOs,⁷⁹ LemonWay reports to have opened 1 million accounts as of March 2016⁸⁰. Agents include BIM branches, shop owners, and LemonWay kiosks (similar to Orange kiosks). Currently, deposits into the e-wallet (cash in) constitute the highest volume of transactions.

9.4.4 Other actors and developments to monitor

While security challenges have rendered the financial sector and economy in general more fragile, they have also **pushed development actors to explore DFS as a way to reach beneficiaries in hard-to-access zones where banditry and theft are also present as risks**. As an example, in 2014, using DFS, a USAID-funded Office of Transition Initiatives (OTI) project transmitted more than \$1 million as payments including for its operations and to individuals for cash-for-work programs in the North.

USAID has also strongly encouraged its implementing partners to use digital channels for payments to beneficiaries and for operations. It is also pushing the government to pay all of its employees using MM, including smaller salary payments of less than 50,000 FCFA that are currently paid in cash.

The **LEAP (Linking Financial and Social Capital to Enhance Resilience of Agro-Pastoral Communities) program** launched in January 2016 as a two-year, \$3 million program that aims to increase access of 50,000 agropastoralists in northern Mali and northwestern Niger to affordable and appropriate financial products as a way to build resilience to climate change and related shocks.⁸¹ Mercy Corps is the lead organization of the consortium implementing this, which also includes Planet Finance, Planet Guarantee, and the MFIs ASUSU SA (in Niger) and Soro Yiriwaso.

⁷⁹ <http://www.maliweb.net/economie/lemonway-au-mali-quel-credit-pour-autant-dincertitudes-1154152.html>

⁸⁰ <https://twitter.com/lemonway?lang=en>

⁸¹ "LEAP Solution Statement Global Resilience Challenge Mercy Corps." 2015. <http://www.globalresiliencepartnership.org/assets/downloads/solution-statements/Mercy-Corps-LEAP-Solution-Statement.pdf>

LEAP will use MM technology to increase accessibility of financial services in rural areas by supporting private partners with an up-front investment in developing innovative mobile services. The baselines that the program is conducting now will inform prototype development of these services.

9.5 Niger

With two-thirds of its land mass being desert, Niger has the highest proportion of its population living in rural areas (82 percent) in WAEMU.⁸² Mobile penetration, literacy, access to electricity and internet, and financial inclusion rates are all among the lowest in the zone. While posing challenges for DFS development, these factors also heighten the need for precisely such services.

On the other hand, Niger's GDP grew from 4.1 percent in 2013 to 7.1 percent in 2014 and was estimated to reach 6.0 percent in 2015 and 6.5 percent in 2016, driven mostly by agriculture, as well as by the construction, transport, and communications sectors (African Development Bank 2015b).

The country is distinguished by presence and use of national money transfer services, and some second-generation DFS are expected to be introduced this year.

9.5.1 MNOs

Orange, Airtel, and Moov all have MM offers in Niger, consisting of the "standard" cash in/out, P2P transfer, and bill (electricity, TV) payment. Airtel also offers cross-border transfers with MTN Benin and MTN Côte d'Ivoire and Moov/Flooz with Flooz Côte d'Ivoire, Benin, and Togo.

All MNOs offering MM prioritize strengthening their agent network, addressing agent liquidity concerns, and growing geographic coverage of their mobile networks. One MNO is also planning to introduce digital microcredit and microsavings products based on similar offerings that it has launched in other African countries. It will partner with large NGOs for awareness-raising and financial education on how these products work to potential customers.

On the other hand, another MNO sees developing the offer and increasing the uptake of first-generation products (e.g., bill payments, e-wallet-to-bank-account links) as the priority since the population's "basic" financial service needs have not yet been met. Similarly, another MNO is prioritizing launching more international transfer options by partnering with a money transfer operator.

9.5.2 Banks

Niger had 11 registered banks as of September 2015, and as in other WAEMU countries, the banks tend to concentrate on higher-income, urban clientele.

One of the pan-African banks interviewed that is both the e-money issuing partner and agent for several MNOs is also trying to launch a GIM prepaid Visa card in conjunction with MNO partners, so that the card is linked to a MM account, allowing the

⁸² World Development Indicators, based on World Bank staff (2014) estimates based on United Nations, World Urbanization Prospects.

TABLE 16. Financial Inclusion Indicators – Niger

Indicator	Value	Notes
Estimated total population (millions)	19.9	United Nations (World Population Prospects, 2015)
Adults as % of total population estimate	50%	United Nations (World Population Prospects, 2015)
Estimated adult population (millions)	9.9	United Nations (World Population Prospects, 2015)
GDP per capita (USD)	\$427	World Bank World Development Indicators. Data from 2014.
% of population below poverty line	50.3%	Defined as the % of total population living on less than \$1.90 a day. Data as of 2011. Source: Poverty & Equity Databank and PovcalNet
Internet users (per 100 people)	2.0	Internet users are individuals who have used the internet (from any location) in the past 12 months. Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. Source: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates (2014)
Access to electricity (% of population)	14%	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys and international sources. 2012 estimates. Source: World Bank, SE4ALL database from World Bank, Global Electrification database.
% of population in rural areas	82%	World Bank Staff (2014) estimates based on United Nations, World Urbanization Prospects.
Estimated literacy rate (% of adult population)	19.1%	2015 estimate. Adult literacy rate is the percentage of people age 15 and over who can read and write. Source: CIA World Factbook.
Mobile penetration rate (% of population)	34%	As of Q4 2015. Measured by the number of SIMs in circulation versus total population so there is a risk of double/triple counting since a number of people have multiple SIMs. Source: GSMA Intelligence 2016.
Total financial inclusion (% of adult population, including MFIs, Poste & MM)	7%	Denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSMA Mobile MMU service in the past 12 months (% age 15+). Source: Global Findex 2014

