

From Mobile to Credit

Access to financial services for poverty reduction and economic growth in Mali





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Abbreviations and Acronyms

AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism	
AMRTP	Autorité Malienne de Régulation des Télécommunications, des Technologies de	
	l'Information et de la Poste (Telecom Regulator)	
ΑΡΙ	Agence pour la promotion des investissements au Mali (Investment Promotion	
АТМ	Agency) Automated Teller Machine	
B2B	Business-to-Business	
B2P	Business to Pusiness Business-to-Person	
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest (Central Bank of West African	
BCLAU	States)	
BIC	Bureau d'Information sur le Credit (Credit Bureau)	
CCS-SFD	Decentralized Financial Systems Control and Surveillance Unit	
CICO	Cash-In/Cash-Out	
C/I Ratio	Cost-to-Income Ratio	
CGAP	Consultative Group to Assist the Poor	
CMDT	<i>La Compagnie Malienne pour le Développement du Textile</i> (Malian Company for Textile Development)	
CNPM	Conseil National du Patronat (Mali employer's federation)	
CNSMO	National Implementation Monitoring Committees	
CVECA	<i>Caisse Villageoise d'Epargne et de Crédit Autogérée</i> (Village Savings and Credit Institutions)	
DFS	Digital Financial Services	
EME	Etablissement de Monnaie Electronique (mobile money operator)	
EMOP	Enquête modulaire et permanente auprès des ménages (Modular and Permanent	
	Household Survey)	
FAS	Financial Access Survey	
FAO	Food and Agriculture Organization of the United Nations	
FCFA	CFA franc	
FGD-UMOA	Fonds de Garantie des Dépôts dans l'UMOA (Deposit Guarantee Fund)	
FGSP	Fonds de Garantie pour le Secteur Privé (Private Sector Guarantee Fund)	
G2P	Government-to-Person	
GDP	Gross Domestic Product	
GIM-UEMOA	<i>Groupement interbancaire monétique de l'Union économique et monétaire ouest-</i> <i>africaine</i> (Interbank Banking Group of the WAEMU)	
GSMA	Global System for Mobile Communications Association	
IFC	International Finance Corporation	
IFDC	International Fertilizer Development Center	
IMF	International Monetary Fund	
INPS	Institut National de Prévoyance Sociale (National Institute of Social Welfare)	
INSTAT	Institut National de la Statistique (National Institute of Statistics Office)	
IOB	Intermédiaires en opérations de banque (intermediaries in banking operations)	
ISIC	International Standard Industrial Classification of All Economic Activities	

КҮС	Know Your Customer		
LLC	Limited Liability Corporation		
LSMS	Living Standards Measurement Study		
MEF	Ministry of Economy and Finance		
MFI	Microfinance Institution		
MIS	Management Information System		
MNO	Mobile Network Operator		
MSME	Micro, Small, and Medium Enterprises		
NGO	Nongovernmental Organization		
NINA	National Identification Number of Natural and Legal Persons		
NPL	Nonperforming Loan		
OHADA	Organisation pour l'harmonisation en Afrique du droit des affaires (Organisation for the Harmonization of Corporate Law in Africa)		
отс	Over the Counter		
PAYG	Pay as You Go		
P2B	Person-to-Business		
P2G	Person-to-Government		
P2P	Person-to-Person		
SICA-UEMOA	<i>le Système Interbancaire de Compensation Automatisé de l'UEMOA</i> (Automated Interbank Clearing System)		
SICSS	Systeme d'information Centralise du Suivi des SFDs (Automated MFI Reporting System)		
SIM	Subscriber Identification Module		
SME	Small and Medium Enterprises		
SSA	Sub-Saharan Africa		
STAR-UEMOA	<i>Système de Transfert Autmatisé et de Règlement de l'UEMOA</i> (Real-Time Gross Settlement System)		
USSD	Unstructured Supplementary Service Data		
VSLA	Village savings and loan associations		
WAEMU	West African Economic and Monetary Union		
WAMU	West African Monetary Union		
WDI	World Development Indicator		

Acknowledgements

This report was produced by a core team led by Andrea Dall'Olio (Lead Financial Sector Economist, World Bank Group) and includes Md Mansur Ahmed (Agricultural Economist, World Bank Group), Maria Pagura (Senior Financial Sector Specialist, World Bank Group), Corinne Riquet (Consultant, CGAP), and Shanyue Yan (Consultant, World Bank Group). Details for each chapter are as follows:

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Chapter 2 was authored by Andrea Dall'Olio. Data analysis was provided by Shanyue Yan, and contributions were received by Ousmane Sacko (Crossboundary), Alexandre Laure (Senior Private Sector Specialist, World Bank), and Nona Karalashvili (Economist, World Bank).

Chapter 3 was authored by Andrea Dall'Olio, Maria Pagura, and Md Mansur Ahmed. Data analysis was provided by Shanyue Yan, and contributions were received by Joanne Gaskell (Agricultural Economist, World Bank Group) and Tenin Fatimata Dicko (Young Professional, World Bank Group).

Chapter 4 was authored by Corinne Riquet and Andrea Dall'Olio with contributions from Peter Zetterli (Senior Financial Sector Specialist, CGAP) and Xavier Decoster (Consultant, World Bank Group).

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Chapter 6 was authored by Maria Pagura with contributions from Juan Buchenau (Senior Financial Sector Specialist, World Bank Group), Modibo Camara (A2F Consulting), Andrea Dall'Olio, Lindsey Tan Lim (Young Professional, World Bank Group), and Jean Michel Lobet (Senior Financial Sector Specialist, World Bank Group).

The team benefitted from the guidance from Consolate Rusagara, FCI GP Africa West Practice Manager, and acknowledges the support received from the Mali CMU, in particular from Soukeyna Kane (Country Director), Jose Calix (Program Leader), and Michel Rogy (Program Leader).

The team would like to thank the peer reviewers, Leora Klapper (Lead Economist, World Bank Group) and Panos Varangis (Lead Financial Sector Specialist, World Bank Group) for the comments provided during the review process.

The team would also like to thank Francesco Strobbe (Senior Financial Sector Specialist, World Bank Group) for providing comments to earlier versions of the report and colleagues who participated at the inception phase of the study: Rong Chen (Analyst, World Bank Group), Louise Grogan (Consultant, University of Guelph), Daniel Pajank (Economist, World Bank Group), and Nicholas Smith (Young Professional, World Bank Group).

Irfan Kortschak and Amanda Green provided editing assistance.

Executive Summary

i. **The financial sector in Mali has gained substantial depth over the past decade**. The banking sector—the backbone of financial intermediation in Mali—holds more than 90 percent of the country's total financial assets. Since the early 2000s, the banking sector has expanded considerably as new players have entered and existing ones have become consolidated. By 2016, banking sector assets stood at 51 percent of gross domestic product (GDP) in 2016, in line with the average for Sub-Saharan Africa (SSA). By contrast, the microfinance sector has stagnated since 2012, owing to a protracted crisis stemming from weak governance and poor performance. Although most of the sector's incumbents have been affected by the situation, a few recently established players have managed to gain significant market share and are beginning to reverse the decline.

ii. Mali's financial sector has traditionally been segmented between banks and microfinance institutions (MFIs). Banks, most of which are located in urban areas, have focused generally on the needs of formal enterprises and upper-middle-class households, while MFIs have targeted poorer households, informal businesses, and rural clientele. Although recent efforts to reach a broader set of customers have enhanced access to financial services across the country, "brick-and-mortar" institutions continue to serve mainly the formal business sector and salaried employees, including civil servants.

iii. Mobile operators have recently become aggressive competitors of banks and MFIs, helping to expand the reach of financial services. The entry of mobile network operators (MNOs) has altered the competitive landscape significantly, as their products are targeted not only to lower-income and rural households, but also to the traditional clients of banks and MFIs. In 2017, 35 percent of adults in Mali held an account at a financial institution or MNO, up substantially from less than 10 percent at the beginning of the decade. Mobile money has allowed a considerable share of the population to access a safe and affordable way to store and transfer funds. About half of account holders (17 percent of adults) rely on mobile financial services alone.

Client Focus: Individuals and Informal Businesses

iv. Although a significant share of the Malian population is likely to remain "unbankable" in the near future, access to financial services could still offer important benefits. Despite recent progress, a large share of the population still depends on informal channels to address financial needs such as transferring funds, saving, and borrowing. Women and those who are less educated are more likely to be financially excluded. Financial products could bring benefits to these segments of the population, even if they are unlikely to have immediate access to credit. As a starting point, the digitization of (some of) their payments (including government payments and those for the sale of agricultural products) could reduce transaction costs, while accounts could provide a safe mechanism for saving.

v. **Mobile money could serve as an entry point for individuals and informal businesses to participate in the broader financial sector**. With close to 90 percent of the population covered by the mobile data network, mobile financial services could reach a much broader clientele than the traditional financial sector. Mobile money could provide previously excluded segments of the population with a way into the broader suite of savings and credit products. By using mobile financial products, these clients could build a transaction history that would help them access credit in the future.

Client Focus: Agriculture

vi. **Agricultural households tend to be excluded from the financial sector, and particularly from accessing formal credit**. The most common barriers to accessing financial services include limited financial literacy, high costs, and distance from a service point—all of which are especially binding for agricultural households. Agricultural households also have lower access to formal credit. The agricultural sector—which employs 58 percent of the total working-age population and contributes 41 percent of GDP—receives less than 5 percent of formal credit to the economy, mostly to finance cotton production. Despite the rural prominence of MFIs, only about 4 percent of agricultural households receive credit from an MFI or a bank.

vii. Structuring value chains and improving access in rural areas are preconditions for facilitating access to financial services, including credit, for farmers. In addition to mobile money services, instruments such as agent banking (in which retail establishments serve as agents of a financial institution) could expand the reach of banks and MFIs. Moreover, interventions to structure some agricultural value chains—such as creating producers' organizations—could provide a reliable channel through which agricultural producers could access credit, while also fostering access to financial services by digitizing payments made by large purchasers. The digitization of agricultural payments could be piloted in the cotton sector, as well as in sectors with high added value, such as fruits and vegetables.

Client Focus: Formal Sector Firms

viii. Almost all formal firms in Mali have access to an account, but cash is still the norm for business transactions and credit remains concentrated. As a result, relationships between firms (especially smaller and semi-formal ones) and financial institutions remain shallow. Credit allocation is concentrated, with a few large enterprises receiving the bulk of the credit in the economy and most firms having access only to short-term working-capital finance. This high level of concentration is typical of developing economies, where lenders respond to information asymmetries by focusing on a select set of established borrowers. As a result, however, credit constraints hinder even larger firms' ability to plan, invest, and expand over time.

ix. Increasing firms' access to finance will require improving the availability of credit and extending the duration of loans to finance medium-term investments. Actions to improve the "bankability" of businesses, to provide banks with better information on which to base credit assessments, and to strengthen the relationship between banks and firms should be accompanied by actions to increase the supply of longer-term credit.

The Role of the Public Sector: Policies and Interventions

x. The public sector can promote financial inclusion and access by improving the policy environment and addressing specific market failures. This report proposes a priority list of recommendations, including "quick wins" that would be expected to bear fruit in the near term as well as high-impact actions to bring concrete results over the longer term.

xi. A set of priority policy actions could be proposed to the Malian authorities and to the regional financial sector regulator (BCEAO) to strengthen the financial sector policy environment:

- To create a level playing field among providers and facilitate access, the BCEAO could revise the legal framework to enable banks and other financial institutions to introduce financial products with lighter "know your customer" (KYC) requirements;
- To increase penetration of financial services in underserved areas, the BCEAO could revise the agent banking regulatory framework to expand the range of potential agents and allow all financial institutions (including MFIs) to benefit from it;
- To **foster product diversification and reduce the cost of mobile financial products**, the government could increase competition in the mobile phone market by facilitating entry of new operators;
- To **support the uptake of digital credit**, the BCEAO could introduce flexibility in the application of interest rate caps while putting in place appropriate consumer protection regulations, including those designed to curb abusive lending practices;
- To **revamp the role of the MFI sector**, the BCEAO and the government could improve supervision of MFIs, revise their resolution framework, and address nonviable institutions;
- To facilitate access to credit among a broader range of individuals and firms, the BCEAO could take action to improve the quality of credit information and include new information sources on borrowers.

xii. Key public interventions could be enacted by the government, with the support of development partners, to address market failures, facilitate access, and encourage the use of financial services:

- To facilitate access to finance on the part of those at the bottom of the financial pyramid, the government and development partners should promote initiatives to increase (digital) financial literacy, delivered through innovative channels in partnership with private providers;
- To foster the use of financial services and, in turn, stimulate supply in underserved areas, the government could roll out a comprehensive program to digitize government payments;
- To create cost synergies and improve supervision of the MFI sector, the government and development partners should promote the implementation of a shared management information system for MFIs;
- To bring the benefits of financial products and increase the flow of credit to the agricultural sector, the government and development partners should foster the digitization of agricultural payments and support the structuring of agricultural value chains by working to encourage and/or strengthen producer organizations and attract large-scale investors;
- To increase access to finance for small and medium enterprises, including in the agriculture sector, the government could consider capitalizing the guarantee scheme and improving its functioning mechanism;
- To facilitate the provision of investment financing to firms, the government and the BCEAO, together with development finance institutions, should promote the market for longer-term finance, including by supporting banks' access to long-term funding sources and by improving the fiscal and regulatory framework for leasing.

Overview

1. Introduction

1. Maïmouna Konipo (Maï) is a small trader in Mali's capital, Bamako. She sells fresh fish in a stall in the Kalaban Coura market. She purchases the fish every morning from Bozo fishermen on the banks of the Niger River. Her business is doing well and she makes a living from it, but she has not managed to expand it very much over the years. To prevent losses from failures to sell her daily stock, some time ago she purchased two small second-hand refrigerators to preserve the fish overnight. These refrigerators broke down after a while, however, and she did not have sufficient funds to replace them. Maï tried to obtain a loan from a microfinance institution (MFI), but her application was rejected on the grounds that she had no collateral to offer. Last year, Maï opened a mobile money account, which she uses regularly to send money home to her parents in Sevare. She finds that there are many advantages to this method of sending money compared to her previous approach of entrusting it to a bus driver for delivery. Maï has recently come to realize that a significant proportion of her customers also have mobile money accounts. Some of these customers prefer to use these accounts, rather than cash, to pay for her wares. As a result, she has accumulated some savings in her account. She has also heard that a friend in Côte d'Ivoire received a small loan through her mobile account. Maï does not know much about the system her friend used, but she hopes it will soon become available in Bamako to enable her to purchase a refrigerator to expand her business.

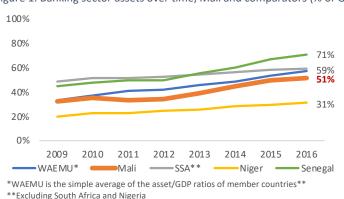
2. **Chaka Dembele is a maize farmer in the Koulikoro region**. Chaka is able to meet his family's needs from the small plot of land he cultivates. Although primarily a subsistence farmer, he occasionally manages to sell some surplus. When he generates cash from the sale of his crops, he tucks the funds away in his home to save them or lends money to members of his family or close friends in the village. His output varies over time, however, depending on factors such as seasonal conditions and the quality of seeds, fertilizers, and pesticides that he purchases with funds he borrows from family and friends when the planting season approaches. If he were able to purchase higher-quality seeds, fertilizers, and other inputs and to invest in the construction of a basic irrigation system, he believes that he could increase his yield significantly. Unfortunately, he does not have access to the credit necessary to make such investments. The funds he can access as loans from family and friends are limited and uncertain, and he has no access to formal financial institutions or other sources of credit.

Mr. Coulibaly owns a factory that produces shea butter near Segou. The factory purchases 3. shea nuts from a nearby women's organization and from elsewhere in the country. Mr. Coulibaly would like to increase his factory's production capacity substantially given the promising prospects for the sale of shea butter on export markets. He faces two major challenges, however. First, increasing his productivity would require him to upgrade his equipment, which would in turn require bank financing. He has a good relationship with a local bank, which provides him with an overdraft facility to purchase basic inputs in bulk. The bank is prepared to extend him a loan for a maximum tenure of three years to finance the purchase of the state-of-the-art machinery that he requires, but since the monthly payments to service a three-year loan would be too high for his enterprises to bear, he has decided to postpone his plans until a time when he has accumulated sufficient internal funds to finance them. Second, he is unable to scale up the quantity of inputs he receives with sufficient confidence in the supply. The women's organization that he sources from is unable to provide him with greater quantities of shea nuts with any high degree of certainty. While he is prepared to provide the farmers in his network with fertilizers and pesticides to increase and stabilize their yield, he is only willing to invest a limited amount of resources in this way, as the farmers are unable to provide collateral and may end up selling their output to a competitor, leaving him to bear the loss.

4. The stories of Ms. Konipo, Mr. Dembele, and Mr. Coulibaly exemplify the segmented nature of Mali's financial sector. Traditionally, individuals, small informal entrepreneurs, and farmers in Mali have conducted the vast majority of their transactions in cash, with limited or no connection to formal

financial systems. Instead, they hold their savings either by hiding money in their homes or by investing in informal savings groups. When they need credit, they must rely on loans from family and friends or on informal financial services providers. Only a small proportion have access to an MFI whose services can help them save and/or obtain credit. An even smaller proportion have access to or relationships with a bank. However, given the high rate of penetration of mobile telephone services and the recent introduction of mobile money services, an increasing proportion of the previously excluded population have been able to open affordable accounts. Increasingly, they are using mobile money accounts to conduct financial transactions and to exchange funds in a safe manner. In contrast to informal businesses and small-scale rural producers, a large proportion of formal small and medium enterprises (SMEs) and larger businesses hold accounts at formal financial institutions and use banks to conduct at least some of their financial transactions. Even in these cases, however, they predominantly use cash when dealing with smaller suppliers and in receiving payments from retail customers. While an increasing share of formal businesses have access to credit facilities, most credit is provided to larger borrowers who have long-standing relationships with banks. Access to longer-term credit is still constrained overall.

5. **Despite these limitations, Mali's financial sector has gained substantial depth over the past decade**. With more than 90 percent of the country's total financial assets, the banking sector remains the backbone of financial intermediation in Mali. Over the past decade, the banking sector has continued to expand through a process of organic development as new players have entered and existing ones have become consolidated. Increased competition has been a significant driver for the expansion of the sector, enabling it to grow rapidly to the point where its depth now matches that of regional comparators. Although still lagging behind more developed financial systems in Africa, the ratio of Mali's financial sector assets to gross domestic product (GDP) is now close to the average level for Sub-Saharan Africa (SSA).





Source: IMF Regional Economic Outlook, 2017.

6. **Mali's financial institutions were negatively affected by the political and security crisis, with MFIs experiencing the most significant impact**. Since 2012, Mali has faced a protracted political and security crisis that has affected its economy and its social structures, with some significant spillovers on the financial sector. The economic downturn associated with the crisis revealed and exacerbated a number of structural weaknesses in the MFI sector, affecting some of the largest institutions in particular. As a result, the sector underwent a period of significant turmoil from which it has only recently begun to recover, in parallel with the entry of some new players.

7. **Mobile network operators (MNOs) have significantly changed the competitive landscape of the financial sector and contributed to an increase in the level of financial access**. With the entry of MNOs into Mali's financial sector arena beginning in 2010, the level of competition in the sector has increased considerably, resulting in positive disruptions to the market. The political crisis drove an increase in the use of mobile financial services for money transfers, since mobile money provided a safe and affordable means to transfer funds to and from areas affected by the security situation. 8. **Mali's financial sector is regulated by the regional central bank (***Banque Centrale des Etats de l'Afrique de l'Ouest*, or BCEAO) and supervised by both regional and national institutions. BCEAO's mandate covers all service providers in the financial sector. However, BCEAO shares supervision and oversight functions with a number of regional and national institutions (Table 1). In particular, the Banking Commission is responsible for supervising not only the banking sector, but also the systemic MFIs (of which there are seven in Mali). Responsibility for supervising the smaller MFIs falls under the mandate of the Ministry of Finance, which delegates associated functions to the Decentralized Financial Systems Control and Surveillance Unit (CCS-SFD). The emergence of mobile money has increased the complexity of the regulatory framework, since MNOs have been encouraged to create independent companies as nonbank e-money issuers, known as *Établissements de Monnaie Électronique* (EME). The EMEs are regulated and supervised by regional financial sector regulators, whereas the MNOs themselves are subject to regulation by the entities responsible for regulating national telecommunications.

Area of Competence	BCEAO	WAEMU Banking	WAEMU	National
	Beliko	Commission	Commission	Authorities
Prudential regulation	,			
- Credit institutions and large MFIs	\checkmark			
- E-money issuers	✓			MEF
- Other MFIs	✓			CCS-SFD
Prudential supervision				
- Credit institutions and large MFIs		√ √*		
- E-money issuers		√*		
- Other MFIs				CCS-SFD
Payment systems regulation	✓			
Payment systems oversight	✓			
FCP regulation				
- Credit institutions and large MFIs	\checkmark			
 E-money issuers 	\checkmark			
- Other MFIs	✓			CCS-SFD
FCP supervision				
- Credit institutions and large MFIs		\checkmark		
- E-money issuers				
- Smaller MFIs		✓		CCS-SFD
Anti-Money Laundering/Combating				
the Financing of Terrorism (AML/CFT)				
regulation				
- Credit institutions and large MFIs	\checkmark			CENTIF
 E-money issuers 	\checkmark			CENTIF
- Other MFIs	✓			CENTIF/CCS-SFD
AML/CFT supervision				
- Credit institutions and large MFIs		\checkmark		CENTIF
 E-money issuers 		\checkmark		CENTIF
- Other MFIs				CENTIF/CCS-SFD
Issuance of identification				CTDEC
General consumer protection				Ministry of
				Commerce
Telecommunications				ARTC
Competition			\checkmark	DNCC

Table 1. Regional and national regulatory institutions

*Expected to be set up in the near future. Currently under BCEAO. DNCC= National Directorate of Trade and Competition Source: Team analysis.

9. Despite increasing competition, Mali's financial sector remains significantly segmented, with banks focusing on meeting the needs of formal enterprises and upper-middle-class households, MFIs targeting a largely rural clientele, and mobile money providers competing for retail customers. Each of the three main categories of providers in the financial sector have a preferred customer segment (Figure 2). Banks, most of which are still located in the capital city and other urban areas despite an effort to increase their footprint, primarily serve formal enterprises, salaried workers, and the richest

households. MFIs provide credit to individuals, microenterprises, and small farmers and have increased the reach of the financial sector in rural areas. Mobile money providers target retail customers by offering money transfer products. While these services were initially located largely in urban centers, they are expanding into rural areas, taking advantage of a capillary distribution network.



Figure 2: Target customer segment by financial service provider

Source: Team analysis.

10. This report analyzes the demand for financial services in Mali and the manner and extent to which the financial sector could improve upon its ability to meet these needs. This report leverages three World Bank Group (WBG) data sources (Findex, Living Standards Measurement Studies (LSMS), and Enterprise Surveys) to analyze the financial needs of three main segments of the population: (i) retail customers, individuals, and/or small informal businesses; (ii) households involved in agricultural production; and (iii) formal enterprises. Section I of the report addresses the demand for financial services and provides strategic directions to enhance financial inclusion and access for each customer segment. Section II presents an overview of the three key categories of financial sector providers (banks, MFIs, and mobile money/digital financial services (DFS) providers). For each category, the report analyzes the market structure, product offerings, the competitive landscape, and the constraints that preclude providers from better meeting the needs of current and potential clients. Each chapter in Section II concludes with specific recommendations for policy makers to address the identified constraints.

2. Promoting poverty reduction and growth through enhanced financial inclusion

11. Mali is a large, landlocked, low-income country in which the majority of the population is engaged in agriculture and in the informal sector. Close to half of Mali's population lives below the poverty line.¹ Nearly 60 percent of Malians are located in rural areas, and a similar proportion of the working-age population is engaged either directly or indirectly in agriculture. Among those who are not engaged in agriculture, trade or small services are the most common economic activities in urban areas. Only a small proportion of the population is employed in the formal sector, with the state and a limited number of formal enterprises providing salaried employment to less than 5 percent of the working-age population.

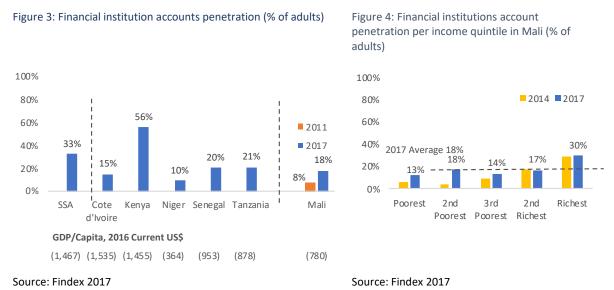
12. The financial sector can play a significant role in reducing poverty and increasing economic growth in Mali. Increased access to formal financial services benefits people in many ways. It provides a safe, efficient means of conducting day-to-day financial transactions, including sending and receiving funds. It may facilitate savings, which can in turn enable households to face unexpected events and better manage cash flow spikes, to smooth consumption, and to build working capital. It can facilitate access to finance among small businesses or microenterprises, enabling business operators to invest

¹ World Bank Poverty and Equity Data Portal 2017.

in assets and expand their businesses. Credit can foster agricultural productivity by enabling farmers to purchase inputs in a timely manner and invest in productive assets. Formal businesses need access to financing to invest in new technologies to improve productivity, grow, and export (CGAP 2016). Mali's financial sector is fulfilling these functions to some extent, but its role could be enhanced significantly through appropriate policy actions and interventions.

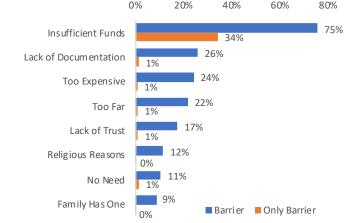
2.1 Financial inclusion in Mali: casting a broader net

13. Access to an account at a financial institution has improved significantly in Mali, but remains limited. In 2017, 18 percent of Malian adults held an account at a financial institution. While this is still well below the average for SSA, one can observe a significant improvement since 2011 (8 percent) and 2014 (11 percent) (Figure 3). The improvement is particularly significant for the poorest individuals (Figure 4).



14. Limited financial literacy, lack of documentation, high costs, and distance from an access point remain among the most pervasive constraints preventing individuals and businesses from accessing an account. A number of obstacles continue to prevent a significant proportion of the population from accessing traditional financial services, with low levels of financial literacy ranking high among them. The commonly cited argument that an individual has insufficient funds to justify holding an account (Figure 5) often indicates a lack of understanding of the ways in which low-income households can use financial services effectively. For example, a significant proportion of domestic remittances are transferred through cash-based, often informal, channels because the users are not yet familiar with financial services that can be conducted through these means. Lack of documents to satisfy "know your customer" (KYC) requirements is the second-biggest constraint according to Findex 2017, indicating the need to accelerate the rollout of the national identification card (NINA). Cost is the third most commonly cited reason for not holding a traditional bank account. Although the regulatory authorities have attempted to address this constraint by imposing caps on fees and charges, over the long term, increased competition among providers of financial services is likely to be the most effective means of reducing costs. Finally, other reasons cited for not holding an account include distance from an access point and a lack of trust in financial institutions.

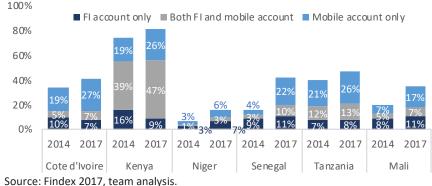
Figure 5: Barriers to access a financial institution account (% of adults without formal accounts indicating the reason)



Source: Findex 2017, team analysis.

15. Mobile money has doubled the share of financially included individuals by reaching a share of the population unserved by financial institutions, including those who do not immediately qualify for credit. The share of adults with access to an account in 2017 nearly doubles (from 18 to 35 percent) if one considers mobile account holders: 17 percent of Malian adults had access only to a mobile account (Figure 6). The uptake of mobile money demonstrates that affordable transactional products can meet the needs of a large proportion of the population, including those who were not served by financial institutions. These segments of the population used to conduct almost all of their financial transactions in cash, but recognized that mobile money can be faster and more secure for everyday transactions such receiving and sending remittances, paying for inputs, receiving payments for the sale of their products, or storing small balances.



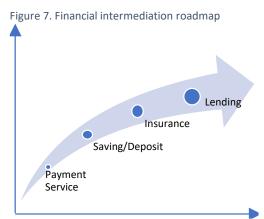


16. **Financial inclusion could be deepened through the systematic adoption of electronic payments by government institutions and other key stakeholders**. There are significant opportunities to migrate a range of financial transactions to electronic channels,² thereby stimulating the uptake of electronic money. Many government-to-person (G2P) and person-to-government (P2G) payments could be migrated to electronic channels with multiple benefits for both people and the government, since it would, for example, allow easier traceability of transactions. Similarly, a range of agricultural payments, including for the purchase of inputs and for the sale of crops, could be migrated to electronic form. However, the migration of these payments to electronic channels will require interventions at multiple levels: ensuring that people have access to an account, implementing systems to facilitate the processing of bulk payments, and interventions to ensure that, once provided with electronic money, users can access it easily through a point-of-sale network (for merchant payments).

17. Mobile financial products could provide people with a safe and effective means to hold savings, thus increasing the scope for financial intermediation. After being granted access to a

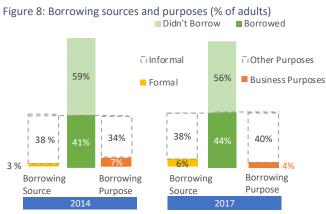
² In this report, "electronic channel" excludes over-the-counter (OTC) channels (such as Western Union).

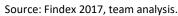
(mobile) account, individuals could gradually gain access to a broader suite of products and services (Figure 7). Since more than 40 percent of people in Mali save, the most immediate use for an account could be to hold savings, substituting cash or other informal savings. Access to a mobile account has been proven to incentivize savings activities (Ouma, Odongo, and Were 2017). Mobile financial services could also be used to integrate semi-formal and informal savings institutions, such as the savings groups used widely by women in Mali, into the formal financial system.



Source: team analysis.

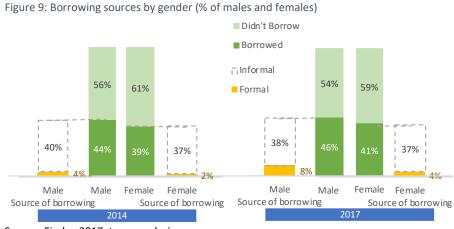
18. Access to and use of transactional financial services among a greater proportion of the population could facilitate access to credit. In Mali, approximately 44 percent of the adult population borrows money. Despite an increase in formal credit penetration over the past three years, Malians most often borrow via informal channels (Figure 8). Many of these borrowers might be able to borrow more, or on more advantageous terms, from the regulated financial sector. However, financial institutions currently lack the ability to evaluate the creditworthiness of many potential borrowers because their interactions with them are either limited or nonexistent, they have limited additional sources of information on which to base their credit assessment (given the limited coverage of the newly established regional credit bureau), and/or the potential clients are unable to provide collateral. Increasing access to and usage of accounts, including mobile ones, could enable account holders to establish a transaction history that could in turn facilitate their access to credit.





19. The expansion of mobile financial services could be particularly beneficial for underserved groups such as women. Despite an improvement in the overall penetration of formal credit, gender disparities remain pervasive in Mali and have actually increased over the past three years: although a similar share of men and women borrow money, men are twice as likely to borrow from formal financial institutions (Figure 9). Experiences of Fintech companies in Eastern Africa and in the rest of the world have established that mobile money account users' transaction histories can be particularly

beneficial in facilitating access to credit among groups that would be otherwise excluded, and this may be especially important in bridging the gender gap.³

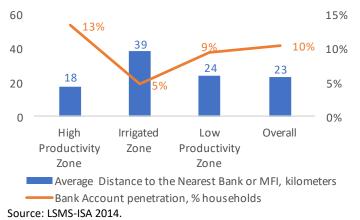


Source: Findex 2017, team analysis.

2.2 Financial services to agricultural households: mobile money, but credit to come?

20. Financial inclusion is even lower among agricultural households than in the general population, driven to a large extent by the limited presence of providers in rural areas. At present, only 10 percent of rural households⁴ hold a bank account, with distance from a point of service being a major constraint to access (Figure 10). Although financial inclusion is correlated with income level and wealth, the correlation with literacy is even stronger.

Figure 10: Bank account penetration (% of households) and distance to financial institutions (kilometers)



21. **Most agricultural households still rely solely on informal means to save and borrow**. Only 6 percent of agricultural households utilize formal financial services to hold savings, and only 4 percent receive credit from a financial institution. The MFI crisis (Chapter 6) has dampened consumer confidence in what might otherwise have been a more widely utilized financial service provider. Instead, the rural population relies heavily on informal sources to access credit or hold savings.

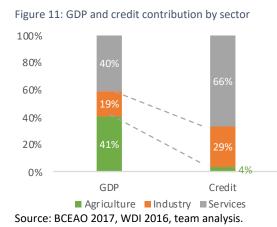
22. Mobile money has allowed many agricultural households in Mali to access financial services for the first time. Although agricultural households so far use mobile money primarily for transactional services, mobile mechanisms have the potential to provide an entry point for access to a broader set

³ Extending the type of collateral acceptable to formal financial institutions could increase access to credit among women entrepreneurs. Credit offered via mobile accounts has shown to be particularly beneficial for women-owned businesses who would not otherwise qualify for loans from financial institutions.

⁴ According to data from the Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA), account ownership at the individual level is estimated to be about 4 percent. Furthermore, out of the 10 percent of households with accounts, most (6 percent) have only one and only a small fraction (4 percent) have two.

of products, especially if MNOs and other providers enter into partnerships to provide a wider range of savings and credit products.

23. The provision of formal financing to agriculture remains constrained by the fragmentation of agricultural value chains and the small-scale nature of agricultural production in Mali. Providing credit to small-scale family-run businesses entails significant risks. This is particularly true for businesses in the agricultural sector. The creditworthiness of smallholder farmers is difficult to assess unless they sell their output to markets or to specific buyers. Moreover, monitoring of credit performance is costly, the risks associated with exogenous shocks are high, and rural households often lack assets that can be used as collateral. Since rainfed, subsistence farming remains the predominant model of agricultural production in Mali—with the exception of cotton production—it is not surprising that the sector as a whole receives only 4 percent of the formal credit in the economy, despite the agriculture sector's contribution of more than 40 percent of Mali's GDP (Figure 11).



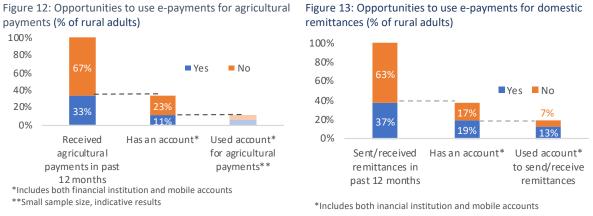
24. Three distinct categories of agricultural households in Mali deserve a differentiated strategy to foster their access to financial services as a tool to boost their resilience and productivity. Based on financial needs and access to and participation in specific agricultural value chains, agricultural households in Mali can be segmented into three categories. For each of them, a specific strategy should be pursued:

- a. *Segment A:* subsistence farmers and small producers in unstructured value chains should be encouraged to access transactional financial products as an entry point to the financial sector;
- b. *Segment B*: producers participating in structured/semistructured value chains should be supported in their effort to gain market access and credit through the value chain; and
- c. **Segment C: larger, commercial producers** should receive credit from formal financial institutions, with public support to enhance their creditworthiness and facilitate access to credit of the appropriate tenure.

25. **Most subsistence farmers (Segment A) are likely to remain "unbankable" for the foreseeable future**. Smallholder and/or subsistence farmers' access to formal finance is likely to remain constrained by the size of their plot (which links to their income-generating capacity), by the unstructured nature of the agricultural value chains in which they are involved (which limits their opportunity to commercialize their output), and by their inability to provide collateral. Most households in Segment A will continue to rely on the informal sector and/or grants and subsidies (including those provided by the government).

26. However, financial inclusion could benefit even subsistence farmers by enabling them to reduce transaction costs, to save in an account, and to create a transaction history. Even subsistence farmers engage frequently in financial transactions of various kinds, including for the sale of their output, the purchase of inputs, the receipt of remittances, and the receipt of government transfers. Without access to accounts, farmers need to travel long distances to transfer or receive cash (Figure

12 and Figure 13). This travel poses financial and opportunity costs (loss of production), limiting the frequency of these payments.⁵ Financial inclusion of farmers could be increased via mobile money or by increasing the presence of agent banking in rural areas. Similar benefits could be achieved for the provision of grants, subsidies, and other government transfers through accounts rather than cash.⁶



Source: Findex 2017, team analysis.

Source: Findex 2017, team analysis.

27. Mobile money could create opportunities for the poorest agricultural households to invest in productive assets through pay-as-you-go (PAYG) schemes. Fintech companies could leverage mobile money to reach agricultural households by making solar pumps, lamps, and other productive agricultural equipment available to a wider set of clients. Transaction histories from mobile money accounts could be used to assess the creditworthiness of the household acquiring the asset (on a lease or installment basis), with these accounts used to channel payments. If a household were to receive regular flows of funds, such as from G2P transfers, through mobile accounts, this could be factored into an assessment of the ability of the poorest households to repay loans, thereby increasing the number of potential borrowers.

28. Value chain financing, currently available for cotton producers, should be extended to other agricultural value chains (Segment B). Value chain financing, in particular for the cotton value chain, has proven to be a valuable instrument in providing a number of households with access to finance.⁷ Value chain financing is only effective, however, to the extent that intermediaries are willing to absorb the credit risk associated with on-lending to individual producers. Unfortunately, there are only a limited number of structured agricultural value chains in Mali, thus limiting the potential for value chain financing to be used to channel credit.

29. Efforts should be made to support the structuring of value chains by attracting investors or supporting the creation of producers' groups, which could also channel credit through value chain financing. To increase access to finance for agricultural households, the structuring of value chains should be a priority. At present, the limited capacity of intermediary organizations limits the development of structured agricultural value chains. The low levels of organization and limited capacity of producer cooperatives and interprofessional organizations, including processing/industrial associations, constrains not only the development of an agro-industrial sector in Mali, but also the delivery of financing that leverages value chains.

30. While the MFI sector and some banks have reached out to the larger-scale agricultural households (Segment C), the financing gap remains relevant. MFIs have targeted the rural sector and reached out to some agricultural households, but their financing needs exceed the amount of credit

⁵ If the value chain payments were to be digitized, the frequency of payments could be increased, since the transfers could be immediate and at a limited cost.

⁶ Benefits could be for both the entities providing the funds and the households receiving the funds.

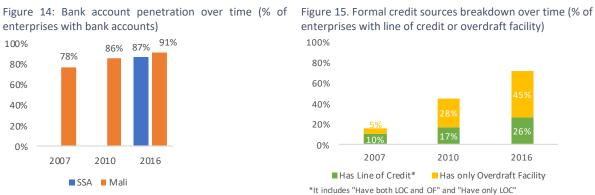
⁷ It is important to note, however, that welfare analysis points to the fact that cotton-growing households are not better off than the rest, despite receiving credit. The credit conditions for the credit provided (in kind) by the Malian Company for Textile Development (CMDT) to cotton farmers could be one of the reasons for this outcome.

that the MFI sector can provide on its own. The agricultural sector is perceived as particularly high-risk and requiring dedicated skills and a specific footprint to facilitate the provision of credit. The stateowned agricultural bank (*Banque Nationale de Développement Agricole*, or BNDA) has a rural footprint and provides financing to some larger-scale farmers and to producers in the cotton value chain. In the case of cotton financing, however, BNDA finances the sector only indirectly (by financing the Malian Company for Textile Development, or CMDT in French, which on-lends to individual farmers) and through a consortium of other banks.

31. Large-scale, commercial producers could benefit from increased access to credit, particularly longer-term credit that would enable them to finance productivity-enhancing investments. At present, a small proportion of larger producers has access to some form of financing or could gain such access if supported. Even among these producers, however, access to credit remains complicated by the fact that banks perceive loans to the agricultural sector to be high-risk propositions and generally offer credit only for short-term tenures. Extending the coverage provided by the Private Sector Guarantee Fund (*Fonds de Garantie pour le Secteur Privé*, or FGSP) could incentivize financial institutions to reach a broader set of customers, while schemes to provide wholesale long-term financing to banks might incentivize them to extend the tenure of their loans.

2.3 Limited access to finance among SMEs and for longer-term investments

32. While SMEs and larger businesses have a relatively high level of access to formal financial services, most of them lack access to credit. Despite the limited size of Mali's formal enterprise sector, it contributes more than one-third of the country's GDP and three-quarters of exports. This sector's access to financial services has increased considerably in recent years, but even larger firms—despite having accounts—continue to use cash for most transactions (Figure 14). In addition, while most of the 10,000 or so formal businesses that operate in Mali have access to an account, a relatively small proportion of them has access to credit, with smaller enterprises remaining almost completely excluded (Figure 15).

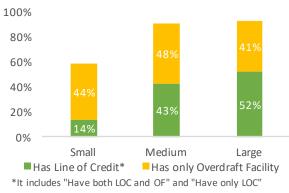


Source: Enterprise survey data, team analysis.

*It includes "Have both LOC and OF" and "Have only LOC" Source: Enterprise survey data, team analysis.

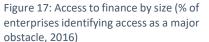
33. **Despite some recent progress, access to credit remains highly concentrated, with smaller firms having access, at most, to short-term working-capital facilities**. This high level of concentration is typical of developing economies, with asymmetry of information incentivizing lenders to focus on a select number of potential borrowers, particularly large enterprises with whom they have established relationships. In Mali, the top 50 borrowers receive almost one-third of the total credit. As a result, most smaller enterprises have access only to overdraft facilities, which can be used to finance only working capital, not investments.

Figure 16: Formal credit sources breakdown by enterprise size (% enterprises with line of credit or overdraft facility, 2016)



Source: Enterprise survey data, team analysis.

34. More than half of small enterprises are credit-constrained, while the limited availability of medium- to long-term finance hampers the investment capacity of larger enterprises. Limited access to credit remains one of the most significant constraints on businesses, particularly smaller ones. Half of smaller firms are fully or partially credit-constrained, which means that they cannot access credit despite needing it. For larger enterprises-including those operating in sectors, such as agroprocessing, that are critically important to creating agricultural value added—the short-term nature of loans is an issue.



68%

100%

80%

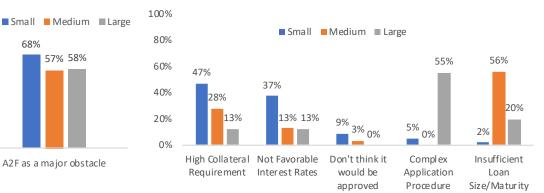
60%

40%

20%

0%

Figure 18. Main reasons for not applying for credit (% of enterprises that did not apply for credit, 2016)



Source: Enterprise survey data, team analysis.

3. Developing the financial sector: key priorities

3.1 Digital financial services: leveraging mobile money to reach the bottom of the pyramid

35. Mali is on a path toward a mobile banking revolution that could facilitate access to the formal financial sector for a significant proportion of previously excluded individuals and informal businesses. While mobile money was introduced in Mali in 2010, it is only over the past three or four years that the market has begun to develop significantly. Mali is leapfrogging along the path of the most developed countries in SSA, becoming the second-largest market in the West African Economic and Monetary Union (WAEMU) in terms of the total number of accounts and transactions.

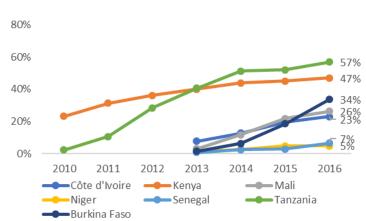


Figure 19: Trends in mobile money payments: a cross-country comparison (mobile money transaction as % of GDP) 100%

Source: FAS, Central Bank of Tanzania, team analysis.

36. Mobile money has the potential to transform access to financial services in rural areas, addressing constraints related to proximity and cost. The rate of penetration of mobile money agents is much higher than for traditional banking, with significantly lower costs. In 2016, there were 287 active mobile money agents for every 100,000 adults in Mali, well above that in Côte d'Ivoire (146), Niger (100), and Senegal (176). By contrast, in Mali there were only 3.8 bank branches for every 100,000 people and 3.3 MFI service points.

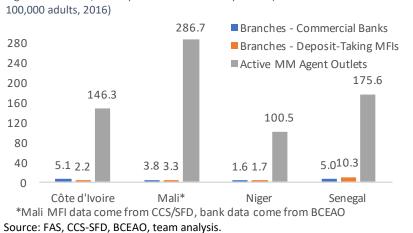


Figure 20: Branch/outlet penetration rate comparison (number of branches or outlets per

37. Mali's mobile money market has thus far been dominated by first-generation products, consisting mostly of person-to-person (P2P) transfers. The mobile money market is dominated by domestic remittances and airtime sales, with little money remaining in electronic form. As of December 2016, nearly the entire value of mobile money transactions consisted of cash-in/cash-out (CICO) transactions (64 percent) and P2P transfers (29 percent). Airtime top-up constituted almost one-third of the total volume of mobile money transactions but accounted for only 2 percent of the total value transacted.

Figure 21: Volume of transactions per mobile money account use (% of total transactions, 2016)

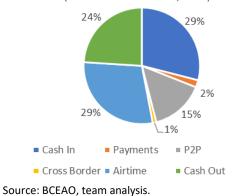
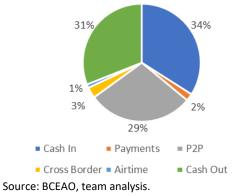


Figure 22: Value of transactions per mobile money account use (% of total value of transactions, 2016)



38. **Despite recent growth, the mobile money market is characterized by limited competition, which could hamper further development**. The mobile money market is dominated by one of only two major players. Limited competition probably explains why growth in the use of mobile money to transfer funds has not been accompanied by a reduction in the associated costs. For example, CICO transactions remain relatively expensive compared to other informal channels, such as the delivery of funds through networks of tradespeople. The latter channel continues to play a significant role for the payment of remittances, probably because it is reported to be cheaper than using mobile money. Similarly, increased competition could drive a diversification in product offerings, another area in which Mali has lagged behind other markets in the region.

39. A level playing field between mobile money players and other financial institutions could be achieved by ensuring interoperability and removing other regulatory bottlenecks that hinder competition. The limited level of interoperability between different modalities and institutions holds back competition in the mobile money space. The participation of mobile money service providers in the regional payment switch could be an option to ensure that EMEs offer interoperable payment services. It would also enhance competition with financial institutions.

40. **Mobile money providers are now diversifying their products to include savings and credit products, including through partnerships with other institutions**. According to WAEMU regulations, mobile savings and credit products may be offered only through partnerships between mobile money service providers and financial institutions. Dedicated savings products are currently being developed, mainly through partnerships between mobile money providers and financial institutions, including MFIs. These products could be tailored to meet the needs of new segments of the market and to encourage the increased usage of mobile money.

41. The public sector could play a role through measures to foster demand and enhance competition, and by issuing regulations that are conducive to the expansion of DFS. These measures could leverage mobile money and DFS to extend the reach of the financial sector and to provide an entry point to market segments at the bottom of the pyramid. To achieve these goals, actions are required in three main areas (Table 2).

Table 2. Mobile money sector actions and recommendations

	Area		Recommendations
1	Foster the demand for DFS by eliminating constraints on access and providing additional use cases to stimulate uptake	a.1.1. a.1.2. a.1.3.	The government could support the implementation of programs to increase awareness and facilitate the use of digital accounts among those with limited levels of both general and financial literacy. The government could roll out a digitization program for government payments and support private and public sector operators in digitizing payments in selected agricultural value chains. The government could strengthen the national ID system to facilitate the identification of potential customers who are excluded because of their lack of ID documents and support the development of fully digital processes to reduce time and cost of access.
2	Enhance competition between DFS providers and create a level playing field among them to reduce costs and foster product diversification	a.2.1. a.2.2. a.2.3.	The government could encourage competition in the mobile telecommunications market by facilitating the entry of new mobile network operators. The government could encourage open access to the Unstructured Supplementary Service Data (USSD) channel to foster the diversification of DFS offerings, including through Fintech companies. The BCEAO could foster interoperability between mobile money service providers and other financial sector institutions to ensure a level playing field, facilitate use, and enable access.
3	Create a regulatory environment conducive to the delivery of savings, insurance, and credit products through DFS platforms	a.3.1. a.3.2. a.3.3.	The BCEAO could make interest rate caps more flexible, while enhancing measures to protect consumers against abusive lending practices. The BCEAO could adopt a balanced approach to the regulation of Fintech companies to encourage experimentation with different approaches. The BCEAO could facilitate the integration of DFS providers into the credit information system to fully leverage customers' digital footprint and facilitate the delivery of credit products.

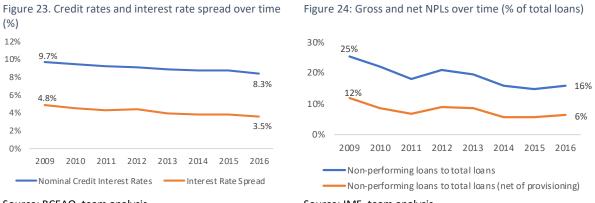
Recommendations to be implemented at regional level

3.2 The banking sector: reaching out to new customers and financing longer-term investments

42. While Mali's banks have developed organically, expanded their customer base, and increased their deposit and loan portfolios in recent years, credit concentration remains high. The number and relative size of banks operating in Mali (13) is commensurate with the size of the market. Asset concentration among the largest banks does not preclude competition, with ownership being shared among Pan-African and international banking groups, the domestic private sector, and the state. The number of bank depositors nearly doubled between 2009 (0.7 million) and 2016 (1.3 million), as did the total value of intermediated funds. Despite growth in the number of clients, including borrowers, the credit portfolio remains highly concentrated.

43. While the banking sector's footprint has increased significantly in recent years, including in rural Mali, further expansion is constrained by the costs and risks associated with serving the poorest and most remote areas. The entry of new players and the consolidation of the sector have been accompanied by a significant increase in the banking sector's footprint, with the branch network increasing fourfold from 2006 to 2016. The expansion appears to have decelerated, however, with banks signaling their limited intention to expand their geographical footprint to rural areas. For banks to reach out to new clients, it will be necessary for them to identify new, cost-effective coverage models.

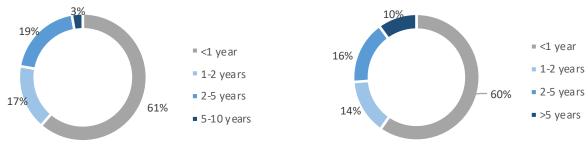
44. Increased competition has pushed banks' margins downward, while the quality of their portfolios has improved only slightly in recent years. Increased competition has exerted a healthy downward pressure on margins (Figure 23). The proportion of gross nonperforming loans (NPLs) stood at 15.8 percent in 2016 and net NPLs at 6.1 percent. This places Mali on par with the WAEMU average and represents a significant improvement from the high levels of NPLs recorded in Mali during the crisis, when gross NPLs were at 21.0 percent and net NPLs at 8.7 percent (Figure 24).



Source: BCEAO, team analysis.

45. **Despite the growth in banks' credit portfolio, a disproportionately large share of loans is provided to the trade and services sectors—those that are best able to absorb the short-term lending offered by banks**. Banks fund their credit activities largely on the basis of retail and wholesale deposits. Since deposits are mostly short-term in nature, banks tend to limit their provision of credit to shortterm loans due to prudential considerations (Figure 25 and Figure 26). This credit allocation reflects not only the composition of the enterprise sector, but also the fact that trade and services firms' financial needs are mostly short-term. Two-thirds of the credit goes to trade and services, while less than one-third goes to manufacturing, a sector that requires funding for long-term investments.





Source: BCEAO, team analysis.

46. The lack of adequate information to enable banks to assess the creditworthiness of potential clients precludes them from reaching out to a broader set of business and retail clients. Despite the recent increase in the number of clients, a large proportion of wholesale customers are still unserved or underserved by banks. The nascent state of development of the credit information system is a key constraint on the further expansion of banks' credit portfolios, limiting access to credit in particular for retail clients and small informal businesses.

47. The public sector could establish a conducive policy environment and provide financial and infrastructural resources to enable the banking sector to expand its reach. For banks to scale down to reach small informal businesses and retail clients, they must be able to reach these clients in a cost-effective manner. To be able to provide loans to new clients, banks need appropriate tools to mitigate the relatively high level of risk associated with this expansion. Finally, banks need access to financial resources of the appropriate tenure to provide long-term finance to businesses. To achieve these goals, actions are required in three main areas (Table 3).

Source: IMF, team analysis.

Source: BCEAO, team analysis.

Table 3. Banking sector actions and recommendations

	Area		Recommendations
1	Develop a supportive regulatory framework and implement policies that are conducive to expanding the banking sector's customer base to include new market segments and underserved geographical areas	b.1.1. b.1.2.	The BCEAO could consider enabling banks and other financial institutions to introduce a range of products with simplified KYC requirements. The government could consider providing support to banks to expand outreach to rural areas by reducing the cost of setup infrastructure.
		b.1.3.	The BCEAO could consider amending the agent banking regulatory framework to allow banks and other financial institutions to fully leverage an agent banking model.
2	Increase the resources available to financial institutions to extend credit for longer terms and to a wider range of clients	b.2.1.	The BCEAO could fully implement the deposit insurance scheme to raise confidence in the banking sector and stimulate formal savings.
		b.2.2.	The government could monitor the impact of public sector borrowing in crowding out the private sector and take measures to limit it.
		b.2.3.	The government could consider providing banks with long- term funding resources.
3	Expand the customer base for lending by improving tools for screening borrowers and secured lending	b.3.1.	The BCEAO could enforce provisions to improve the coverage and quality of credit bureau data.
		b.3.2.	The BCEAO could foster collaboration between banks and Fintech companies to provide them with additional tools to screen borrowers, in particular SMEs and individual
		b.3.3.	entrepreneurs. The government could improve upon the functioning of risk mitigation instruments and on the legal and regulatory framework for secured lending, including leasing.

Recommendations to be implemented at regional level

3.3 MFIs: health and efficiency to leverage the footprint of microfinance

48. After a period of strong growth in the 2000s, the MFI sector experienced a prolonged crisis that continues to have an impact on the sector. While MFIs expanded the reach of the financial sector into rural areas, owing to resource and capacity constraints, they did not manage to develop a capillary network to reach the most remote areas. The weaknesses of the MFI sector became evident in the early years of this decade, when a number of MFIs, including some of the larger ones, experienced performance issues. To a large extent, these issues resulted from or were exacerbated by weak governance and a poor supervisory model, which required external interventions to avoid a full-blown crisis. The sector has not yet recovered fully, as shown by the high level of NPLs among some of the largest MFIs and by the fact that a number of smaller institutions whose licenses have been revoked are still awaiting liquidation.

49. **Recent actions by national and regional authorities have helped to address the high level of NPLs in the MFI sector**. Since 2013, the overall level of NPLs in the sector has declined steadily, from 10 percent in 2013 to approximately 4.9 percent in June 2017. This trend has resulted from a combination of factors: (i) the clean-up efforts of the Ministry of Economy and Finance (MEF), including through measures to revoke the licenses of poorly performing or defunct MFIs; (ii) the good performance of new entrants, which have expanded rapidly and now account for a significant share of the sector's loan growth; (iii) enforcement of the new microfinance law, which requires adherence to stricter prudential norms; and (iv) closer supervision by the BCEAO of the largest MFIs in the sector, as mandated by Article 44 of the microfinance law.

50. **The recent entry of new institutions has invigorated the MFI sector**. While the crisis affecting established institutions is stabilizing, new institutions have emerged and boosted the sector's

professionalism and quality of governance. New institutions such as Microcred have introduced new management and performance tools and behave according to norms more similar to those of banks than of Mali's established MFIs. These new institutions have rapidly gained a significant market share, facilitating the overall recovery of the MFI sector.

51. **The MFI sector has traditionally played a critically important role in Mali's rural areas**. MFIs have been the choice providers of credit to the rural sector, currently serving roughly a million, mostly low-income, clients. In some areas, they have been the *only* providers of formal credit. The largest MFI commenced operation specifically to serve farmers in cotton- and rice-producing zones. At present, this MFI remains an important player in the rural market, with approximately 65 percent of its loan portfolio consisting of loans to farmers and producers in the agricultural sector (Figure 27).

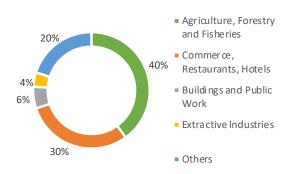


Figure 27: MFI credit allocation by sector (% of outstanding credit, 2016)

Source: CCS-SFD, BCEAO, team analysis.

52. While Mali's MFIs vary considerably in size, the sector is dominated by a small number of large institutions. There are approximately 100 MFIs registered and licensed by the MEF, of which only one-third are currently operational and regularly fulfilling the ministry's reporting requirements. However, seven large MFIs (those with more than FCFA 4.5 billion, or around US\$ 7.6 million, in total assets) dominate the market. At the end of 2015, these large MFIs held 82 percent of the sector's total assets, 87 percent of total loans outstanding, 84 percent of total deposits, and 72 percent of clients. Including medium-sized MFIs,⁸ roughly 17 institutions account for the totality of the market.

53. The imposition by the BCEAO of more stringent controls and reporting requirements, especially for the largest MFIs, has helped to stabilize the sector. Since the crisis of 2009/10, the BCEAO began to enforce more strictly the microfinance law that was established in 2008 by WAEMU member states. The new law placed a stronger emphasis on supervision and control by the BCEAO, especially in the case of large MFIs with the total value of loans or deposits in excess of US\$ 3.4 million. The law also requires adherence to stricter prudential norms and reporting requirements. Large MFIs must submit financial statements on a monthly basis, in addition to certified annual financial statements. Tighter supervision, control, and reporting requirements, together with the provision of support to help MFIs achieve compliance with the new law, have helped to stabilize the sector. As a result, NPLs in the sector declined from 10 percent in 2013 to 5 percent in June 2017.

54. Although the overall health of the sector has improved, MFIs face numerous challenges that still need to be addressed. In particular, the quality of MFIs' corporate governance requires strengthening. Efforts have been made to build the capacity of elected officials, but more attention is still required. Addressing corporate governance issues is particularly important in the case of large financial cooperatives, where the educational levels and relevant experience of elected representatives and board members remain low. While improvements have been made to the quality and composition of management teams of large MFIs, strategic management capacity still needs to be strengthened. Risk management systems need to be improved as well, particularly considering the size

⁸ Those with assets ranging from FCFA 500 million to 4.5 billion (around US\$ 843,000 to 7.6 million).

of some MFI networks. In addition, weaknesses in the Management Information System (MIS) have hampered internal control systems, causing delays in the production of vital information and therefore in decision making.

55. To achieve higher levels of financial inclusion, it is necessary to professionalize the MFI sector and to take advantage of its footprint in rural regions and its knowledge of rural clientele to foster the formalization of savings and expand access to credit in rural areas. The sector has been instrumental in bringing a significant proportion of the population into the financial sector, and it remains the principal provider of financial services for the rural population. Actions to address governance issues, to create a level playing field for new actors, and to improve the sector's efficiency by leveraging new technology could foster its further development (Table 4).

	Area		Recommendations	
1	Restore confidence in the sector by strengthening MFI supervision, ensuring that defunct and nonviable entities exit the market, and enhancing the sector's governance structures	c.1.1.	The BCEAO could strengthen the capacity, resources, and quality of MFI supervision.	
		c.1.2.	The government could restore or close failing MFIs and establish a formal resolution framework to address MFI bankruptcy.	
		c.1.3.	The BCEAO could accelerate implementation of the deposit insurance scheme and scale it up to include MFIs that meet the BCEAO's prudential requirements.	
	Strengthen MFIs' operational capacities by facilitating the establishment of shared MIS and IT systems and enhancing access to funding	c.2.1.	Donors could support the establishment of a shared IT platform to enable viable small and medium MFIs to automate their accounting and information management systems.	
2		c.2.2.	The government could provide incentives and support for reducing operational costs, especially those associated with MFIs' expansion into rural areas.	
		c.2.3.	Donors and development finance institutions could support the establishment of a refinancing facility for MFIs.	
	Foster innovation by expanding MFIs' access to the USSD channel, sharing costs related to product development, and developing partnerships with MNOs	c.3.1.	The government could encourage opening up USSD channels to MFIs to facilitate their delivery of new, innovative services.	
3		c.3.2.	Donors and development finance institutions could play a pivotal role in promoting innovative microfinance products, including cash transfer, savings, insurance, and credit products.	
		c.3.3.	Donors could play a catalytic role by providing incentives that promote partnerships between MFIs and MNOs, especially those that scale up services in remote areas.	

Table 4. MFI sector actions and recommendations

Recommendations to be implemented at regional level

Section 1 The Demand for Financial Services in Mali

Chapter 1 Access to financial services and usage by individuals and informal businesses

Key findings

- Financial inclusion in Mali has improved significantly in the past three years, although from a very low base.
- Despite this progress, a large share of the population—particularly those who are illiterate and women—remain financially excluded.
- Although banks have significantly broadened their customer base, mobile financial services have contributed most effectively to expanding access to the population.
- Significant opportunities exist to enhance the use of financial services to save, but this would require greater access to a capillary network and increased trust in financial institutions.
- Most Malians borrow from informal sources but innovative ways to deliver credit including through mobile accounts, if appropriately supervised, could enhance access to formal credit.
- Three strategic directions are suggested to increase the financial inclusion of individuals and enhance intermediation:
 - Facilitate access to low-cost financial services by removing supply- and demand-side obstacles, including financial literacy;
 - **Deepen inclusion through the systematic adoption of electronic payments** as an alternative to cash to increase use of financial services; and
 - **Foster financial intermediation and improve access to credit** by leveraging mobile money as an entry point to financial services.

1.1 Financial inclusion: progress made, but access and usage remain low

1. The penetration of traditional financial services in Mali has increased over the past decade, but only one of five adults has access to an account at a financial institution. Between 2004 and 2016, increased supply and greater diversification of product offerings by banks and MFIs⁹ contributed to greater financial sector depth and increased usage by the population. The share of bank and MFI accounts per 100 adults has reached 14.3 and 8.9, respectively (Figure 28).¹⁰ The increased penetration of financial services is confirmed by figures derived from the Global Findex database (Box 1), which measures the proportion of the adult population with access to financial services. Findex data show that, in 2017,¹¹ 18 percent of adults in Mali held an account at either a bank or an MFI, a proportion that is not substantially different from that in neighboring countries, but considerably lower than that in African nations with more developed financial systems (Figure 29).¹²

⁹ This is the result of the entrance of new players in both the banking and microfinance subsectors (Chapter 5 and Chapter 6). In this report, we refer to MFIs as all types of formal microfinance institutions, including savings and credit cooperative organizations (SACCOs).

¹⁰ The actual indicator measured by the International Monetary Fund's Financial Access Survey is "depositors" at banks and MFIs, which in this report is used as a proxy for the number of accounts. Deposit accounts in Mali include checking, demand, savings, and time deposit accounts.

¹¹ The country-level data of Global Findex 2017 was released in April 2018.

¹² Findex data might differ from account data due to multiple account ownership by the same individuals and company accounts opened on behalf of businesses.

Box 1. Global Findex and Financial Access Survey Data

The Global Findex database (Findex) provides in-depth data on how individuals save, borrow, make payments, and manage risks. The 2017 Findex consists of updated indicators on access to and use of formal and informal financial services, also shown by gender, income, and age. Collected in partnership with the Gallup World Poll and funded by the Bill & Melinda Gates Foundation, the Global Findex is based on interviews with about 150,000 nationally representative and randomly selected adults (aged 15 and over) in over 140 countries, representing more than 97 percent of the world's population.

Launched by the International Monetary Fund (IMF) in 2009, the Financial Access Survey (FAS) is the key resource for supply-side data on financial inclusion, covering 189 countries and spanning more than 10 years. The FAS is based on administrative data provided by central banks and other regulators. The methodology ensures harmonization of concepts and promotes international comparability of data on a wide array of financial services, such as deposits, credit, and insurance.

Source: Authors' compilation from World Bank Global Findex website, IMF FAS website, and FAS Trends and Developments 2017.

Figure 28: Evolution of financial institution accounts over time (financial institution accounts per 100 adults)

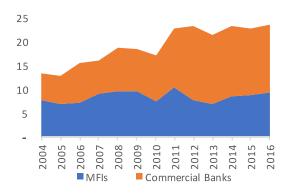
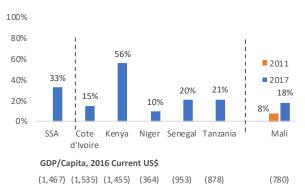


Figure 29: Financial institution account penetration (% of adults with accounts at a financial institution)



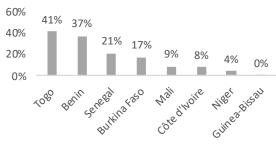
Source: FAS, WDI, team analysis.

Source: Findex 2017, WDI, team analysis.

2. The positive trend in access to accounts at financial institutions in Mali has been driven largely by an increase in the proportion of the population served by banks rather than MFIs. Between 2004 and 2015, the penetration of banks increased significantly, with only minor setbacks during the period of political turmoil in 2012. The growth in MFIs' customer base was less impressive, as this sector has suffered long-term malaise and has been more negatively affected by the political and security situation (Chapter 6). As a result, only 8.9 percent of adults in Mali hold accounts with MFIs— below the average in most other WAEMU countries (Figure 30).

100% 80% 60%

Figure 30: Penetration of MFI accounts (% of adults with MFI accounts, 2015)



Source: FAS, WDI, team analysis.

3. The increase in access to financial services in Mali is particularly remarkable given the country's high population growth. With an average annual population growth rate of around 3

percent, Mali has one of the most rapidly expanding populations in the world (Box 2). In this context, the increase in the proportion of the population with access to financial services represents a significant increase in financial institutions' absolute number of clients. Between 2004 and 2016, the number of accounts in commercial banks increased by 271 percent, from 0.4 million to 1.3 million, while those in MFIs increased by 72 percent, from 0.5 million to 0.9 million.

Box 2: Mali—A Demographic and Socioeconomic Breakdown

Mali's population is young and urbanizing, and the country faces challenges related to income inequality. In 2016, Mali's total population stood at around 18 million people, of whom 52 percent were adults. Females made up 50 percent of the total population. While roughly 60 percent of Mali's inhabitants lived in rural areas, the country has been experiencing a rapid urbanization process. The urban population has grown at an average annual rate of 4.9 percent—more than twice the rate in rural areas. At these rates, the urban population will double in less than 15 years. In addition, there is a high level of income inequality, with the top 40 percent of income earners earning 60 percent of total income.

In 2014, the active working-age population (those aged 15-64, excluding students and retirees) stood at almost 6 million. Of these, 71 percent derived their livelihoods primarily from informal businesses, while only 1.7 percent derived their livelihoods primarily from formal business activities (Table A-1; more details in Chapter 2).

4. Access to brick-and-mortar financial institutions is higher among upper-income individuals, but low- and middle-income earners are catching up quickly. Among lower-income earners (those in the two lowest income quintiles), the proportion of adults with access to formal financial services has more than doubled in the past three years, outperforming their peers in higher income quintiles and poised to hit the national average (Figure 31). When compared to other countries in the region, however, access to formal financial services remains limited, even among the middle class: among the top three quintiles, only one in five adults in Mali (20 percent) hold accounts at a financial institution— lower than in Kenya (68 percent), Tanzania (26 percent), or even Senegal (24 percent) (Figure 32).

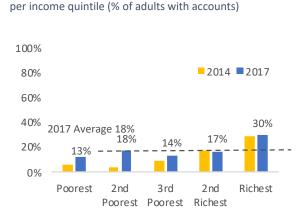
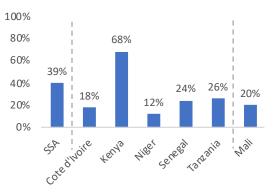


Figure 31: Financial institution account penetration

Figure 32: Financial institution account penetration among higher-income adults (% of adults in top three income quintiles with accounts)



Source: Findex 2017, team analysis.



5. Mobile money has grown at double-digit rates over the past three years, doubling the share of financially included adults. The relatively low penetration of traditional financial services, even among higher-income earners in Mali, suggests that factors other than income constrain access to banks or MFIs, thus highlighting the role that mobile money can play in continuing to fuel growth in the coverage of financial services. Mobile money services were introduced in Mali in 2010, but they have become particularly popular since 2013, when the deteriorating security situation drove an increase in the number of mobile money transactions for both personal and business activities, including by a number of nongovernmental organizations (NGOs) that used these services to conduct social payment transactions (Chapter 4). As a result, in 2017, 24 percent of adults in Mali had access to a mobile account. Of those, 70 percent (17 percent of adults in total) had only a mobile account (Figure 33).

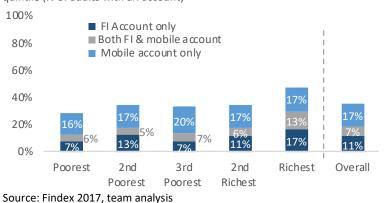


money services are used to a significant extent in all income brackets (Figure 34).

Figure 33: Account penetration (% of adults with the following accounts)

6. The rapid expansion in the share of the adult population using mobile money services has helped to fill the inclusion gap for all income classes. If the share of the population using mobile money services is added to the share of the population using traditional financial services, the total proportion of adults with access to financial services has nearly doubles to reach 35 percent. Mobile

Figure 34: Mobile and financial institution account penetration per income quintile (% of adults with an account)

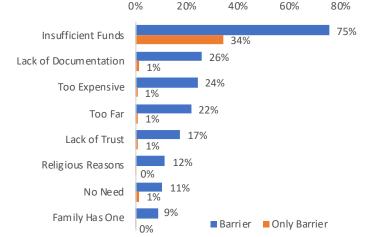


7. **Given the high level of informality in Mali's economy, a relatively large proportion of the population uses mobile money services to conduct small, informal business activities**. It is estimated that close to two-thirds of Mali's workforce is engaged in the informal sector, mainly in small-scale businesses in trade and retail services in cities and in agricultural activities in rural areas. Most of these businesses are either operated solely by their owner or employ only other family members (Chapter 2 and Chapter 3). Because a large majority of these businesses are not formally registered, it is difficult to differentiate between the use of these services for personal and business transactions and thereby to determine the extent to which mobile money is used for business purposes. However, anecdotal evidence strongly suggests that the growth in the rate of mobile money usage is particularly high among informal business owners and that they are using these services to support their businesses.

1.2 Constraints on access to financial services

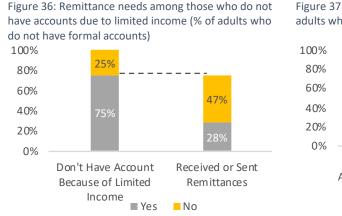
8. Since providing access is a precondition to fostering the use of financial services in a lowaccess environment like that of Mali, reducing the unserved population should be a key priority. An analysis of the main reasons cited by respondents for their failure to hold an account at a financial institution may help to identify the key demand constraints (Figure 35).





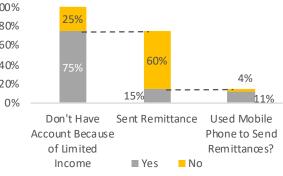
Source: Findex 2017, team analysis.

9. The most common reason cited for not holding an account at a financial institution is insufficient funds, although a significant proportion of even the poorest groups have a clear need for financial services that could be at least partly met by (mobile) financial services. Interestingly, of the 75 percent of adults who claimed that they did not hold an account because they had insufficient funds to justify it, 37 percent (or 28 percent of the total) had received or sent remittances during the previous year (Figure 36). This represents a clear financial need that might have been met by financial service providers other than banks or MFIs, including mobile money services. In particular, 15 percent of the population claimed that they did not hold an account because of insufficient funds but sent remittances (indicating that they did in fact have an income or access to financial resources of some kind), and 11 percent used mobile money services to send these remittances (Figure 37). This appears to indicate that, in the minds of average Malians, traditional financial services are associated with high income, contrary to evidence that financial sector needs are universal.





100%



10. The second most commonly cited reason for not holding an account at a financial institution relates to the lack of identification (ID) documentation.¹³ Despite the extensive rollout of NINA cards (Box 3), about 3.6 million people in Mali (19.8 percent of the total population) still do not have legal proof of their identity. While this figure is significantly lower than in many other SSA countries, ensuring that all individuals have easy and low-cost access to the minimal documentation required to fulfill KYC requirements to open an account may be a critical measure in improving access to financial services. It is likely that this constraint is more binding in rural areas.

Source: Findex 2017, team analysis.

Source: Findex 2017, team analysis.

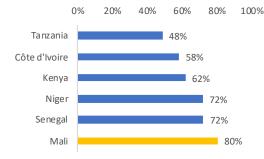
 $^{^{\}rm 13}$ Jointly with the share of population that indicated "I cannot get one."

Box 3: The NINA Card

Access to subscriber identification module (SIM) cards or mobile money accounts can be problematic for people who do not possess legal proof of identification—a particular challenge for members of vulnerable groups. In Mali, lack of proof of identification should not represent a significant constraint to accessing a mobile money account or a SIM card. In addition to a national ID card, passport, or driver's license, a document known as the "NINA card" can be used to register a SIM card or to open a mobile money account.

In 2006, the Government of Mali promulgated a law requiring the attribution of a unique number to every citizen, known as the National Identification Number of Natural and Legal Persons (NINA). Following a census that commenced in 2009 and a process of elaborating electoral rolls in 2013, Mali developed a secure, centralized national identity system. About 6.7 million NINA cards were distributed to provide proof of identity for the purpose of participating in the electoral process. In 2016, the government issued a decree that gave the NINA card the status of a national identity card. The identification is issued in A4 format with a photo and a bar code, providing all relevant information related to the individual's identity. There is no cost for accessing the NINA card. Currently, around 70 percent of adults in Mali possess this card. The *Centre National de Traitement des Données de l'Etat Civil*, which is in charge of managing the technical platform for this national identity system, is working to establish a system to enable external parties to access the database and to verify identities. This creates opportunities to facilitate the opening of digital accounts. The technical platform will need to be upgraded, however, if the system is to reach its full potential.

Figure 38: National ID coverage by country (% of population covered by ID, 2017)



Source: World Bank Identification for Development Database, team analysis.

11. Lack of a tiered KYC regime is an additional constraint to access for individuals who do not possess formal identification documents. Mali currently has only a simplified KYC regime for mobile financial service providers (Box 4). This may not only pose competition challenges, as banks and MFIs could develop similar "KYC light" accounts, but it may also prevent individuals who lack government-issued identification documents from opening an account and/or making transactions.

Box 4: KYC Regime in WAEMU

Within WAEMU, the national authorities of individual countries are responsible for issuing identification documents. However, regional authorities are mandated to regulate KYC requirements, which have been consolidated into a single uniform law that applies to all financial service providers in all WAEMU countries.¹⁴ The law requires customers to provide ID to establish their name, surname, date and place of birth, and domicile before they can open an account or make transfers. To be identified, the customer needs to provide a valid official ID document with a photo, while proof of address can be established either through a document or other means.¹⁵

KYC requirements could represent a barrier to financial inclusion for those citizens who lack a valid ID. For this reason, other jurisdictions have introduced a tiered or simplified KYC regime for low-risk products, for particular groups of consumers and/or institutions, or for particular geographical areas.

¹⁴ The uniform law was adopted in 2015 with *Decision No. 26 of 02/07/2015 / CM / UMOA Adopting the Draft Uniform Law on Combating Money Laundering and Terrorist Financing in WAMU Member States*. Article 1.35 of the uniform law adopts a rather broad definition of an institution, which includes any institution that offers: deposit, savings, payments, and credit products. The uniform law has been transposed into the Malian legal system with Law No. 2016-08 of 17 March 2016 on A Uniform Law on The Fight Against Money Laundering and the Financing of Terrorism.

¹⁵ Annex to Decision No. 26 of 02/07/2015 / CM / UMOA Adopting the Draft Uniform Law on the Fight Against Money Laundering and Terrorist Financing in the WAMU Member States, Articles 26 and 27.

However, the KYC regime creates an uneven playing field for mobile money, since the regulation governing the provision of mobile money services¹⁶ creates the possibility that service providers will open "light" accounts for clients without legal proof of identity, with a maximum cap on the value of transactions of 200,000 FCFA (US\$ 361) per month.¹⁷ These provisions have become more controversial since national telecommunications regulators have asked telecommunications companies to identify all owners of SIM cards.

A clearer regime, in which tiered or simplified KYC requirements apply to all financial service providers, would not only favor financial inclusion but would also limit overall money laundering and financing of terrorism risks.

12. The third most commonly cited reason for not holding an account at a financial institution is

cost. Cost remains a constraint to accessing traditional financial services. Mobile financial services have partially addressed cost issues: while costs per mobile money transaction are probably relatively high, mobile accounts carry no cost when not used. This may make these services attractive to members of the poorest and most vulnerable groups. While regulatory authorities in Mali, and across the region, have attempted to reduce the cost of financial services by imposing caps on fees and charges (Box 5),¹⁸ a more viable alternative could be to foster competition among providers. Competition could be encouraged, for example, by actively promoting customer mobility and comparability between similar products.

Box 5: Experiences with Zero-Cost Accounts in Mali

In June 2014, the BCEAO issued an instruction requiring banks and their intermediaries to offer a set of services free of charge. These services include opening and closing an account, depositing and withdrawing cash at all counters of the customer's bank, domiciling salary, making withdrawals through the bank's automated teller machine (ATM), making card payments within WAEMU, receiving transfers (whatever their origin), and obtaining account statements. On the other hand, only savings accounts are free of maintenance fees. MFIs are not covered by this instruction, limiting its impact and impairing competition.

Although these provisions were intended to facilitate account opening, account maintenance, and customer mobility, the instruction fails to define the types of services that should be offered for free. As a result, the application of this instruction may be difficult. In fact, certain practices may render its provisions void. For example, although the instruction states that account opening and closing should be free of charge, many financial service providers within WAEMU request a non-engagement certificate to close an account. Considering that such certificates can cost in excess of 50,000 FCFA, account closures can be costly, limiting customer mobility and dampening competition.

In addition to this general provision, the market has evolved toward the provision of free basic financial services. Ecobank, for example, offers a zero-cost bank account, Xpress Account, through all of its subsidiaries in Africa. Ecobank Mali received authorization from the BCEAO and the telecom regulator (AMRTP) to open Xpress Accounts with reduced customer ID requirements. Identification information from the customer's SIM card can be used to open the Xpress Account, and these accounts can be opened directly from a mobile phone application. Since the launch of the mobile application in April 2017, Ecobank Mali has opened around 25,000 Xpress Accounts, around 90 percent of which are held by new customers.

13. Distance from a traditional point of service is the fourth most commonly cited reason for not holding an account at a financial institution. Mali is a large country with limited population density. Despite the growth in the number of bank and MFI branches (Chapter 5 and 6), the high cost of opening brick-and-mortar branches implies that institutions often have little or no business justification for locating branches in remote rural locations. A large proportion of the rural population therefore still lives at a considerable distance from an access point, and a high inverse correlation can be established between access and distance (Chapter 3). At the same time, the current agent banking framework imposes a number of constraints on this service model (Box 32, Chapter 4), including the fact that

¹⁶ While at the same time it provides that all AML/CFT provisions are applicable to e-money issuers and that clients need to be identified (*Instruction No. 008-05-2015 Governing the Terms and Conditions of Practice for the Activities of Electronic Money Issuers in WAMU Member States*, Article 27).

¹⁷ BCEAO, Instruction No. 008-05-2015 Governing the Terms and Conditions of Practice for the Activities of Electronic Money Issuers in WAMU Member States, Article 31.