TABLE 16. Financial Inclusion Indicators – Niger (Continued)

Indicator	Value	Notes
Formal financial inclusion not including MFI accounts (% of adult population with bank accounts)	4.89%	BCEAO. Information note, Number 44. 4th trimester 2015.
Number of MM subscribers (millions)	1.9	BCEAO, September 2015
% of active MM subscribers (BCEAO)	17.2%	BCEAO, 2014 (September 2015 report did not include this statistic for Senegal)
% of population age 15+ with an active MM account (Global Findex)	4%	Denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). Source: Global Findex 2014
MM transaction values in 2015 (billions FCFA)	149	BCEAO, September 2015. This figure only represents values up to September 2015.
MM transaction values 2014 (billions FCFA)	110	BCEAO, 2014. This figure represents 2014 transaction values.
Volume of remittances received (USD millions)	\$152	2014 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
Volume of remittances sent (USD millions)	\$91	2012 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data . 2013.

holder to withdraw at any of the MNO's MM agents and at the bank's ATMs. MNOs are very interested, but the biggest blockage in developing this is the bank's own MIS, which is currently being reconfigured. It is not, however, considering developing credit products for mobile subscribers as it does not know the MNOs' clients and therefore cannot offer them credit.

Another bank with a relatively strong presence in rural areas is in discussions with the government to offer prepaid cards to students receiving scholarships, which would eliminate the need for students/parents to register for bank accounts to receive these scholarships. It also has financial support from a donor to provide financing to farmers and, as part of this arrangement, it is considering mobile repayment options. The bank has also considered placing "mobile" agents in local markets and placing POS devices with large merchants in villages; however, the lack of a willing insurer is a big constraint. It would also explore opportunities for loan reimbursements via the mobile channel, but it believes that existing regulation does not allow this.

TABLE 17. MNO MM Offers in Niger

MNO MM offer	Products				Total number of MM accounts ^a	Estimated agent network
	Bill payments ^b	Bank account-MM link	Cross-border transfer within WAEMU	Other products		
	X (electricity, TV)		X (MTN Benin & MTN Côte d'Ivoire)		1.9 million (~17% active ^c)	N/A
	X (electricity, TV)	X (BOA, Ecobank)				
	X (electricity)		X (with Flooz Côte d'Ivoire, Benin, Togo)			

a. BCEAO (2015c).

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. The level of activity is from year-end 2014. September 2015 BCEAO statistics do not show this number.

9.5.3 MFIs

Recently, there have been massive closures of MFIs in Niger by the authorities, and it is estimated that there are only 10 left that are still viable. ASUSU is the largest by loan portfolio, followed by a handful of other large MFIs.

One of the largest MFIs that is an MM agent is reported to have signed a contract with the Ministry of Education, whereby salaries will be paid into those staffs' MFI accounts, which will be linked to their MM wallets and can be withdrawn at any of the MNO's MM service points. The MFI will also be partnering with Mercy Corps on its LEAP program, whereby it will be helping to develop and roll out DFS to its traditional village savings group clientele.

TABLE 18. Top MFIs in Niger, By Amount of Loans Outstanding

MFI's - most recent data	Report Date	51.6m Loans (USD)	252,067 Borrowers	12.7m Deposits (USD)	572,216 Depositors
AUSU SA	2015-09-30	29,606,335	130,587	—	270,253
Taanadi	2015-12-31	4,817,033	24,959	1,957,495	2,846
Capital Finance	2015-12-31	3,373,825	6,325	3,158,443	26,129
MECREF	2015-12-31	2,789,604	25,970	1,873,444	27,128
Kokari	2015-12-31	2,579,402	22,575	457,510	19,500
Yarda Tarka Maggia	2015-12-31	2,255,949	22,320	1,298,549	102,244

Source: MIX Market. "Niger market profile." <http://www.mixmarket.org/mfi/country/Niger>

DFS and negotiating with MNOs on behalf of MFIs do not yet seem to be priorities for the professional association of MFIs (APSF), which is prioritizing securing more favorable refinancing terms for its members from banks. However, the national BCEAO office recently presented the 2015 e-money guidelines to APSFD, which has helped the association to realize that DFS would be an upcoming issue for the sector.

9.5.4 OTC providers

Along with traditional money transfer operators such as Western Union, Money Gram, Quick Cash, and MoneyExpress, two Nigerien OTC providers appear to dominate the domestic money transfer market with an extensive network of service points across the country: **BNIF AFUWA** and **AL IZZA**. They have reportedly been asked by BCEAO to “formalize” their legal status (to become “Etablissement Financier à caractère bancaire”) and are also reported to have consultants advising them on offering mobile solutions.

Wari is also present in Niger, in partnership with BOA. Services offered aside from P2P transfer include pension payments and Canal+ bill payment. Wari sees a lot of potential for growth with cross-border money flows from Libya, Sudan, and other countries.

9.5.5 Government agencies

With the support of **UNCDF** in the framework of a program financed by the EU, Niger developed and adopted a National Strategy for Financial Inclusion in 2015. Implementation has not yet started. UNCDF is trying to create a roundtable of donors who will push for implementing this strategy.

ARTP, the telecom authority, estimates that 40–50 percent of population has access to a mobile network. At this stage, it does not regulate DFS aside from trying to ensure service quality and data confidentiality. However, ARTP did recently send MNOs in-country a questionnaire to better understand their MM offerings and transaction volumes. It has no formal relationship with BCEAO at this point but plans to validate the questionnaire numbers with BCEAO.