¹⁸ See for example, BCEAO Instruction No. 004 – 06- 2014 Relative aux Services Bancaires Offerts à Titre Gratuit par les Etablissements de Crédit de l'UMOA à leur Clientèle.

agent banking applies only to banks and not to MFIs.¹⁹ Proximity is one of the main advantages of mobile money services. Because mobile money services can be provided through agents and because it is easier to establish a mobile money service point than to establish a brick-and-mortar financial institution, access to financial services is no longer restricted by physical distance to a financial institution. In 2016, there were 287 active²⁰ mobile money agents for every 100,000 adults in Mali, a much higher rate than in Côte d'Ivoire (146), Niger (100), and Senegal (176). By contrast, there were only four bank branches and three MFI service points in Mali for every 100,000 people (Figure 39). Of course, while physical access to mobile money agents is clearly much greater than to traditional financial institutions in Mali, the types of transactions that can be conducted through mobile money services remain more limited (Chapter 4).

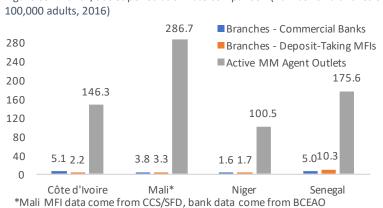


Figure 39: Branch/outlet penetration rate comparison (number of branches or outlets per

14. The lack of a clear legal and regulatory framework to protect consumers may also constrain access, limit usage, and result in higher prices. Without a clear framework that sets minimum standards for consumer protection (Box 6), practices within the financial services industry vary substantially—particularly with regard to disclosure and transparency. While some institutions are transparent about their fees and charges, for example, others provide only minimal and/or unclear information to consumers. Even those institutions that do provide consumers with this kind of information tend not to use a simple or standardized format, which limits consumers' ability to compare services. Overall, the lack of clarity and uniformity, together with users' limited familiarity with formal services, may be an additional reason why consumers believe that they have insufficient funds to justify opening and operating an account, despite the fact that they engage in financial transactions and save informally.

Box 6. The Financial Consumer Protection Framework in WAEMU

The existing framework for protecting financial services consumers focuses on regulating the cost of financial products and services and includes the following rules:

Rules related to remuneration of term savings, although these do not apply to all savings products offered;²¹

Source: FAS, CCS/SFD, BCEAO, team analysis.

¹⁹ Despite the fact that the agent banking framework allows only banks to have intermediaries, the BCEAO has recently allowed Microcred to recur to agents using their Baobab model.

²⁰ Defined as agents who have performed transactions in the past 90 days.

²¹ Decision No. CM/UMOA/016/09/2014 Setting the Conditions of Compensation of Savings Products applies only to regulated savings products and not to all products offered by credit institutions, MFIs, and postal financial services.

- Rules forbidding the imposition of usury rates and limiting the overall cost of credit (with a maximum cap that differs between credit institutions, including their intermediaries, and MFIs);²²
- Rules related to the effective interest rate, defining the method for its calculation (nominal interest rate plus several various commissions), and obliging financial services providers to disclose to consumers not only the nominal interest rate, but also the effective interest rate;²³
- Rules related to transparency and disclosure of information that include a requirement that banks²⁴ and mobile money services display their fees and charges at their points of service (that is, branches, agents, and ATMs) and the requirement that mobile money services provide consumers with a copy of the contract and a receipt after each transaction;²⁵
- Rules mandating the provision of certain key services free of charge;²⁶ and
- Rules obliging mobile money services to establish formal mechanisms to handle consumers' grievances.²⁷

However, the legal and regulatory framework for consumer protection remains incomplete and not fully coherent. For example, existing rules impose different obligations on different types of institutions that provide similar retail financial products and services. This limits comparability and creates an uneven playing field, since consumers enjoy a different level of protection at different types of institution.

In addition, the lack of minimum rules on the format and manner of disclosures makes many provisions ineffective. In fact, while contracts need to be provided to consumers, these are often lengthy and complicated. The lack of requirements relating to the language of disclosures (such as an obligation to provide information in a language that the consumer understands) and terminology (such as an obligation to use simple and readily comprehensible terms) renders many provisions void, as a large proportion of consumers may find contracts difficult to understand. Similarly, the lack of provisions on the format and manner of disclosures renders the obligation to publish a schedule of fees and charges less effective, as consumers cannot easily compare these fees and charges. Finally, the lack of rules on the timing of disclosures renders contracts and obligations related to effective interest rates void, as financial service providers can choose to provide them only at the point when a consumer signs a contract, which does not give consumers the time or opportunity to read and understand the contract or to compare different providers.

Although the legal texts do not explicitly confer the mandate for financial consumer protection on any particular institution, this mandate implicitly falls on the BCEAO and the Banking Commission. In fact, the BCEAO has developed regulatory texts covering financial consumer protection issues and has included a specific component on responsible finance in its regional financial inclusion strategy. Despite this, neither within the Banking Commission nor at the BCEAO is there a specific team or department dedicated to financial consumer protection. As a result, financial service providers are often unaware of or disregard the rules formulated by these institutions.

15. The large proportion of unregistered SIM cards might impede access to mobile financial services accounts. Despite the implementation of awareness campaigns and the large proportion of the population with valid ID documents (in particular, the NINA card mentioned above), a large share of SIM cards in Mali remain unregistered. This is likely due to the fact that, until now, no coercive measures have been taken to require consumers to register their cards. These unidentified customers are not allowed to open mobile financial services accounts, however.

16. **Financial exclusion appears to be higher for women and low-literacy adults**. A strong correlation can be established between gender/educational level and access to these services. In fact, the proportion of women holding accounts of any sort, either at traditional brick-and-mortar institutions or with mobile financial services, is considerably lower than the proportion of men. In 2017,

²² Decision *No. 003-08-2013 credit institutions and decentralized financial systems relating to the fixing of the rate of usury in WAMU Member States* sets the maximum limit for credit institutions at 15 percent and for MFIs at 24 percent.

²³ Law No. 2014-044 on the definition and repression of usury and BCEAO, *Decision of the Monetary Policy Council No* 397/12/2010, on the rules, instruments and procedures for the implementation of the BCEAO currency and credit policy.

²⁴ BCEAO, Decision of the Monetary Policy Council No 397/12/2010, on the rules, instruments and procedures for the implementation of the BCEAO currency and credit policy.

²⁵ BCEAO, Instruction No. 008-05-2015 Governing the Terms and Conditions of Practice for the Activities of Electronic Money Issuers in WAMU Member States, Article 30.

²⁶ BCEAO Instruction No. 004 - 06- 2014, *Relating to Banking Services Offered Free of Charge by the WAMU Credit Institutions to Their Clients.*

²⁷ BCEAO, Instruction No. 008-05-2015 Governing the Terms and Conditions of Exercise of the Activities of Issuers of Electronic Money in WAMU Member States, Article 30.

on average, 45 percent of men held an account at either a traditional financial institution or with a mobile financial service provider, compared to only 26 percent of women (Figure 40). According to the most recent registration data, close to 80 percent of the holders of mobile money accounts are male. Similarly, account ownership appears to correlate strongly with level of education, even within income groups. Considering individuals in the top three income quintiles, those with higher levels of education are twice as likely to have access to an account than individuals with lower levels of education (Figure 40).

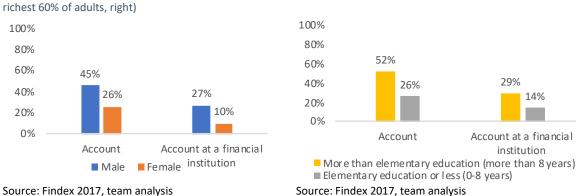


Figure 40: Account and financial institution account penetration by gender (% of adults, left) and literacy level (% of

17. Large-scale, broadly targeted financial literacy programs delivered through mobile technologies could be useful in removing barriers to inclusion. In Mali, where a majority of people use a basic phone and the illiteracy rate is high, particularly among women, partnerships between MNOs and interested banks/MFIs to disseminate behavioral messages in local languages through mobile phones could be a powerful way to reach inactive or low-usage customers (Box 7).

Box 7: Financial Literacy Programs—An Example from Tanzania

Governments, financial service providers, and NGOs use financial education as a tool to enable people to better understand the financial system and to make better financial choices. Financial education programs are built on the assumption that providing education leads to higher levels of knowledge, which in turn helps consumers make better choices. Recent evidence demonstrates that successful financial education programs are defined by the following characteristics: (i) they are simple and actionable; (ii) they are personalized for individuals' needs and situations; (iii) they are timed to coincide with decision-making processes; (iv) they are accessible and entertaining; and (v) they are targeted to reach those who are primed to learn, such as young adults.

Technological innovations, such as mobile phone applications and messaging interfaces, hold significant potential for the delivery of financial education programs but need further work and testing. Mobile devices can enable financial education to be personalized at the individual level. Mobile or tablet apps can provide self-paced and self-directed programs, personalized for the particular context or timed to coincide with a person's decisions, at a reasonably low cost. Technological solutions that manage to adapt individual experiences to specific needs will have much greater impact than one-size-fits-all approaches.

In rural Tanzania, the Consultative Group to Assist the Poor (CGAP)-in partnership with Arifu, TechnoServe, Vodacom, and the Busara Centre for Behavioral Research—has developed a project intended to benefit farmers through in-person trainings. The platform is managed by Arifu, which has developed a personalized learning tool that provides customized learning content based on consumers' preferences and responses. Using the farmers' own feedback from initial user testing, the partners developed a series of interactive SMS scripts that enabled farmers to guide their own learning process on their phones, to do so when they wanted, and to access the particular content they wanted. For example, those more interested in loans could learn how to check their loan limit or to use a cost calculator tool, while those interested in savings could read a story about farmers similar to themselves who saved using the M-Pawa saving system to meet their business or personal savings goals.

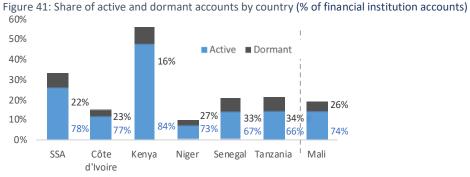
The team tested a range of different types of behavioral messages to drive an uptake of the SMS content and to facilitate different learning approaches, including narrative, facts, and introducing the Arifu name in the SMS as a personal learning guide to increase personalization of the experience.

The results from the six-month pilot project were impressive. A total of 33,782 invitations were sent to farmers. The 2,862 farmers who accessed the Arifu learning platform saved at rates more than five times higher than farmers who did not access the learning platform. Similarly, farmers who accessed the Arifu learning content, regardless of the specific delivery method, took out larger loans and repaid at higher rates than those who did not access the learning content. On average, the more screens a farmer viewed, the more financial activity they engaged in on M-Pawa.

While financial education through mobile phones and digital platforms can have a positive impact on consumers' financial knowledge and behaviors, it is worthwhile pointing out that generic, school-based financial education tends to be less effective, according to a World Bank Policy Research Working Paper²⁸. This type of financial education is also likely to create a pitfall in which the government is disincentivized to strive for better disclosure, consumer protection, recourse in the case of error, and so on.

1.3 Usage of (transactional) financial services is still limited

18. **Despite Mali's progress in expanding access to financial services, use of these services remains limited**. While access to an account is a precondition to financial inclusion, in itself it is not sufficient. To benefit from this access, individuals need to use financial services to enact payments, to conduct other transactions, and to save. Among individuals who held an account with a financial institution in 2017, only three out of four used it regularly. One-fourth of those with an account had not used it to conduct any transactions over the past 12 months (dormant account). Although the share of active financial institution accounts in Mali has seen an increase of five percentage points in the past three years, outperforming regional peers, it still falls short of the average among SSA countries (Figure 41).



Source: Findex 2017, team analysis.

19. Proximity to a branch is correlated with the rate at which financial services are used, and the introduction of mobile money services has helped to extend coverage through a capillary network of point-of-service locations rather than traditional financial institutions, especially in rural areas. Individuals will only use mobile financial services if they have easy access to their funds. As mentioned above, the limited coverage of financial service access points in a dispersed country such as Mali is a constraint on usage, especially in rural areas. While the proliferation of mobile financial services has reduced the gap by increasing the number of service access points, issues related to the availability of funds at specific access points might still preclude higher rates of usage.

20. **Similarly, network effects drive higher rates of usage, especially for payments**. A "network effect" arises when the usefulness of a good or service is a function of the availability of the same good or service to other users. The use of electronic money implicitly involves participation in a network, as a user can only make electronic payments if other individuals, merchants, or government offices accept the payment. This suggests that a concerted effort is needed to stimulate greater uptake by individuals, merchants, and government agencies—for example, through extensive rollouts of digitization programs for government-to-person (G2P) and person-to-government (P2G) payments (Chapter 4).

21. Individual usage is also driven by the quality of the product and the degree to which it is customized to meet retail users' needs. Individuals tend to use financial products more frequently if the products meet their specific needs. In Mali, only a limited number of financial institutions have

²⁸ Miller, Margaret, Julia Reichelstein, Christian Salas, and Bilal Zia. 2014. "Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature." Policy Research Working Paper No. 6745 (January).

made a concerted effort to segment their customer base, in particular among retail customers, and to understand the needs of each segment in order to adapt and design affordable products and services to meet their differing needs. This is particularly the case for the low-income segment: most banks in Mali have not been motivated or incentivized to develop financial services that meet the particular needs of this segment of the population (Chapter 5). There are signs that this is beginning to change. EcoBank's introduction of Xpress Accounts, for example, indicates a new level of interest in developing products that meet the needs of low-income consumers and informal businesses.

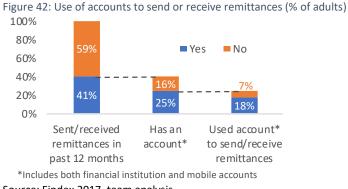
22. The use of electronic financial services may increase if consumers have a clear understanding of reimbursement rules in cases of erroneous or mistaken transactions, and of the availability of adequate consumer recourse mechanisms. Consumers, particularly those who have only recently begun to use formal financial services, may be relatively more likely to make mistakes when conducting transactions. Owing to the lack of clear rules and minimum standards across providers on the treatment of erroneous or mistaken transactions, different providers treat these cases differently and on *ad hoc* basis. This reduces consumers' willingness to conduct transactions,²⁹ particularly if someone within their circle has had a bad experience when seeking reimbursement or restitution following a mistaken or erroneous transaction. Finally, the fact that only mobile financial service providers are obliged to establish formal consumer grievance mechanisms³⁰ and that even these lack minimum standardized procedures, may reduce consumers' confidence and belief that their grievances will be treated appropriately, efficiently, and independently.

23. **Remittances are one form of financial transaction that, if migrated to electronic channels, would increase use of financial services**. There are opportunities to migrate a range of different financial transactions to electronic channels and thereby to stimulate the rate of use of accounts. While these channels could be used for utility payments, salaries, and a wide range of other transactions, the transfer of remittances holds perhaps the greatest potential given that at least one-third of adults in Mali have sent or received at least one remittance over the past year.

24. **Migrating remittances to electronic channels requires improved access and support for usage**. A significant proportion of transfers of domestic remittances might have been transacted through non-electronic, often informal, channels simply because either the sender or the receiver or both did not have an account (Chapter 4). In fact, around 16 percent of adults sent or received domestic remittances but did not have an account with either a traditional financial institution or with a mobile financial services provider, and therefore had no choice but to send cash through intermediaries or other means. It is important to note, however, that 7 percent of adults did not use electronic channels despite having an account and having sent or received remittances in the past (Figure 42). While this might have been due in some cases to the fact that the other party to the transaction did not have an account, other issues such as proximity to an access point or cost may also have been factors.

²⁹ According to the 2013 and 2014 reports published by the Senegalese *Observatoire de la Qualité des Services Financiers*, analysis of data on consumer complaints points to a recurring theme (among the most common in 2013) of transaction-related issues. Considering that the *Observatoire de la Qualité des Services Financiers* is not yet receiving complaints from the clients of e-money issuers and that this is the most developed product type in Mali, transactional errors and—by consequence—consumer grievances could be a significant problem.

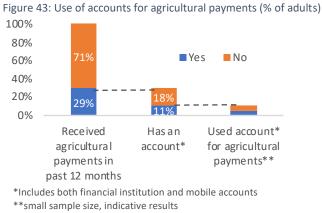
³⁰ BCEAO, Instruction N°008-05-2015 *Régissant les conditions et modalités d'exercice des activités des émetteurs de monnaie électronique dans les états membres de l'UMOA*, Article 30.



Source: Findex 2017, team analysis.

25. Payments for the purchase of agricultural commodities or agricultural inputs could also be migrated to electronic channels. More than half of Mali's population involved in agriculture. If provided with opportunities to do so in a cost-effective and simple manner, those engaged in this trade could utilize electronic money to conduct associated transactions, including for the purchase of inputs and the sale of commodities. Efforts to facilitate this migration could prioritize structured value chains in which a single buyer purchases agricultural commodities, such as cotton, from a large number of farmers and cooperatives. However, even the digitization of payments in a specific value chain requires the existence of a complete financial ecosystem to enable payments to be accepted by all of the parties involved in the transaction. The building of such an ecosystem would probably go beyond the capacities and resources of any individual operator. Instead, such an ecosystem would need to be considered a public good, with public support provided to facilitate its development (Chapter 3).

26. As in the case of remittances, the migration of payments for agricultural commodities and inputs to electronic channels requires both improved access and support for usage. The existence of a critical mass of users is needed to ensure that all parties can conduct transactions electronically. At present, only 11 percent of individuals in Mali received payments for agricultural commodities while holding an account at the same time. Even among those who have an account, only an insignificant share of them used their account at all over the past year (Figure 43).³¹ This indicates factors other than lack of access also constrain use of this channel. Ensuring that funds are transferred at low cost and that the proceeds are immediately available to the receiver (including via cash-out operations) are equally important to stimulate increased usage.



Source: Findex 2017, team analysis.

27. The further development of merchant payment systems would create significant opportunities to increase the usage of mobile money for small retailers and informal businesses. As discussed above, Mali's economy is characterized by a high degree of informality, with a large number of small businesses conducting transactions mostly in cash. Developing the use of mobile money as a

³¹ Owing to the limited sample size, this result is only indicative.

means of transacting payments with small businesses would create daily opportunities for a large number of people to use and become familiar with this payment channel. Migrating this form of transaction to electronic channels would, however, require significant investment in front-end systems and equipment, user promotion and education, and partnership facilitation (Chapter 4).

28. Payments from government agencies to citizens and vice versa could also be considered for migration to electronic channels. The government and its citizens interact in multiple ways. A wide variety of P2G payments, such as the payment of levies, taxes, or fees, and G2P payments, such as social transfers or pensions, are currently transacted in cash. These payments could be migrated to electronic channels, with multiple benefits for both people and government. Although mobile financial service providers have already engaged in discussions with government agencies on the potential digitization of P2G and G2P payments, the dialogue is still at an initial stage. Yet a strong effort will be required to create a mutual understanding of the benefits to be derived from using digital channels for these payments and of the steps to be undertaken to facilitate such a transition.

1.4 A small proportion of the population saves through financial intermediaries

29. Although a large proportion of adults in Mali do save, not many use financial institutions and most prefer cash or informal instruments. Only a small proportion hold their savings in banks or MFIs, and thus most savings activities take place outside the financial sector, which limits the extent of financial intermediation. In fact, in 2017, only slightly above 6 percent of adults in Mali held their savings in formal financial institutions (Figure 44). Even among Malians in the highest income quintile, only 10 percent saved in financial institutions. This figure is much lower than the SSA average of 15 percent. Nonetheless, more than half of adults in Mali (54 percent) saved through a range of methods, mechanisms, and institutions (Figure 45). A proportion of those who save may use mobile financial services to do so. Mobile money balances are limited,³² however, and not remunerated (Chapter 4).

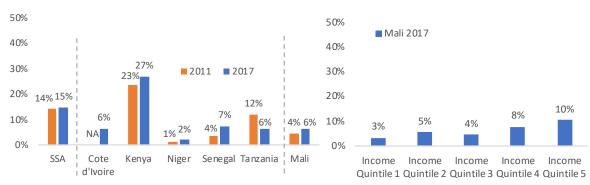


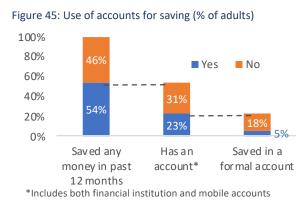
Figure 44: Saving at financial institutions by country and income quintile (% of adults who save at financial institutions)

Source: Findex 2017, team analysis.

30. Although the proportion of adults who hold their savings at formal financial institutions is necessarily constrained by the limited share of individuals who hold accounts, even some account holders prefer to hold their savings in cash and through other informal means. Some useful insights into savings behaviors can be derived by filtering the data to identify the proportion of the population that saves, then determining the share of savers who hold an account at a formal financial institution or with a mobile financial services provider, and finally determining the proportion of those who use financial institutions accounts to save. While 54 percent of adults in Mali do save some of their earnings, only 23 percent both save and have an account (Figure 45). Those who do not hold an account will necessarily save outside financial sector channels, including through balances left in their mobile accounts. Failure to hold an account is not the only reason that adults save outside formal channels. Considering that only 5 percent of adults save, hold an account, and use their accounts to save (Figure

³² The maximum balance in a mobile money account is FCFA 2 million, which is lowered to FCFA 200,000 for an unidentified account holder. See Chapter 4 for a more detailed description.

45), the remaining 18 percent adults are those who should be targeted on a priority basis to encourage changes in savings behavior.



Source: Findex 2017, team analysis.

31. If the formal financial sector is to tap into the large proportion of savings that are held outside this sector, and thereby to increase the level of financial intermediation, extending the sector's reach will be essential. As discussed above, physical proximity is a significant factor in determining people's decisions as to whether or not to hold an account. Even among those who do hold an account, proximity may determine whether or not they use those accounts to hold their savings, as accessing the savings deposited into these accounts may be costly and time consuming. Measures to increase the proximity of service providers' outlets to potential users or to otherwise increase users' access to their savings is a necessary precondition, therefore, to capturing savings held outside the formal financial system, especially for people in rural areas, where physical access is particularly limited.

32. **Trust is another key factor in determining users' decisions about whether or not to hold their savings with either traditional formal financial institutions or mobile financial service providers**. Propensity to use financial services correlates strongly with trust in financial institutions. In Mali, the level of public confidence in either traditional or mobile financial services has eroded as a result of several factors, including the recent crisis in the MFI sector. The standing of MFIs, which tend to target lower-income and rural households, has been affected considerably by issues related to weak governance and poor performance over the past decade (Chapter 6). This has compromised the ability of a significant proportion of MFIs to serve their target clientele reliably and has undermined public confidence. In particular, the failure of a number of large MFIs, including Jemeni, has resulted in a high level of public mistrust and a decline in the use of MFIs' services, particularly for savings. The microfinance sector has also been seriously hampered by the political and security crisis (Chapter 6).

33. The establishment of a functional deposit insurance scheme, combined with campaigns to raise awareness of the scheme, could help to enhance trust in the financial sector, which could in turn increase the propensity to use formal financial institutions for the purpose of saving. To increase the level of public confidence in the financial sector and protect depositors from possible financial institution failures, the BCEAO has introduced a deposit insurance scheme (Chapter 5, Box 37). Completing the rollout and implementation of the deposit insurance scheme and building public awareness regarding its existence and function will be critical in building public confidence and thereby stimulating an increase in savings through formal channels.

34. The implementation of strong measures to prevent abusive terms and practices by financial institutions could also increase trust in the formal sector and thereby stimulate increased savings through formal channels. As discussed above, the regional financial consumer protection framework is inadequate to ensure that consumers are treated fairly and to prevent abusive practices. As a result, standardized adhesion contracts may contain abusive clauses such as limiting the provider's responsibility, allowing the provider to unilaterally change conditions without informing the consumer,

and enabling it to rescind the contract. Financial service providers may also adopt abusive practices, such as bundling and tying other products to formal savings accounts and imposing excessively high penalty fees for the early termination of term-deposit contracts. Such terms and practices could limit consumer confidence in financial service providers.

35. The introduction of digital savings could be an avenue through which Mali could increase savings rates. As described above, individuals in Mali can retain a balance on their mobile money accounts, which is a form of savings. According to WAEMU regulations, however, MNOs and nonbank mobile financial service providers are not permitted to offer their own savings and credit products. Mobile savings products may only be offered, therefore, through partnerships between mobile money service providers and financial institutions (Chapter 4). Dedicated savings products are only now being developed, mainly through partnerships between mobile money providers and financial institutions including MFIs. This follows the example of other countries in Africa (Box 9). Empirical research has shown that providing individuals with opportunities to save through the use of digital savings products not only increases the likelihood that an individual or a household saves, but also increases the average amount saved (Ouma, Odongo, and Were 2017). In a country like Mali, where the development of digital savings products is still at an early stage, there is a significant opportunity to increase the total value of savings held at formal financial institutions.

36. Semiformal channels such as savings groups are a widely used mechanism for savings, especially for women, and mobile money could be an instrument to formalize these savings. While the proportion of women who engage in savings in Mali is almost as high as for men, women are much less likely to use formal channels (Figure 46). Indeed, the most common savings system utilized by women involves informal savings groups (Box 8). Measures to support the formalization of such groups could provide the participants with higher levels of security and foster increased financial intermediation. These measures could involve the use of mobile money (Box 9).

Box 8. Informal Financing Systems in Mali

Despite the advancement of microfinance and mobile money systems in Mali, many people still rely heavily on informal financial services to manage their lives and businesses. A few of the most common forms are highlighted below:

a) Money keeper: Many Malians keep their money with a trusted individual in their community. This could be a neighbor, religious leader, successful businessperson, or retired person. People deposit money with the trusted "keeper" on an occasional basis. The money keeper holds the money and promises to refund it on demand or for uses as agreed upon by the two parties. The money keeper charges no fees for this service. This informal system is prevalent primarily in rural Mali, but can also be seen in larger towns and the capital city. Risk to the depositor is low in rural areas and moderate in urban centers, where some money keepers use deposited funds for their own purposes and cannot guarantee a full refund on demand.

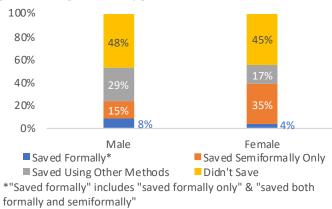
b) Tontine: In one of the most popular and important informal financial systems in Mali, individuals come together in a group and agree to make regular payments into a common fund at agreed intervals (for example, daily, weekly, biweekly, or monthly). Each person takes turns receiving the funds at each interval. *Tontines* are popular because they can include many people, they work across all sectors/groups, and they can generate large volumes of capital over a brief period. People like them because they are flexible and easy to use. An individual can join just because she knows the other members. There are not applications to fill out or background checks. *Tontines* are particularly important for the extreme poor, as they are the only way individuals can accumulate savings to pay for large financial obligations such as school fees, baptisms, and marriages. In addition, in Mali, women rely on *tontines* to accumulate in-kind goods such as clothing, fabric, pots and pans, and other household goods, as well as items to prepare a child's dowry and other events. There are no actual costs associated with the *tontine* system. However, some transaction costs are incurred in collection and distribution activities.

c) Village savings and loan associations (VSLA): An extension of the *tontine* system, VSLAs provide more transparency and ensure that all group members are involved in decision making. Popularized by international NGOs, a VSLA is a group of people who save together and take small loans from those savings. The VSLA operates in cycles of one year. At the end of the one-year cycle, accumulated savings and loan profits are returned to the members. Sometimes VSLA members decide to pay into a social fund to provide members with a basic safety net for health and life emergencies. VSLAs differ from *tontines* in that each member does not have to save the same amount. More flexibility is built into the borrowing function, in that members can take a loan of up to three times their savings for a maximum period of three months. Loans are repaid in flexible installments at monthly meetings. Multiple members can borrow at the same time.

Informal financial services are important and widespread in Mali. Financial inclusion can be enhanced by leveraging and supporting existing ecosystems of informal finance, as opposed to simply substituting them. Oxfam's Savings for Change program in Mali does this by strengthening informal women's savings and credit groups. The program introduces a novel oral accounting system which, among other things, allows for more flexible rules on receiving emergency loans via the group. Evidence from Mali suggests that women in these programs saw increased savings and access to credit, as well as positive impacts on food security and livestock ownership.

Sources: Beaman, Karlan, and Thuysbaert (2014); Kalala and Ouedraogo (2001).

Figure 46: Savings methods by gender (% of male and female adults)



Source: Findex 2017, team analysis.

Box 9. Digital Savings Products for Informal Groups and Individuals

In 2014, Airtel Uganda launched Airtel Weza, a mobile savings product targeting those who save through informal groups. By linking this product to financial institution accounts, it could yield interest. In the same year, Tigo Tanzania distributed payouts with a total value of US\$ 8.7 million to its 3.5 million mobile money customers.³³ Individual shares were calculated based on their average Tigo Pesa account balance, with the aim of attracting an increase in deposits. Similarly, in Kenya, the M-Shwari bank account has been introduced to enable clients to save, make transfers, and receive credit. M-Shwari accounts are a form of digital bank account offered by the Commercial Bank of Africa, linked to M-Pesa (mobile money) accounts offered by Safaricom. Based on the individual savings behaviors of M-Shwari account holders, clients may be granted small loans (Chapter 4).

37. Savings held with mobile financial service providers could enhance informal groups' access to formal credit. By encouraging informal savings clubs to hold the group's savings in mobile money or digital bank accounts, a financial institution could create a formal savings product that mimics the operational modalities of a traditional savings club—for example, by ensuring that the product requires three group members to have account access in order to conduct transactions. A mobile money account linked to a financial institution account could enable the group and individuals within the group to establish a credit rating based on savings and transactional histories. Based on the record of the group and its members, the financial institution could offer loans to the group and its individual members. For such a system to be successful, however, it would be essential for the group to have easy and cheap access to the group's funds.

38. At the household level, increased savings can enable households to smooth consumption and manage risk. Over half of adults in Mali have difficulty accessing funds in cases of emergency (Figure 47). Although the greatest proportion of respondents state that their primary source of emergency funds is from working, a significant share of them still resort to friends and family. This can be problematic, particularly in cases where shocks affect an entire community, rather than merely an individual household. There is a need, therefore, to develop not only savings products but also insurance products.

³³ Global System for Mobile Communications Association (GSMA). 2014. State of the Industry: Mobile Financial Services for the Unbanked. Mimeo.

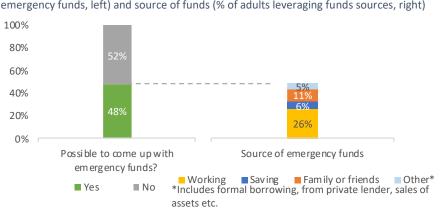


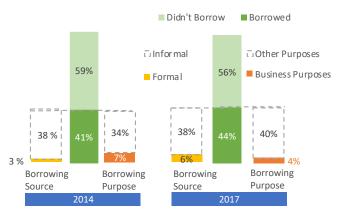
Figure 47: Emergency fund availability (% of adults finding it possible or not to come up with emergency funds, left) and source of funds (% of adults leveraging funds sources, right)

Source: Findex 2017, team analysis.

1.5 Most borrowers use informal credit

39. A large proportion of households in Mali take out loans to meet their consumption, education, medical, and other needs. Approximately 44 percent of the Malian adult population borrowed in 2017, in line with the SSA average. While the majority of these loans were contracted to meet consumption, education, or medical needs, about 4 percent of adults borrowed money to establish or operate an urban or rural business (Figure 48).

Figure 48: Different borrowing purposes and sources (% of adults)



Source: Findex 2017, team analysis.

40. **The vast majority of borrowers in Mali borrow from friends and family, with only a small proportion using formal financial services**. Despite overall growth in the volume of credit to the private sector (Chapter 5), the proportion of people taking out loans from financial institutions remains limited, and informal and semiformal sources remain the most common. Only 6 percent of adults borrowed from a financial institution (Figure 48).³⁴ There is a promising trend, however, as this rate has doubled in the past three years and is now approaching the SSA average of 7 percent.

41. In most income quintiles, the penetration rate of formal credit has more than tripled in the past three years. Although it is still the case that only a small proportion of adults in Mali have access to formal credit, this rate has grown rapidly across income quintiles since 2014 and remains largely correlated with income levels—except the richest quintile, where credit might not be needed at all (Figure 49). Several factors might explain this credit allocation. On the one hand, credit bureaus cover less than 2 percent of all adults in Mali. In the absence of effective tools for screening borrowers, financial institutions tend to extend credit only to customers with whom they have a long-standing

³⁴ The prohibition on interest under Islamic law might play a role in explaining constraints on the demand side, although this should be further explored and analyzed.

relationship. Since those in the lower income quintiles are considerably less likely to hold an account with these institutions, they are unable to establish this kind of relationship and so their access to credit is also limited. Additionally, most financial institutions require collateral in the form of land titles in order to grant a loan, and only the richest strata of the population has access to such assets to pledge.

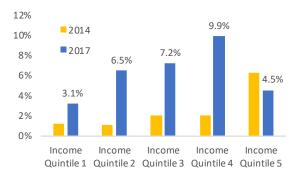


Figure 49: Formal credit penetration per income quintile (% of adults with access to formal credit)

Source: Findex 2017, team analysis.

42. Individuals who need credit for business purposes are more likely to have obtained loans from formal financial institutions than those who need credit for other purposes. Operators of businesses often need credit to establish and/or operate their businesses. The value of this credit is more likely to be higher than can be accessed from informal sources. As a result, 29 percent of individuals who borrowed for businesses purposes in Mali took out loans from formal financial institutions, while only 10 percent of those who borrowed for other purposes did so from a formal institution (Figure 50).³⁵

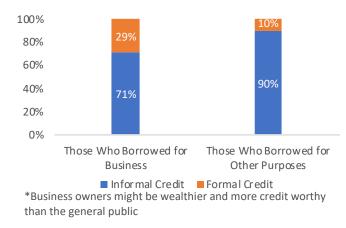


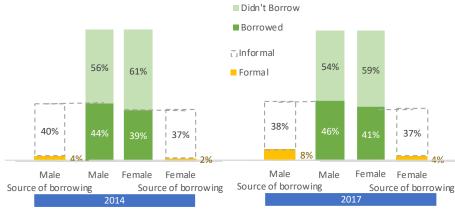
Figure 50: Borrowing sources for business*/nonbusiness purposes (% of adults who borrowed from formal or informal sources)

Source: Findex 2017, team analysis

43. On average, women are less likely than men to borrow from formal financial institutions. While the formal credit penetration rate doubled from 2014 to 2017 for both males and females, there remains a pervasive gender gap (Figure 51). Financial institutions' collateral requirements pose a key constraint on women's access to credit. It is much more difficult for women to obtain the personal and/or physical guarantees they need to secure a loan. Therefore, extending the type of collateral that is acceptable to formal financial institutions could increase women entrepreneurs' access to credit and address the constraints on the growth of their businesses that are created by the lack of access.

³⁵ Other purposes include health and medical purposes, educational needs and school fees, and others, according to the Findex 2017 Questionnaire.

Figure 51: Borrowing sources by gender (% of males and females)



Source: Findex 2017, team analysis.

44. The development of mobile financial services creates opportunities for the future development of the credit market. As stated above, the inability of the vast majority of potential borrowers to provide collateral and/or to establish a credit history contributes to the low penetration rate of formal credit. By contrast, increased use of mobile financial services could facilitate an increase in formal loans. Holding an account with a mobile financial services provider or with a financial institution could enable a greater number of people to establish a relationship with an institution based on their transaction history, which could be used to establish a credit rating. This could enable an individual or group to qualify for short-term revolving credit delivered through mobile technologies or for formal credit delivered with the support of credit-scoring methodologies. This would be particularly true for the 14 percent of adults who both held an account and borrowed, but still chose to obtain credit from informal sources (Figure 52). The potential opportunities created by leveraging digital data are demonstrated by the experiences of other countries in SSA (Box 10).

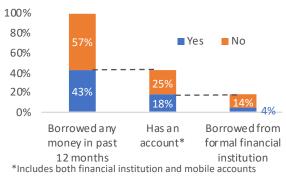


Figure 52: Borrowing from formal financial institutions (% of adults)

Source: Findex 2017, team analysis.

Box 10: Leveraging Digital Data for Individual Credit in Kenya and Tanzania

The use of digital data for credit analytics is becoming increasingly common as a means to assess the eligibility of both enterprises (Chapter 2) and individuals for credit, particularly in Kenya and Tanzania.

In Kenya, M-Shwari, a leading digital credit platform launched in 2012 through a joint partnership between the Commercial Bank of Africa and Safaricom, had 4.5 million active users and had disbursed loans of a total value of US\$ 277.2 million by 2015. Essentially a bank account issued by the Commercial Bank of Africa that offers both savings and loan services, M-Shwari is integrated into M-PESA's mobile money system and taps into its established operational infrastructure and broad outreach. M-PESA usage history, together with other Safaricom user records (such as call, SMS, and network browsing records) are used to determine an M-Shwari client's creditworthiness and to determine corresponding individual credit limits. Another digital credit provider, Branch, targets smartphone users and disburses loans through a stand-alone Android app accessible through Google Play. Its algorithm crunches social media data, GPS data (available only through smartphones), and other mobile network data to calculate credit scores and determine loan amounts.

In Tanzania, M-Pawa, the domestic version of M-Shwari, offers similar services and utilizes similar credit-scoring mechanisms. In the two-year period after its launch in 2014, this product attracted more than 4 million customers and

disbursed loans with a total value of US\$ 14.3 million. M-Pawa utilizes the client's M-PESA usage history. Other mobile loan products, such as Timiza (powered by Airtel) and Tigo Nivushe (powered by Tigo), tend to rely on MNOs (such as Airtel Money for Timiza, Tigo Pesa for Tigo Nivushe) and their existing mobile money infrastructure. They also utilize customer usage history as an important source of data to assess creditworthiness. These data have enabled loan providers to identify new customers more cost-efficiently, to improve customers' experiences and thus deepen their relationship with these customers, and to manage credit risks.

As cautioned by a recent note prepared by CGAP, however, the growth of digital credit must be accompanied by goodpractice standards and customer protection mechanisms. TransUnion, a credit-scoring company, noted in 2016 that more than 400,000 customers in Kenya were listed as defaulters for loans of Ksh 200 (about US\$ 2), casting uncertainty on their ability to receive appropriate credit in the future and raising concerns about the fairness of existing credit reporting practices for consumers.

1.6 Improving inclusion for individuals and informal businesses: key directions

45. Individuals in Mali, including those who operate informal businesses, have gained considerably more access to financial services in the recent past, due in large part to mobile financial services. Starting from a low base, Mali has made significant progress in increasing the proportion of the population with access to financial services. This has been driven largely by the uptake in the use of mobile financial services, which have become the predominant modality used by individuals and informal businesses, particularly among poorer segments of the population.

46. **Despite significant progress, both access to and usage of financial services remain limited.** This chapter presents the gaps and constraints that remain in achieving greater access and usage, in line with the financial inclusion strategy developed by the BCEAO at the regional level. Addressing these gaps will enable Mali to create opportunities and benefits at both individual and aggregate levels. To tackle these gaps and constraints, concerted efforts are required in three directions:

- a. Direction 1: Facilitate access to low-cost financial services by removing both supply- and demand-side obstacles. Unless people have access to financial products and services, they cannot benefit from them. On the demand side, a key priority should be to remove the obstacles that preclude unserved individuals, including the operators of informal businesses, from gaining access to an account.³⁶ Similarly, efforts should be made on the supply side, with appropriate policies to foster competition and increase transparency and comparability between financial services providers, to ensure affordability or to alleviate infrastructure constraints.³⁷
- b. Direction 2: Deepen inclusion through the systematic adoption of electronic payments as an alternative to cash. Mali remains a cash-based society. Creating an environment in which the use of electronic channels is the preferred modality for a wide range of transactions will be beneficial for individuals, businesses, and the public sector. This will involve migrating a number of transactions to electronic payments systems, including transactions between individuals (P2P) and those involving businesses (P2B and B2B). The government has an important role to play in facilitating this transformation, since it controls significant flows of funds in sending payments to households (G2P) and receiving them (P2G).³⁸ Incentives and public support should be provided to businesses that are willing to use electronic channels, such as incentives for deploying a merchant payment infrastructure, including POSs. At the same time, policy actions should facilitate this migration by ensuring a fully interoperable payment ecosystem in which users have access to their

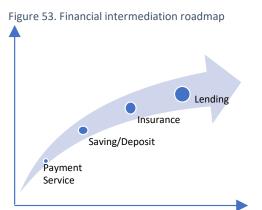
³⁶ Examples of such constraints include the availability of a valid piece of identification to enable individuals to fulfill financial institutions' KYC requirements and limited financial literacy among disadvantaged groups in Mali.