9.5.6 Other actors and developments to monitor

Niger Poste is in discussion with a technical partner to develop a mobile phone money transfer solution. This will basically use the MNO P2P model, but will also build off Niger Poste’s large physical network of 82 branches across the country. Currently, it offers bill payment (water and electricity) and money transfer domestically and regionally (to Benin) in partnership with eMoney Solutions, who developed the payment platform for both Niger Poste and La Poste of Benin. The cross-border money transfer service has already experienced high volumes since launching in December 2015. Niger Poste also has a partnership with MoneyExpress and is in discussions with SmallWorld, Ria, and MoneyGram for P2P transfers and remittances. Likewise, it plans to renew its partnership with Western Union.

It also has ambitions to become a bank (“banque postale”) but does not have the financial resources to do this. Thus, it is actively seeking financial support.

UNCDF Niger has supported MFIs, APSFD, and the Ministry of Finance since 2010 as part of its financial inclusion strategy. These efforts have largely been aimed at professionalization of the sector, capacity-building, and supporting refinancing from banks to MFIs. Other donors funding financial inclusion in Niger include the EU, the Belgian Fund for Food Security, the French Development Agency, the International Fund for Agricultural Development, the World Bank, the Swiss Development Cooperation, and USAID.

9.6 Burkina Faso

Despite the political crisis and lower gold and cotton prices, strong economic growth was expected for 2015 (5.5 percent) and 2016 (7 percent) (African Development Bank 2015c).

At 71 percent, Burkina Faso has the second highest proportion of its population living in rural areas in WAEMU after Niger. While there is a reasonably strong trend toward urbanization (more than 6 percent annually since the 1990s), population density remains low at approximately 64 habitants per kilometer. Cotton production is significant in the agricultural sector, employing approximately 90 percent of active agricultural workers.

A large diaspora of Burkinabé have sought work in Côte d'Ivoire. The World Bank estimated that approximately 1.5 million lived in Côte d'Ivoire in 2013, making the value of cross-border flows between the two countries significant (almost 105.7 billion FCFA in 2014.)⁸³

While the value of digital transactions more than doubled between 2014 and September 2015, the number of total MM accounts remains low at 2 million (second lowest in the region).⁸⁴

9.6.1 MNOs

In 2012, Airtel launched its MM solution and ONATEL/TelMob followed in 2013 with its Mobicash MM service (Lessekou and Planet Finance 2013). The third MNO present in the country, Telecel, is reported to be developing a MM offer as well. Although statistics are not available to confirm this, Airtel Money is thought to be the market leader, both in terms of clients and agent network.

With the Burkina-Côte d'Ivoire corridor constituting one of the largest cross-border flows in the zone, MTN and Orange in Côte d'Ivoire have partnered with Airtel in Burkina Faso to offer cross-border MM transfer between the two countries.

Airtel, which Orange is in the process of acquiring,⁸⁵ is reported to be applying for the e-money issuer license in Burkina Faso, following the lead of Orange in other WAEMU countries.

⁸³ World Bank remittance matrix, 2014.

⁸⁴ Ibid.

⁸⁵ <http://www.orange.com/en/Press-and-medias/press-releases-2016/Orange-to-acquire-Airtel-subsidiaries-in-Burkina-Faso-and-Sierra-Leone>

TABLE 19. Financial Inclusion Indicators—Burkina Faso

Indicator	Value	Notes
Estimated total population (millions)	18.1	United Nations (World Population Prospects, 2015)
Adults as % of total population estimate	54%	United Nations (World Population Prospects, 2015)
Estimated adult population (millions)	9.8	United Nations (World Population Prospects, 2015)
GDP per capita (USD)	713	World Bank World Development Indicators. Data from 2014.
% of population below poverty line	55.3%	Defined as the % of total population living on less than \$1.90 a day. Data as of 2009. Source: Poverty & Equity Databank and PovcalNet
Internet users (per 100 people)	9.4	Internet users are individuals who have used the Internet (from any location) in the past 12 months. Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. Source: International Telecommunication Union, World Telecommunication/ICT Development Report and database, and World Bank estimates (2014)
Access to electricity (% of population)	13%	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys, and international sources. 2012 estimates. Source: World Bank SE4ALL database, Global Electrification database.
% of population in rural areas	71%	World Bank staff (2014) estimates based on United Nations, World Urbanization Prospects.
Estimated literacy rate (% of adult population)	36%	2015 estimate. Adult literacy rate is the percentage of people age 15 and over who can read and write. Source: CIA World Factbook.
Mobile penetration rate (% of population)	79%	As of Q4 2015. Measured by the number of SIMs in circulation versus total population so there is a risk of double/triple counting since a number of people have multiple SIMs. Source: GSMA Intelligence 2016.
Total financial inclusion (% of adult population, including MFIs, Poste & MM)	14%	Denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution; having a debit card in their own name; receiving wages, government transfers, or payments for agricultural products into an account or through a mobile phone at a financial institution in the past 12 months; paying utility bills or school fees from an account at a financial institution in the past 12 months; receiving wages or government transfers into a card in the past 12 months; or personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months (% age 15+). Source: Global Findex 2014

(Continued)

TABLE 19. Financial Inclusion Indicators—Burkina Faso (Continued)

Indicator	Value	Notes
Formal financial inclusion not including MFI accounts (% of adult population with bank accounts)	13.14%	BCEAO. Information note, Number 44. 4th trimester 2015.
Number of MM subscribers (millions)	2	BCEAO, September 2015
% of active MM subscribers (BCEAO)	22.1%	BCEAO, 2014 (September 2015 report did not include this statistic for Senegal)
% of population age 15+ with an active MM account (Global Findex)	3%	Denotes the percentage of respondents who report personally using a mobile phone to pay bills or to send or receive money through a GSMA MMU service in the past 12 months; or receiving wages, government transfers, or payments for agricultural products through a mobile phone in the past 12 months (% age 15+). Source: Global Findex 2014
MM transaction values in 2015 (billions FCFA)	803	BCEAO, September 2015. This figure only represents values up to September 2015.
MM transaction values 2014 (billions FCFA)	392	BCEAO, 2014. This figure represents 2014 transaction values.
Volume of remittances received (USD millions)	120	2014 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
Volume of remittances sent (USD millions)	112	2010 estimate. Source: World Bank. http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data . 2013.

ONATEL/TelMob, the inheritor of the state-owned telecom institution's infrastructure, is reported to be updating its technical platform, which has limited its expansion in terms of bank partners. Its offer is less diverse than that of Airtel, consisting of only certain merchant payments and Onatel bill payments and not including cross-border transfer.

9.6.2 MFIs

The country is home to 82 MFIs with more than 371 service points that serve approximately 1.5 million Burkinabé. However, even MFI service points remain concentrated in urban centers. According to the APSFD-BF, more than 80 percent of the provinces have fewer than six MFIs present, and a quarter of the province only have two. Other provinces have 6–8, except for Kadiogo, in which lies Ouagadougou, with 18 institutions.

TABLE 20. MNO MM Offers in Burkina Faso

MNO MM offer	Products				Total number of MM accounts ^a	Estimated agent network
	Bill payments ^b	Bank account-MM link	Cross-border transfer within WAEMU	Other products		
 (recently acquired by Orange) ^c	X (school fees, water, electricity, TV, insurance bills from GA-VIE)		X (with Orange Côte d'Ivoire and MTN Côte d'Ivoire)	<ul style="list-style-type: none"> ■ Recharge of prepaid card from UBA 	2 million (~22% active ^d)	19,000
	X (Onatel telecom)					

a. BCEAO (2015c).

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. <http://www.orange.com/en/Press-and-medias/press-releases-2016/Orange-to-acquire-Airtel-s-subsidiaries-in-Burkina-Faso-and-Sierra-Leone>

d. The level of activity is from year-end 2014. September 2015 BCEAO statistics do not show this number.

The profiles of MFIs vary widely from one institution to another in terms of size, legal structure, supply, and performance. However, APSFD-BF divides the sector into three main categories:

1. Mutual institutions or savings and credit cooperatives (which represent the predominant form).
2. Direct or shared credit facilities, form generally adopted by NGOs or associations seeking to integrate microfinance activities in their development programs.
3. Commercial companies, which are an emerging form of MFI in Burkina Faso.

The MFI RCPB is by far the largest MFI, with over 70 percent of the market share both in terms of savings and loan portfolio, followed by a handful of other large MFIs. With support from CGAP, it is exploring opportunities to integrate DFS into its offerings.

Although the number of MFI clients has increased substantially during the past decade, only 12 MFIs (or less than 3 percent of all existing MFIs) were found to meet BCEAO standards in 2013.⁸⁶

9.6.3 Banks

There were 13 banks in the country as of September 2015. Banks dominate the financial system in terms of volume, holding 70 to 90 percent of the financial assets of

⁸⁶ « Rapport d'analyse des performances financières de 2013 des membres de l'APSFD-BF », APSFD-BF. May 2015.

TABLE 21. Top MFIs in Burkina Faso, By Amount of Loans Outstanding

MFI's – most recent data	Report Date	189.5m Loans (USD)	211,794 Borrowers	247.2m Deposits (USD)	1.4m Depositors
RCPB	2015-12-31	136,846,492	72,456	209,663,313	1,032,723
FAARF	2012	8,147,675	—	1,514,253	—
PAMF – BFA	2014	7,071,604	22,532	3,328,812	21,737
URC-Nazinon	2012	5,381,864	12,108	5,940,589	65,813
SOFIPE	2015-12-31	4,717,922	12,211	2,818,252	30,961
GRAINE sarl	2015-12-31	3,764,005	26,642	1,250,598	41,502
CVECA BM	2011	2,998,434	17,987	2,183,742	45,414
APFI – Burkina	2015-12-31	2,972,899	6,125	3,245,493	20,520
Micro Start	2014	2,232,992	—	1,222,490	37,614
URCCOM	2012	2,183,847	5,217	2,493,714	18,714

Source: MIX Market. <http://www.mixmarket.org/fr/mfi/country/Burkina%20Faso>

the country.⁸⁷ In addition, the sector is concentrated with over 50 percent of deposits held by three pan-African banks (Ecobank [21.07 percent], Bank of Africa [15.89 percent], and Coris Bank [15.27 percent]). These same three banks are leaders in terms of lending with 18.44 percent, 17.83 percent, and 17.39 percent of market share, respectively.⁸⁸

As in the rest of the region, banks are concentrated in a handful of primary urban centers, such as Ouagadougou and Bobo-Diasso. There are approximately 220 bank branches and financial institutions, of which almost half (102) are within the urban area of Ouagadougou. Moreover, according to the information available on bank websites, there are 128 ATMs in the country with a very limited number (about 20) outside of branches.

Nonetheless, banks are exploring alternative distribution channels, usually consisting of bank cards, internet banking, SMS, and telephone banking services. Some banks are innovating further. For example, Coris Bank has set up a mobile car equipped to recruit and serve customers in markets, small shops, and more rural areas. The bank is also setting up a mobile electronic banking platform that functions via the USSD channel (but is more adapted to smartphones). This platform will provide a range of payment services.