³⁷ Infrastructure constraints include the limited availability of cheap and reliable energy sources, which prevents financial sector operators from reaching clients in rural areas.

³⁸ Payments are not the only transactions that could be migrated to electronic channels; payments related to the purchase of commodities and inputs in agricultural value chains (such as cotton) could also be migrated to electronic channels, creating an easier, faster, and more secure means to transfer funds to farmers.

funds through access points managed by different institutions,³⁹ and by establishing an adequate, accessible, and independent mechanism to handle consumer grievances.

c. Direction 3: Foster financial intermediation and improve access to credit by leveraging mobile money as an entry point to financial services. The first way to increase financial intermediation would be through measures to ensure that individuals and informal businesses conduct an increased proportion of their transactions in electronic form through financial intermediaries (Direction 2).⁴⁰ Since most people in Mali will enter the financial sector through mobile financial services, these people will only be able to graduate to more complex financial products, including credit, if digital financial service providers, including Fintech companies, will partner with traditional financial institutions to facilitate the exchange of information on customers to improve customer profiling and facilitate credit assessment based on transaction history (Figure 53).⁴¹



Source: team analysis.

Box 11. The WAEMU Regional Financial Inclusion Strategy

Since 2014, through a consultative process at regional and national levels, the BCEAO has been designing a Regional Financial Inclusion Strategy. This strategy was approved by the regional council of Ministers of Finance in June 2016. The objectives of the regional strategy are to ensure access to and use of a diversified set of adapted and affordable products and financial services to 75 percent of the WAEMU adult population within five years (to 2020), with a focus on women, youth, the rural population, and SMEs.

The strategy is divided into five axes:

- i) Develop an enabling legal and regulatory framework, and effective supervision;
- ii) Clean up and reinforce the microfinance sector;
- iii) Promote innovations favorable to excluded populations (particularly youth, women, rural population, and SMEs);
- iv) Reinforce financial education and customer protection; and
- v) Put in place a policy and fiscal framework favorable to financial inclusion.

In November 2016, the BCEAO organized a funders' roundtable, the last step in the process of designing the strategy. National Implementation Monitoring Committees (CNSMO) have been established to monitor implementation of the regional strategy at the national level for each member state. Their mission is to ensure the articulation and development of synergies between national strategies and regional strategy. Member states that already have a national strategy and an implementation framework in place will over time migrate the existing framework into the CNSMO structure to ensure synergies across the region. The CNSMOs are composed of representatives of the relevant ministries, professional associations, promotion agencies, technical and financial partners, postal services, insurance companies, and the National Direction of the BCEAO, which manages the Secretariat. Mali's CNSMO was established by Order No. 2017-2585 / MEF-SG of August 4, 2017, of the Minister of Economy and Finance, and the members of the committee were named by the structures concerned. The CNSMO has not yet held its first meeting.

³⁹ This would reduce transaction costs and facilitate the transition.

⁴⁰ Uptake of financial services would also generate a flow of information that financial institutions would be able to leverage to assess potential borrowers, resulting therefore in increased access to credit.

⁴¹ For more details pertaining actions to fully integrate MNOs and other DFS providers into the financial infrastructure would facilitate the creation of such an ecosystem, see recommendation in Chapter 4.

1.7 References

- Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). 2016. Principaux indicateurs des SFD de l'UMOA.
- Beaman, Lori, Dean Karlan, and Bram Thuysbaert. 2014. "Saving for A (Not So) Rainy Day: A Randomized Evaluation of Savings Groups In Mali." Mimeo (October). Available at: http://faculty.wcas.northwestern.edu/~lab823/bkt_sfc.pdf (accessed June 4, 2018).
- Consultative Group to Assist the Poor (CGAP). 2015. "The Potential of Digital Data: How Far Can It Advance Financial Inclusion?" CGAP Brief (January). Washington, DC: CGAP. Available at: <u>http://www.cgap.org/sites/default/files/Focus-Note-The-Potential-of-Digital-Data-Jan-2015.pdf</u> (accessed June 4, 2018).
- . 2016. "The Proliferation of Digital Credit Deployments." CGAP Brief (March). Washington, DC: CGAP. Available at: <u>https://www.cgap.org/sites/default/files/Brief-Proliferation-of-Digital-Credit-Deployments-Mar-2016 1.pdf</u> (accessed June 4, 2018).
- Cook, Tamara, and Claudia McKay. 2015a. "How M-Shwari Works: The Story So Far." Access to Finance Forum No. 10 (April). Available at: <u>https://www.cgap.org/sites/default/files/Forum-How-M-Shwari-Works-Apr-2015.pdf</u> (accessed June 4, 2018).
 - ——. 2015b. "Top 10 Things to Know About M-Shwari." CGAP Blog (April 2). Available at: http://www.cgap.org/blog/top-10-things-know-about-m-shwari (accessed June 4, 2018).
- Demigurc-Kunt, Alsi, Leora Klapper, Dorothe Singer, and Peter Van Oudheusden. 2015. "The Global Findex Database 2014: Measuring Financial Inclusion around the World." Policy Research Working Paper No. 7255 (April). Washington, DC: World Bank. Available at: http://hdl.handle.net/10986/21865 (accessed June 4, 2018).
- Grameen Foundation. 2014. "Airtel Uganda, Grameen Foundation and Plan Uganda Introduce a new Group Savings Product for Village Savings & Loan Associations." (August 13). Available at: https://grameenfoundation.org/press-releases/airtel-uganda-grameen-foundation-and-plan-uganda-introduce-new-group-savings-produc-2 (accessed June 4, 2018).
- GSMA. 2014. State of the Industry: Mobile Financial Services for the Unbanked. London: GSMA. Available at: <u>https://www.gsma.com/mobilefordevelopment/wp-</u> <u>content/uploads/2015/03/SOTIR_2014.pdf</u> (accessed June 4, 2018).

International Monetary Fund (IMF). 2017. Financial Access Survey.

- Innovations for Poverty Action (IPA). 2017. "Beyond the Classroom, Evidence on New Directions in Financial Education." Financial Inclusion Program Brief (January). New Haven, CT: IPA. Available at: <u>https://www.poverty-action.org/sites/default/files/publications/Beyond-the-Classroom-Financial-Education-Brief.pdf</u> (accessed June 4, 2018).
- Kaffenberger, Michelle, and Patrick Chege. 2016. "Digital Credit in Kenya: Time for Celebration or Concern?" CGAP Blog (October 3). Available at: <u>http://www.cgap.org/blog/digital-credit-kenya-time-celebration-or-concern</u> (accessed June 4, 2018).

 Kalala, Jean-Pierre Muimana, and Alpha Ouedraogo. 2001. "Savings Products and Services in the Informal Sector and Microfinance Institutions in West Africa: The Case of Mali and Benin." MicroSave (September). Available at: http://www.microsave.net/files/pdf/Savings Products and Services in the Informal Sector an <u>d Microfinance Institutions in West Africa The Case of Mali and Benin.pdf</u> (accseed June 4, 2018).

- Mazer, Rafe. 2016. "Interactive SMS Drives Digital Savings and Borrowing in Tanzania." CGAP Blog (August). Available at: <u>http://www.cgap.org/blog/interactive-sms-drives-digital-savings-and-borrowing-tanzania</u> (accessed June 4, 2018).
- Miller, Margaret, Julia Reichelstein, Christian Salas, and Bilal Zia. 2014. "Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature." Policy Research Working Paper No. 6745 (January). Washington, DC: World Bank. Available at: <u>http://documents.worldbank.org/curated/en/297931468327387954/pdf/WPS6745.pdf</u> (accessed June 4, 2018).
- Ouma, Shem Alfred., Teresa Maureen Odongo, and Maureen Were. 2017. "Mobile Financial Services and Financial Inclusion: Is It a Boon for Savings Mobilization?" *Review of Development Finance* 7(1): 29–35.

World Bank Group (WBG). 2016. M-Pawa Infographic.

——. 2017a. Identification for Development Database. Available at: <u>http://id4d.worldbank.org/global-dataset</u> (accessed June 4, 2018).

——. 2017b. Global Findex Database. Available at: https://globalfindex.worldbank.org/ (accessed June 4, 2018).

———. 2017c. Tanzania Economic Update – Money Within Reach: Extending Financial Inclusion in Tanzania. Washington, DC: World Bank. Available at: <u>http://hdl.handle.net/10986/26393</u> (accessed June 4, 2018).

. 2017d. World Development Indicators Database. Available at: <u>https://datacatalog.worldbank.org/dataset/world-development-indicators</u> (accessed June 4, 2018).

Chapter 2 Access to financial services among small and medium enterprises and larger firms

Key findings

- Mali's private sector employs about a quarter of the total workforce outside agriculture.
- Most businesses consist of sole proprietor operating in the informal sector: the owners of these activities access financial services as individuals.
- Less than 10,000 legal entities are registered in Mali, but these enterprises generate more than 40 percent of GDP and about 80 percent of the country's exports.
- Most formal enterprises hold accounts at financial institutions, but the majority still use cash for most business transactions, owing both to the limited penetration of financial services and to the general level of informality in the economy.
- Although access to finance among formal enterprises has improved in recent years, two-thirds of smaller firms cite it as the most significant constraint on doing business.
- Most frequently, small businesses refrain from applying for formal credit despite needing it since they believe that their application will be rejected or that the imposed terms will be too onerous to bear.
- While larger enterprises have easier access to formal credit, the short-term tenure of the credit offered makes it unsuitable for financing medium- to long-term investments.
- Three strategic directions are proposed to improve access to financial services in the business sector:
 - Support business formalization as a precondition for businesses to receive access to formal finance. One approach would be to discourage the use of cash and facilitate a transition to electronic money to conduct business transactions.
 - Introduce and/or improve tools to reduce the perceived risk associated with lending to smaller enterprises. There is an urgent need for better risk information tools, guarantee schemes, and asset-based lending such as leasing.
 - Extend the maturity of loans provided by financial institutions to the business sector. Interventions to develop the market for long-term funding for financial institutions should be accompanied by an improvement in the assessment of the creditworthiness of borrowers to support medium- to long-term lending.

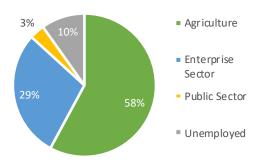
2.1 What type of enterprises are there in Mali?

1. The majority of Mali's workers are engaged in agriculture, while the non-farming business sector employs about 30 percent of the workforce. Mali's working-age population⁴² consists of about 6 million people, 90 percent of whom are actively employed. Around 60 percent of them are directly or indirectly employed in agriculture, about 28 percent in the nonagricultural enterprise sector, and 3 percent in the public sector⁴³ (Figure 54).

⁴² Defined by the Mali Modular and Permanent Household Survey (*Enquête modulaire et permanente auprès des ménages*, or EMOP) as the population that engaged in, or was actively looking for, any activity aiming to produce goods or provide services in return for remuneration or profit in the seven days preceding the survey. It excludes the majority of students and retirees.

⁴³ This does not include employment in state-owned enterprises or companies with state participation.

Figure 54. Employment breakdown per sector (% of working-age population, 2016)



Source: EMOP – Statistical Office.

2. Sole proprietors operating (informal) businesses employ the largest share of the workforce outside of agriculture and the public sector. It is difficult to determine with accuracy the total number of active businesses, since not all sole proprietors in Mali formally register their business⁴⁴ at the onestop shop at the Agency for Investment Promotion (Agence pour la promotion des investissements au Mali, or API).⁴⁵ Roughly 80–90 percent of the enterprise sector workforce is employed by sole proprietors. The sole proprietors operate small/micro-scale businesses, either on their own or with the help of family members and perhaps a few salaried workers, and most often without a formal registration. Sole proprietorship ("entreprise individuelle") is the preferred legal form, even in cases where the owner would like to formalize his/her activities. Lower costs, the absence of a minimum capital requirement, and a more favorable taxation regime are behind this choice. In fact, while it only costs FCFA 8,500 (US\$ 14), with no minimum capital requirement, to establish a sole proprietorship, establishing a company requires a minimum capital of FCFA 1,000,000 (US\$ 1,700) and involves the payment of FCFA 250,000 (US\$ 420) in notary fees. Furthermore, sole proprietors are not subjected to corporate income taxes, but to a simplified lump sum taxation system (the synthetic tax for sole proprietors), fixed at FCFA 14,700 (US\$ 27) or 3.5 percent of turnover.⁴⁶

3. Only about 10,000 legal entities are formally registered in Mali, but they make a significant contribution to the economy. Most typically, a businessperson launches a business venture as a sole proprietor and only transforms it into a legal entity once he or she perceives that it has reached a size that justifies a more structured legal form, with perceived benefits related to limited liability. In 2017, about 10,000⁴⁷ formal enterprises were active in Mali, a number of them with state participation (Table A-2). Business density (that is, legal entities operating in the country as a share of the population) is comparable to that of Côte d'Ivoire and only slightly lower than that of Senegal (Figure 55). Despite the limited number of formal enterprises and their small contribution to total employment,⁴⁸ formally registered legal entities are estimated to account for close to 80 percent of total exports in sectors as diverse as cotton and mining to generate more than 40 percent of GDP and contribute to more than 40 percent of the value addition in the economy. The remainder of this chapter will focus on access to and use of financial services among formal enterprises, with a focus on SMEs and larger businesses, as covered by the World Bank Enterprise Survey (Box 15).

⁴⁸ These enterprises are estimated to employ about 100,000 people.

 ⁴⁴ Registration as sole proprietor is chosen most often by traders and other liberal professions (such as lawyers and doctors).
 ⁴⁵ Data are also difficult to obtain because the Register of Commerce operates only a paper-based registry for businesses that registered before the one-stop shop was established at the API in 2009.

 ⁴⁶ For small activities that are not registered formally, a minimum lump sum tax of FCFA 2,500 (US\$ 4.2) is collected annually.
 ⁴⁷ More than 15,000 legal entities are included in the business registry at API. According to Statistical Office data, however, this figure also includes enterprises that have ceased activity and stopped reporting revenues; only 10,000 are active.

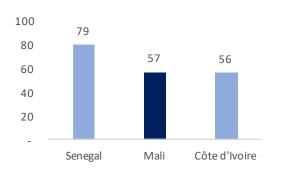
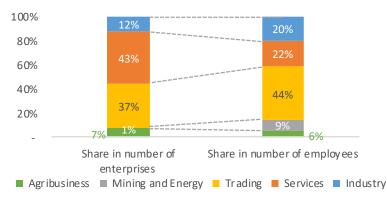


Figure 55: Business density comparison (number of companies per 100,000 people)

Source: National statistics office of each country (2012 data for Côte d'Ivoire, 2017 data for Mali and Senegal)

4. Formal enterprises are engaged mostly in trading activities, followed by industry and services, but the mining sector is also present with a few large enterprises. Formal businesses in Mali employ just over 11 workers, on average. The relatively small scale of businesses can be explained in part by the types of activities in which most of these businesses are engaged. Most formal businesses are active in the trade and services sector (80 percent) and thus do not require a large workforce. Manufacturing is focused on agro-processing, including the production of pasta products, beer, baked goods, vegetable oil, sugar, dairy, textiles, and tobacco. An exception to this trend is the mining and energy sector, where a relatively small number of enterprises employ, on average, about 150 workers (Figure 56).

Figure 56: Sectoral and employment distribution of Malian enterprises (2017)



Source: Estimates from INSTAT and INPS data

Box 12: Classification of Micro, Small, Medium and Large Enterprises by WAEMU and the World Bank Enterprise Survey

All WAEMU countries share the same definition of micro, small, and medium enterprises (MSMEs) and large enterprises:*

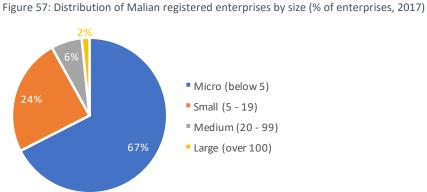
- Micro enterprise: employs 1–5 people (usually has turnover of FCFA 0-50 million (US\$ 0-84,000));
- Small enterprise: employs 5–49 people (usually has turnover of FCFA 50-200 million (US\$ 84,000-337,000));
- Medium enterprise: employs 50–199 people (usually has turnover of FCFA 200-1,000 million (US\$ 365,000-1,800,000)); and
- Large enterprise: employs more than 199 people (usually has turnover of over FCFA 1 billion (US \$ 1,686,000)).

Based on data availability and analytical needs, however, this chapter uses the World Bank Enterprise Survey's classification based only on employment:

- *Micro enterprise:* employs fewer than 5 people;
- Small enterprise: employs 5–19 people;
- Medium enterprise: employs 20–99 people; and
- *Large enterprise:* employs more than 99 people.

* WAEMU's Charter of MSMEs

5. A large majority of formal businesses are of limited size. Even among formal business entities, only 800 have more than 20 employees—and thus can be considered medium or large (about 8 percent of all formal enterprises). By contrast, two-thirds of these entities are microenterprises with fewer than five workers, and another 24 percent are small enterprises (Figure 57). Among Mali's 50 companies in terms of employment (Table A-2), the largest businesses are engaged in services (including financial services, telecommunications, and security services, with the latter thriving in particular since the advent of the security crisis in Mali), followed by mining companies, concentrated in the Kayes region. A number of the top 50 companies are involved in manufacturing, particularly the agro-processing sector.⁴⁹



Source: Estimates from INSTAT and INPS data.

6. Mali's enterprises are often part of fairly diversified business groups. The Malian private sector is dominated by the presence of large business groups whose activities are diversified in several subsectors. Anecdotal evidence points to organic development of such diversified groups. In particular, a large majority of entrepreneurs begin in trade and over time diversify their activities, creating various specialized subsidiaries (Box 13).

Box 13. Profiles of Selected Malian Enterprises

Toguna S.A., a typical Malian company

Toguna S.A. was created in 1994 by Seydou Nantoumé, a Malian trader, as an importer and reseller of fertilizer in Mali. The company grew and opened a fertilizer production unit in 2006 to offset the costs of importation. Toguna Agro Industries was born. In 10 years, as many other Malian businesses do, Toguna created 16 subsidiaries to perform many other activities, including mining in Northern Mali to secure the supply of phosphate (Toguna Mining), truck and tractor production to lower transportation costs (Toguna Motors), and real estate investments in safe stocks (Toguna Immobilière).

Today, Toguna is not only a leading company in its field in Mali but also in the region, with a fertilizer production capacity of 400,000 tons per year and activities in Burkina Faso, Côte d'Ivoire, Senegal, Guinea, Mauritania, Niger, Benin, Sierra Leone, and The Gambia. Although the company is highly diversified, it continues to import a significant amount and sells its products to other competitors as a classic Malian trading company would do; the core of the business started in 1994 remains the same despite apparent changes.

Azalaï Hotels Group, a finial of the Malian private sector

Created 20 years ago, Azalaï Hotels Group was the first hotel chain in West Africa and remains a regional leader in the hotel sector. Created by Mossadeck Bally, a Malian entrepreneur, Azalaï Hotels has developed tremendously through the years. Present in Bamako, Ouagadougou, Cotonou, Bissau, Nouakchott, and Abidjan, and currently building hotels in Dakar and Conakry, the group has generated more than 4,000 direct and indirect jobs across the subregion.

⁴⁹ A challenge in establishing the size of enterprises is that most businesses do not report updated figures regarding the number of employees.

7. **Even in the case of formally registered enterprises, the availability and reliability of financial data remain limited**. Financial accounts are the basis on which banks are able to assess clients' creditworthiness. Unfortunately, despite the relatively large share of enterprises in Mali with certified accounts, the quantity and quality of information on cash flows, revenues, assets, and other critical matters are limited. This is particularly the case for smaller businesses, which form the bulk of Mali's enterprise sector (Box 14).

Box 14. Are Firms' Accounts in Mali Reliable?

Banks in Mali indicate that the absence of reliable accounts is one of the main reasons for refusing credit to an enterprise. This finding contrasts with enterprise sector data, which show that the proportion of enterprises with certified accounts has increased dramatically over time, from 26 percent in 2007 to 77 percent in 2016—and approaching 100 percent among larger enterprises (Figure 58). The increase can be explained in part by tax authorities' imposition of a requirement that enterprises present audited accounts to facilitate the calculation of taxes. However, this requirement has not necessarily improved the quality of enterprises' accounts, especially in the case of smaller enterprises. As a result, banks complain that certified accounts are often not reliable, as demonstrated by the prevalence of material errors in these accounts. Improving the quality and reliability of these accounts should be prioritized by enterprises hoping to receive formal financing.

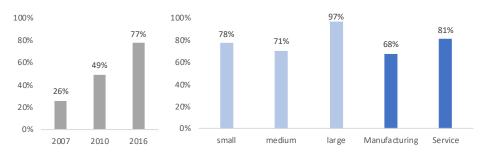


Figure 58: Enterprises with audited accounts over time, by size and sector (% of enterprises with audited accounts)

Source: Enterprise Survey data, team analysis.

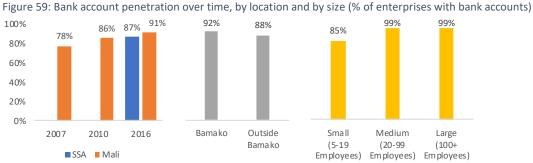
Box 15. Enterprise Surveys

The Enterprise Survey is a firm-level survey of a representative sample of an economy's private sector, conducted by the World Bank and its partners (http://www.enterprisesurveys.org). Data are collected through face-to-face interviews with business owners or top managers and cover a broad range of business environment topics, including access to finance, corruption, infrastructure, crime, competition, and performance. The universe comprises nonagricultural, nonextractive formal private (at least 1 percent) enterprises with at least five employees. The following sectors are included: manufacturing (ISIC Rev. 3.1., 15-37), construction (ISIC 45), retail and wholesale (ISIC 50-52), hotels and restaurants (ISIC 55), transport and communications (ISIC 60-64), and information technology (ISIC 72).

This chapter uses data from the Enterprise Survey in Mali, implemented in 2007, 2010, and 2016 (Table A-3 shows the sample distribution). The analysis here focuses mainly on questions included in the finance section of the questionnaire to gauge the extent of access to finance in Mali's formal private sector. Findings are complemented by analysis of data from the survey's mobile money section.

2.2 Most SMEs and large enterprises have bank accounts, but prefer cash

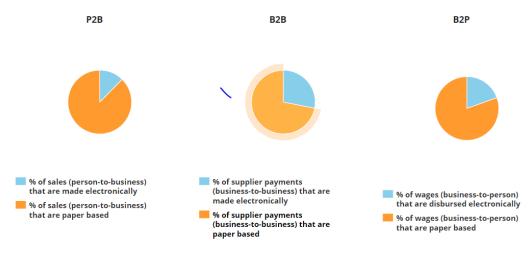
8. **Over the past 10 years, access to financial services among enterprises has increased significantly in Mali**. Between 2007 and 2016, the proportion of formal enterprises holding a bank account increased from 77.5 percent to 91.3 percent. This rate is higher than the average for the SSA region, confirming that Mali's banking sector targets formal enterprises. Interestingly, despite the limited penetration of banks in rural areas (Chapter 5), the share of firms with an account located outside of Bamako is only four percentage points lower than those in the capital (Figure 59).



Source: Enterprise survey data, team analysis.

9. Although most formal enterprises hold bank accounts, they still conduct most of their transactions in cash. Holding a bank account is not sufficient to stimulate the use of formal banking services in conducting business transactions. World Bank research (WBG 2016a) shows that, in Mali, formal retailers prefer to use cash to conduct the vast majority of their daily transactions. In total, 85 percent of payments from customers (P2B) are received in cash, which might be explained by the fact that the majority of these customers do not have access to formal financial services. The data also show that more than 70 percent of transactions between retailers and their suppliers and wholesale buyers (B2B) are conducted in cash, despite the fact that the vast majority of these businesses do hold bank accounts. Finally, in more than 80 percent of cases, retailers use cash to pay their employees (B2P) (Figure 60).

Figure 60: Merchant transactions through cash and electronic channels (% of sales, supplier payments, wages)

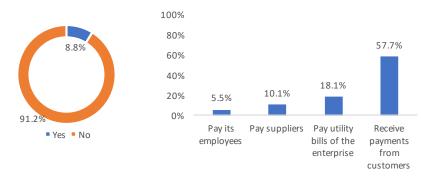


Source: WBG 2016a.

10. The limited level of financial literacy and the high level of informality in business transactions partly explain businesses' unwillingness to use electronic money. With limited financial literacy, businesses are often unfamiliar with the way banks operate and are discouraged from using such services by withdrawal/payment ceilings or by fees imposed by financial institutions. As a result, many entrepreneurs only use banking services to send or receive funds when they perceive that no other option is available. They tend to leave only limited balances in their accounts. At the same time, in an economy that operates with a high degree of informality and in which businesses do not necessarily report their full financial income to the tax authorities, there is little incentive to use financial services to conduct a large share of business transactions.

11. **Formal businesses are increasingly using mobile money to conduct business transactions**. The use of mobile money is not limited to individuals or informal businesses. In 2016, almost 9 percent of formal enterprises reported having used mobile money, with the majority of such transactions involving the receipt of payments from customers. Mobile money was also used to pay utility bills, suppliers, and employees (Figure 61).

Figure 61: Usage of mobile money (% of enterprises using mobile money or not (left) and % enterprises using mobile money for different purposes(right)) in 2016



Source: Enterprise Survey data, team analysis.

12. **Evidence indicates that formal enterprises are increasingly using mobile money services to pay employee salaries**. Data from one of Mali's mobile operators confirms that formal enterprises are increasingly utilizing mobile money services to streamline their payment operations. As of mid-2017, 80 firms in Mali were using mobile money services to pay salaries to a combined total of around 8,000 employees, which represents around 8 percent of the estimated total formal private sector workforce. While mobile money services are used by formal enterprises across Mali, more than 90 percent of wholesale mobile money clients are based in Bamako.

13. A number of constraints limit the uptake of mobile money by formal enterprises. While costs appear to be a disincentive to the use of mobile money, another reason cited by formal enterprises was that the value of their transactions exceeded the limits imposed on mobile money accounts (Chapter 4). In addition, they cited the lack of a comprehensive financial ecosystem that would enable them to utilize mobile money services with their full range of customers and suppliers (Figure 62). It could be expected that this last issue could be at least resolved at least in part if full interoperability between mobile money services and the broader financial infrastructure were achieved.

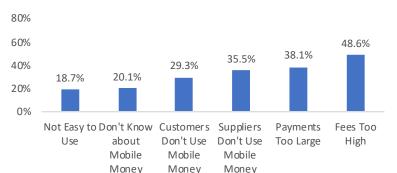


Figure 62: Major reasons for not using mobile money (% of enterprises not using mobile money, 2016) 100%

Source: Enterprise Survey data, team analysis.

2.3 Access to finance has improved, but remains a key constraint

14. **Enterprises have gained significantly more access to credit in the past 10 years**. Between 2007 and 2016, the proportion of formal enterprises that had a credit line increased from 10 percent to 26 percent, while the proportion that had access to only an overdraft facility increased from 5 percent to 45 percent. Interestingly, 47 percent of formal enterprises, on average, used personal loans issued to the owner to finance the business. This serves as a third credit source and could further increase the share of enterprises with credit access (Figure 64).

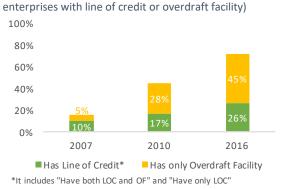
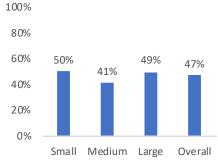


Figure 63. Enterprises' access to credit over time (% of

Figure 64. Usage of owner's personal loans (% of enterprises usi owner's personal loans to finance business, 2016)

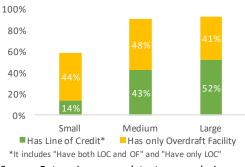


Source: Enterprise survey data, team analysis.

Source: Enterprise Survey data, team analysis.

15. Access to credit is strongly correlated with enterprise size, as large and medium formal enterprises are significantly more likely to have access to credit lines. In 2016, 93 percent of large and medium enterprises had access to either a credit line or an overdraft facility, around twice the proportion of smaller enterprises (Figure 65). This reflects the credit policies of a number of Mali's major commercial banks, which grant credit lines only to enterprises with turnover in excess of FCFA 500 million (US\$ 843,000). Since only a small proportion of enterprises meets this threshold, credit in this form is highly concentrated, with close to one-third of all commercial bank credit being granted to the 50 largest borrowing groups (Chapter 5).

Figure 65: Enterprises' access to credit by size (% of enterprises with line of credit or overdraft facility, 2016)



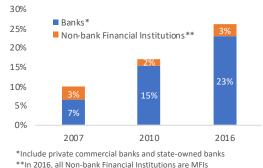
Source: Enterprise survey data, team analysis.

16. **Overdraft facilities are the preferred form of credit for businesses in Mali**. The most common form of credit issued by commercial banks to enterprises is short-term credit in the form of overdraft facilities to finance working capital. The preference for overdraft facilities is the result of banks' desire to limit credit risks, as individual overdraft facilities tend to be limited in value. Furthermore, banks are able to periodically reevaluate the creditworthiness of their clients and to adjust the availability of credit on this basis. By contrast, credit lines are considered to be a relatively high-risk credit product due to their longer tenure. In addition, banks that rely almost exclusively on sight deposits to finance their loans prefer to accord credit that can be revoked any time (Chapter 5). As a result, around 50 percent of formal enterprises have access to overdraft facilities—twice the proportion of enterprises that have access to a line of credit.

17. Relative to the role played by MFIs, banks are becoming increasingly prominent in serving the credit needs of formal enterprises. In 2007, when only 10 percent of formal enterprises had access to a line of credit, two-thirds of enterprises that received credit did so from banks, with the remaining third receiving credit from MFIs. By 2016, when the proportion of formal enterprises with access to a line of credit had increased to around 26 percent, almost 90 percent of enterprises that received credit lines did so from banks, with the remaining 10 percent receiving credit lines from MFIs. Thus, while the overall proportion of formal enterprises receiving credit lines from 3.4 percent to 3.1 percent. This

proportion fell to its lowest point in 2010, when the crisis afflicting the MFI sector started to unfold, constraining the sector's ability to serve new customers.

Figure 66. Line of credit financing sources over time (% of enterprises whose line of credit is financed by banks or nonbank financial institutions)



Source: Enterprise Survey data, team analysis.

18. More than 50 percent of enterprises use financial institutions to finance a portion of their working capital, although smaller businesses rely to a much larger extent on internal funds. In 2016, more than half of all Mali's enterprises were able to finance a share of their working capital through financing provided by banks and MFIs. Relative to the proportion in 2007, this represents a sevenfold increase, with the proportion in Mali standing at twice the average for SSA. The share of larger enterprises using banks to finance working capital is even higher, reaching 80 percent. Despite this increase, however, the greatest proportion of enterprises' working capital is sourced from internal funds, with banks financing only 13 percent of smaller enterprises' working capital needs, on average.

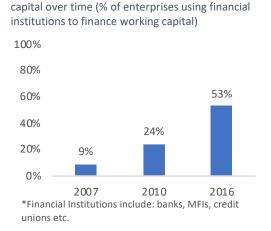
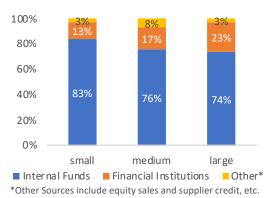
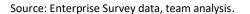


Figure 67: Use of financial institutions* to finance working

Figure 68. Working capital financing by size (% of working capital financed by different sources, 2016)

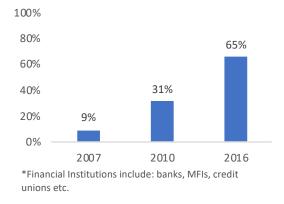




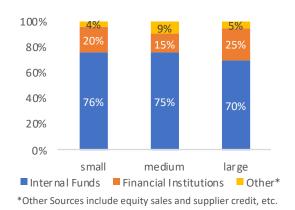


19. A greater number of formal enterprises use banks and MFIs to finance investments, although the share of investments financed remains lower for SMEs than for larger ones. Internal funds remain the most common source of finance for investment. On average, banks provide financing for 19 percent of formal enterprises' investment needs. The proportion is higher for larger enterprises, reaching 25.2 percent in the case of large enterprises.

Figure 69: Use of financial institutions* to finance investments over time (% of enterprises using financial institutions to finance Investments)







Source: Enterprise survey data, team analysis.



20. Despite the overall increase in access to credit, access is still perceived to be particularly problematic for many enterprises. In total, 68.1 percent of small enterprises state that limited access to finance is a major constraint on their business activities. This confirms the fact that local financial institutions consider this segment to be relatively risky. This is highly problematic, given that micro and small enterprises constitute the majority of Mali's enterprise sector and need financing in order to invest and grow into larger establishments. The proportion of firms citing limited access to credit as a constraint declines with enterprise size, but remains in excess of 50 percent even in the case of large enterprises (Figure 71). In addition, when enterprises are asked to rank the top obstacles to doing business from a list of ten possible issues, businesses of all sizes in Mali cite limited access to finance as one of the most significant constraints.

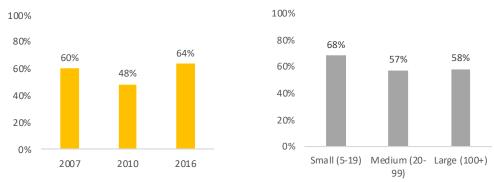
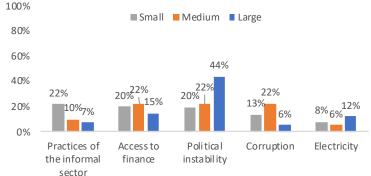


Figure 71: Firms regarding "access to finance" as a major constraint over time and by size (% of enterprises identifying access to finance as a major constraint, 2016)



Figure 72: Biggest obstacles facing enterprises by size (% of enterprises citing the following issues as the most significant obstacle, 2016)



Source: Enterprise survey data, team analysis.

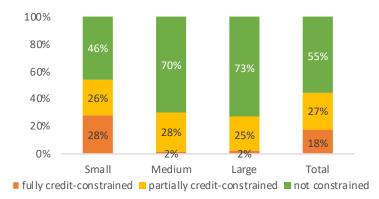
21. Perceptions that credit poses a key constraint to doing business can be explained by the fact that more than half of Mali's enterprises remain fully or partially credit constrained. By analyzing the availability of credit to enterprises and the results of their credit application processes (Box 16), it can be estimated that almost half of enterprises are partially or fully credit constrained—a slightly lower, but similar, proportion than the share of enterprises citing limited access to finance as a major constraint. This is consistent with the fact that even enterprises with access to credit may have received less funding than needed.⁵⁰ Smaller enterprises suffer to a relatively high degree from credit constraints. Around a quarter of small enterprises are fully constrained, in that they have no access to any form of formal financing, despite needing it. Another quarter are partially constrained (that is, they received less credit than they needed, either because they were granted only a portion of their requested sum or because they applied for less than they needed due to negative expectations and/or credit conditions). The proportion of credit-constrained firms is significantly lower among medium and large enterprises.

Box 16: Identifying Credit-Constrained Enterprises Using Enterprise Survey Data

Fully credit-constrained enterprises: These are enterprises that needed loans but could not or did not access them, either because they applied and were rejected or because they did not apply based on a belief that conditions were onerous or that they would be rejected.

Partially credit-constrained firms: These are enterprises that received some loans, although the value of the loans was insufficient to meet their needs, either because the financial institution rejected their requests or because they did not apply for higher amounts because they believed that the conditions were onerous or that they would be rejected.

Figure 73: Enterprise credit constraints by size (% of enterprises with full/partial/no credit constraints, 2016)



Source: Enterprise survey data, team analysis.

22. In Mali, self-selection plays an important role in credit rationing, especially among smaller enterprises, which often do not even apply for credit despite needing it. An analysis of the results of credit application processes sheds some light on the reasons why credit is rationed in Mali (Figure 74). While 80 percent of enterprises, on average, need credit, only 41 percent approach a financial institution to apply for it. This finding confirms anecdotal evidence that banks prefer to serve existing clients, rather than considering firms with whom they do not have an established credit relationship. These clients are more likely to be larger enterprises, which are also able to provide the requested collateral.

23. Conversely, the high acceptance rate shows that only enterprises who qualify for credit apply for credit, confirming an ongoing phenomenon of self-selection. Only a small proportion of enterprises' loan applications is rejected. Among small enterprises, 6 percent need credit, applied, and were rejected. This proportion is smaller among medium and large enterprises, with around 100 percent of applications by large enterprises being granted.

⁵⁰ Or it could simply be a signal of a "survey bias" due to firms' higher expectations.

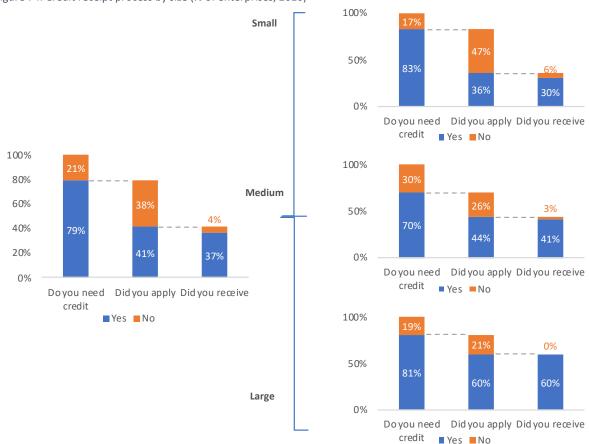


Figure 74: Credit receipt process by size (% of enterprises, 2016)

Source: Enterprise survey data, team analysis.

24. Small enterprises are more likely than larger enterprises to refrain from applying for credit, with their lack of collateral and unfavorable loan terms being the most commonly cited reasons. Less than half of SMEs apply for credit, even when they need it. Enterprises are aware of banks' collateral requirements, requested in more than 90 percent of cases and with a value amounting to 200 percent of the value of the loan, on average). If they do not hold such assets, they generally refrain from applying. Moreover, banks tend to impose higher interest rates on loans to small enterprises than on loans to large enterprises. Unfavorable interest rates are the second most commonly cited reason for small enterprises to forego applying for credit (Figure 76).

25. The recently introduced Private Sector Guarantee Fund (FGSP) is expected to reduce the risks associated with lending to SMEs, but its impact has been limited so far. A credit guarantee scheme is in place with the aim of assisting SMEs in accessing finance, yet its establishment in 2014⁵¹ does not appear to have substantially reduced the level of credit concentration in Mali. While the volume of applications has been substantial (amounting to about 1,030 since its inception), the majority of them (about 800) were associated with a government subsidy scheme to finance tractors (Chapter 3). In 2016, the FGSP provided guarantees for 978 loans, to a total value of FCFA 18 billion (US\$ 30.4 million). Only 10 applications were reported to have been rejected, with 5 percent of transactions requiring recovery actions.

Box 17. Mali's Private Sector Guarantee Fund

In 2014, the Government of Mali established a Private Sector Guarantee Fund (*Fonds de Garantie pour le Secteur Prive*, or FGSP). This fund is a new nonbank financial institution that provides partial risk guarantees to banks and financial institutions making loans to SMEs. With initial capital of FCFA 4.8 billion (US\$ 8.1 million), government and government agencies have a majority shareholding in the FGSP, while six banks, one private company, and the employer's federation (*Conseil National du Patronat*, or CNPM) are minority shareholders. The FGSP was granted a license as a financial

⁵¹ WBG. 2015. Financial Sector Assessment Program -The Banking System and Credit to The Economy

institution and is subject to prudential regulation and supervision by the Banking Commission. The FGSP provides partial risk guarantees to lenders, covering up to 50 percent of the risk of loans to SMEs for amounts valued at between FCFA 10 million (US\$ 17,000) and FCFA 500 million (US\$ 843,000). Initial restrictions relating to sectoral coverage have been lifted, and the FGSP can guarantee loans for both short-term working capital and longer-term investments.