9.6.4 Other actors

The National Savings Bank (CNE), operated by the national postal service, **SONAPOST**, has a strong presence across the country through the 106 postal outlets of SONAPOST. Its offer is also attractive for lower-income segments, for example, it offers a savings account with an annual 3.625 percent interest rate, and requires a

⁸⁷ Burkina Faso 2015: Economic Outlook, <http://www.africaneconomicoutlook.org/>

⁸⁸ Portrait du secteur bancaire 2014—Association Professionnelle des Banques du Burkina Faso, http://www.tresor.economie.gouv.fr/11371_burkina-faso-le-secteur-bancaire-en-2014

minimum balance of only 10,000 FCFA. It also offers a microinsurance product for an annual fee of only 1,000 FCFA, providing access to compensation of up to 50,000 CFA in case of accident. In addition, it partners with Western Union and Quick Cash for money transfer. However, it offers no credit products to date, although this is an envision for the future through the creation of an MFI.

The microinsurance product **Cauri d'or** offered by the insurance company UAB Vie, with support from the Bill & Melinda Gates Foundation and the International Labour Organisation (ILO), has been fairly successful, with an annual revenue of 2 billion FCFA and an average of 12,000 new clients every year. The product consists of a contractual savings plan and includes life and disability coverage in case of accident. Customer contributions are collected everyday by UAB Vie agents, who are equipped with phones that allow them to update customer account information through a mobile platform.⁸⁹

Similarly, **Planet Guarantee**, an insurance brokerage company, has partnered with Allianz-Burkina to introduce a Sahel harvest agricultural insurance product. To date, approximately 8,000 cotton producers have been registered, mostly by mobile agents who travel to rural areas to introduce the crop insurance Sahel, marketed by its partner Allianz Burkina. About 8,000 "Cotton growers" have accepted it. To enjoy the benefits of agricultural insurance, the producers do not need to move in big cities because officers were available nearby.

⁸⁹ <http://www.impactinsurance.org/fr/projects/lessons/cauri-dor-automated-daily-collection-insurance>

ANNEX I: MM OFFERS, BY COUNTRY

Note that the estimated number of agents and number of MM accounts in the following include some double-counting as one agent can serve multiple providers and one person can have multiple accounts.

Country	MNO MM offer	Products				Total number of MM accounts (rate of activity) ^a	Estimated agent network
		Bill payments ^b	Bank account- MM link	Cross-border transfer within WAEMU	Other products		
BENIN		X (TV)		X (with Flooz Côte d'Ivoire, Niger, Togo)		2.3 million (41% active) ^c	9,000 agents
		X (TV)		X (with MTN Côte d'Ivoire & Airtel Niger)	<ul style="list-style-type: none"> ■ Insurance product for motorcyclists in partnership with NSIA. Fee (5,000 FCFA per year) collected directly from MM account and payouts also done via MM.^d ■ Group-level agreement with Western Union allows money transfers to be made directly into MM wallet 		

Country	MNO MM offer	Products				Total number of MM accounts (rate of activity) ^a	Estimated agent network
		Bill payments ^b	Bank account-MM link	Cross-border transfer within WAEMU	Other products		
BURKINA FASO	 (recently acquired by Orange) ^j	X (school fees, water, electricity, TV, insurance bills from GA-VIE)		X (with Orange Côte d'Ivoire and MTN Côte d'Ivoire)	<ul style="list-style-type: none"> Recharge of prepaid card from UBA 	2 million (22% active)	N/A
		X (Onatel telecom)					
		X (electricity, water, Sonatel, TV)	X (BICICI, EcoBank)	X (Côte d'Ivoire, Mali)	<ul style="list-style-type: none"> Bank to wallet (BICICI, EcoBank) Orange collecte to be launched 	2.2 million (42% active) ^j	10,000 agents
SENEGAL		X (electricity, water, Sonatel, cable TV)	X (Link with Western Union, which allows WU transfer to TigoCash e-wallet)	X (Côte d'Ivoire, Senegal; reception from France)	<ul style="list-style-type: none"> "Tigo matic" ATMs—3 in Dakar so farⁱ 		
		X (water, electricity, cable TV, school fees, bulk payments from NGOs to beneficiaries)	X (Ecobank, BICIM)		<ul style="list-style-type: none"> Piloting savings product targeting women, with NSIA, a microinsurance company, the NGO PSI, and PlaNet Guarantee, and associated life/disability and maternal health insurance product 	2.7 million (51% active) ^j	18,000 agents ^k
MALI		X ⁱ					N/A

NIGER		X (electricity, cable TV)		X (MTN Benin & MTN Côte d'Ivoire)		
		X (electricity, cable TV)	X (BOA, Ecobank)			7.9 million (17% active) ^j
		X (electricity)		X (with Flooz Côte d'Ivoire, Benin, Togo)		
TOGO		X (electricity, university fees, GTAC2A-VIE insurance fees)		X (with Flooz Côte d'Ivoire, Niger, Benin)		159,297 ^m (58% active)

a. Unless indicated otherwise, figures are from BCEAO (2015c). Activity rate is over 90 days.

b. Not including various merchant partners (e.g., stores, hotels, restaurants, pharmacies, e-commerce) and postpaid telecom subscriptions.

c. CGAP estimates suggest that this activity level might be an over-estimation.

d. <http://www.mtn.bj/fr/mobile-money/les-services-mobile-money/Pages/assur-zem.aspx>

e. <http://www.orange.com/en/About/Global-footprint/Orange/countries/Welcome-to-Orange-Cote-d-Ivoire>

f. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/04/2015_MMU_Mobile-money-crosses-borders_New-remittance-models-in-West-Africa.pdf

g. As reported to MIX Finclusion, June 2015.

h. <http://www.orange.com/en/Press-and-medias/press-releases-2016/Orange-to-acquire-Airtel-s-subsiaries-in-Burkina-Faso-and-Sierra-Leone>

i. The level of activity is from year-end 2014. September 2015 BCEAO statistics do not show this number.

j. <http://www.tigo.sn/tigo-cash/tigo-matic>

k. <http://www.orange.com/en/About/Global-footprint/Orange/countries/Welcome-to-Orange-Mali>

l. Bill payments are reportedly possible via MobiCash (see <http://www.anpe-mali.org/news/signature-de-convention-malitel-anpe-vers-la-creation-de-2-000-auto-emplois-pour-un-mali-emergent>) but specific payment acceptors via this platform are unknown.

m. This number is as of year-end 2014. September 2015 BCEAO statistics do not show this number.

n. Moov Togo. « RESEAU DES POINTS DE VENTE FLOOZ ». http://www.moov.tg/moov/pdf/Reseau_points_de_vente_Flooz_Lome_Interieur.pdf

ANNEX II: SUMMARY OF OTC PROVIDERS' OFFERINGS IN WAEMU

OTC operator	Profile / services	Present in	Partners
	<ul style="list-style-type: none"> ■ Consider itself to be a transactional platform for financial services ■ Most known for P2P transfers and bill payments ■ Also want to (and in some markets do) offer airtime sales and (cash out of) salary payments ■ Compete with MNOs' MM offerings on price and agent network distribution (better in some countries) ■ Currently piloting a prepaid GIM card in Senegal (issued by bank partner and co-branded Wari/bank partner), which offers cash in/out, life insurance, and various merchant payments ■ 200,000 cards ordered. Have already launched in Senegal; will soon launch in Côte d'Ivoire and Benin. ■ UBA is the main partner for now. ■ Will target MFIs to sell cards to their clients. E-wallet can be linked to clients' MFI account. However, it will be up to the MFIs to develop the product, marketing, open the accounts, etc. ■ Health insurance also offered with each card (in partnership with NSIA insurance) for a fee—can also serve as an identification card in medical centers. ■ Agents have other income sources (typically, their own small businesses)—Wari is an additional income source. Other income sources also necessary to ensure that agents also have sufficient liquidity for Wari transactions 	<ul style="list-style-type: none"> ■ Senegal—20,000 service points^a ■ Benin—2,500 service points (number that are active unknown) ■ Côte d'Ivoire—number of agents unknown 	<ul style="list-style-type: none"> ■ Several bank partners, including Ecobank as one of the first bank partners, and UBA for the prepaid GIM card ■ Several Postal networks

	<ul style="list-style-type: none"> ■ Launched in 2013 in Senegal ■ An offering of BOSS Ltd. (Boygues Solutions Systems Limited), a subsidiary of the Groupe BOYGUES ■ Focus initially on P2P transfer. Now also focused on bulk payments (e.g., university/school fees, utility bills) and on promoting the card and Vitfé e-wallet. ■ In June 2015, launched the prepaid GIM-Visa card—sold 10,000 cards in first 3 months <ul style="list-style-type: none"> ■ Card linked to customer’s Vitfé e-wallet, which can be linked to any phone regardless of operator ■ Priced at 10,000 CFA ■ In the process of launching the Vitfé e-wallet, in partnership with several banks and MFI networks. With Vitfé, e-wallet-to-cash/ e-wallet-to-card (and vice versa) transactions are possible. Functions even on basic phones. <ul style="list-style-type: none"> ■ JoniJoni sees the e-wallet as a way of building a culture in which financial transactions are done remotely + savings are virtual (and therefore more secure) ■ Cards are aimed at a higher-income/more technology savvy segment that is comfortable with cards ■ Also offering financial institutions a nonbranded (“white label”) money transfer offering, using the JoniJoni technology platform, which the institutions can then brand themselves—but would still be compatible with the JoniJoni network. This allows bank clients to transfer money from their accounts to any JoniJoni point, allowing them to withdraw cash where the bank does not have a physical presence and/or to perform other types of services either not offered by the bank or offered at a higher cost (e.g., P2P, bill payment) ■ Partners with Small World for international money transfers 	<ul style="list-style-type: none"> ■ Senegal—12,000 service points^b, mostly in “institutional” settings (MFI branches, gas stations, etc.) 	<ul style="list-style-type: none"> ■ UBA is principal bank partner for card and POS devices ■ B finance, another subsidiary of BOYGUES, which has a field team that promotes JJ on the ground, and manages networks of partner agents. ■ Other subsidiaries of BOYGUES also support BOSS in the marketing of JJ products.
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a. Estimate as of October 2015. http://www.dakaractu.com/WARI-45-000-emplois-crees-20-000-points-au-Senegal-une-plateforme-adaptee-aux-besoins-des-populations_a99041.html
b. <http://www.jonijoni.net/>