In 2015, as part of the Financial Sector Assessment Program, the World Bank conducted a review in Mali. The findings of this review highlighted some aspects of FGSP's business model that may need review and revision to maximize its potential impact and value added:

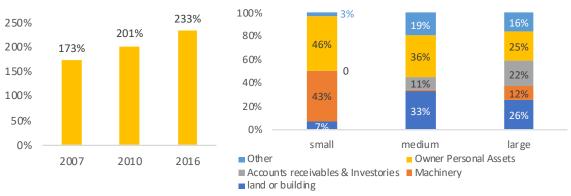
- To be eligible for guarantees, banks and financial institutions must agree to a blanket cap on the interest rate that they will charge to borrowers who benefit from the guarantee. These caps vary from 8.5 to 9.0 percent, well below the usury rate of 15 percent for banks and 24 percent for financial institutions. These rates are below the average rate paid by borrowers in 2013 (9.5 percent), so are unlikely to be sufficiently high to encourage banks to make loans to perceived high-risk borrowers such as SMEs without a firmly established credit history. Indeed, the usury rate itself may limit banks' appetite to lend to new or risky ventures.
- The fees charged (a risk premium of 1 percent per year on outstanding guarantees to be paid by the lender, and a 2 percent flat fee to be paid by the borrower) are uniform rather than risk-based.
- The 50 percent cap on the guaranteed amount may need to be increased for new or riskier ventures.
- The shareholding is currently dominated by the state, and no private sector shareholder has more than a small shareholding. A more significant private sector stake would be desirable to ensure buy-in and policies that meet the requirements of the beneficiaries.

The FGSP (the credit guarantee operator) is considering plans to expand into credit provision. While its plans have not been clearly articulated, if the FGSP competes with other financial institutions, a conflict of interest arises, potentially detracting from the confidence that lenders may have in accessing the FGSP's credit guarantee services, ultimately affecting the availability of credit for those who need it.

Source: WBG (2015).

26. The collateral requirements imposed by financial institutions have increased over time, which is likely to have discouraged smaller enterprises from approaching financial institutions. Collateral remains a requirement for obtaining credit in Mali, and the required value has increased significantly over time to 230 percent of the value of the loan, on average. For smaller enterprises, machinery and the enterprise owner's personal assets are the most common forms of collateral utilized (Figure 75).





Source: Enterprise survey data for 2016, team analysis.

27. Collateral requirements might be eased through reforms to facilitate the development of the leasing market and to improve the secured transactions regime. The development of asset-based lending products, such as leasing (Box 18), and the introduction of an improved secured transactions regime (Chapter 5) might help firms overcome burdensome collateral requirements.

Box 18: Leasing in Mali—An Opportunity for Asset-Based Financing

The leasing industry is significantly underdeveloped and could be key to long-term financing in Mali. Until recently, the leasing market has been highly concentrated, with only a single operator, and limited to major urban centers. Data show that, on average, approximately 50 new leases are written per year for a total value of approximately FCFA 5 billion (US\$ 8.4 million). The average lease tenure is three to five years. With only 26 percent of loans being for a tenure of two years or more (Chapter 5), leasing could become a long-term financing option for SMEs and large businesses in Mali. Currently, however, Mali's leasing serves only 2.5 percent of the potential market, according to an assessment conducted by the International Finance Corporation (IFC) in 2016, which estimated the potential scale of leasing in Mali at FCFA 206 billion (US\$ 347 million).

Legislative adjustments need to be made to reduce the cost of leasing transactions. For Mali to achieve the full potential offered by leasing arrangements, including by extending their reach into key agricultural industries, two reforms need to be implemented. First, legislative reform is required to provide a more conducive and competitive environment. The WAEMU leasing law has been approved by the Government of Mali and should proceed to Parliament. Second, changes are needed to the taxation system to avoid the potential for "double taxation" (see below). Were both of these reforms to be implemented, it would be new players would be expected to be attracted to the market, thereby increasing competition and coverage. At least two companies have indicated interest in entering the market if these two legislative reforms were implemented.

Legal position: Lessors in Mali do not currently receive the same legal status as other creditors. Consequently, the rights of the lessor may be subordinated to other creditors in some circumstances. For example, if a general lien were taken over the assets of a business by the creditor and the debtor defaulted or became insolvent, the lessor's property could be lost in a recovery procedure. Strengthening the lessor's legal position so that he/she has the same rights as other creditors would reduce the risks inherent in leasing transactions, affording the lessor the same benefits to access a lien and secure rights and thus reducing the cost of the lease.

Fiscal position: Depending on the underlying lease transaction and asset, particularly whether the asset is movable or immovable property, different situations may arise.

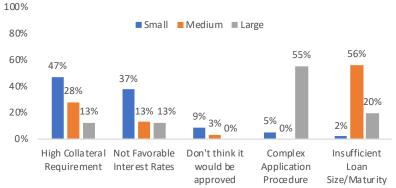
In the case of movable assets, lease transactions are subject to value-added tax, a consumption tax on the supply of a good or service. Each "supply transaction" is taxed. To ensure a competitive environment compared to other transaction types, the tax system should ensure that the same asset and transaction is only taxed once.

The potential for "double taxation" arises, as the same asset is subject to a purchase transaction by the lessor (the first supply transaction), a lease transaction with regular repayments (a second supply transaction), and a potential purchase of the leased asset by the lessee at the end of the lease (the third supply transaction). Each supply transaction attracts value-added tax. This compares unfavorably to traditional loans from a bank to purchase an asset, which includes only one supply transaction.

In the case of immovable assets, registration fees (or stamp duties), proportionate to the value of the transaction, are required to be paid both at the execution of the lease (when property is acquired by the lessor) and at the end of the lease contract (if the purchase option is exercised by the lessee). 98 percent of leases in Mali today end in the purchase of the equipment by the lessee. In Mali, both situations may arise, effectively 'punishing' the lease transaction with 'double taxation' compared to other forms of credit which only incurs tax once.

28. The tenure of available loans is the main reason why a medium or large enterprise might choose not to apply for credit. Larger enterprises have easier access to financing, and in fact most of them apply when they need a loan: the share of "opted-out" firms is lower for medium (37) and larger firms (26). Where loan applications are not filed, however, the most commonly cited reasons are the short tenure of loans and their limited value, which discourage financing for investment. This also confirms that larger enterprises suffer to a greater extent from the absence of a well-developed market for long-term funding (Chapter 5). Interestingly, of the relatively small proportion of large enterprises that do not apply, a significant proportion cite the complexity of application procedures as a constraint (Figure 76).

Figure 76: Main reasons why enterprises do not apply for credit (% of enterprises that did not apply for credit, 2016)



Source: Enterprise survey data, team analysis.

2.4 Improving access to finance for firms: key directions

29. Despite a significant increase in formal enterprises' access to and use of financial services in Mali, financial institutions provide only a limited share of financing for firms' working capital and investment needs. Almost all firms have access to an account, and access to finance—in the form of both credit lines and overdraft facilities—has increased. Yet internal funds remain the most common source of funding when firms need to finance working capital or make investments, with bank financing covering less than 20 percent, on average, of overall needs.

30. **The financial sector targets a small number of large businesses.** The relative ease with which large businesses have access to credit is due primarily to financial institutions' greater ability to assess the risk profile of businesses with which they have developed long-term relationships. The use of transactional and other financial services reduces the information asymmetries between borrowers and lenders, thereby increasing access to credit. Nevertheless, access to credit remains somewhat problematic for larger enterprises given the relatively short tenure and low value of available loans. In particular, larger firms lament the absence of a market for long-term finance, which constrains their ability to invest in longer-term projects.

31. Access to finance remains one of the top constraints faced by smaller enterprises in doing business in Mali, owing to the inability of the financial sector to assess their risk. In the absence of a functioning credit information system (Chapter 5), the perceived level of risk involved in providing loans to small businesses that transact in cash and do not always maintain reliable financial statements remains high. A high proportion of smaller businesses are credit constrained, therefore, although they could potentially be or become creditworthy if the information asymmetries between lenders and borrowers could be reduced.

32. Addressing constraints in access to finance in Mali would enable enterprises to grow, create employment, and generate export opportunities. Expanding the availability and quality of financing for enterprises would require efforts along three strategic directions:

a. Direction 1: Incentivize the use of electronic channels for business transactions as a tool to formalize the business sector and enable businesses to establish a history of financial transactions. The increased use of accounts to settle business transactions would not only make these transactions more secure and less costly, but would also provide financial institutions with more detailed information on the businesses conducting these transactions (including cash flow, customer base, and so on). This would reduce the information asymmetries that complicate the provision of credit to SMEs, increase the ability of financial institutions to assess enterprises' creditworthiness, and improve access to finance. Despite these potential advantages, enterprises in Mali still do not make wide use of electronic payment channels to conduct business transactions; a switch to digital channels could be supported through appropriate policies and actions to promote it. Such interventions would have the character of a public good, since they would

incentivize smaller enterprises to operate in the formal sector and thus benefit the government in turn. $^{\rm 52}$

- b. Direction 2: Reduce the perceived risk to financial institutions of providing credit to smaller enterprises. The intensified use of formal financial services to conduct business transactions (Direction 1) would help to establish and strengthen relationships between banks and enterprises. This in itself would promote increased access to financial services. A complementary set of public sector interventions could be implemented to improve borrower screening, extend the range of acceptable collateral, and leverage credit guarantee schemes.⁵³
- c. Direction 3: Encourage financial institutions to offer longer-term credit to facilitate the financing of investments. The availability of longer-term financing is essential to support enterprises in undertaking growth-generating capital investments. Commercial banks consider long-term financing to be a relatively high-risk proposition, particularly because long-term credit creates liquidity risks for deposit-funded financial institutions. Improved risk screening (Direction 1 and Direction 2) will reduce the perceived level of risk associated with providing longer term loans. In addition, there is a need to identify measures to provide banks with longer-term funding instruments that would allow for the extension of the maturity of loans (Chapter 5).

⁵² Chapters 4 and 5 will detail possible actions to be undertaken: (i) financial education for entrepreneurs; (ii) transition to noncash forms of payment for taxes, levies, fees, and public utilities (P2G); (iii) incentives for firms to use electronic channels to receive payments from retail and wholesale customers; and (iv) public sector investments (and/or incentives for private sector investments) in the merchant payment infrastructure.

⁵³ A detailed list of actions will be listed in Chapter 5: (i) improved credit infrastructure to enable financial institutions to better assess potential borrowers; (ii) enhanced risk-sharing mechanisms such as the FGSP; (iii) improvements to the secured transactions regime; and (iv) reform of the legal and fiscal framework for leasing.

2.5 References

Agence pour la promotion des investissements au Mali (Investment Promotion Agency, API). 2017. List of registered enterprises.

Institut National de la Statistique (National Institute of Statistics, INSTAT). Employment data.

——. Private sector data.

- Islam, Asif, Silvia Muzi, and Jorge Luis Rodriguez Meza. 2016. "Does Mobile Money Use Increase Firms' Investment? Evidence from Enterprise Surveys in Kenya, Uganda, and Tanzania. Policy Research Working Paper No. 7890 (November). Washington, DC: World Bank. Available at: http://hdl.handle.net/10986/25692 (accessed June 6, 2018).
- World Bank Group (WBG) and World Economic Forum (WEF). 2016. *Innovation in Electronic Payment Adoption: The case of small retailers*. Washington, DC: WBG. Available at: http://documents.worldbank.org/curated/en/765851467037506667/Innovation-in-electronic-payment-adoption-the-case-of-small-retailers (accessed June 6, 2018).
- WBG. 2015. "Financial Sector Assessment Program—Development Module, Mali: The Banking System and Credit to The Economy." Technical Note (December). Washington, DC: World Bank. Available at: <u>http://hdl.handle.net/10986/24269</u> (accessed June 6, 2018).

 2016a. Cash vs. Electronic Payments in Small Retailing: Estimating the Global Size.
 Washington, DC: World Bank. Available at: <u>http://pubdocs.worldbank.org/en/219031465585757849/WBG-Electronic-Payments-Small-Retailing.pdf</u> (accessed June 6, 2018).

——. 2016b. Enterprise Survey Mali Full Survey Data. Available at: <u>https://www.enterprisesurveys.org/portal/login.aspx</u> (accessed October 2, 2017).

——. 2016c. World Development Indicators Database. Available at: <u>https://datacatalog.worldbank.org/dataset/world-development-indicators</u> (accessed June 4, 2018).

Chapter 3 The financial needs of agricultural households

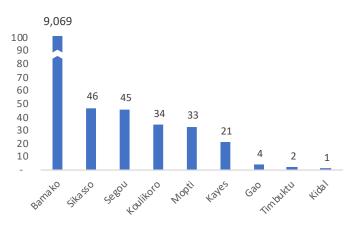
Key findings

- The agricultural sector employs about 60 percent of the Malian workforce and provides livelihood to 11 million Malians, distributed across four livelihood zones.
- Agricultural production is mostly rainfed, and close to half of agricultural households' plots are small and micro-sized, utilized to produce for self-consumption.
- Most households in rural areas rely on cash, as fewer than one in 10 rural households has access to an account in a financial institution, but mobile money has contributed to significantly increasing access.
- Financial access is positively correlated with a household's literacy and welfare levels and inversely correlated with its distance from a physical access points such as a bank or microfinance institution (MFI).
- About half of agriculture households in Mali save, but only 6 percent of them do so in formal ways. Those that have an account at a financial institution are much more likely to save.
- Less than one-third of agriculture households receive credit: 14 percent obtain it from informal sources, 12 percent via value chain financing (suppliers and cooperatives), and only 4 percent via financial institutions.
- The majority of cotton producers benefit from the value chain financing mechanism managed by CMDT.
- Financing is strongly correlated with the size of cultivated plots: large ones are twice as likely to receive credit than small and micro-sized ones.
- Households that are involved in the commercialization of their production are more likely to receive credit through value chains or from financial institutions.
- A three-pronged strategy is suggested to improve access to and use of financial services among rural households:
 - **Provide small, subsistence households with a transactional (mobile) account** to fulfill their transactional needs and open the door to the financial sector;
 - **Support the structuring of selected agricultural value chains**, which, despite covering a limited number of households, could serve as a conduit for financing for those households that are involved in commercial production; and
 - **Foster the extension of formal financial services for commercial farmers** and processors with bankable projects.

3.1 Mapping out Mali's agricultural landscape

1. **Despite important progress in reducing extreme poverty, poverty incidence remains high in Mali, particularly in rural areas where the majority of people are involved in agriculture**. Between 2001 and 2011, extreme poverty in Mali declined from 55.4 percent to 48.4 percent through a combination of growth and reduced inequality driven by increased agricultural productivity in cereals. After a surge in extreme poverty connected to the 2012 crisis, the rebound in growth in 2014–15 allowed for a further decline in extreme poverty, estimated at 43.9 percent in 2016. Still, 90 percent poor people in Mali live in rural areas and rely on rainfed agriculture and agro-pastoralism to make a living. Even if the pace of urbanization were to continue and the incidence of rural and urban poverty were to remain unchanged, by 2030 83 percent of those in extreme poverty would reside in sparsely populated rural areas (Figure 77).

Figure 77. Population density by region (people/km², 2016)



Source: PopulationData.net, team analysis.

2. This chapter will analyze rural agricultural households' financial needs and access to financial services. To complement the analysis in chapter 1, which focused on the broad patterns in usage of financial services by individuals across Mali, and that in chapter 2, which discussed access to finance among SMEs and large firms, including a number of those dedicated to the processing of agricultural products, this chapter will dive into the specific financial needs of the primary sector—namely, rural households involved in agriculture. To do so, the chapter will leverage the wealth of data collected through the Living Standards Measurement Survey–Integrated Surveys on Agriculture (LSMS–ISA) (Box 19).

Box 19. The LSMS-ISA

Identifying policies and investments to boost rural finance in Mali has been a challenge due to the lack of micro-level data. This study addresses this challenge by leveraging data from the Living Standards Measurement Study–Integrated Surveys on Agriculture 2014 (LSMS–ISA), a nationally representative survey with a focus on agriculture.

The 2014 LSMS–ISA was carried out by the National Institute of Statistics in Mali, with technical assistance from the World Bank. The survey collected information from a random sample of households throughout the country using three structured questionnaires: (i) a household module, (ii) a community module, and (iii) an agriculture module. The household module gathered information on demographic characteristics, education, health, employment, consumption behaviors, and financial inclusion at the individual level. The financial inclusion module (a subsection of the household module) collected information on access to financial services, such as ownership and use of transaction accounts, saving patterns, and access to credit. The community module collected information on farm production practices, cropping patterns, input use, labor use, output production and marketing, and livestock and fisheries activities. This chapter explores the data gathered by the agriculture module, along with information on financial inclusion from the household module and, as necessary, information from the community module as well.

This chapter analyzes data of the 2,183 rural farm households in the sample. Information on credit behaviors was aggregated from individual-level data points, while information on farm production was aggregated from plot-level data. The method used for aggregation was variable-specific and included count, mean, and summation. For example, bank account ownership by any member was deemed sufficient for the household to be considered an owner of a bank account. In the case of multiple instances of credit, each member's credit was summed to obtain the household's total credit. In agriculture, production of a crop in any plot was attributed to the household. Thus, a household was considered to produce multiple crops if it had a mixed-cropping plot, while another household could be considered a single-crop household if its multiple plots produced the same crop. Farm size and production were summed over the total number of plots to determine the household's total farm size and production. If any of the crops produced by a household was sold (or intended to be sold) in the market, then the household was considered to be a market participant. Similarly, if any member

of a farm household was involved in livestock and fisheries, these activities were attributed to the household. Details on the distribution of households by agricultural zone and farm size are listed in Table A-4.⁵⁴

3. **Mali can be divided roughly into four agro-climatic and livelihood zones, each with specific characteristics**. Agricultural production and livelihood outcomes across Mali vary widely across these zones⁵⁵:

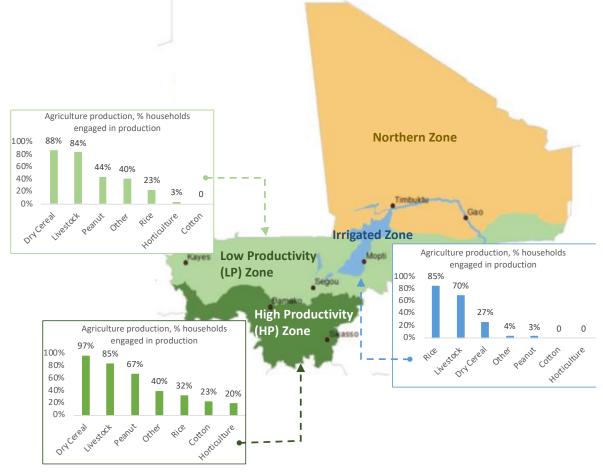
- a. *Northern zone:* In this zone, the main livelihood is transhumant pastoralism (seasonal migration of livestock) and long-distance trade with bordering countries. Rainfall is too low to support crop cultivation. With population density between one and four people per square kilometer, the area is sparsely populated. This is also the area of the country in which the security situation has deteriorated the most.
- b. *Low-productivity zone:* Moving south to the drylands, both population density and rainfall increase. In addition to livestock rearing, people base their livelihoods on cereal crop production (including millet, sorghum, and some maize), although crop productivity from rainfed agriculture is notably lower than in the rest of Mali.
- c. *Irrigated zone*: This zone, significantly smaller than the other three zones, encompasses the fluvial basin of the Niger River, which carries high potential for irrigated cultivation. People in this zone derive their livelihood predominantly from irrigated rice production (85 percent of households). Rice farmers benefit from a system of irrigation canals and dams, managed and maintained by the Office du Niger, a parastatal organization. Livestock rearing is common (70 percent of households), and a smaller share of households is engaged in cereal production (27 percent).
- d. *High-productivity zone*: This southern zone, with the highest rainfall and population density, is the most productive rainfed agriculture zone. It is also the only food surplus zone in the country. While cotton is the main crop in the region and in the country as a whole, only about one in four households is engaged in its production. Production of cereals (such as sorghum, millet, and maize) and livestock rearing are widespread (in close to 100 percent and 85 percent of households, respectively), followed by cultivation of a range of smaller crops (including rice, cotton, cowpeas, and peanuts). High-value horticulture is widespread in the region.

4. **About 1 million households in Mali are engaged directly in agriculture, providing livelihoods for about 11 million people**. Households are organized around the farming activity, with the men handling most of the land preparation, cultivation, and harvesting activities, while women focus on post-harvest duties such as threshing, drying, dehulling, and winnowing the grains. Households in Mali include 11 people, on average, although large variances exist across regions (Figure 78).

⁵⁴ Due to security issues in the northern part of Mali at the time of the LSMS, data are unavailable for the northern zone. As such, our analysis will focus on three of the four livelihood zones presented in Section 3.1, namely the high-productivity zone, the irrigation zone, and the low-productivity zone.

⁵⁵The livelihood zones are highlighted in a recent World Bank study on agricultural productivity, which describes the rural and agricultural conditions in Mali (WBG 2016).

Figure 78. Mali's agricultural zones and agricultural production in each zone



Source: WBG 2016; LSMS–ISA 2014.

5. The majority of agricultural production in Mali is rainfed and carried out by smallholder farmers. Small farming is the predominant production model: more than 40 percent of households have less than 2.5 hectares of land, with 14 percent of households farming subsistence-level plots that are smaller than 0.2 hectare. Another third of households farm medium-size plots (between 2.5 and 7.5 hectares) and the remaining 22 percent of households cultivate a plot larger than 7.5 hectares (Figure 79). Even the larger plots are not necessarily large according to international standards.⁵⁶ The combination of small plot size and the fact that agriculture production is rainfed—with the exception of those maintained by the Office du Niger—helps to explain the sector's low productivity.

⁵⁶ This is in line with the findings of Masters et al. (2013), who argue that average farm size in Africa has been decreasing since 1950. A 2013 report by the High-Level Panel of Experts on Food Security and Nutrition (HLPE) claims that 80 percent of farmlands in the 14 Africa countries it studied are smaller than 2 hectares. Adamopoulos and Restuccia (2014) testify that, in the poorest countries, farms below 5 hectares constitute 70 percent of total farmland.

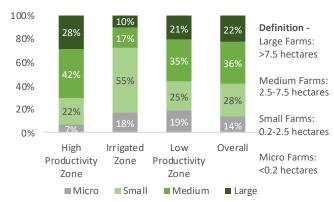
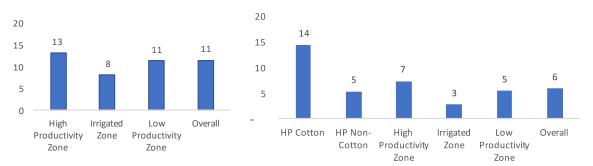


Figure 79. Distribution of households by farm size and zone (% of households in each zone)



6. **Larger plots sustain larger households**. The largest households (around 13 members per household) are found in the southern, high-productivity zone. In contrast, households in the irrigated zone are smaller given the intensive production system of irrigated rice, which requires smaller land and labor inputs (Figure 80).





Source: LSMS–ISA 2014, team analysis.

7. **Agricultural households are headed almost exclusively by men with limited education.** Agricultural households in Mali are headed by men in most cases (about 98 percent), and on average the household head is approximately 50 years old. The education and literacy levels of household heads are low, on average: more than three-quarters (about 82 percent) have no formal education, and only one of four is literate (Figure 81). Some variance exists across agricultural zones, with the irrigated zone showing higher levels of educational attainment and slightly higher literacy.

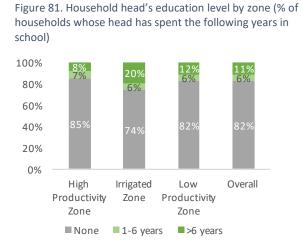
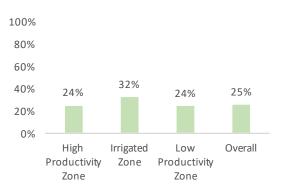




Figure 82. Households head's literacy level by zone (% of households whose head is literate)



Source: LSMS–ISA 2014, team analysis.

8. The Government of Mali aims to make agriculture the engine of economic growth as a means to ensure better returns to producers and food security for everyone. To accomplish this, the country's agricultural policies and programs focus on developing a modern, competitive, and sustainable agricultural sector. The 2006 Agricultural Orientation Law (*Loi d'orientation Agricole*, or LOA) is the long-term agriculture development policy, aiming to modernize the sector by increasing private investment and disengaging government from the sector through decentralization, privatization, and good governance. Under the law, a national agricultural strategic framework (the Agriculture Development Policy for 2011–2020) and investment plan (National Agricultural Sector Priority Investment Plan for 2015–2025) prioritize investments in programs and projects over a 10-year period (Key support to the agriculture sector is highlighted in Box 20).

Box 20. Government Support to the Agriculture Sector

Direct Support to the Agriculture Sector: The government provides *direct* support to the agricultural sector under the national agricultural strategic framework. This framework aims to: (i) enhance the capacity of institutions and governance of decentralized public authorities and farmer organizations; (ii) increase investment in rural areas, with a focus on basic factors of production such as land, financing, equipment, and infrastructure; (iii) increase productivity and the competitiveness through better rural infrastructure, an enabling business environment, and greater focus on value addition; (iv) improve agriculture research and training; and (v) ensure food and nutrition security by producing enough food to cover all of Mali's nutritional needs. Some of the government's major support to the agriculture sector is highlighted below:

Government support to production and processing

- The Malian Company of Textile Development (CMDT), created in 1974, is a state-owned cotton company charged with the production and marketing of Mali's cotton. It provides the following services: (i) agricultural advice to cotton producers; (ii) collection, marketing, and ginning of seed cotton; (iii) sale of cotton fiber for export and Malian textile industries; and (iv) sale of the cotton seed.
- The Office du Niger is a public institution of industrial and commercial character. The Office manages approximately 100,000 hectares of irrigation canals fed through gravitational pull from the Niger River and Markala Dam. Irrigated land is geared to produce rice during the rainy season and horticulture crops and sugar cane during the dry season. The Office du Niger provides the following services: (i) water management; (ii) maintenance of hydro-agricultural/irrigation facilities; (iii) technical studies; (iv) land management; and (v) technical assistance to farmers and rural communities.

Subsidies and price controls

- Fertilizer subsidies: The government offers farmers a 30 to 50 percent subsidy on fertilizers to produce targeted crops such as rice, cotton, and maize. Subsidies are paid directly to input suppliers after proof of sale and delivery has been provided. Since 2011, the fertilizer subsidy program has grown from FCFA 11 billion to 37 billion (US\$ 18.5 million to 62.4 million) and covers approximately 85 percent of cotton and cereal producers' fertilizer needs.
- **Tractor subsidies:** In 2015, the government provided 1,000 tractors to the farming community at a 50 percent discount. Through the program, farmers who can contribute at least 20 percent of the costs and have at least 20 hectares of land can borrow from banks at a discount rate of 8.75 percent to cover the remainder of the costs.
- **Fixed prices for cotton:** The government, through CMDT, fixes prices for cotton at the beginning of the planting season. The pricing regime is typically on par with international prices.

Special funds to support agriculture

• National Fund for Agricultural Modernization and Development: Sanctioned under Mali's Law of Orientation for Agriculture, the fund consists of three funding windows: (i) agricultural development projects; (ii) loan guarantees; and (iii) catastrophic risk management. The Ministry of Finance assures the fiscal management of the fund, while the Ministry of Rural Development determines the budget required and chairs the Steering Committee. In 2017, the Government of Mali allocated US\$ 8.4 million (FCFA 5 billion) to the fund, up from US\$ 4 million (FCFA 2.4 billion) in 2014.

Matching grants

• Many development projects for agriculture, fisheries, and livestock have a matching grant component. Given commercial banks' hesitancy to finance farmers and agribusinesses, many development projects have resorted to using matching grant schemes. Matching grants are only a partial solution to the sector's growing financing needs, as they disappear at the end of the project.

Support to Agriculture Finance: The government uses the financial sector to ensure financing to the agriculture sector through the following direct channels:

Government participation in development banks

• The Government of Mali is the main shareholder in three banks that provide agriculture and rural finance: the Banque Nationale de Développement Agricole (BNDA); the Banque de Développement du Mali (Mali Development Bank, or BDM); and the Banque Malienne de Solidarité (BMS). These banks are instrumental in financing the production and marketing of cotton and are key partners in implementing the government's tractor subsidy scheme.

Interest rate controls and guarantees

• The government uses interest rate controls to increase farmers' access to financing and equipment. For the tractor subsidy, the government requested local banks to provide fixed-rate loans at 8.75 percent to tractor subsidy recipients. They also required the FSGP to guarantee the tractor loans at 50 percent of the loan value.

Capacity development services for banks and MFIs

- The government, together with its development partners, provides capacity building to banks and MFIs on
 agriculture finance. The Canadian government has provided US\$ 18 million for the Agriculture and Rural Financing in
 Mali project (FARM) for 2015–20. The project provides capacity building to farmers and financial institutions (mainly
 the two large financial cooperatives of Kafo Jiginew and NyesigiSo, both long-standing partners of the Canadian
 cooperative, Des Jardins).
- **Support from development partners**. The World Bank provided technical assistance to the main agricultural bank, BNDA, from 2013–15 to strengthen the bank's capacity on agricultural SME lending and to reinforce their capacity for risk management and portfolio management in the agri-SME segment.
- **Project on Rural Microfinance**: Started in 2010, the seven-year project was financed by the International Fund for Agriculture Development. The aim of the project was to increase access to rural finance by strengthening the capacity of microfinance institutions to better serve producers and the rural population.

9. A few key subsectors dominate Mali's agricultural production, but cotton is the only structured value chain. Although more than 30 types of crops grow in Mali, the production of cotton, rice, coarse cereals, horticulture, livestock, and peanuts accounts for approximately 85 percent of agricultural production. Outside of cotton and rice, production systems are mostly low-intensity, based on traditional low-input/low-output cultivation techniques, and the majority of agricultural production is for self-consumption or for the internal market. The key value chains can be described as follows:

- a. Cotton: In the 2017–18 growing season, 725,000 tons of cotton are estimated to have been harvested, making Mali the largest cotton producer in Africa this year (Ecofin Agency 2018). As Mali's cash crop, cotton is produced and commercialized through the country's most organized and structured value chain. Its production is carried out by a large number of small, medium, and large producers in southern Mali, who are organized in producer associations. One unique buyer, CMDT, the parastatal cotton company, supports cotton production and is in charge of its marketing and sale functions.⁵⁷ To support production, CMDT provides an integrated package of inputs and financing to farmers through producer associations. Cotton producers in the southern zone also benefit from government-led fertilizer subsidy programs, which offer a discount of approximately 50 percent on fertilizer prices.
- b. Rice: Rice is the second most important crop cultivated in Mali and the dominant cereal crop. Mali does not produce enough rice to meet domestic demand, requiring it to import roughly 30 percent of its needs. Paddy rice is collected and sold to buyers in nearby rural centers—for example, traders and rice millers of differing size. Little vertical integration exists between actors in the rice value chain. Irrigated rice production, the bulk of the subsector, is located in the Office du Niger, the oldest and largest government-established rice production area. Farmers rent land from the Office

⁵⁷ In 2016, CMDT exported US\$ 262 million in cotton to buyers in Asia. Bangladesh, Malaysia, India, Vietnam, Indonesia, Turkey, Thailand and China were the main export markets (OEC 2016).

to produce rice on the land. Today, the Office du Niger provides farmers with access to land, irrigation maintenance services, collection of water user fees, and assistance in the distribution of inputs such as improved seeds and fertilizers. It does not, however, provide credit to smallholders. ⁵⁸ With the recent growth of the microfinance sector and the expansion of commercial bank outlets, producers in the Office du Niger are financed by MFIs and banks in the region. Primary suppliers of financing include CVECA-ON, Kafo Jiginew, and BNDA.

- c. Dry cereals: Most of Mali's cultivated area (72 percent) is dedicated to cereal production, primarily for self-consumption. Cereals are produced by smallholders and largely disconnected from the market. There is little structure to the cereals value chain, and most of the production is collected at the village level by producer groups and individual traders to be sold at spot markets in local towns and regional centers. Some farmers who are members of large cooperatives receive access to credit in kind for inputs and guaranteed purchase at the end of harvest, while a number of others leverage cotton financing via CMDT to finance cereal production as well.⁵⁹ The cooperative sells aggregated volumes to spot traders and markets. Recent efforts by the authorities to strengthen and develop the animal feed value chain will help to formalize relationships between cereal producers and feed millers.
- d. Livestock: Production of livestock is an important, widespread subsector for Mali. The livestock subsector employs at least 30 percent of the Malian workforce and contributes 10-12 percent of GDP and up to 10 percent of export earnings. No formal contracts exist among actors in the value chain, but important flows of animal assets and money can be traced throughout the chain. Livestock is marketed through three channels: at the village level, in larger villages and towns, and at terminal markets in the capital city. Small producers raise livestock to be sold as household needs arise, and several middlemen exist to facilitate the livestock trade. In Mali, more than 1,800 traders, about 200 middlemen, and about 250 milk processors are active in the livestock value chain (Sallah 2017). A key constraint in the livestock sector comes from the absence of a structured animal feed value chain producing high-quality animal feed, which could support the transition from more traditional styles of livestock raising to more modern systems supporting the production of cattle, sheep, goats, and poultry. Developing the animal feed value chain would require fostering and enabling contractual relationships among stakeholders, combined with targeted, hands-on support to farmer cooperatives. This would, in turn, bring significant opportunities for expanding investment in animal feed commodities and their processing (including cereals, oilseeds, and feed milling).
- e. Horticulture: A few examples exist of commercial investment in horticulture, where large investors have had a significant impact on the value chain. In the mango value chain, for example, international investors have set up a mango-processing plant (Box 21) in the high-productivity zone to produce mango pulp for sale to juice companies in Europe. In 2015, the company bought 11,000 tons of mangoes from local producers and produced 5,000 tons of puree and concentrate. The company works with several small traders or "pisteurs," who aggregate mangoes at the village level and bring them to collection points near the factory. There is no contractual arrangement between the factory and the farmers or small traders. Although mango is Mali's largest fruit export (US\$ 35.5 million in 2014), it operates far below capacity due to: (i) the ageing of orchards; (ii) a lack of financing that could sustain densification/expansion activities, which usually takes four to six years; (iii) limited access to production areas due to poor road infrastructure, exacerbated by the fact that the mango harvest coincides with the rainy season; and (iv) insufficient storage facilities and collection centers.

 ⁵⁸ Prior to the liberalization of cereal marketing boards in Mali in the 1990s, the Office du Niger offered an integrated financing system similar to that of the CMDT. After liberalization, private traders faced difficulties in obtaining bank financing.
 ⁵⁹ In fact, part of this credit in kind might have come from the CMDT, as farms that grow both cotton and dry cereals tend to use CMDT inputs for dry cereals as well.

f. Peanuts (or groundnuts): Grown on 0.29 million hectares, with an average production of 0.26 million tons and productivity of 880 kilograms per hectare, peanut cultivation is not one of Mali's major crops. By comparison, the country produces roughly 2.9 million tons each of maize and millet (FAO 2017). Still, peanut is an important crop. Farmers use it to diversify production choices, often integrating peanut production alongside key crops such as cotton and millet. Peanut production is especially important for female producers, who are also the major peanut processors. Peanuts present opportunities for value addition at the farm level, as the nuts can be roasted, crushed and made into a paste, or pressed to extract oil. The peanut sector was well-supported by the state until the early 1990s, at which time the parastatals managing the sector were disbanded and peanut processing was left in the hands of the private sector. Today, Mali's peanut processing sector consists of only a handful of small processors and a large number of smallholder producers who engage in artisanal processing at the village level. The high risk of aflatoxin contamination is a key challenge for the sector, deterring investment in modern production and value-addition technologies.⁶⁰

10. **Mali's private agro-industrial sector is underdeveloped and engages in only a few cases with independent smallholders**. As few as 40 firms pay 80 percent of all formal private sector salaries (WBG 2015b), while enterprises in the industry sector employ only 6 percent of Mali's total working-age population (Chapter 2). Very few private sector players have emerged that have the capacity to contract relationships with numerous smallholders to ensure a sustainable supply of raw materials (Box 21).

Box 21. Large-Scale Agro-Processing Development in Yanfolila—CEDIAM

Mali's mango value chain contains significant untapped agribusiness potential. The country has a clear international competitive advantage in the sector, but only 7 percent of total production was exported in 2016 (or 12 percent of exportable varieties). A key player in the mango value chain is CEDIAM, a fruit processing company, which began operation in Yanfolila in 2012.

CEDIAM exports fresh mangoes, mango puree, and mango concentrate to international markets following international norms and certification standards (ISO 22 000 FSSC, Organic EOS and NOP, Global Gap and Fair Trade). In 2015, CEDIAM sourced 11,000 tons of mangoes from over 4,000 mango producers and produced 5,000 tons of puree and concentrate. Yet the company utilizes only 20 percent of installed capacity due to constraints pertaining to the sourcing of raw materials in Mali. These constraints are driven mainly by seasonality, particularly because the rainy season compounds accessibility challenges by worsening the quality of roads while also leading to higher post-harvest losses given the perishability of mangoes. For this reason, CEDIAM is working with farmers' organizations to improve yield and reduce post-harvest losses, which can be as high as 35 to 50 percent of the total crop produced. In addition to increasing production, CEDIAM is also investing directly in mango plantations.

Since the mango harvest season starts in March and ends in July, there is a need to find a complementary crop (such as tomatoes or passion fruits) that can be processed in the same facility during the mango off-season.

11. The limited capacity of intermediary organizations further constrains the development of structured agriculture value chains. Since the majority of farmers operate at a small scale and have limited capacity and/or resources to interact with suppliers and traders, intermediary organizations such as cooperatives have an important role to play in facilitating access to high-quality inputs and strengthening commercialization outcomes. Unfortunately, low levels of organization and capacity among producer cooperatives and interprofessional organizations, including processing/industrial associations, hinders the development of an agro-industrial sector in Mali. Growing Mali's agricultural private sector will require a gradual approach, seeking relatively organized and potentially creditworthy actors as anchors and then forging with (or around) them productive alliances with smallholders and farmers' cooperatives to improve the quantity and quality of supply. Better integrating local suppliers around agro-industrial processing units and supporting private sector providers of agribusiness services will augment revenues and lower costs, helping to maximize the

⁶⁰ Boken et al. (2008) state that peanuts can be contaminated by aflatoxin, a natural toxin that may develop due to drought conditions at the pre-harvest stage or temperature- and humidity-related factors that may occur during post-harvest storage. Consumption of aflatoxin-contaminated peanuts can cause liver diseases such as jaundice, hepatitis, or cancer.

economic benefits derived from each value chain. One approach of the World Bank's Project for the Support of Agro-Industrial Competitiveness in Mali (*Projet d'Appui à la Compétitivité Agro-industrielle au Mali*) will be to expand market opportunities to the poorest farmers as a collective (through their cooperatives and associations) by supporting their participation in productive alliances that will guarantee them relationships with buyers and good prices for their produce. The project will support over 100 producer and trader cooperatives⁶¹ in the mango and animal feed value chains and many more to help farmers consolidate into formal cooperatives. Table 5 summarizes the characteristics of the various actors participating in the principal value chains.

12. As a result of the fragmentation of the value chain, only about half of Malian agricultural households commercialize their agricultural output. By analyzing household production and sale activities, it is possible to distinguish between farmers who consume most of their production within the family and "market participants," or those who engage in market activities by growing crops or livestock with the purpose of selling (part of) their production. Only 40 to 50 percent of micro, small, and medium farms in Mali participate in market activities. This share increases with size, and 60 percent of larger farmers commercialize at least part of their production (Figure 84).