ANNEX III: LIST OF STAKEHOLDERS INTERVIEWED

Organization	Name & Position of person interviewed
BENIN	
Bank of Africa	Maxime Elegbede, Director of Marketing and Communication
ABSU-CEP (Agence Béninoise du Service Universel des Communications Electroniques et de la Poste /Beninese Agency for Universal Electronic Communications Service and Postal Services)	Emile Ayétchoro Kougbadi, Executive Director
Alidé	Alain Dedé, Accounting & Finance Officer Akossekon Landry, IT officer
APBEF (Association Professionnelle des Banques et Etablissements Financiers du Benin/Professional Association of Banks and Financial Establishments)	Cosme Ahouansou, Executive Director Giresse Carel Avokandoto, Officer in Charge of Studies
ARCEP (Autorité de régulation des communications électroniques et de la poste/Regulatory Authority of electronic communication and postal services)	Géraud-Constant Ahokpossi, Director of Networks and Infrastructure Luc Boko, Director of Markets and Forecasts
ASMAB (L'Association pour la solidarité des marchés du Bénin)	Daniel Fangbedji, President of the Administration Board
Banque Atlantique	Eric d'Oliveira, Marketing Manager
BCEAO National office	Mme Gado, Head of Services for Banking Operations
	Mme Aidado, Head of Surveillance of Payment Systems
	Mr. Baillo, Head of Services for Information Systems
Division of Microfinance Support (La Direction de la Promotion de la Microfinance)	Mme Gebeye, Adjoint Director
	Mme D'Almeida, Institutional Support Officer
Ecobank	Jacques Pofagi, Trade & Cash Management Manager
eMoney Solutions	Said Maliki
	Martin Biaou
FECECAM (Faîtière des Caisses d'Épargne et de Crédit Agricole Mutuel du Bénin)	Victorin Codjo Houedanou, Executive Director
Finadev	Luc Morio, Executive Director & President of Administrative Board
Ministry of Finance—MFI surveillance unit	Louis Biao, Coordinator
	Ylouassi Hedrack, statistics unit
	Mr. Ahlouanso, IT division
	M. Ngonse, IT division

Organization	Name & Position of person interviewed
Moov/Flooz	Aissatou Diallo, Sub-Directeur Data & Digital Services
	Nassif Adébayo Toukourou, Responsible for Distribution & Partnerships, Mobile Money
MTN	Sylvie Bouraima, Mobile Money Manager
National Microfinance Fund (Le Fonds National pour la Microfinance)	Mr. Rodrigue Sonnako, Head of IT
PADME	Desiré Gogon, Executive Director
	Head of Risk Management
	Head of Marketing
	Head of IT
Prime Minister's Office	Quentin Sauzay, Head of Mission
UBA	Franck Ahissou, Head of e-banking
UNCDF	Cossoba Nanoako, Programme Officer
Vital Finance	Wakil Adjibi, Administrative Executive Director
Wari	Retice Sidney Assinonvo, Business Development Representative
CÔTE D'IVOIRE	
AFD (Agence Française de Développement/French Development Agency)	Bruno Leclerc, Director
	Mireille Bourgeat, Responsible for the Mission
APSFDCI (Association Professionnelle des Systèmes Financiers Décentralisés du Côte d'Ivoire/Professional Association of Decentralized Financial Systems)	Cyrille Tanoé, Executive Director
Banque Atlantique	Marc Hervé Yabi, Communication Assistant
Banque Atlantique (group)	Souleymane Diarrassouba, Executive Director
	Ibrahim Dohia Traore, Director Information System ABI
	Amadou Diallo, Responsible for Retail banking, marketing and innovative products
BCEAO National office	Issiaka Kone, Head of Services for Banking Operations
Bio Partenaire	Dr. Andres Tschannen, Operations Manager, Global Cocoa Sustainability/ Barry Callebaut Sourcing

(Continued)

Organization	Name & Position of person interviewed
Cdiscount	Issouf Rouamba, Country Manager
	Cheick Oumar Guira, Head of commercial activities, marketing & GRC
CELPAID	Souleymane Ouattara, Managing Director
	Gbodja Paul, Technical assistant on Microfinance
Competition Commission and fighting against the rising cost of living	Sako Antoine Désiré Nomvia, Administrator of Financial Services, Secretary General
Digital Afrique Telecom	Celestin Komenan, Director of Business Development
	Sidick Bakayoko, Marketing Director
	Michael Yapo, Director of Technical Operations
FIDRA (Fonds Internationale pour le Développement de la Retraite Active)	Maurella Nadege Djatty, Executive Director Adjoint
	Charles Meledje, Director of Strategic Development and Studies
Ivoirien Society Bank (Société Ivoirienne de Banque [SIB])	Carolle Kanga, Responsible for Marketing Operations
Jumia	Wilfried Assouan, PR Associate
MicroCred	François Barnabe, Executive Director
Mimoyé Finance	KOUASSI Yao Georges, Executive Director
Minister for the Prime Minister in charge of Economy and Finance	Issa Fadiga—Special Advisor, Executive Secretary, Programme of Development of the Financial Sector
Ministry of Postal Services and Information and Communication Technologies	Dadié Roger DEDE, Director of ICT
MTN	Head Mobile Money
MTN master agent	M. Sidibé
Nestlé	Amadou Thioye, Country Controller
NSIA Bank	Georges K. Kouassi, Head of Electronic Banking Department
	Cédric Kouadio Yao, Head of Development Services, Electronic Banking
Office of the Prime Minister	Ahoutou Emmanuel KOFFI, Cabinet of the Prime Minister, Adjoint Director of the Cabinet
Orabank	Tiornan Coulibaly, Adjoint Executive Director
Orange	Jean Marius Yao, Director Projects & Orange Money