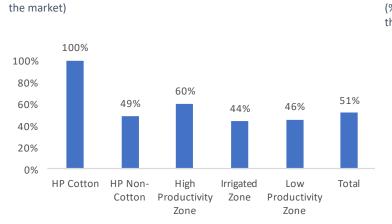
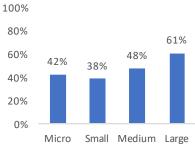


Figure 83. Market participation by zone (% of households participating in

Figure 84. Market participation by farm size (% of noncotton households participating in the market)



Source: LSMS–ISA 2014, team analysis.

Source: LSMS–ISA 2014, team analysis.

⁶¹ An example of such support includes (but is not limited to) institutional capacity building aimed at organizing farmers' groups into cooperatives (including governance and leadership) and providing training to improve cooperatives' marketing and business skills in mango and animal feed production and inputs. In the animal feed value chain, productive alliances between producers and purchasers will receive grant funding in the form of a matching grant for the following activities: (i) business development services, including access to financial services, business management, advisory work to facilitate firms' access to markets in Mali and abroad, information technology, certification, and others; (ii) agribusiness technical assistance, including quality improvement through better use of storage systems, harvesting, and drying equipment; increased productivity through adoption of better farming techniques; capacity building and training to improve the industrial practices of agro-processors; strategies for local sourcing of alternative feed inputs; and others; and (iii) equipment and infrastructure, including installation of production equipment (such as shellers, threshers, and dryers), modernization and/or construction of post-harvest storage facilities (such as warehouses, silos, and ventilated storage), construction of industrial production units for expansion, and others.

Сгор	Farm Size	Production Cycle	Inputs	Fertilizer subsidies	Buyers	Technical assistance	Export
Cotton	Many small, and several medium and large	1 crop: 5-6 months May/June to Sept/Oct.	CMDT	Yes	CMDT	CMDT	Yes
Rice	Many micro and small	Irrigated: 2 crops/year; 4-7 mos. Rainfed: 7 mos. May- Dec	Office du Niger	Yes	Several small and medium traders	Office du Niger	No
Cereals	Many micro and small	Maize, Millet and Sorghum: 3 months	Local suppliers	Yes	Several small traders	No	No
Peanut	Many micro and small	90-100 days	local suppliers	No	Several small traders	No	No
Fresh Mango	Many small farmers	Fruit annually	Local suppliers	No	Several small traders;	Exporter	Yes
					Few large exporters		
Livestock	Many small farmers/herders	n/a	Local suppliers	No	Several small traders; larger markets near cities	No	Yes, neighboring countries

Source: FAO, team analysis.

3.2 Financial inclusion remains extremely limited among Mali's agricultural households

13. With only 10 percent of agricultural households holding an account at a bank or other financial institution, rural Mali lags behind the rest of the country in terms of financial inclusion (Figure 85).⁶² Data show that most families have at most one account among their members.⁶³ Account ownership is also not strongly correlated with farm size.

⁶² If any member of the household owns a bank account, the household is considered an owner of a bank account. The LSMS– ISA 2014 survey did not collect information on mobile money accounts.

⁶³ A household includes, on average, about six adult members. Since 6 percent of households have a single account and 4 percent of households have two or more accounts, the estimated share of agricultural household members with an account is about 4 percent. As such, account penetration results from LSMS–ISA 2014 are lower than those measured by Findex 2014, according to which about 11 percent of individuals in rural areas have a financial institution account. This discrepancy might be explained by a number of factors: (1) the LSMS–ISA data analyzed for this chapter include only households that were

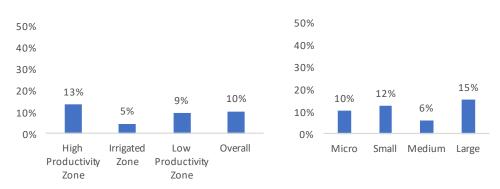
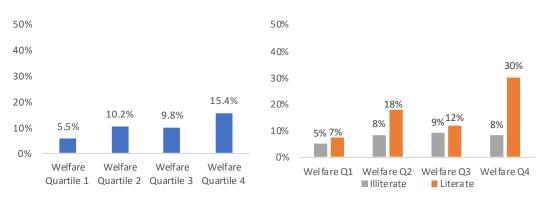


Figure 85. Bank account penetration by zone and farm size (% of households with bank accounts)

Source: LSMS-ISA 2014, team analysis.

14. Account ownership is associated with wealth, but even more so with literacy. As expected, wealthier agricultural households are more likely to have a financial institution account. Even among the wealthiest households, however, only 15 percent hold an account (Figure 86). Literacy shows a stronger correlation to account ownership than income: for every welfare level, agricultural households whose heads are literate have much higher account penetration, confirming the results presented in Chapter 1 for the overall population. In addition, for households whose head is literate, account penetration grows with welfare and reaches 30 percent for the top income quartile, three times the average. For households whose heads are illiterate, on the other hand, account penetration remains more or less similar across welfare quartiles (Figure 86).

Figure 86. Bank account penetration by welfare quartiles (left) and controlling for literacy (right) (% of households with bank accounts)



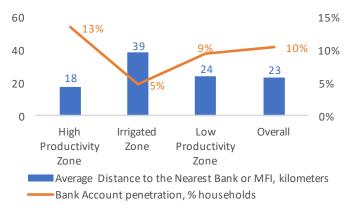
Source: LSMS-ISA 2014, team analysis.

15. **Distance appears to be a major driver of account ownership**. As discussed in Chapter 1, distance from a branch contributes greatly to decisions on whether or not to open an account. The low penetration of formal financial services in rural areas may be explained to a large extent by physical distance to banks and/or MFIs. In fact, despite a rapid expansion in the number of branches of banks (Chapter 5) and other institutions (Chapter 6), rural areas remain underserved. Data on the average distance from a branch show that, even in the most populated and productive areas, access points are still limited: on average, a rural Malian household has to cover 23 kilometers (about 15 miles) to reach an outlet of a financial institution (Figure 87). The strong correlation between proximity and access is

involved in agricultural activities, a subsample of rural households; (2) slightly different sample coverage, since the LSMS–ISA had broader coverage and that of Findex was limited by the security situation in more remote regions, which are also those characterized by lower account ownership; and (3) survey error (estimated to be about 4 percent).

evident in the data: in the high-productivity zone, which has the highest bank account penetration, households are much closer, on average, to a branch than in other areas.⁶⁴

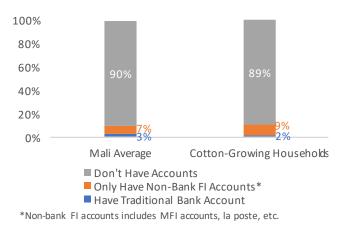
Figure 87. Distance to a financial institution (in kilometers) and bank account penetration (% of households with bank accounts)



Source: LSMS–ISA 2014, team analysis.

16. **Data confirm that MFIs are the preferred financial service provider for rural households**. MFIs target rural and agricultural households, and their greater proximity to clients is evidenced by their more developed rural network: MFIs have about 250 branches outside the capital, as compared to about 150 bank branches. As such, households are more likely to hold an account with an MFI (Figure 88).

Figure 88. Financial institution account breakdown by type (% of households with/without the following types of accounts)



Source: LSMS–ISA 2014, team analysis

17. Households that are engaged in market activities are more likely to have an account. Households that participate in the market are more likely to have bank accounts than households that do not. This dynamic is largely true across agricultural zones (Figure 89) and reflects the fact that accounts could be needed for commercial purposes. Even among the households with the largest plots under cultivation, however, ownership and use of financial services remains limited—even though these households could benefit from making and receiving payments, saving, and obtaining credit from a financial institution.

⁶⁴ A multinomial logit and probit exercise suggests that a one-kilometer increase in the distance to a financial institution reduces the probability of having a bank account by 0.02 percent.

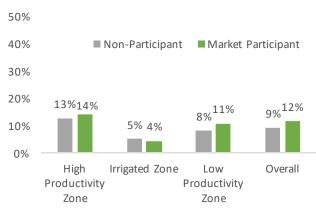


Figure 89. Bank account penetration per zone (% of households with bank accounts)

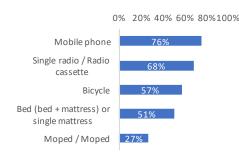
Source: LSMS–ISA 2014, team analysis.

Box 22. Use of Alternative Distribution Channels—The Case of Banco Agrario Colombia (BAC)

In 2005, BAC covered 67 percent of Colombia's municipalities with 100 percent of transactions from branches. Its 727 branches conducted 48.6 million transactions per year. By 2015, BAC had managed to increase its coverage to 98.3 percent of the municipalities by adding just 20 branches (up to 747) and relying much more on alternative financial service distribution channels such as banking agents, the Internet, and ATMs. The total number of transactions had increased to 111.4 million per year, of which 54.1 million were conducted through branches and the rest (57.3 million) through alternative distribution channels. The use of alternative distribution channels through a combination of technology and agent banking enabled BAC to more than double its transactions and increase its territorial coverage by almost 50 percent while increasing its branch network by less than 3 percent.

18. The popularity of mobile phones among agricultural households is closely linked to the success of mobile money among these households. Despite high poverty, rural households dispose of some basic assets, with the most popular ones being leveraged to communicate: almost three-quarters of them have mobile phones, followed by radios, bikes, beds and mattresses, and mopeds (Figure 90). Mobile phone penetration, in particular, is high and increasing (in 2014 three-quarters of rural households had access to at least a mobile phone, confirming macro-level data on mobile phone ownership; see Chapter 4). Mobile phone ownership holds multiple benefits for rural households (Box 23). As expected, asset ownership is strongly correlated with farm size and welfare, but mobile phone penetration remains widespread even among smaller households.

Figure 90. Top five household asset items (% of households owning the following asset)



Source: LSMS–ISA 2014, team analysis.

Box 23. Mobile Phones as Communication Tools

Apart from playing an integral role in digital financial services (Chapter 4), mobile phones serve as cost-efficient, real-time, highly personalized communication tools whose benefits are enhanced by information and communication technology and interactive voice response systems.

Mobile phones enable cheap access to price conditions and market information. In 2003, the Agriculture Commodities Exchange of Kenya created a text-messaging platform, SokoniSMS64through a partnership with Safaricom to update farmers on pricing information. Another mobile phone agricultural platform, iCow, hosts a reservoir of real-time information on farm activities, available 24/7 for farmers to search and verify the information they need. Agricultural calendar reminders and self-diagnostic tools are also embedded in the platform.

Mobile phones can provide personalized farming advice and consultation. They facilitate communication between farmers and agriculture experts via, for instance, hotlines and text messages. A study conducted by Kremer et al. (2014) found that, simply by providing access to farmer hotlines, the possibility of a plot not receiving fertilizer dropped by 3.8 percentage points and the possibility of a delay in fertilizer delivery dropped by 8.5 percentage points. In the meantime, smallholder farmers who received SMS messages with agriculture advice had 11.5 percent higher yields than those who did not. More communication channels could be mobilized once farmers start to adopt smartphones, which support the transmission of photos and videos and allow for more accurate and effective consultation.

19. With a much stronger penetration and a capillary agent network, mobile money allows rural households to gain not only connectivity, but also access to financial accounts. Mobile money services have a much larger agent network than brick-and-mortar financial institutions (Chapter 4) and a stronger presence in rural areas, allowing users to overcome the challenges posed by physical distance from formal branches. In 2017, mobile money allowed the share of individuals⁶⁵ in rural areas with access to an account to nearly double.

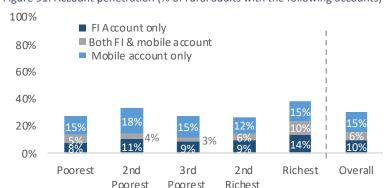


Figure 91: Account penetration (% of rural adults with the following accounts)

Source: Findex 2017, team analysis.

20. Fostering the digitization of government payments could be an important instrument for strengthening inclusion in rural areas. An increase in the number of cases in which digital payments could be leveraged could in turn increase the supply of financial services—particularly mobile ones— in rural areas (Chapter 1). Among the opportunities for agricultural households to benefit from electronic money, G2P payments for subsidies and social programs stand out. The option of delivering programs through digital payments should be prioritized (Box 24).

Box 24. Government Subsidies: Can They be Delivered by the Financial Sector?

Farmers' increased access to inputs and equipment through the government's fertilizer and tractor subsidy programs has contributed to increased productivity.

Fertilizer subsidies: Motivated to deal with the 2007–08 food crisis and mounting food prices, the Government of Mali instituted a fertilizer subsidy program in 2008–09 to boost cereal production. The program targeted rice production initially and has since evolved to cover cotton, maize, sorghum, and wheat crops. Through the program, farmers have access to a 30 to 50 percent subsidy on fertilizers to produce the targeted crops. Subsidies are paid directly to input suppliers after proof of sale and delivery have been provided. Since 2011, the fertilizer subsidy program has grown from FCFA 11 billion to 37 billion

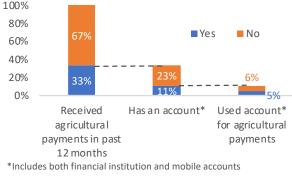
⁶⁵ LSMS–ISA does not include questions pertaining to the usage of mobile money services; the data presented in this section therefore refer to individual usage of mobile phones by rural individuals, rather than by agricultural households specifically.

(US\$ 18.5 million to 62.4 million) and covers approximately 85 percent of cotton and cereal producers' fertilizer needs (IFDC 2015).

Tractor subsidies: To help reach its goal of producing 650,000 tons of cotton in 2015–2016, the government extended its subsidy program to include tractors (Reuters 2015). Under the pilot program, which began in 2015, the government provided 1,000 tractors to the farming community at a 50 percent discount. Farmers who meet bank lending conditions are responsible for covering the remaining 50 percent of the costs: a 20 percent contribution in personal funds and 30 percent through a bank loan at a subsidized interest rate of 8.75 percent per year. The loans are granted through a banking pool led by BNDA, along with the *Banque Malienne de Solidarité* and the *Banque International pour le Mali*. Toguna Industries, a private Malian firm, was chosen to be the main supplier of tractors for the scheme.

21. **Digital money could substitute for cash in regular transactions in selected value chains**. The use of digital money among private sector entities could be facilitated in "tight" value chains, especially those in which regular payments among buyers and sellers are established. Digital payments could be mutually beneficial for buyers (who would revert to safer transfers, limit the movement of cash, and so on) but also for sellers (who could receive payments in a more frequent and regular stream, be subject to fewer safety issues, and so on). Increasing access to accounts, however, remains the intervention most likely to foster increased usage. For example, 5 percent of adults in rural areas received agriculture payments, had an account, and used the account for the payment, indicating an account usage rate close to 50 percent for agriculture payments. However, 23 percent of rural adults received agriculture payments but did not have an account, thus limiting the uptake of digital transactions (Figure 92).

Figure 92. Use of account for agriculture payments (% of adult population in rural areas)



Source: Findex 2017, team analysis.

3.3 Rural households save, but not formally

22. **About half of rural households save, but only a small proportion save in a formal account**. Overall, around 47 percent of rural households in Mali save in various forms. Yet only one in eight who saved used a formal account to hold savings (Figure 93). This can be explained by the limited availability of accounts, which is in turn connected with proximity to a branch: households would like to be assured that they will have easy access to their cash when needed, an opportunity that is not granted when the distance to the nearest bank branch is great.



Figure 93. Saving behavior by zone (% of households saving formally and informally)

23. **Households that have access to an account are more likely to save formally**. Formalization of savings requires access to an account. When there is access to an account, use of the account to save is widespread: on average, 6 percent of total households (66 percent of those with bank accounts) save into a bank account, although with variations across regions (Figure 94). Only a small share of households have an account, however. In addition, the propensity of households that hold an account to save is much higher than that of those without an account, indicating that the opportunity to save in a safe and convenient manner might provide an incentive for people to do so. As expected, the propensity to save increases with the welfare level. More importantly, the share of formal savings increases with literacy levels.⁶⁶

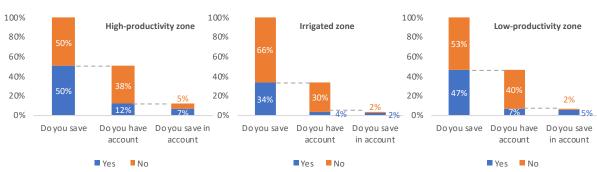
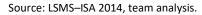


Figure 94. Savings habits in high-productivity zone (left), irrigated zone (middle), and low-productivity zone (right) (% of households)



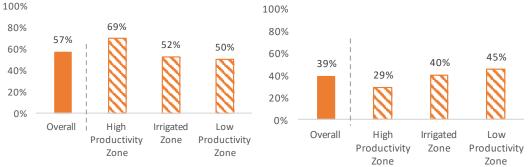
24. The uptake of mobile money can offer an opportunity to extend the range of households with access to an account and, in turn, to increase formal savings. As discussed in Chapter 1, actions to increase formal savings should first address constraints in the availability of accounts. Especially in rural areas, this primarily implies reducing the distance between users and access points. The recent uptake of mobile money in Mali offers an opportunity to grant account access to households that have been excluded in the past. Partnerships between mobile money operators (EME) and banks/MFIs could leverage the rural presence of mobile money operators to facilitate mobile savings, with the possibility that the banks of MFIs could eventually offer full-fledged saving accounts (Chapter 6, Section 6.5).

3.4 Microinsurance: a still nascent buffer for potential shocks

25. Mali's economy has been prone to exogenous shocks, such as droughts, that affect agricultural output and household welfare. During 1980–2013, Mali experienced eight droughts and 21 flood events that affected close to 7 million people in total. Combining the regular occurrence of droughts, floods, and locust infestations in the region with the country's reliance on rainfed agriculture makes household income subject to large fluctuations that cannot be absorbed by the limited level of household savings. The absence of safety nets, together with the low level of savings overall, translates into negative welfare consequences for those who experience household-level shocks such as illness or death of a family member. LSMS data confirm that more than half of agricultural households in Mali have suffered some sort of shock in the recent past: about 39 percent of households had suffered from a crop shock over the past year, while 57 percent had suffered from a health shock over the past month (Figure 95).

⁶⁶ This is also related to the fact that account ownership—a precondition to formal savings—is directly correlated with literacy.





Source: LSMS-ISA 2014, team analysis.

26. Several microinsurance schemes have arisen to protect farmers against exogenous shocks in Mali, but challenges remain in extending them to a wider population. Canada's Ministry of Foreign Affairs, Trade, and Development has successfully run a group rice index insurance pilot with about 1,500 farmers in Segou that covers risks such as rice-specific disease. Farmers can also insure a wider range of crops to mitigate the risks of drought, thanks to crop insurance plans developed by PlaNet Guarantee (Box 25). However, technical challenges (such as quantifying risks for livestock insurance plans) together with socioeconomic challenges (such as security issues) impede the microinsurance industry from evolving beyond its current, nascent stage.

Box 25. Microinsurance Schemes in Mali

Group Rice Index Insurance—a promising pilot in Segou

The crop insurance program is part of a larger US\$ 14 million agriculture and rural finance program, PROFARM, that Canada is undertaking in Mali with *Développement International Desjardins* and *Financière Agricole du Québec- Développement International* between 2014 and 2020.

The rice index insurance product is underwritten by Allianz and covers risks from rice-specific diseases and grain-eating birds. Premiums vary based on land area, beginning at FCFA 3,700 (US\$ 6.2) for a quarter hectare and insured capital of FCFA 25,000 (US\$ 42) and topping out at FCFA 29,600 (US\$ 50) for two hectares and insured capital of FCFA 200,000 (US\$ 337).

The one-year pilot has been successful, reaching about 1,500 farmers. Through PROFARM, Canada's Ministry of Foreign Affairs, Trade, and Development aims to develop tools and standards for crop insurance and better cater to the financing needs of the rural sector. It plans to expand the program to other regions and to another crop sector. The ministry has encouraged partners, such as Mercy Corps, to consider the use of mobile money to facilitate insurance payments should the program be expanded to northern Mali.

The potential commercial viability of crop insurance hampered by distribution challenges

For the past seven years, PlaNet Guarantee has been distributing crop insurance underwritten by Allianz to farmers in Mali, but has not been able to reach scale. Its product protects farmers of maize, sesame, sorghum, millet, and all rainfed crops against the risk of drought. Payouts are triggered by a satellite-based weather index rather than by the actual loss incurred by the individual farmer.

Premiums fall between 6 and 12 percent of the total coverage amount. A typical insurance premium for one growing season, or roughly one year, would be FCFA 12,600 (US\$ 21) per farmer. The product is sold at purely commercial rates without state subsidies. Furthermore, it is taxed at 20 percent, although discussions ae underway regarding the possibility of waiving taxes for crop insurance next year. The maximum payout is 80 percent of the crop's value. The insurance product pays a percentage of the coverage amount based on the growing stage when the payout is triggered—for example, 30 percent at the sowing phase.

The product is sold through three main distribution channels: (1) MFIs, such as Soro Yiriwaso; (2) agribusiness input providers, who offer the insurance for free along with fertilizer purchases; and 3) retail distributors (farmer cooperatives) that sell to individual farmers and accept mobile payments.

PlaNet Guarantee has found it difficult to rely on farmer cooperatives for sales volumes. In the last three years, cooperatives were unable to deliver enough paying customers. Hence, it is now focusing on distributing via MFIs and agribusiness input providers. The product has covered 31,000 farmers over the last seven years. In 2017, 15,000 subscriptions were made, but only 10 percent of these paid the insurance premiums. Moving forward, challenges include:

- The limited capacity of farmers to pay the premiums, exacerbated by the 20 percent tax on crop insurance;
- Security issues that hamper field sales activities, impede the flow of agri-finance, and affect the quality of farming inputs imported into the country; and
- The fact that the product was initially envisioned to insure cotton crops, but PlaNet Guarantee was unable to obtain agreements from the cotton sector.

As of the end of 2016, the product's payout ratio was 47 percent. This ratio is high compared to overall insurance claim rates of 15 percent. To make the product commercially viable, 40,000 insurance policies must be sold each year. PlaNet Guarantee is continuing sales of the product to try to reach the necessary scale.

Livestock insurance—an example from Kenya

Although livestock insurance has strong potential in Mali, it is not yet widely available in West Africa. One reason is because livestock tend to graze across national borders, requiring insurance companies to quantify risk across countries. The World Bank Group's Global Index Insurance Facility is devising ways to provide livestock insurance in the region.

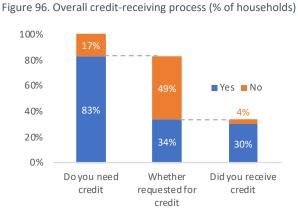
The Kenya Livestock Insurance Program is a model that could potentially be replicated in Mali. The program was launched in 2015, led by the World Bank's Disaster Risk Finance and Insurance program, the International Livestock Research Institute, and Financial Sector Deepening—Kenya. The product protects pastoralists against climatic shocks. From 1999 to 2013, average livestock mortality rates ranged from 9 to 18 percent per year.

The Government of Kenya paid premiums of Ksh. 167 million to cover 14,000 vulnerable households from six counties for the period from October 2016 to September 2017. The insurance was provided by a consortium of seven companies and one reinsurer.

Payouts were made twice, in August 2016 and again in February 2017. In February, payouts were declared to 12,000 insured beneficiaries (59 of the 67 insured units), amounting to Ksh. 215 million. Payouts were made in less than a month to beneficiary bank accounts or mobile money accounts. Given the limited number of premiums the government can pay, the program is promoting a voluntary but subsidized livestock insurance product to expand the number of covered beneficiaries.

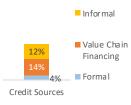
3.5 Credit needs of rural households: high and fulfilled mostly through informal channels

27. Despite pervasive credit needs among rural households in Mali, less than one-third of them access credit and mostly from informal sources or via agricultural value chains, including cotton financing scheme. On average, more than 80 percent of Malian rural households need credit. However, only 30 percent of the overall population in rural areas has access to some form of credit: (i) credit through the *value chain* (suppliers, cooperatives, or CMDT) is the most common sources of credit, reaching 14 percent of rural households; (ii) *informal credit* (from friends, family, and informal savings/credit groups such as *tontines*) benefits 12 percent of rural households; and (iii) credit from *financial institutions* is received by only 4 percent of rural households. As already observed for both individuals and enterprises, only 41 percent of those households that need credit demand it (or 34 percent of the overall population). Self-selection results in a high acceptance rate: close to 90 percent of those who apply receive a positive response.



Source: LSMS–ISA 2014, team analysis.

Figure 97. Overall credit sources (% of households with the following sources of credit)



Source: LSMS–ISA 2014, team analysis.

28. The wide disparities in credit access across regions are to a large extent connected with the presence (or absence) of structured value chains through which some credit needs are fulfilled. The percentage of households with access to credit ranges from about 80 percent among households that are involved in cotton production in the high-productivity zone,⁶⁷ to less than 20 percent among households in the low-productivity zone. These disparities can be better understood by analyzing the sources of credit; while the penetration of formal credit is limited across the country and informal credit shows some variance across regions (Figure 98), the driver of regional disparities appears to be the presence (or absence) of value chain financing. For example, the absence of value chain financing as compared to the country average explains the lowest levels of credit access in the dryland, low-productivity zone.

Box 26. Cotton Financing in Mali

CMDT has negotiated a pooled financing mechanism with banks in Mali to fund cotton production and trade. A pool of commercial banks finances cotton production through CMDT, which then on-lends to contracted farmers through in-kind loans of inputs and supplies to producer organizations. The purchase price is agreed upon well before planting time so that farmers know how much credit they will need. The same pool of banks provides a trade-finance facility to CMDT for cotton commercialization.

At harvest time, CMDT takes a second loan, a trade loan, to buy the cotton from the contracted farmers. At the point of sale, CMDT deducts the farmer's loan amount and remits the remaining balance to the farmer. CMDT repays the first loan to the banks. The second loan is paid after CMDT receives payment from its international buyers. The volume of pooled financing is highly dependent on the previous year's performance and on the current season's international market and pricing conditions. BNDA is the lead bank in the pooled financing of cotton production and the largest local financier, whereas the Mali Development Bank is the lead local bank and largest contributor of cotton trade finance.

Although short-term credit needs are well met by the financing put in place by banks through the value chain, producers complain that they are unable to access financing on their own to meet investment needs such as on-farm improvements, equipment purchases, and so on.

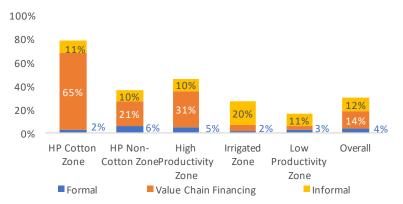


Figure 98. Credit sources by zone (% of households with the following sources of credit)

Source: LSMS–ISA 2014, team analysis.

29. Value chain financing differs from credit offered by either financial institutions or informal sources, as it is most commonly delivered in kind. Value chain financing allocates the credit risk to the actor who retains the best information on borrowers along the value chain. In the case of cotton, CMDT receives credit from financial institutions and on-lends it to households. In this way, value chain financing addresses well the asymmetric information that constrains the provision of credit in the agriculture sector (see Box 27 for another solution, the partial credit guarantee). Intrinsic to the nature of value chain financing is the fact that credit is delivered to the household in kind, namely in the form of inputs. More than 84 percent of value chain financing is in kind, while the vast majority of credit provided by informal sources and financial institutions is in cash (Figure 99).

⁶⁷ A household is considered a cotton producer—and categorized in this separate category—if it produces any quantity of cotton. Within the high-productivity zone, cotton producers and noncotton producers are mutually exclusive categories.

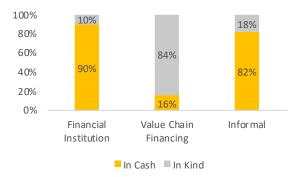
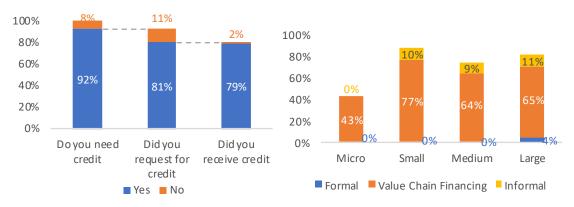


Figure 99. Nature of credit, by financing source (% of households that received credit)

Source: LSMS–ISA 2014, team analysis.

30. Value chain financing via CMDT reaches a large majority of households involved in the cotton value chain, spilling over to other producers in the high-productivity zone. Cotton-producing households benefit from the presence of a structured value chain that ensures the purchase of the cotton produced as well as a financing mechanism for inputs. The presence of an intermediary (CMDT) that provides financing for cotton production explains the dramatic difference in credit availability between cotton farmers and the rest. In fact, almost all cotton producers take advantage of CMDT-related credit (either directly or through cooperatives). This system works well in the cotton sector since the value chain is tight, with no side selling possible. Interestingly, CMDT credit extends to noncotton crops as well.⁶⁸

Figure 100. Receiving credit and credit sources for cotton households (% of cotton households)



Source: LSMS–ISA 2014, team analysis.



In Mali, farmers, agribusiness SMEs and SMEs in most sectors tend to be constrained in their access to credit by a lack of collateral, credit history, and reliable financial accounts that would mitigate asymmetric information risks and enable financial institutions to better assess their creditworthiness. High interest rates on SME and agricultural loans reflect these conditions and inhibit credit demand. Even with high interest rates, however, the supply of credit is greatly constrained for such borrowers, simply because financial institutions do not wish to take the risk. Additionally, most banks are not familiar with appraisal for small business credit, nor have they developed appropriate methodologies (such as credit scoring and cash-flow-based appraisal) for assessing these types of loans, hence making this market segment less appealing.

Partial credit guarantees aim to absorb part of the default risk of the borrower and, by providing this level of comfort, to encourage financial institutions to increase the supply of credit to credit-constrained firms and farmers. The positive effects of partial credit guarantees relate to the financial additionality on the extensive margin, in that these guarantees induce banks to expand the risk frontier by providing loans to firms/farmers without access to loans currently (as opposed to subsidizing bank risk on borrowers that already have access to credit). Partial credit guarantees also improve access to

⁶⁸ This spillover effect might well be due to the fact that some cotton households also grow other crops and tend to use CMDT inputs for other crops as well.

advantageous financing conditions such as lower interest rates, larger borrowing amounts, longer-term loan maturities, and fewer restrictions on the amount and type of collateral required.

The World Bank's Agricultural Competitiveness and Diversification Project in Mali piloted a small partial credit guarantee fund (US\$ 2 million), which guaranteed 30 loans to SME agricultural clients. The recovery rate for such loans was high: 96 percent of outstanding loans were repaid, proving that there is an appetite for such a financing mechanism in the country.

The partial guarantee scheme for SMEs (the *Fonds de Garantie pour le Secteur Prive*, or FGSP) has also benefitted agribusinesses, but its scale and reach remain limited (Chapter 2).

Source: Zander, Miller, and Mhlanga (2013); WBG 2015a.

31. **Despite the availability of cotton financing, however, cotton-producing households are not better off than the rest.** Despite cotton being the cash crop of Mali, with more land under cultivation and greater availability of financing, cotton-producing households are no better off than the average rural household. In fact, they are worse off than southern zone households that are not engaged in cotton farming. The market structure along the value chain, together with the in-kind provision of (input) credit via CMDT, might partly explain this welfare outcome. Despite the greater availability of credit, the credit terms provided by CMDT and the output prices provided to farmers might imply a distribution of the value-added along the value chain that does not benefit farmers.

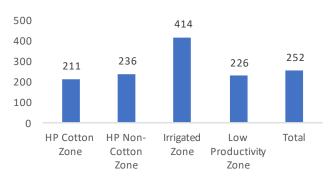


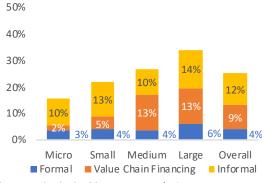
Figure 101. Mean per-capita expenditure⁶⁹ by zone (in FCFA thousands)

Source: WBG (2016); LSMS–ISA 2014.

32. Access to credit increases with farm size and is driven strongly by the commercial orientation of the agricultural activity, due in large part to the increased availability of value chain financing and credit provided by financial institutions. As expected, the share of households with access to credit increases with the size of the area under cultivation, doubling from about 15 percent for micro farms to more than 30 percent for larger ones. Most importantly, this difference is driven largely by the type of credit obtained by larger households. In fact, the share of households with informal credit varies only marginally with the size of the plots, most likely since informal credit is relationship-based and does not depend on the income capacity of the receiving household. Value-chain financing channeled via cooperatives and other intermediaries, however, affects mostly medium and larger farms, indicating that the structuring of value chains is critical to improving credit outcomes. Formal credit provided by banks and MFIs also increases, although from a very low base with farm size: while only 3.5 percent of micro farms obtain formal credit, this share reaches 6 percent for large farms (Figure 102). The size distribution of farms across Mali's regions also contributes to explaining the regional variations in credit availability: for example, credit availability in the irrigation zone is among the lowest in the country, and this is also the region where the plots are the smallest.

⁶⁹ Per-capita expenditure excludes expenditure for productive purposes such as agriculture inputs. It includes only consumption expenditure made by households to meet their everyday needs, such as food, clothing, housing (rent), energy, transport, durable goods (notably cars), health costs, leisure, and miscellaneous services.

Figure 102. Credit sources by farm size (% of noncotton households with the following sources of credit)



Source: LSMS-ISA 2014, team analysis.

The commercial orientation of a given type of agricultural production also drives credit 33. availability. By distinguishing between farms that trade (part of) their production and those that do not, a number of important differences arise. As expected, market participants have higher access to credit, although the difference is not very large, on average. More interestingly, credit availability for market participants grows significantly with size (about 40 percent of large farms have access to credit) but shows little variation for nonmarket participants, confirming that credit fulfills a commercial need and is offered on the ability of the household to repay (using farm size as proxy). The commercial orientation of production is also measured by the fact that more than half of medium-sized farmers and close to half of large farmers participating in market activities have used credit for agricultural purposes, a much larger share than among peers who did not commercialize their production.

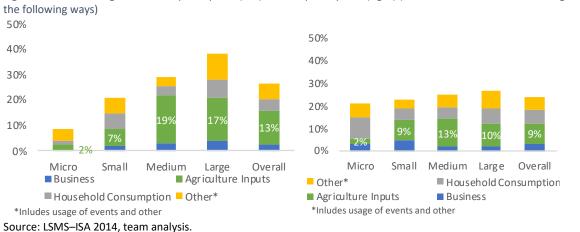
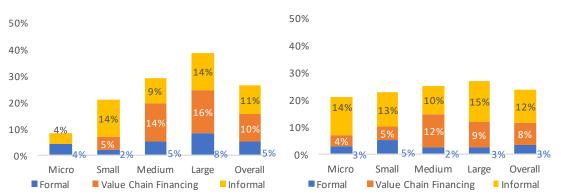


Figure 103. Credit usage for market participants (left) and nonparticipants (right) (% of noncotton households using credit in

34. Medium and large farmers who participate in markets are more likely to access credit from financial institutions, value chain financing via cooperatives, and suppliers. The commercial nature of the credit received by farmers who commercialize their production is confirmed by the larger share of loans being granted by financial institutions to this group. Finally, market participants—especially medium and large ones—are more likely to participate in structured value chains and to leverage opportunities to receive credit from these sources (Figure 104).





Source: LSMS-ISA 2014, team analysis.

35. Outside of cotton, a large share of households use credit to smooth consumption or for nonfarm business activities, although medium and large farms increasingly use credit to fund agriculture. While most cotton-growing households use credit to finance agriculture, as expected given the in-kind nature of the credit, this share is much lower for the rest of households (Figure 105). In fact, credit is shared equally between consumption smoothing/funding nonbusiness activities and agricultural production. Households with larger plots, however, use credit to finance agricultural production compared to households with smaller farms, which need it more to fund consumption.

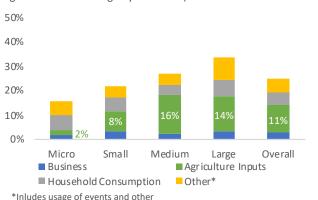


Figure 105. Credit usage by farm size (% of noncotton households using credit in the following ways)

Source: LSMS–ISA 2014, team analysis.

36. Substantial variance exists across regions in terms of credit requests, highlighting differences in productivity and the absence of specific credit institutions in certain areas. As observed for individuals and firms in Mali, only those rural households that expect a positive outcome from their credit application tend to request credit. As a result, self-selection limits the number of farmers who apply for credit despite needing it. Yet, on average, 30 percent households (or more than 80 percent of households that needed and requested credit) received a positive response to their credit application (Figure 106). While self-selection appears pervasive across Mali, the situation is highly differentiated across regions. Outside the cotton sector, households in the high-productivity zone are more likely to apply for credit, and those who do not are less likely to be able to repay. Motivations are similar in the low-productivity zone, where lower productivity reduces the share of potential applicants. In the irrigation zone, the absence of dedicated institution is a particularl challenge. The lack of financial literacy also explains the low application rate (Figure 107).

⁷⁰ "Formal credit" includes credit from financial institutions (such as banks and MFIs); "value chain financing credit" includes credit from CMDT, suppliers, and cooperatives; "informal credit" includes credit from other households, *tontines* (informal savings/credit groups), and others.

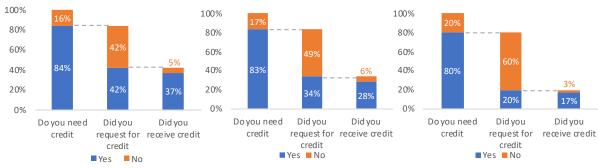
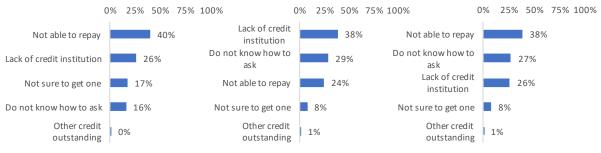
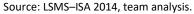


Figure 106. Receipt of credit among households in high-productivity noncotton zone (left), irrigated zone (middle), and low-productivity zone (right) (% of households)

Figure 107. Major reasons for not requesting credit in high-productivity noncotton zone (left), irrigated zone (middle), and low-productivity zone (right) (% of households that did not request credit)





37. Value chains are emerging for major agricultural productive activities. Looking again at household credit sources by agricultural productive activities further testifies to the prominence of cotton value chain financing, while revealing other value chains in which financing is starting to emerge. Among horticulture households, 29 percent utilized value-chain-financed credit, nearly double the share that used informal credit.

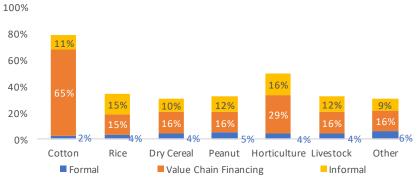


Figure 108. Credit sources by crop (% of households with the following sources of credit) 100%

38. **Credit to rural households is mainly short-term**. Overall, 26 percent of households receive credit with a tenure less than one year, while only 4 percent receive credit with a longer term. In the high-productivity cotton zone, the prevalence of short-term credit is the highest, with 76 percent of households receiving credit that matures within one year—again reflecting the bias in using credit for cotton production. In the high-productivity noncotton zone and in the low-productivity zone, despite lower overall rates of credit receipt, a larger share of credit recipients count on longer-term financing. Farm size and access to longer tenures, as compared to small and medium-sized farms (Figure 109).

Source: LSMS–ISA 2014, team analysis.

Source: LSMS–ISA 2014, team analysis.



Figure 109. Credit tenure by zone (left) and farm size (right) (% of households with the following credit tenures)

39. Increased penetration of mobile money accounts could be instrumental in delivering credit to agricultural households, also in the form of pay-as-you-go (PAYG) financing for specific assets. The penetration of mobile money accounts among rural households could create the digital footprint needed to extend credit to them. Experience across Africa has proven that mobile money can be used to provide short-term credit products (Chapter 1) and to deliver assets to poor people through PAYG systems, addressing a variety of needs that could otherwise go unfulfilled (Box 28).

40. In particular, the gap between mobile phone penetration and electricity penetration opens the door for the delivery of off-grid electrification systems through PAYG systems connected via mobile. While the electricity penetration rate has increased in rural areas as well, it remains substantially lower than the penetration rate of mobile phones (Figure 110). This gap suggests that rural households in some areas may have trouble charging their phones. At the same time, it suggests that there may be demand for off-grid electricity, which could be offered using PAYG models, with payments channeled via mobile financial services.

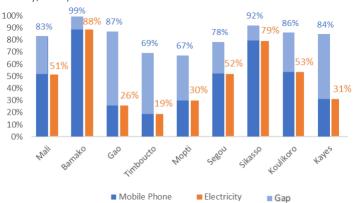


Figure 110: Gap between household electricity and mobile phone penetration by region (% of households with phone or electricity, 2016)

Source: EMOP, team analysis.

Box 28. Providing Smallholder Farmers with Assets and Inputs through Mobile PAYG Programs

Mobile money has been used to enable bottom-of-the-pyramid customers to access assets to be financed via pay-as-yougo (PAYG) programs connected to a mobile account. A number of such programs have been rolled out successfully in other African countries and could expand into Mali.

Solar lights sold by M-KOPA in Kenya: M-KOPA sells a solar lighting and phone charging system on a PAYG basis that accepts only M-Pesa as the form of payment. M-KOPA lights are distributed by agents who are often also M-Pesa agents. Customers pay a down payment of 15 to 20 percent via M-Pesa and take the solar system home. The customer has a year to pay off the balance at a minimum rate of about KHsh. 40 per day (roughly equal to typical daily spending on kerosene). The system includes solar panels, a control box, three lamps, and a mobile phone charger.

A SIM chip in the unit enables the provider to connect and disconnect the system remotely based on the customer's payment behavior. Customers receive a warning before their M-KOPA balance hits zero, and the system is disconnected a

More than 6 months to 1 year Source: LSMS–ISA 2014, team analysis.

day or two later if the customer does not pay. The system can be reactivated once the customer pays, or M-KOPA can issue a refund of all previous payments if the system is removed.

M-KOPA targets rural Kenyans with irregular incomes. The system costs US\$ 170 upfront or US\$ 195 if paid over the course of a year. M-KOPA launched in 2012 and sold about 8,000 systems within a year. Although few were paid off in full, few customers defaulted and most asked for additional time to pay.

Pedal/solar water pumps provided by KickStart International: KickStart International provides pedal-powered water pumps in a variety of SSA countries through a layaway program whose payments are made using M-Pesa. There is a deposit of 15 to 20 percent up front deposit, and the balance must be paid off in three months. Customers only receive the pump after the full price is paid.

KickStart currently sells two human-powered pumps: a hip pump and a treadle pump. The hip pump costs about US\$ 70 and sprays 10 gallons per minute, while the treadle pump costs US\$ 170 and sprays 16 gallons per minute. Unlike M-KOPA's solar systems, KickStart's pumps do not have a remote activation feature.

Dealers have not been highly enthusiastic, as they prefer cash payments over M-Pesa, which requires time to convert into cash. Farmers have also demonstrated reluctance to use the M-Pesa PayBill mechanism, which implies transaction fees that are subsidized by KickStart at 50 percent.

According to KickStart, the pedal pumps have yielded an average increase of 400 percent in household income. More than 30 percent of layaway customers are female, a much higher percentage than traditional buyers. About 300,000 pedal pumps have been sold in 16 SSA countries. A foldable flat-pack solar pump will follow, which will include a power switch, cell phone charger, and keyboard to enable PAYG functionality.

Seeds and fertilizer provided by myAgro: Based on the scratch card purchase system used for selling prepaid phone credits, myAgro offers seeds and fertilizers to farmers in Mali and Senegal.

Because farmers face risks in saving at home—such as natural disasters, theft, and the temptation to give or spend the money, myAgro reduces the need to save at home by creating a layaway program for agricultural inputs.

Farmers enroll with myAgro and select a layaway package of seeds, fertilizer, and training. They purchase a scratch card from a myAgro third-party vendor, which puts money toward their package. The farmer scratches the card and sends the code via SMS to myAgro, which verifies the purchase and credits the farmer's balance. When the layaway is paid in full, myAgro delivers the input package to a nearby distributor.

The familiarity of the scratch card process and the availability of vendors (30–40 myAgro vendors for every mobile money agent) makes it convenient for farmers to save. Some farmers visit vendors multiple times a day to buy scratch cards. Scratch cards do not have transaction fees associated with mobile money platforms, and having a physical card encourages farmers to collect their "proofs of purchase" in their myAgro wallet.

During its five-year run, 30,000 farmers have joined the program, and myAgro aims to reach 1 million smallholder farmers by 2025. Farmers purchase eight cards, on average, and more than 70 percent complete layaway payments in a year, with 90 percent re-enrolling year to year.

Sources: Nicholas P. Sullivan and Tonny K. Omwansa, One Acre Fund, Powering Ag, M-KOPA, KickStart International, myAgro website

3.8 Improving financial inclusion for rural households: summary and key directions

41. **Most people in rural areas remain financially excluded and rely on informal means to transact, save, and borrow**. Financial inclusion is extremely low among rural households in Mali. Only 10 percent of rural households have a bank account, only 6 percent save formally, and only 4 percent receive credit from a financial institution. Rural residents instead rely heavily on informal credit sources to fill the gap. In combination with the significant degree of informality in financial services, an MFI crisis has led to consumer mistrust in what would have been a more prevalent form of formal finance.

42. Mobile money has made a positive impact on rural households, allowing many financially excluded households an entry point into the financial sector. Mobile money has allowed many households to access bank accounts, becoming financially included for the first time. Although mobile money has so far granted rural households mostly transactional services, it has the potential to open the door to a broader set of products, especially if MNOs and other providers partner together.

43. Three categories of rural households can be identified, based on their financial needs, credit access, and participation in specific agricultural value chains. As noted above, rural households can be categorized according to their size and value chain participation:

- Subsistence farmers and small producers in unstructured value chains: Access to finance remains constrained for these households by their small size, the unstructured nature of the agricultural value chains in which they are involved, and the limited presence of financial sector providers.
- **Producers participating in structured/semistructured value chains:** Value chain financing, in particular for the cotton value chains, has proven to be a valuable instrument in providing a number of households with access to finance. Unfortunately, only a limited number of value chains are structured in Mali, which limits the potential for value chain financing to be used to channel credit.
- Large, commercial producers: A small fraction of larger rural households have access to some form of financing or could do so if supported. Even for these households, however, credit access remains complicated, since banks perceive agriculture to be risky and the tenure of credit is usually short-term.

44. Improving financial access for each of the categories of rural households requires a targeted strategy. Recommendations are summarized across the following three technical directions:

- a. Direction 1: Leverage digital financial services as an entry point for smaller households into the financial sector and to provide them with direct financing of specific durable assets (such as solar systems for energy). While the majority of smaller/subsistence households are unlikely in the short term to be creditworthy and to obtain credit from a traditional financial sector provider, mobile money and DFS providers can serve as a potential entry point. Developing dedicated mobile products and services tailored to rural residents, who are less well educated and less well off, will be a prerequisite to expanding access. It will be important for the regulatory framework, therefore, to accommodate flexibility in product origination. DFS could be leveraged in multiple ways: (i) MNOs and DFS providers could support foster the digitization of farmer payments—to reduce the cost and risks of delivery, but also to help individual farmers to establish a digital footprint, which would open the door to the provision of credit in the future; (ii) grants, subsidies, and other government programs could be channeled, where possible, through DFS to foster financial inclusion and provide households with a stable financial flow, which could be used by households to "collateralize" their credit applications; and (iii) DFS have proven to be useful in delivering credit specific assets to rural households and farmers, through dedicated PAYG mechanisms where borrowers repay the assets on an installment basis (Box 28).
- b. Direction 2: Support the strengthening of key agricultural value chains to leverage them for the provision of credit to the rural sector. Interventions in the real sector could indirectly support the provision of credit in agriculture. Well-structured value chains provide a reliable channel for financial institutions to provide credit indirectly to large numbers of small and medium-sized farms. While banks are unlikely to be a provider of choice for smaller producers, banks can—through a competent aggregator—structure financing and other services to a pool of farmers in a cost-effective manner and with an appropriate allocation of risk. Malian banks are doing this already in the cotton sector. Priority should thus be placed on structuring interventions to strengthen other important value chains (such as rice, grains/animal feed, horticulture crops, and livestock) so that, in the future, banks and other institutions can leverage them to provide financing. Complementary interventions could be put in place to increase value chain efficiency by digitizing payments to farmers, with multiple benefits. For banks, this would reduce the costs and risks associated with distributing large sums of cash at the end of production cycle. For enterprises,

it would make payments more secure, and for farmers, it would help create the "digital" footprint mentioned above, which could be leveraged to formally enter the financial market. Wellestablished value chains in the cereals sector could also form the basis for establishing mechanism a financing mechanism in the form of warehouse receipts, which afford farmers the ability to use securely stored commodities as collateral for post-harvest loans and more flexibility in timing their crop sales to coincide with times when prices on local markets are more competitive.

c. Direction 3: Foster the expansion of formal financial services to the rural sector by providing support for rural presence, extending long-term financial resources, and providing credit enhancement schemes. Banks and MFIs are already providing credit to farmers and agricultural producers/processors. Supporting the current providers of financial services in rural areas should be a priority. This could take several forms, including measures to increase the presence of financial service providers in rural areas and to facilitate customer assessment and monitoring, which would in turn be expected to increase access to services. Despite the recent crisis, MFIs have an important role to play in expanding access to finance to rural households. To date, however, their reach in the rural sector has been limited for several reasons (Chapter 6). Priority should thus be placed on strengthening MFIs' ability to expand their distribution channels and develop better and more appropriate products. Grants and subsidies could be offered to offset the investment costs associated with establishing new outlets in rural areas. Promoting partnerships with MNOs to bring new products and services to rural clients in a more cost-efficient manner could also be prioritized. For example, mobile money could be used to reach distant clients, like informal savings clubs, and those partnerships could be leveraged to bring those clients into the formal financial sector. Providing long-term resources to fund investments in agriculture and agribusiness, together with credit enhancement mechanisms, could be an important tool in expanding the reach of formal financial institutions.

3.9 References

- Adamopoulos and Restuccia. 2014. "The Size Distribution of Farms and International Productivity Differences." *American Economic Review* 104(6): 1667-97.
- Berhane, Guush, Stefan Dercon, Ruth Vargas Hill, and Alemayehu Seyoum Taffesse. 2015. "Formal and Informal Insurance: Experimental Evidence from Ethiopia." Paper presented at the 2015 Conference of the International Association of Agricultural Economists, Milan, August 9–14.
- Boken, V. K., G. Hoogenboom, J.H. Williams, B. Diarra, S. Dione, and G.L. Easson. 2008. "Monitoring Peanut Contamination in Mali (Africa) sing the AVHRR Satellite Data and A Crop Simulation Model." *International Journal of Remote Sensing* 29(1): 117–129.
- Diallo, Moussa Alassane. 2017. "Malian Agriculture: Subsidies Need to Be Scaled Up." Ideas for Development (May). Available at: <u>https://ideas4development.org/en/malian-agriculture-national-agricultural-development-bank-mali/</u> (accessed June 8, 2018).
- Ecofin Agency. 2018. "Cotton: Mali to become Africa's leading producer in 2017–18" (January 23). Available at: <u>https://www.ecofinagency.com/agriculture/2301-37968-cotton-mali-to-become-africa-s-leading-producer-in-2017-18</u> (accessed June 7, 2018).
- Food and Agriculture Organization of the United Nations (FAO). 2017. "Country Briefs: Mali." Global Information and Early Warning System (GIEWS) Country Briefs, October 30. Available at: <u>http://www.fao.org/giews/country-analysis/country-briefs/country.jsp?code=MLI</u> (accessed June 7, 2018).
- International Fertilizer Development Center (IFDC). 2015. "Mali Fertilizer Assessment." Muscle Shoals, AL: IFDC (December). Available at: <u>https://ifdc.org/download/15153/</u> (accessed June 8, 2018).
- Kremer, Michael, Lorenzo Casaburi, Sendhil Mullainathan and Ravindra Ramrattan. 2014. "Harnessing ICT to Increase Agricultural Production: Evidence from Kenya." Draft (March).
- Lowder, S., Skoet, J., Raney, T., 2016. The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide, World Development, Vol. 87, pp. 16-29.
- Masters et al. "Urbanization and farm size in Asia and Africa: Implications for food security and agricultural research." *Global Food Security* 2(3): 156-165.
- Observatory of Economic Complexity (OEC). 2016. International Trade Database.
- Reuters. 2015. "Mali to boost cotton subsidies in bid to hit 650,000 T target." *Reuters* (June 8). Available at: <u>https://af.reuters.com/article/maliNews/idAFL5N0YU3XV20150608</u> (accessed June 8, 2018).
- Rippey, Paul, and Kuria Wanjau. 2013. "No More Tears." *FSD Updates*, Issue 08 (September). Available at: <u>http://s3-eu-central-1.amazonaws.com/fsd-circle/wp-</u> <u>content/uploads/2013/09/30092738/13-09-16 FSD Updates SGs e-Recording issue08.pdf</u> (accessed June 11, 2018).
- Sallah, Abdou. 2017. *Review of the Livestock/Meat and Milk Value Chains and Policy Influencing Them in West Africa*. Rome: FAO and Economic Community of West African States (ECOWAS). Available at: <u>http://www.fao.org/3/a-i5275e.pdf</u> (accessed June 7, 2018).

World Bank Group (WBG). 2014. Living Standards Measurement Study (LSMS–ISA) 2014 Database.

- ------. 2015a. *Principles for Public Credit Guarantee Schemes for SMEs*. Washington, DC: World Bank. Available at: <u>http://hdl.handle.net/10986/23329</u> (accessed June 11, 2018).
- ———. 2015b. "Republic of Mali—Priorities for Ending Poverty and Boosting Shared Prosperity: Systematic Country Diagnostic." (June). Washington DC: World Bank. Available at: <u>https://doi.org/10.1596/23108</u> (accessed June 7, 2018).
- ——. 2016. "Strategies to Increase Agricultural Productivity in Mali's Drylands." Washington, DC: World Bank.
- Zander, Rauno, Calvin Miller, and Nomathemba Mhlanga. 2013. *Credit Guarantee Systems for Agriculture and Rural Enterprise Development*. Rome: FAO. Available at: <u>http://www.fao.org/docrep/017/i3123e/i3123e00.pdf</u> (accessed June 11, 2018).

Section 2 The Supply of Financial Services in Mali

Chapter 4

Mobile money and digital financial services

Nood Bol Juagy

Key findings

- Mobile money and digital financial services (DFS) have developed significantly in Mali over the past few years, building upon the high penetration rate for mobile phone use.
- Mali appears to be headed toward a mobile money revolution of the type that has occurred in many other countries across Africa.
- The volume and value of mobile money transactions have increased significantly, but firstgeneration products such as money transfers still dominate the market.
- Despite the increase in the use of mobile money services, limited competition between service providers has resulted in relatively high prices and limited innovation in product development.
- Nonetheless, a range of new products is being designed and introduced, with the market beginning to move toward more advanced uses.
- Healthy competition and a partnership model between financial institutions and mobile network operations (MNOs) could contribute to developing the market and reaching the unbanked population.
- Participation of MNOs and financial institutions in a fully interoperable payment system would contribute to market development and enhance financial inclusion.
- DFS could be an entry point to the financial sector for bottom-of-the-pyramid users, enabling them to build a history of financial transactions and thus providing the basis for access to an increasingly sophisticated range of products and services.
- Going forward, actions in three policy areas are suggested to achieve this objective:
 - Foster the demand for DFS by eliminating constraints to access and providing additional use cases to stimulate uptake. The government could digitize government payments, provide enabling infrastructure such as a digital identification system, and support interventions to improve financial literacy.
 - Enhance competition between DFS providers and create a level playing field among them to reduce costs and foster product diversification. The government could foster increased competition in the DFS market through policy actions to facilitate the entry of new mobile operators and Fintech companies and remove constraints to accessing digital infrastructure (for example, by opening up the USSD channel), while the BCEAO could foster interoperability between mobile money service providers and other financial sector institutions.
 - Create a regulatory environment that is conducive to the delivery of savings, insurance, and credit products through DFS platforms. The BCEAO could make interest caps more flexible while enhancing customer protection, encourage Fintech companies to experiment with different approaches, and facilitate the integration of DFS providers into the credit information system.

4.1 A dynamic mobile telephony sector

1. **Two mobile network operators (MNOs), Orange Mali and Malitel, compete in the mobile market in Mali, a market that shows a high level of development**. With 20.3 million SIM cards currently in use (Table 6) and a penetration rate of 112 percent of the adult population, mobile telephony is quite well developed, and many customers have SIM cards from both networks (multi-SIM effect).

Table 6: Mali's mobile telecom market breakdown

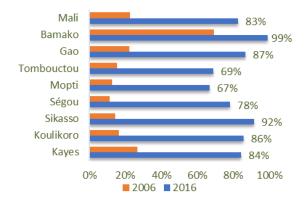
Number of active SIM cards (in million)	2014	2015	2016
Orange	12.7	12.9	13.1
Malitel	10.8	9.8	7.1
Total	23.5	22.7	20.3

Source: ARMTP 2016

2. **Orange is the market leader, and the gap between the two MNOs has increased in recent years**. Competition between the two operators shows that Orange is consolidating its market leader position; in fact, while Malitel has lost customers in recent years, Orange has continued to grow (Table 6). By the end of 2016, Orange's network covered 95 percent of Mali's population and about 46 percent of its territory. As a result, Orange's market share is now about 65 percent.

3. The mobile phone penetration rate is high, although some regional disparities remain. National household surveys show that the mobile phone penetration rate has increased significantly over the past 10 years, with 82.7 percent of households owning at least one mobile phone (INSTAT 2016). While there are significant regional disparities, mobile penetration is quite high even in the regions with the lowest rates. For example, while the mobile penetration rate stands at close to 100 percent in Bamako, it is as high as 66.8 percent in Mopti and 69 percent in Tombouctou, the regions with the lowest rates (Figure 111).

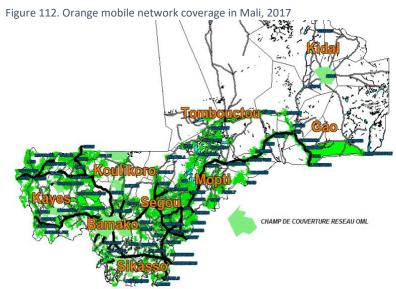
Figure 111: Household mobile phone penetration by region (% of households that have at least one mobile phone)



Source: EMOPs, team analysis.

4. **Mobile network infrastructure is relatively well established in Mali and covers over 90 percent of the population**. In particular, 3G networks covered 36.2 percent of the total population in 2017 (GSMA 2017). The market leader, Orange Mali, provides mobile data services through 2G and 3G GSM networks that cover 89 percent of the population and 91 percent of towns and villages (Figure 112).⁷¹ Orange Mali has started 4G/LTE trials in Bamako and plans to launch the service commercially in 2018.

⁷¹ Orange Mali website. Available at <u>https://www.orange.com/en/Group/Orange-in-the-world/countries/Welcome-to-Orange-Mali/Mali/Orange-Mali-networks</u> (accessed April 27, 2018)



Source: Orange Mali website

4.2 The growing mobile money market

5. **Mobile money services were launched relatively late in Mali compared to other markets in the region**. Although the BCEAO issued regulations covering the provision of mobile money services as early as 2006, these services were only introduced in Mali in 2010, when Orange launched its Orange Money wallet product. Orange Money remained the only mobile money product on the market until 2014, when Malitel launched Mobicash.

6. In 2015, the regulatory framework was updated and encourages MNOs to create specific legal entities to issue e-money. According to the mobile money regulations enacted in July 2015 (Box 29), any nonbank entity, including an MNO, that intends to issue e-money is required to establish a separate legal entity for that specific purpose. These regulations require these entities, known as *Etablissements de Monnaie Electronique* (EMEs), to be licensed by the BCEAO. The two MNOs that offer mobile money products have adopted different approaches in response to these regulations. While Orange has established an EME, known as Orange Finance Mobiles Mali, Malitel continues to offer mobile money through a partnership with banks (Box 30).

Box 29: E-Money Regulation in WAEMU

As in other WAEMU countries, in Mali, mobile money services have been developed within the context of both the regional and national regulatory framework. At the regional level, the WAEMU Central Bank, the BCEAO, retains sole authority to regulate financial services, including mobile money services and, more broadly, DFS. Thus, the regulatory framework for e-money services, including as it relates to the use of agents to provide these services, is the same across member states.

The regulatory framework for e-money services has evolved over time and is currently defined by a regional guideline, Instruction No. 008-05-2015. This instruction defines the rules governing e-money and applies to banks, MFIs, payment financial companies, and authorized e-money institutions. Any nonbank entity, including an MNO, that intends to issue emoney must create a separate legal entity (EME) that must be licensed for that specific purpose. To be licensed, the entity must comply with minimum standards on corporate governance and related matters (such as fit-and-proper standards and internal controls). The EME must be dedicated solely to e-money issuance.

Issuers are required to deposit funds received from e-money clients promptly in dedicated accounts at one or more banks or MFIs. While no trust, escrow, or similar structure is required, the money float must be identified separately in the accounts of the issuer and depository institution, with the total value held by each issuer being at least equal to the value of outstanding e-money at all times. The issuer must place at least 75 percent of the value of outstanding e-money in site/demand deposits, with the rest in specified types of investments.

EMEs are not permitted to issue e-money as credit, nor are they permitted to pay interest on the e-money float. This does not prevent banks and MFIs from linking clients' e-money accounts to their other accounts, including credit or savings accounts.

E-money accounts are subject to reduced customer due diligence requirements, but they are also subject to quantitative limits on the value of e-money holdings per client. The maximum value e-money balance with a particular issuer is set at FCFA 2 million (about US\$ 3,370), with a maximum monthly value of FCFA 10 million (about US\$ 16,860) to recharge the balance across all institutions. The 2015 e-money guideline increased the threshold value of transactions not requiring user identification from FCFA 10,000 (about US\$ 17) per transaction and FCFA 100,000 (about US\$ 168) per account to FCFA 200,000 (US\$ 337) for all transactions per month for an account. It is possible to open an account without presenting valid identification documents if the value of all transactions remains below this monthly threshold.

The e-money instruction regulates the use of agents for the provision of mobile money services, providing for a twotier system of primary agents (distributors) and retail-level subagents (*sous-distributors*). According to this instruction, retailers and other businesses (registered companies or individuals), MFIs, other nonbank financial institutions, and post offices are permitted to serve as primary agents. These agents may serve customers through their retail outlets and/or provide such services through subagents, which must be registered businesses (including individuals and companies). The instruction permits these subagents to offer a limited range of services, including marketing, sales, and the provision of services related to e-money, including signing up new clients for e-money accounts, cash-in and cash-out services, and payment services. Exclusive agency agreements that require an agent to serve a single issuer exclusively are prohibited. The issuer (principal) remains legally responsible to its clients and third parties for all of the services contracted out through its agents, and for the agents' liquidity and due diligence. Issuers thus bear primary responsibility for supervising their agent networks, with the BCEAO fulfilling higher-level oversight and inspection functions. MNOs have been required to deploy their agent networks in the context of these rules and have faced difficulties in finding qualified individuals or companies in rural areas who meet the requirement that subagents be a legally registered commercial entity.

Source: The description of the regulatory framework in this chapter is based largely on Meagher (2017) and CGAP (2016).

Box 30: Mobile Money Providers

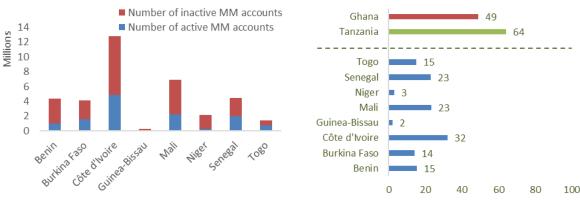
Orange belongs to the French Orange Group. This group is the leading MNO player in WAEMU, with a presence in six of the eight countries in the region (Mali, Côte d'Ivoire, Burkina Faso, Guinea Bissau, Senegal, and Niger). Under the 2015 regulation on e-money, Orange incorporated a separate legal entity, an EME known as Orange Finance Mobiles Mali. In early 2016, this entity applied for and was granted an e-money issuer license. In addition to issuing e-money, Orange Finance Mobiles Mali also manages the development of new mobile money products and services. However, the agent network and technical platform remain under the management of the mobile money unit hosted at the MNO. Orange Money has entered into partnership with several banks in Mali, including BICIM, Ecobank, and Banque Atlantique, with which it deposits the e-money float.

Malitel is held by a Morocco Telephone Group (51 percent), the government (20 percent), and a diverse range of shareholders. The Morocco Telephone Group also has subsidiaries in Mauritania, Burkina Faso, and Gabon. Mobicash, the unit in charge of the mobile money business, is managed directly by the telecom operator. Since Malitel has not yet established an EME, it continues to operate in partnership with the Mali Development Bank, which acts as the e-money issuer and fulfils regulatory compliance obligations, while the MNO manages the distribution of e-money and product development.

7. Mali's mobile money market has expanded significantly over the past few years, catching up with the most developed markets in the region. The rate of uptake of mobile money in Mali remained relatively low until 2013. Since then, its penetration has accelerated significantly. This is due to a number of factors, including Orange's increased investment in the mobile money sector and the entry of a new competitor in the market. As discussed in Chapter 1, the deteriorating security situation in 2012 was another factor driving the uptake, with a number of NGOs and other users leveraging mobile money to transact social payments and thereby circumvent the constraints created by the conflict. By the end of 2016, there were 73 mobile money accounts per 100 adults in Mali, of which about one-third are active. As a result, in WAEMU, Mali is exceeded only by Côte d'Ivoire in terms of the penetration rate and absolute number of opened and active mobile money accounts (Figure 113 and Figure 114).



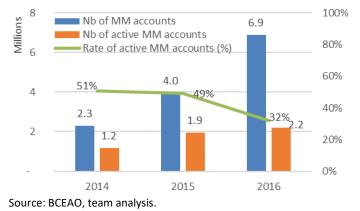
Figure 114: Mobile money penetration in SSA (number of active mobile money accounts per 100 adults, 2016)



Sources: BCEAO; Central Banks of Tanzania, Kenya, and Ghana; team analysis.

8. **Despite the dramatic increase in the number of new mobile money accounts opened, a significant proportion of these accounts remain inactive.**⁷² With the rapid increase in the number of accounts, the proportion of active accounts fell significantly in the period from 2015 to 2016. During this period, while almost 3 million new accounts were opened, the total number of active accounts increased by a mere 200,000 (Figure 115).⁷³ In 2016, only 32 percent of the accounts were active, and a high proportion of these were held by new customers who had never used their accounts to conduct transactions.





9. The total value of mobile money transactions increased significantly as well, reaching about one-quarter of GDP. The increasing importance of mobile money is apparent from the sustained increase in the total value of mobile money transactions between 2010 and 2016. Such transactions reached FCFA 2.2 trillion (US\$ 3.7 billion) in 2016, equivalent to 26 percent of GDP. This is the second highest level in WAEMU, after Burkina Faso (33.6 percent), and comparable to the level in more developed mobile money markets a few years back (Figure 116).

⁷² Active accounts are those that have performed at least one transaction in the past 90 days.

⁷³ In addition, it is reported that Lemonway accounts (a money transfer services provider) are counted in the total number of accounts in 2016 but are all now inactive after the cessation of Lemonway activities in Mali, so this increases the inactive rate artificially.

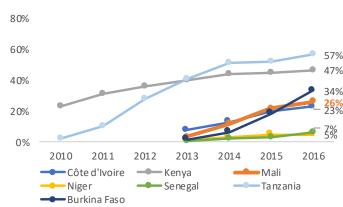


Figure 116: Trends in mobile money payments, cross-country comparison (mobile money transaction value as % of GDP) 100%

Source: FAS, Central Bank of Tanzania, team analysis.

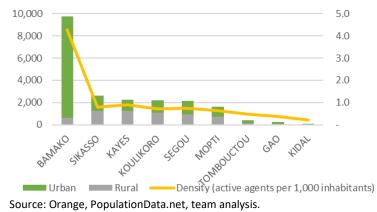
10. Both Orange and Malitel deploy a large network of agents, although the number deployed by Orange is much greater. At the end of 2016, there were more than 26,000 active mobile money agents operating in Mali (against a total of 44,000 registered mobile money agents). With this number, Mali has the largest number of agents and the highest penetration rate (4.7 agents per 1,000 adults) among WAEMU countries. Active Orange Money agents represented almost 80 percent of the total (Figure 117). According to WAEMU regulations (Box 29), exclusivity agreements are prohibited and thus agents are permitted to serve multiple providers.





11. **Despite Mali's high agent penetration rate, regional disparities are evident**. In particular, mobile money service providers report that reaching customers in remote rural areas remains difficult. The limited presence of financial institutions, limited access to electricity, constraints on physical access, and the poor security situation in rural and remote areas make liquidity management difficult for agents. These factors thus limit mobile money penetration in a number of regions, particularly in the north of the country (Figure 118).

Figure 118. Orange Money agents' regional concentration (number of Orange Money active agents, 2017)



4.3 Mobile money and DFS products and services

12. While mobile money offerings are still dominated by first-generation products, innovative products are being developed and introduced. Both the decline in the growth of active users and the relatively slow growth in the volume of transactions over the past year (Figure 116) indicate the need for mobile money service providers to offer consumers a more diverse range of products. In particular, there is a need for a more diversified range of products that meet the specific needs of particular client segments.

13. The vast majority of mobile money transactions involve domestic remittances and airtime sales, and relatively low amounts remain in electronic form, although this may be changing. As of December 2016, almost the entire total value of mobile money transactions consisted of either cash-in/cash-out (CICO) transactions (64 percent) or person-to-person (P2P) transfers (29 percent). While airtime top-ups constituted almost one-third of the total number of mobile money transactions, these transactions accounted for only around 2 percent of the total value.

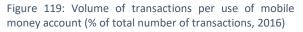
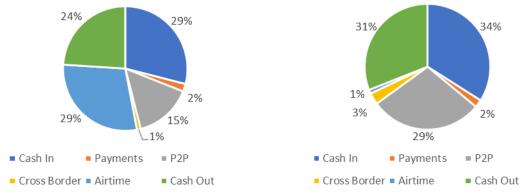


Figure 120: Value of transactions per use of mobile money account (% of total value of transactions, 2016)



Source: BCEAO, team analysis.

14. The majority of mobile money transactions involve transfers between individuals, and the total value of such transactions has grown dramatically over recent years. Between 2014 and 2016, the total value of funds transferred domestically between individuals nearly tripled from FCFA 217 billion (about US\$ 366 million) to FCFA 630 billion (about US \$1 billion). In Mali, one factor driving the use of mobile money for P2P transfers is the persistently poor security situation. At the same time, the strong correlation between the absolute value of funds cashed in, remitted, and cashed out means that the vast majority of funds are deposited solely for the purpose of making a remittance, with the funds withdrawn as soon as they have been received.

15. The relatively high cost of using mobile money services for cash-in/cash-out operations appears to be a constraint on the development of the market. Despite growth in the use of mobile money to transfer funds, the cost of using mobile money services for CICO transactions remains relatively high compared to other channels. Indeed, it has been reported that well-organized informal channels that utilize networks of tradespeople continue to play a significant role in the payment of remittances, with reports that these channels may be cheaper than mobile money services. In fact, for example, the cost of a P2P transfer of US\$ 20 in value costs in Mali almost twice as much as the lowest cost in other WAEMU countries, and four times higher than the cost in Kenya (Figure 121, Table A-6). The high cost of establishing an extensive agent network may be one factor, but the limited level of competition may also have contributed to the high cost of mobile money transfers in Mali.

Figure 121: Total cost of P2P mobile money transfers, cross-country comparison⁷⁴ (equivalent US\$ 20, % of transaction amount, including cash-out costs, 2017)



Source: Rates displayed on providers' websites, team analysis.

16. While the use of mobile money services for merchant payments in Mali is still at an early stage of development, the total value of such transactions has increased significantly. Merchant payments can take various forms, including, for smaller informal businesses, a P2P transfer to the individual account of the merchant. Given the regulatory limits on the total value of transactions to individual accounts, however, larger and more structured businesses may prefer to hold dedicated accounts designed for merchants. The total value of payments to merchants transacted through mobile channels increased by 154 percent between 2014 and 2015,⁷⁵ but this value still represents only around 2 percent of the total value of all mobile money transactions. Nonetheless, it indicates that users are at least starting to utilize mobile money as a means of transacting payments when possible.

17. Mobile money service providers are working to increase access to point-of-sale networks and to use new technologies to facilitate merchant transactions. At present, the number of merchant acceptors is still low, at 921 nationwide. To facilitate an uptake in mobile money transactions in the retail space, Orange is considering adopting the near-field communication technology being used in Côte d'Ivoire and elsewhere. Even with the adoption of such technologies, however, only registered businesses will qualify as merchant acceptors. This naturally limits the number of businesses that will be able to participate, due to the high administrative and financial costs involved in registering a business officially, as the registration requires a minimum share capital of FCFA 1 million (US\$ 1,700) and notary fees of FCFA 250,000 (US\$ 420) (Chapter 2).

18. From a costing perspective, the market for the use of mobile money for merchant payments appears to be competitive in Mali. Customers could benefit from reduced costs and the increased convenience of being able to pay bills directly through their mobile money accounts, rather than having to withdraw cash once they receive funds through these accounts to pay these bills. In fact, the cost of cashing out received funds is more than three times the cost of transacting a payment for an amount up to a value of US\$ 20 (about FCFA 11,860) (Figure 122). Mali is more competitive in this respect than on cash-out transactions (Figure 123).

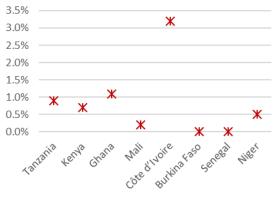
⁷⁴ The calculation is based on the average cost of a mix of providers in a sample of countries as follows: Tigo and M-Pesa in Tanzania; M-Pesa, Airtel, and Equitel in Kenya; Tigo and MTN in Ghana; Orange and Malitel in Mali; Orange, MTN, and Moov in Côte d'Ivoire; Orange and Telmob in Burkina Faso; Orange in Senegal; and Airtel in Niger.

⁷⁵ Bill and salary payments are included in these transactions.

Figure 122: Orange Money transaction (US\$ 20 equivalent), cash-out versus bill pay via mobile money 2017

1000 800 600 400 200 0 Cash out Bill pay Fees (in FCFA) Fees as percentage of transaction amount

Figure 123: P2P transfer fee comparison (% of transaction value, excluding cash-out costs, 2017)



Source: Orange website, team analysis.

19. In Mali, despite the high level of interest from MNOs, systems for the digitization of P2G and G2P payments are still at early stages of development. So far, public entities have not demonstrated a strong interest in utilizing electronic money for government payments. Discussions are ongoing, however, between Orange and the *Institut National de Prévoyance Sociale* (INPS), the public entity responsible for the payment of pensions. Given the poor security situation in some parts of the country, the use of cash for such payments may be problematic; some dramatic experiences (robbery and theft) have pushed INPS to consider the digitalization of pension payments. The tax department may be interested in these systems for similar reasons. While the digitization of payments for the purchase of commodities and inputs in agriculture value chains (such as cotton, rice, and peanuts) has not been prioritized by MNOs in the short term, this could create excellent opportunities to increase the use of mobile money services among farmers and the rural population more generally.

4.4 Limited competition in the mobile money and DFS space

20. With the increasing dominance of a single operator in the mobile money market, there is only a limited level of competition. While both Malitel and Orange offer mobile money services, the market is dominated by the latter. In fact, until recently, Malitel has struggled to expand Mobicash due to limitations in the technical platform. Following its recent adoption of new technology, however, Malitel aims to offer a wider range of services, possibly expanding beyond the purchase of airtime and money transfers to include merchant payments and cross-border money transfers within WAEMU (Table A-7).

21. Apart from the two MNOs, few other DFS providers exist and collectively control only a tiny fraction of the market. In 2013, Lemonway, a French payment services provider, commenced operations in Mali by attempting to offer an e-wallet product with the same kind of product range as existing providers (transfers, bill payments, airtime purchase) and by establishing an agent network, although it achieved only limited success and appears to have closed operations.⁷⁶ WARI, an over-the-counter (OTC) provider that is based in Senegal and operates throughout the region, has been present in the market since the end of 2015, although with a limited footprint (Box 31). In addition, a number of banks have recently introduced digital products to compete with MNOs in the area of money transfers and payments.

⁷⁶ It has not been possible to find any representative of Lemonway in Mali and points of service have been closed.

Box 31: What is an Over-the-Counter Provider?

The term "OTC provider" refers to an operator that interacts directly with customers to deliver fund transfer and bill payment services, even though this operator is legally a subagent of a financial institution. Transactions are defined as OTC if at least one end of the transaction is conducted without involving the wallet of the user, with either the sender or the receiver conducting the transaction over the counter at an authorized provider or agent, and not involving any bank or e-money account belonging to either the sender or recipient. In the case of WARI, neither the sender nor the receiver uses an account. In some markets outside Mali, however, WARI has developed a prepaid card product for payments, in partnership with banks.

A BCEAO instruction⁷⁷ issued in 2015 outlines the regulatory framework for OTC transactions, which are defined as rapid funds transfers. The instruction authorizes banks, nonbank financial institutions, and MFIs to use retail agents (subagents) to transact real-time transfers performed over the counter at an authorized provider or agent, without involving a bank or e-money account held by either the sender or recipient. These agents are prohibited from collecting funds for any purpose other than to conduct the OTC transfer (for example, deposits) unless the agent is a registered MFI. Again, exclusive agency relationships are prohibited. The financial institution is the principal, taking full responsibility for the acts of the agents.

22. One bank in particular, Ecobank, appears to be positioning itself to compete with mobile financial service providers through the launch of a group-wide mobile banking platform and introduction of the Xpress account, which can be opened directly from an application on a mobile phone. In 2017, in a bid to compete with mobile money service providers, Ecobank launched its Xpress account product. Ecobank received authorization from the BCEAO and the telecom regulator (*Autorité Malienne de Régulation des Télécommunications, des Technologies de l'Information et de la Poste,* AMRTP) to enable customers to open Xpress accounts without directly providing proof of their identity, but rather based on the identification documents presented by the customers to purchase their SIM cards. Xpress accounts are subject to the same maximum threshold limit of FCFA 200,000 (approximately US\$ 337) for the total value of monthly transactions, as applies to nonidentified emoney accounts. Funds can be deposited into these accounts through any Ecobank branch, and Ecobank has committed to establishing a network of subagents. Funds can be withdrawn at any Ecobank agency and ATM without a card. It is possible to use this account to send and receive funds from other Xpress accounts, and to make payments.

23. Ecobank Xpress accounts are targeted at individuals who are currently unbanked, including existing customers of mobile money service providers. It is expected that Ecobank will offer a full suite of products and services through these accounts. Since the launch of Ecobank's mobile application in April 2017, 25,000 Xpress accounts have been opened, 90 percent of which have been opened by those who were not previously clients of Ecobank. Value-added services—including services to facilitate payments for utilities, government payments, and merchant payments at scale—are gradually being introduced. The bank is conducting discussions with the telecom regulator, AMRTP, and MNOs to enable accounts to be set up and operated using the USSD channel,⁷⁸ which would make these accounts accessible from a basic mobile phone—used in particular by low-income people. Ecobank accounts, including Xpress accounts, can already be linked to Orange mobile money accounts, with plans to enable linkages with Mobicash accounts in the near future. In addition, Ecobank's product includes a QR code-based merchant payment function powered by MasterCard's MasterPass. Currently, 400 merchants throughout Mali have access to this QR code system.