Organization	Name & Position of person interviewed
Postal Service of Cote d'Ivoire	Amadou Bamba, Director of Financial Products
	Jean Kacou, Marketing Director
Professional Association of Banks and Financial Establishments (Association Professionnelle des Banques et Etablissements Financiers de Cote d'Ivoire [APBEF-CI])	Fanny Ismael Kader, Adjoint Executive Director
Qash Services	Narcisse Kouakou, Adjoint Director, Commercial Services
	Christian Mougoue, Director, Commercial Services & Marketing
SII (Société Ivoirienne d'Investissement)	Marc Essien, Directeur d'Exploitation Adjoint en Charge de l'activité Orange Money
	M. Diallo – Directeur d'Exploitation en charge de l'activité e-recharge
Smallworld	Yves Doho, Regional Manager Africa
Société Générale	Yeo Légnimé, Direction Multichannel Marketing & Communication
Supernet Technologies	Gilbert Gobly, Executive Director
	Christian Zogbo, Responsible for Development
ARTCI (Autorité de Régulation des Télécommunications/Telecommunications Regulatory Authority)	Adou Joséphine, Head of Market Observatory Department
Wari	Aimé Stéphane Babo, Cluster Head Bénin/Togo/Niger
World Bank	Chris Tullis, Impact Evaluation Coordinator
FRANCE	
Afrimarket	President & Co-founder
BNP Paribas - France	Jean Marc Chaudoreille, Responsible for Payments, International Retail Banking
Société Générale (headquarters Paris)	Sadish Outtandy, Marketing Department, International Banking and Financial Services
Tagattitude	Hervé Manceron, COO
SENEGAL	
ACEP (Alliance de Crédit et d'Epargne pour la Production)	Mayoro Loum, Executive Director
	Souleymane Sarr, Responsible for Studies and Development

(Continued)

Organization	Name & Position of person interviewed
ARTP (Autorite de Regulation des Telecoms et des Postes/Regulatory Authority of Telecommunication and Postal Service)	Seyni Faty, Head of Department Interconnection, Markets and Pricing
	Malick Sylla, Head of Monitoring the Quality of service and Operators
	Adama Diouf, Head of Monitoring Service of Postal Operations and of the Market
	Chef du Service Suivi des Operations Postaux et du Marché
BCEAO headquarters	Bwaki Kwassi, Director of Payments Systems and Means
	Patrick Kodjo, Director of Microfinance and Financial Inclusion
	Astou LO Ndiaye, Deputy Director of Microfinance and Financial Inclusion
	Giselle NDOYE, Chief of the Modernization of Payment Systems
	Ms. Guissé, Microfinance division
Ecobank	Alassane Gueye, Responsible for Retail Banking
GIM-UEMOA (telephone conversation)	Blaise Ahouantché, Executive Director
IFC	Tiphaine Crenn, Financial Institutions Group
	Meritxell Martinez, Associate Operations Officer, Access to Finance
Joni Joni	Ousmane Gomel Niang, Executive Director
Manko	Gaëtan DEBUCHY, Executive Director
MicroCred	Marème Sène, Director, Alternative Payment Channels
	Laura Munoz Perez, Development Director
Microfinance Department (delegate Ministry of Microfinance and Solidarity Economy)	Djily Lo, Director
Niokobok	Laurent Liataud, CEO
OQSF (Observatoire de la qualité des services financiers/Observatory of Financial Services Quality)	Abdoulaye GAYE, Executive Secretary
	Alphonse Diombo Thiakane, IT expert
	Alioune Diop, Financial Expert
	Sophie Seck Fall, Judicial expert
Orange	Alioune Kane, Director, Orange Money
	Cheikh Tidiane Sarr, Head of Marketing Department
PAMECAS	Malick Diop, Executive Director
	Moussa Gassama, Head of Studies Department and Commercial Development

Organization	Name & Position of person interviewed
Teranga Capital / In Touch SA	Omar Cissé, Co-founder of Teranga Capital & Executive Director of In Touch SA
TIGO / Mobile Cash	Julien Guth, Director
	Serge Mounghanou, New Business Development Manager
UBA	Malick Sène, Responsible for Digital Banking
UIMCEC	Ousmane Thiongane, Executive Director
	El Hadji Gana Seck Diop, Responsible for Agent Banking Pilot
UNCDF	Sabine Mensah, Experte Technique en Finance Digitale, MM4P
	Omar Ndiaye, DFS Expert
VoLo	Draman Touray, CEO
MALI	
MercyCorps	Allison Huggins, Country Director
BCEAO National Office	Fatoumata Hacko Coulibaly, Microfinance department
	Oumou Toure Tounkara, payment systems department
BNDA Mali	Aichata Toure Cisse, Responsible for Commercial/marketing
CPA/SFD Mali	Alhassane Ibrahima Diall, Director
KAFO JIGINEW	David Dao
Lemonway	Ibrahim KANTE, Executive Director
MicroCred	Sidy Kounta, Director, Commercial Development
Orange	Idrissa DIALLO, Director Orange Money
SORO YIRIWASO	Adama CAMARA, Executive Director
USAID Mali	Dan Thomson, Private Sector Engagement Officer
	Mamadou Sene, Digital Solutions Focal Point
NIGER	
MercyCorps	Thierno Samba Diallo, Country Director
Airtel	Mme Mailele Fatouma Zara
	Moussa Yacouba, Airtel Money Business Development Manager
ARTP (Autorité de Régulation des Télécommunications et de la Poste/Regulatory Authority of Telecommunications and Postal Services)	Abdou Salou, Director, Telecommunications Sector

(Continued)

Organization	Name & Position of person interviewed
BAGRI (Banque Agricole du Niger)	Maman-Lawal Mossi, DER
Banque Atlantique	Aissa Ango Nana, Executive Director
Flooz/Moov	Bechir Ousseini
MECREF Niger	Mme Souley Balkisa, Directrice Générale
Niger Poste	Amadou Abdou Waziri, Executive Director
Orange	Alkerou Hassane, Director Orange Money
APBEF (Association Professionnelle des Banques et Etablissements Financiers/ Professional Association of Banks and Financial Establishments)	Mohamed Mouddour, Executive Director
APSFD (Association Professionnelle des Systèmes Financiers Décentralisés du Niger/Professional Association of MFIs)	Aïchatou Moussa Yérïma, Executive Secretary
UNCDF	Abdourahmane Adamou Kodo

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