24. BNDA has also launched a mobile banking platform that is accessible through the SMS channel from any type of mobile phone. Launched in March 2017, this facility enables existing clients to access a limited range of services, including balance inquiries, mini-statements, and transfers between accounts. In a later phase, BNDA expects to build an agent network to facilitate CICO transactions. BNDA initially expected to use its current Western Union and MoneyGram subagents to

⁷⁷ BCEAO, Instruction No. 013–11–2015 relative aux modalités d'exercice de l'activité de transfert rapide d'argent en qualité de sous-agent au sein de l'UEMOA.

⁷⁸ A communications protocol that can be used for WAP browsing, prepaid callback service, mobile-money services, locationbased content services, menu-based information services, and as part of configuring the phone on the network.

facilitate CICO transactions, but the BCEAO has required that they partner with approved entities which means, in the WAEMU regulatory context, with intermediaries in banking operations (*intermédiaires en opérations de banque*, or IOB) (Box 32). It has been reported that use of the SMS channel is not always satisfactory, with delays occurring between sending requests and the completion of transfer requests. The decision to use this channel was made by default, owing to the inability to use the USSD channel.

Box 32: Agent Banking Regulations

In WAEMU, the rules for agent banking are highly restrictive for banks, with no explicit framework for MFIs. Banks are required to use *Intermédiaires en Opérations de Banque* (IOB), according to Article 105 of the Banking Law (*Loi-cadre portant réglementation bancaire*, BCEAO (and by a BCEAO instruction issued in 2010 (Instruction No. 015-12/2010/RB *fixant les conditions d'exercice des activités d'intermédiaires en opérations de banque*). This instruction requires each prospective IOB to obtain separate, prior approval from the Ministry of Finance, with the advice of the BCEAO. Each IOB is subject to a fit-and-proper test, a required financial guarantee (to be provided by a principal bank), and regular reporting requirements. Banks are responsible for the direct supervision of IOBs and for maintaining an updated list of IOBs with the central bank. Technical, operational, and governance standards for IOBs are not explicitly defined in the BCEAO instruction.

This structure has not been well designed to support agent banking in the context of DFS, making the establishment of large agent networks costly and difficult. Indeed, the IOB model (originally derived from French commercial law) was never intended as an instrument to expand financial inclusion. It is a business niche for a middle man (*intermédiaire*) operating within the traditional banking sector and on its own account, comparable to an insurance agency. Thus, from the introduction of the rules in 2010 until early 2016, only five IOBs had been approved and registered by the BCEAO. Furthermore, in contrast to the e-money instruction, the IOB instruction is silent on whether IOBs can contract out functions to subagents, which implies that this practice is not permitted. Through the FISF project in Côte d'Ivoire, the World Bank has formulated recommendations to revise the IOB regulation and submitted these to the BCEAO; this is also a recommendation from the DFS regulatory diagnostic conducted by CGAP (2016).

In addition, the issue of MFIs providing credit and savings services through agents has also not been addressed directly. Article 36 of the Microfinance Law (*Loi portant réglementation des systèmes financiers décentralisés*, BCEAO) is also silent on the use of agents, but recognizes that MFIs need to have the discretion to enter into arrangements to better serve their clients. Conditions and standards for MFI agent services are not defined in the legislation, however. In practice, the BCEAO has the authority to permit MFIs to use agents for core financial services on a case-by-case basis. The BCEAO is currently preparing a regulation to address this gap in the microfinance law.

25. The limited level of interoperability between different modalities and institutions hampers competition in the mobile money space. Within WAEMU, DFS tend to operate within closed loops, with each loop involving distinct operating standards and limited interoperability between loops. The level of interoperability is increasing, however. In particular, MNOs have achieved varying degrees of platform-level interoperability to facilitate cross-border remittances through their mobile money services. Orange provides this service in Mali, although this facility currently enables only Orange Money customers in other countries to send and receive funds. There has been some movement toward the establishment of account linkages between mobile money service providers and financial institutions. In Mali, Orange Money has established bilateral agreements with three banks, and discussions are ongoing with MFIs. However, in general, banks see mobile money service providers as competitors and are thus not particularly keen to develop partnerships. While there has been some interest on the part of MFIs to establish linkages between accounts held at their institutions and mobile money accounts, technical constraints related to weaknesses in their management information systems typically limit the possibility of integration with MNO platforms.

26. The participation of mobile money service providers in the regional "switch" would allow EMEs to offer interoperable payment services and would enhance competition with financial institutions. In 2003, the GIM-UEMOA (*Groupement interbancaire monétique de l'Union économique et monétaire ouest-africaine*) was created to act as a regional "switch," allowing registered financial institutions to offer their clients cards that can be used to access services at other participating financial institutions across the WAEMU zone. Since 2013, a GIM Prepaid solution has been available to enable GIM members to offer prepaid Visa and/or MasterCard cards to individuals and enterprises, including nonbanked clientele. The cards enable users to conduct top-ups, transfers between cards,

withdrawals, cash advances, purchases, and payments from its network of interconnected service points and merchants that accept GIM, Visa, or MasterCard payments. GIM also offers its members payment solutions, including GIM-Mobile, a product that enables clients of financial institutions to access and conduct transactions on their bank accounts from their mobile phone.

27. **The BCEAO has developed a roadmap for interoperability**. Orange Finance Mobiles Mali is one of the few EMEs in the region that is a member of GIM-UEMOA. Despite its membership, however, mobile payments are not yet interoperable with the rest of the payment system in Mali. The project⁷⁹ was officially launched in June 2017 and several actions have been planned, including an assessment of the readiness of each market and training sessions for all stakeholders involved.

28. The lack of fair and reliable access to mobile communications channels may be a constraint on competition in Mali's digital financial services market. Access to the USSD channel—the communication channel commonly used by DFS providers—is a second important competition issue in Mali. The MNOs control the consumer SIM card, together with the data related to each mobile user's identity and to communication using that SIM card, including the USSD channel. Currently, in Mali, there is no rule requiring MNOs to open access to the USSD channel to external providers, which may hamper competition. AMRTP reports that this issue is currently under discussion with MNOs. In addition, in mid-September, AMRTP launched a study on mobile money and digital financial inclusion, which included an examination of issues related to fair access to USSD channels. This study is expected to produce recommendations related to this issue.

29. **A key constraint to the deployment of digital products is the absence of a functioning e**signature certification system. According to two pieces of legislation,⁸⁰ Mali's e-commerce authority, the telecommunications regulator (AMRTP), has jurisdiction over electronic signatures. In principle, both regional and national legislation provide for transactions to be conducted entirely through digital means once an electronic signature has been certified. In 2016, Mali adopted a national regulatory framework for electronic transactions, including rules for e-signatures, but no approved certification entity has been established. At the regional level, the *Système Ouest Africain d'Accréditation*, while formally established in 2005, is not yet operational. In practice, therefore, it is not yet possible to open accounts or to sign contracts entirely through an electronic process.

Box 33: Product Innovation—Leveraging Mobile Money to Deliver Solar Energy

There is great potential to develop products to support the provision of off-grid electricity using PAYG models facilitated through mobile money services in rural areas. Outside Bamako, Mali's electricity penetration rate stands at around 40 percent. Thus, there are significant opportunities for the deployment of off-grid electricity, the provision of which would contribute to improving the life of the rural population. Many companies have developed high-quality, solar-powered solutions that are intended to meet the needs of the energy poor and are leveraging digital finance, especially mobile money payment systems, to facilitate the sale of electricity on a PAYG basis through small, user-defined installments. PAYG solar photovoltaic products using digitized payments would be a means to diversify the range of available solutions while promoting uptake in the use of mobile money in rural areas. Similar solutions can be explored in other areas—for example, facilitating the use of drinking water pumps.

4.5 Leveraging mobile channel for deposit and credit

30. **Mobile money service providers are beginning to diversify into savings and credit products**. At present, BCEAO regulations require nonbank e-money issuers (EMEs) to partner with a licensed financial institution to provide savings, insurance, or credit products. A market for these products has begun to develop in Mali, with a number of interesting experiences pointing to their potential.

31. Soro Yiriwaso has pioneered the use of Orange Money accounts to digitize savings and credit groups' activities. Soro Yiriwaso is a Malian MFI that specializes in facilitating the establishment and

⁷⁹ The project benefits from implementation support from the African Development Bank and the Bill & Melinda Gates Foundation.

⁸⁰ The 2016-011/6 mai 2016 law « Loi portant sur les régles applicables aux moyens, modalités, prestations et systèmes de cryptologie au Mali » and the 2016-012/6 mai 2016 law on « Transactions, Echanges et Services Electroniques. »

management of group savings and credit systems. With technical support from Mercy Corps, it has implemented a project to use Orange Money services in remote rural areas to meet the needs of underserved populations, particularly poor, rural women. Through this pilot project, Soro Yiriwaso has established a savings product through which clients can save for a well-defined goal and period. The client and any family members who are linked to the account can make a deposit through a mobile phone at any time. Similarly, Soro Yiriwaso has assisted 168 savings and credit groups in establishing an Orange Money account to receive group credits (named YIRIWA), which are then repaid through the Orange from a telephone belonging to the group. Mercy Corps highlights key lessons learned from this pilot: (i) the difficulty of identifying the appropriate business model for conducting these transactions, due to the high cost of cash-outs, which need to be affordable for low-income people in a context where opportunities to use mobile money for payments are still limited; and (ii) the need to demonstrate that this model can be commercially viable.

32. **Orange Money and NSIA Assurance have entered into a partnership to offer a savings product, known as "Sini Tono," that is accessible through mobile money accounts**. A Sini Tono savings account is a separate account from the mobile money account and accessible through the USSD menu of Orange Money. In its original design, a subscription to Sini Tono required an initial minimum deposit of FCFA 3,000 (US\$ 5), after which deposits of any frequency and amount would be free of charge with a minimum of FCFA 100 (US\$ 0.17). This savings account was remunerated at an annual rate of 2 percent. After reaching a defined amount of savings (fixed at FCFA 40,000), the account owner would earn benefits such as life insurance and financial support in the case of childbirth complications. This product was unsuccessful, however, due mainly to a lack of appropriate marketing and insufficient engagement on the part of the partners. It is intended that the product will be redesigned. Other microinsurance products exist, but do not utilize mobile money channels.

33. **Première Agence de Microfinance**, a microfinance institution, has entered into a partnership to develop and introduce a digital nano-credit product. This will be a pioneering experience in the region, where such products have not yet been deployed. A pilot is expected to be launched shortly. This type of partnership is not easy to establish, as it requires a shared vision regarding financial inclusion and agreement on a pricing model. In addition, it is difficult to determine the appropriate business model due to the maximum interest rate cap of 2 percent per month, implemented to prevent usury.

34. At present, interest rates on credit provided by MFIs are capped by regulation to 24 percent per year, while the cap for banks is 15 percent.⁸¹ This has been identified as a potential constraint on the development of innovative digital credit products to the unbanked, for which higher rates may be appropriate (Box 47). The delivery of automated low-value, very-short-term digital credits using scoring models would need to involve a number of stakeholders (including financial institutions, MNOs, and Fintech). At least in the initial period, it would almost certainly involve a high level of NPLs, which would justify a higher interest rate than on traditional loans. As the M-Shwari experience in Kenya shows, however, these digital credits have significant potential to foster higher levels of financial inclusion. Yet, with the imposition of inflexible interest rate caps, it is difficult for the partners involved in the design of such products to develop a sustainable business model.

4.6 Suggested actions to deepen financial inclusion through DFS

35. In Mali, the introduction of mobile money services and the dramatic uptake in their use has had a major positive impact recently in increasing financial inclusion. While the mobile money revolution has only just begun, its effects on the financial sector landscape are already evident. The market for mobile money services in Mali is already the second largest in West Africa in terms of both the number of subscribers and the total value of transactions, and this market is continuing to expand rapidly. With the growing availability of mobile money services, a significant proportion of the

⁸¹ Avis n° 003-08-2013 aux établissements de crédit et aux systèmes financiers décentralisés, relatif à la fixation du taux de l'usure dans les États membres de l'UEMOA, BCEAO.

population that has not previously had access to financial services is now financially included, a particularly significant development given the constraints imposed on the physical movement of funds by the problematic security situation.

36. If supported with appropriate policies and interventions, digital financial services could be leveraged to further expand access and deepen financial inclusion. While the DFS market is driven by a set of active private sector players, policymakers could play an important role by paving the way for the market to develop fully. The public sector could play a critical policy role through regulatory improvements at the national and regional level (via the BCEAO's role as financial sector regulator), both in the financial sector and in the telecommunications market. The public sector could also implement concrete actions to stimulate market developments by supporting the demand for digital services and facilitating the use of mobile money. In particular, recommended priority actions can be grouped into three main areas:

- a. Area 1: Foster the demand for DFS by eliminating constraints on access and providing additional use cases to stimulate uptake. The government could work to remove barriers to reaching underserved segments of the population, including the large proportion of account holders who do not actively use their accounts. Failure to use accounts may be explained by a number of factors, the most significant of which is the limited range of available products and use cases, together with the complexity of the channel for people with limited literacy. To address these factors, this report makes the following recommendations:
 - i. Recommendation a.1.1: The government could support the implementation of programs to increase awareness and facilitate the use of digital accounts among those with limited levels of both general and financial literacy. In Mali, less than 40 percent of the adult population is literate, with a wide disparity between the male literacy rate (approximately 45 percent) and the female rate (approximately 22 percent). In this context, use of a digital channel may be too challenging for a significant proportion of the population, who would continue to prefer using cash. Overcoming this constraint would require innovations to encourage and facilitate first steps in usage. The government could implement financial education campaigns through the use of innovative instruments and in partnership with financial institutions and MNOs (Chapter 1, Box 7). Providers could be encouraged and supported to develop and test innovative apps, interfaces, or voice channels in local languages, as these may have the potential to overcome constraints related to illiteracy. With an improved understanding of the benefits associated with financial products, final-mile customers will gain a better understanding of their financial needs and the products that could meet these needs, while the holders of inactive accounts or those who use only basic services may progressively graduate from the use of basic products to more complex ones.
 - ii. Recommendation a.1.2: The government could roll out a digitization program for government payments and support private and public sector operators in digitizing payments in selected agricultural value chains. The digitization of government payments could have multiple benefits, the most significant of which would be to increase transaction volumes, which would in turn incentivize service providers to increase the number and availability of points of service in unserved areas. At the same time, users will be incentivized to access digital channels to receive and send payments to government, an important use case. A first step in fostering the digitization of G2P and P2G payments would be to map these payments to determine their volume, value, and frequency in order to identify those that could be prioritized for digitization and to raise the government's awareness regarding the potential of this process. Second, there would need to be organizational changes in the public entities that would be involved in the process, and their technical and other capacities would need to be upgraded. Similar changes would be required to facilitate the digitization of payments in selected agricultural value chains, such as cotton or rice, and in consumer goods distribution chains. Since many of these value chains involve private sector operators, but carry a "public good" component, the government

could play a role in facilitating the establishment of a digital ecosystem—for example, by cofinancing the rollout of points of service and other technical tools to promote uptake and enable the provision of DFS to participants, such as input credit for farmers or supply chain financing for retailers and distributors.

- Recommendation a.1.3: The government could strengthen the national ID system to facilitate iii. the identification of potential customers who are excluded because of their lack of ID documents and support the development of fully digital processes to reduce time and cost of access. While the majority of Mali's adults are in possession of ID documents, a significant minority still lack them. This makes fulfilling KYC requirements for these excluded potential customers costly and time consuming. Ensuring universal coverage of the national ID system would remove a significant constraint on reaching these customers. Additionally, given that Mali already has an extensive digital ID system, financial services providers could be allowed to access data and information from this system according to a secure and standardized protocol. This would enable these providers to verify the identity of customers and to provide financial products through digital channels, simplifying the process and reducing costs. It would be necessary to provide support to the Centre National de Traitement des Données de l'Etat Civil, which manages the system, to enable this institution to define the necessary processes and to upgrade the technical platform. It will also be necessary to operationalize the e-signature certification system. To achieve this, the telecom regulator could more clearly define the mandate of the certification entity or entities and to determine which of these entities will implement the delivery of the e-signature system and associated certificates at a reasonable cost and through a simple process.
- b. Area 2: Enhance competition between DFS providers and create a level playing field among them to reduce costs and foster product diversification. Healthy competition in the mobile market is a precondition to ensuring that innovative products are delivered to customers at affordable prices. At the same time, competition between various financial sector providers could be fostered on the basis of the quality of their products and prices, rather than their access to critical infrastructure. Actions could be taken to remove technology bottlenecks and to foster the sharing of infrastructure to allow users to benefit from full interoperability and the emergence of a capillary network of points of service.
 - i. Recommendation a.2.1: The government could encourage competition in the mobile telecommunications market by facilitating the entry of new mobile network operators. The mobile market is currently dominated by a duopoly involving Orange and Malitel. With Orange now controlling two-thirds of the mobile market, its ever-increasing market share threatens to stifle competition. In 2012, a third mobile license was awarded to Alpha Telecom,⁸² which remains inactive despite a previous announcement that it would commence operations in December 2017. The government has been considering granting a license to a fourth mobile operator since 2015, and although it announced recently that the process was gathering pace, no public operational timetable is available. Around the world, the vast majority of mobile markets consist of three or four MNOs, which contributes to vibrant competition dynamics. Mali needs to activate its third mobile operator and award a fourth mobile license as soon as possible to strengthen competition, stimulate investment, and foster freedom of choice for consumers, thus enabling them to benefit from a broader range of more affordable, innovative mobile money services.
 - ii. Recommendation a.2.2: The government could encourage open access to the USSD channel to foster the diversification of DFS offerings, including through Fintech companies. The USSD channel is most commonly used by DFS providers because it is accessible through any type of mobile phone, including the most basic models. Hence, restricted access to the USSD channel

⁸² A joint-venture between Monaco Telecom and local holding company Planor Afrique.

could constrain the development of the DFS market in Mali. This risk may increase as the market matures, with a greater number and range of players (banks, MFIs, Fintechs, and so on) endeavoring to enter the market. For this reason, the telecom regulator could facilitate a dialogue between stakeholders to extend access to the USSD channel to non-MNOs at affordable prices. Easier access to the USSD channel will help facilitate partnerships between Fintech and financial institutions and encourage them to develop a broader range of innovative digital products.

- iii. Recommendation a.2.3: The BCEAO could foster interoperability between mobile money service providers and other financial sector institutions to ensure a level playing field, facilitate use, and enable access. Providers could be encouraged to compete on the basis of the quality of their offerings, rather than on their level of access to a proprietary set of access points. To achieve this, the BCEAO and the government could prioritize and support the development and implementation of the roadmap to foster interoperability between DFS providers and financial institutions through the regional switch (GIM-UEMOA). This would create multiple benefits for users, since it would allow them to utilize a variety of access points (such as ATMs, point-of-sale terminals, and mobile kiosks), without needing to hold multiple accounts with different institutions. Interoperability would also support the establishment of partnerships between mobile money providers and other players, such as MFIs. Finally, with a fully integrated payment system, a customer's digital footprint could be fully leveraged to establish creditworthiness and for other purposes.
- c. Area 3: Create a regulatory environment conducive to the delivery of savings, insurance, and credit products through DFS platforms. DFS have been leveraged successfully to increase access to a broader suite of financial products and services, including credit products. To take full advantage of this, however, a conducive regulatory framework needs to be in place. This report makes the following recommendations:
 - i. Recommendation a.3.1: The BCEAO could make interest rate caps more flexible, while enhancing measures to protect consumers against abusive lending practices. Experiences in the delivery of automated, low-value, very-short-term digital credits using scoring models have shown that, at least in the initial period, this approach can result in a higher level of NPLs. This higher risk would in turn justify a higher interest rate than on traditional loans. The imposition of inflexible interest rate caps might hinder the development of a sustainable business model. It is recommended, therefore, that the BCEAO and the government consider introducing greater flexibility on interest rate caps to facilitate such initiatives. This would require the Ministry of Finance and the BCEAO to engage in a dialogue with stakeholders to determine acceptable interest rate levels. At the same time, as the M-Shwari experience in Kenya shows, these digital credits have significant potential to foster greater financial inclusion, but might also expose consumers to various risks. For this reason, measures to relax interest rate caps could be implemented in parallel with enhanced measures to protect consumers against unfair business practices.
 - ii. Recommendation a.3.2: The BCEAO could adopt a balanced approach to the regulation of Fintech companies to encourage experimentation with different approaches. Fintech⁸³ can play a role in the development of innovative DFS and in enhancing financial inclusion. The BCEAO could implement policies to progressively regulate and supervise such companies, while promoting their presence in the market. This can be achieved in a sequenced manner. The first step would require the BCEAO to assess the activities of current operators to better understand the key national challenges they are addressing (such as aggregating government payments and facilitating electronic settlement of taxes). The regulation and supervision of these entities

⁸³ Companies that use technology innovation to solve or enable financial services. In the digital finance ecosystem, this includes aggregators, credit scoring companies, merchant and bill payment providers, and so on.

could be introduced gradually and based on the level of perceived risk. A possible approach would be to adopt a "regulatory sandbox," or a controlled environment in which specific operators are allowed to test innovative approaches under the overall supervision of the regulator.

iii. Recommendation a.3.3. The BCEAO could facilitate the integration of DFS providers into the credit information system to fully leverage customers' digital footprint and facilitate the delivery of credit products. In parallel with measures to improve the coverage of the credit bureau (Chapter 5), measures could be implemented to integrate mobile financial sector providers into the system to ensure that credit information from these providers is included in the data collected and shared by the bureau. In particular, this could facilitate the provision of credit to smaller businesses.

4.7 References

- Autorité Malienne de Régulation des Télécommunications, des Technologies de l'Information et de la Poste (ARMTP). 2017. Observatoire des Marchés des Télécommunications et TIC au Mali.
- Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). 2014, 2015, 2016. Données sur les services financiers numériques.
- Consultative Group to Assist the Poor (CGAP). 2016. "Market System Assessment of Digital Financial Services in WAEMU." CGAP Working Paper (September). Washington, DC: CGAP. Available at: <u>http://www.cgap.org/publications/market-system-assessment-digital-financial-services-waemu</u> (accessed June 11, 2018).
- Central Intelligence Agency (CIA). 2017. "The World Fact Book: Mali." Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/ml.html (accessed June 12, 2018).
- Cook, William, and Claudia McKay. 2017. "Banking in the M-PESA Age." CGAP Working Paper (September). Washington, DC: CGAP. Available at: <u>http://www.cgap.org/publications/banking-m-pesa-age</u> (accessed June 12, 2018).
- GSMA. 2017. "The Potential of Mobile for Rural Energy Access in Mali." London: GSMA (April). Available at: <u>https://www.gsma.com/mobilefordevelopment/programme/m4dutilities/the-potential-of-mobile-for-rural-energy-access-in-mali/</u> (accessed June 11, 2018).
- International Monetary Fund (IMF). 2017. Financial Access Survey Database. Available at: <u>http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C</u> (accessed June 12, 2018).
- *Institut National de la Statistique* (National Institute of Statistics, or INSTAT). 2016. *Enquête Modulaire et Permanente auprès des Ménages* (EMOP).
- Meagher, Patrick. 2017. "Regulatory Framework for Digital Financial Services in Côte d'Ivoire: A Diagnostic Study." CGAP Working Paper (November). Washington, DC: CGAP. Available at: <u>http://www.cgap.org/publications/regulatory-framework-dfs-c%C3%B4te-d%E2%80%99ivoire</u> (accessed June 11, 2018).
- World Bank Group (WBG). 2017. World Development Indicators Database. Available at: <u>https://datacatalog.worldbank.org/dataset/world-development-indicators</u> (accessed June 4, 2018).

Chapter 5 The banking sector

10 E

Key findings

- Mali's banking sector has experienced sustained growth over the past decade, and 13 banks with a mixture of public and private ownership structures currently compete in the market.
- The consolidation and growth of the banking sector has been accompanied by an expansion of its footprint, including into rural areas.
- While banks still focus primarily on large corporate clients, they have increasingly expanded their retail and small-business customer base.
- Increased competition in the banking sector has pushed interest rate spreads down and contributed to the expansion of credit.
- Although the total value of loans now reaches 25 percent of GDP, loans remain highly concentrated. A lack of solid information related to potential clients outside the formal business sector limits further expansion, however.
- Most credit is provided to businesses in the trade and services sector, with a much smaller proportion going to manufacturing. Although agriculture contributes 41 percent of GDP, it receives only 4 percent of the total value of credit.
- With the major source of banks' funding for loans being derived from short-term deposits, most commercial credit is offered for a short tenure.
- Going forward, the banking sector's strategic priority could be to better serve the investment needs of the business sector, while deepening its customer base. Actions in three policy areas are suggested to achieve this objective:
 - Develop a supportive regulatory framework and implement policies that are conducive to expanding the banking sector's customer base to include new market segments and underserved geographical areas. This will require the BCEAO to reform its AML/CFT regulations and the agent banking framework, among other reforms.
 - Increase the resources available to financial institutions to extend credit for longer terms and to a wider range of clients. The government could reduce its dependence on bank financing to fund the deficit and consider facilitating financial institutions' access to long-term financing resources. At the regional level, it will be important for the BCEAO to complete implementation of the deposit insurance scheme, which is expected to drive an expansion in the deposit base.
 - Expand the customer base for lending by improving tools for screening borrowers and secured lending. The BCEAO could work to strengthen the quality of the data available in the credit registry and credit bureau, while the government could enact improved leasing legislation and improve the functioning of the credit guarantee scheme.

5.1 Mali's banking sector: developing rapidly and increasingly competitive

1. Over the past decade, Mali's banking sector has experienced sustained growth and deepening. The total value of banking sector assets has grown at 7 percent of GDP per year, on average, between 2009 and 2016. At the end of 2016, the asset-to-GDP ratio stood at 51.3 percent, only slightly lower than the average rate for SSA (Figure 124). Despite this growth, Mali's ratio still lags

behind that of African countries with more developed financial systems, including some within the WAEMU region.

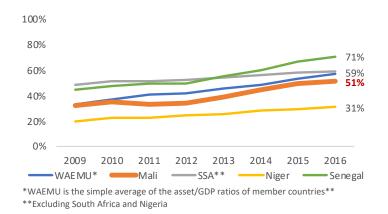


Figure 124. Mali banking sector growth over time (total banking sector assets as % of GDP)

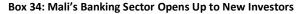
Source: IMF (2017b), team analysis.

2. The entry of new banks, together with the consolidation of a number of existing institutions, has resulted in a diversified ownership structure. In 2004, single banking license legislation was introduced for the WAEMU area. This has driven the emergence of WAEMU-based banking groups, some of which have entered into the Malian market over the past decade. Competition has also been driven by the consolidation of a number of existing institutions (Box 34). As of today, nine out of 13 banking institutions are part of African banking groups, one bank is owned by a major French group, and the state retains moderate to significant stakes in three systemically important local banks. Almost half of the banking sector's total assets are held by African banks, including some pan-African and other regional West/North African groups. The other half of the banking sector's assets are shared by the Malian government (about one-third), local investors (about 10 percent), and international investors, including development institutions (about 10 percent) (Figure 125).

Figure 125. Bank ownership structure in Mali (% of total bank capital, 2015)



Source: BCEAO, team analysis.



Over the past decade, there have been a number of changes to the banking sector's ownership structure, with increased investment from private entities, mainly African banking groups. A few examples highlight these changes:

- In 2008, the Government of Mali sold a 51 percent stake in *Banque Internationale pour le Mali* to Attijari Wafa Bank, Morocco's largest banking group.
- In 2010, *Banque Marocaine du Commerce Exterieur of Morocco* (BMCE) acquired a 35 percent stake in the Bank of Africa (BOA) Group. The BOA Group was established in Mali in 1982, with almost no external support. This investment helped to rebrand the Group's network of banks, including BOA Mali, bringing in much needed capital and banking expertise. By 2016, BMCE owned a 72 percent stake in the BOA Group.

• In 2016, the Government of Mali successfully merged the ailing *Banque de l'Habitat du Mali* with the *Banque Malienne de Solidarité*. The authorities are working on strengthening the balance sheet of the new *Banque Malienne de Solidarité* in an effort to make it attractive to potential private investors.

3. The size of banks and nonbank financial institutions varies considerably. In 2016, three tiers of banks could be identified, based on the value of their assets. The top tier consisted of four large banks of similar size, whose combined assets accounted for close to 60 percent of the sector's total. The second tier consisted of three medium-sized banks, which collectively controlled around 26 percent of the sector's assets, while the third tier included six smaller institutions, which collectively controlled the remaining 15 percent of the sector's assets (Figure 126; Table A-8). In addition to banks, the sector includes three small nonbank credit institutions: a leasing company and two guarantee funds (Table A-9). All 16 financial institutions are subject to WAEMU regional banking regulations and are supervised by the WAEMU Banking Commission (Box 35; Table A-10).

Box 35: Banking Sector Governance Body

The legal, prudential, and supervisory system for banking in Mali is governed largely at the WAEMU level, though national authorities also play a role. The main oversight bodies are:

- The WAEMU Council of Ministers, which establishes the general legal and regulatory framework and is the body of appeal for decisions related to winding up credit institutions.
- The BCEAO, which establishes monetary policy and supports the supervision of the banking sector through its eight national directorates. It also oversees payments systems and determines accounting and credit policies applicable to banks.
- The WAMU Banking Commission, which supervises credit institutions and has the power to impose sanctions in cases of noncompliance with directives and to place institutions under temporary administration. With the Ministry of Finance, the Banking Commission approves the granting of banking licenses.
- Mali's national Ministry of Finance, which has the power to issue and withdraw banking licenses on the basis of recommendations issued by the BCEAO and the Banking Commission.

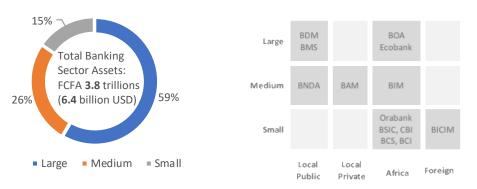


Figure 126. Banking sector assets according to bank size (% of total banking sector assets, 2015)

Source: BCEAO, team analysis.

4. **Mali's banking sector has significantly expanded its branch network, driven by competition for new customers**. In 2006, there were a total of 80 bank branches operating in Mali. Within 10 years, this figure had reached 353, resulting in a significant increase in the number of branches per 100,000 adults from 0.7 to 3.8.

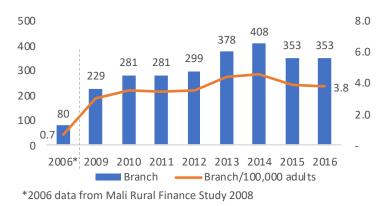
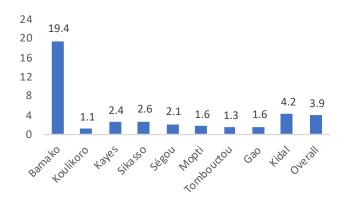


Figure 127. Bank branch penetration over time (number of commercial bank branches and branches per 100,000 adults)

Source: BCEAO, WBG (2008), team analysis.

5. The network of branches remains concentrated in Bamako, however, as a result of demand concentration and infrastructure constraints that make branch network extension costly. While the number of bank branches has increased in every region of Mali, the penetration rate varies considerably (Figure 128), with more than half of these branches located in Bamako. The concentration of branches in Bamako is a result of both the limited demand for banking services in rural areas (Chapter 3), and the poor quality of infrastructure, with unreliable supply of electricity, phone, and Internet services. This deters banks from opening bank branches and other point of service, including ATMs, in more remote areas.

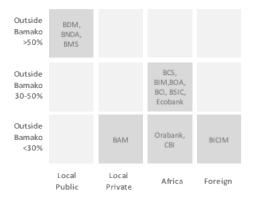
Figure 128. Bank branch distribution by region (number of branches per 100,000 adults, 2015)



Source: BCEAO, team analysis.

6. Local public banks have a greater reach through capillary branch network outside the capital, although branches reach mostly regional centers versus rural areas. On average, local banks tend to have larger branch networks than their foreign competitors. Local banks also have the strongest presence outside of the capital city. This is not surprising, given the government's commitment to serving rural areas. However, several Pan-African banks have also extended their presence into other regions and opened branches outside of Bamako (Figure 129). Despite this more capillary presence, banks are mostly present in regional centers. Distance from a branch remains a critical constraint to access, particularly for rural households, which are located at an average distance of 23 kilometers from the nearest bank or MFI branch (Chapter 3).

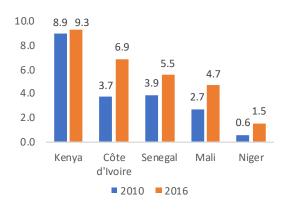
Figure 129. Bank ownership and distribution by location



Source: BCEAO, team analysis.

7. **Mali's ATM network is comparatively less well developed**. ATM penetration is relatively low, with 4.7 ATMs serving every 100,000 adults, as compared to 9.3 in Kenya, 6.9 in Côte d'Ivoire, and 5.5 in Senegal (Figure 130). Mali's ATM penetration rate is only slightly higher than the bank branch penetration rate of 3.8, pointing to lower penetration of electronic money and use of cards among the adult population. This is despite a relatively well-developed payment system infrastructure (Box 36), integrated at the regional level.





Source: IMF (2017a), team analysis.

5.2 Financial intermediation: a positive trend, but credit still concentrated

8. Banks have consistently mobilized deposits from private enterprises, individuals, public enterprises, and other institutional investors, in roughly equal proportions. Deposit mobilization has progressed in line with an increase in the total number of depositors (Figure 131; Chapter 1), resulting in 3 percent growth per year, on average, in the deposit-to-GDP ratio. Despite a slight decline during the political crisis, this growth has regained momentum since 2012 (Figure 132). In terms of the overall depositor profile, one-third of new deposits in 2016 were from private enterprises, one-quarter were from individuals, another quarter were from public entities, and the remaining 17 percent were from investors such as insurance companies, pension funds, and cooperatives, village groups, and NGOs.

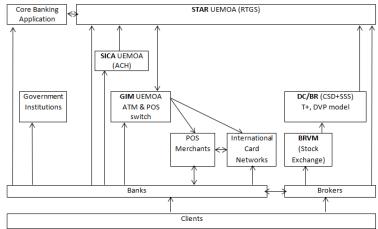
Box 36. Payment Infrastructure in the WAEMU

Over a decade ago, the BCEAO initiated a vast modernization of the regional payment system. The BCEAO's efforts in this area have focused on enhancing the safety, reliability, and efficiency of the WAEMU financial infrastructure and have included implementation of core infrastructure, creation of a Payment Systems and Instruments Department within the BCEAO, and continuous efforts to strengthen the legal, regulatory, and oversight framework.

The regional payment system includes key pieces of infrastructure:

- STAR-UEMOA is the regional centralized real-time gross settlement system for large-value and systemically
 important transactions, established in June 2004 and operated by the BCEAO. The objective is to contribute
 to the development and integration of regional financial markets by providing a safe and efficient system for
 processing payments.
- SICA-UEMOA is the Interbank Automated Clearinghouse for the clearing and settlement of retail payments between participating institutions at the national and regional levels. SICA entered into full production in February 2008. SICA-UEMOA is composed of nine clearinghouses, one for each WAMU country and one for regional clearing. SICA-UEMOA provides daily multilateral clearing of transactions (cheques, bills of exchange, promissory notes, payment orders, and direct debits), denominated in CFA francs.
- **GIM-UEMOA** is the single switch for card payments. GIM-UEMOA has been operational since June 2007 and is the only card scheme covering all WAEMU countries. GIM also manages interfaces and gateways to strategic partners (such as Visa and MasterCard), the acquisition and operation of electronic payment equipment and materials (ATMs), the manufacturing and personalization of cards, and the consolidated management of payment card statistics. Its objectives include the promotion of electronic payments.

SICA and GIM settle on a deferred net settlement basis at the STAR.



Overview of the UEMOA Regional Payment System

The GIM platform

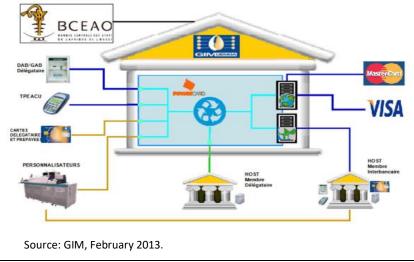
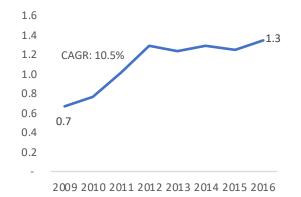
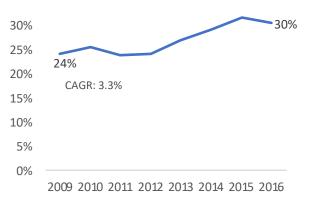




Figure 132. Outstanding deposits with commercial banks over time (bank deposits as % of GDP)

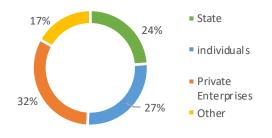




Source: IMF (2017a), team analysis.

Source: IMF (2017a), team analysis (BCEAO data show similar results).

Figure 133. New deposits sources (% of yearly new deposit amount, 2016)



Source: BCEAO, team analysis.

9. The operationalization of Mali's new Deposit Guarantee Fund is expected to increase public confidence in Mali's banking sector, further accelerating deposit mobilization. Currently, deposits are not covered by any form of public guarantee. However, banks in Mali will soon be required to pay into the regional Deposit Guarantee Fund (FGD-UMOA), established in 2014 and expected to become fully operational by the end of 2018 (Box 37). The introduction of the FGD-UMOA should increase the level of public confidence in the sector, especially among smaller savers, thus increasing the likelihood that they will use banks save, and thereby fostering financial intermediation.

Box 37: WAMU Deposit Guarantee Fund (FGD-UMOA)

The WAMU Deposit Guarantee Fund (FGD-UMOA) was formally established in March 2014 by a decision of the Governor of the BCEAO, following authorization by the WAEMU Ministers' Council in September 2012. FGD-UMOA is a regional institution covering the eight WAEMU countries. It is established as a formal legal entity with financial autonomy. The Fund's objectives are to:

- Protect small depositors against loss of savings in the event of the bankruptcy of a member credit institution or MFI;
- Contribute to the stability of the WAMU banking and microfinance sectors; and
- Contribute to the promotion of financial culture within the UMOA.

Within the ceiling set by the Council of Ministers, the Fund's status defines the nature of deposits that are subject to guarantee. These include sight deposits or term deposits, savings accounts and savings plans, current accounts, or ordinary accounts balance. The Fund is divided into two components: one for credit institutions and the other for MFIs. Membership in the Fund is mandated by banking and microfinance laws.

10. **Credit to the private sector has increased at a faster pace than deposit mobilization**. The overall growth of the banking sector, marked by the entry of new institutions and an increase in competition, has been reflected by a strong growth in credit to the private sector, with the ratio of credit to GDP increasing from 15.5 percent in 2009 to 25 percent in 2016, an average annual growth rate of about 7 percent (Figure 134). This ratio is in excess of the average for SSA and approaches that of regional peers within WAEMU. This growth has occurred despite the political instability of 2012, which destabilized the economy, and the volatile environment in some of Mali's regions.

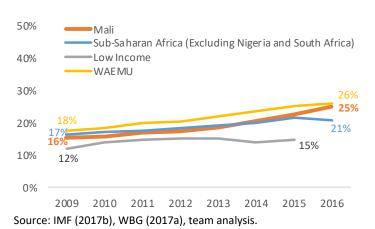
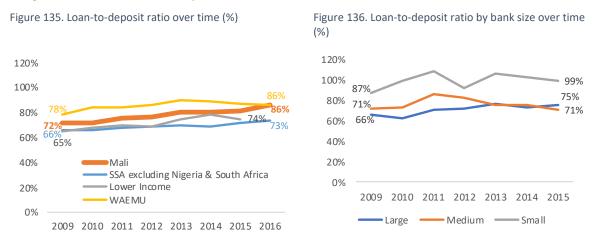


Figure 134. Growth of credit to the private sector over time (% of GDP)

11. The loan-to-deposit ratio is below 100 percent for the system as a whole, but has surpassed this level for the smaller institutions. Increasingly, Mali's banks are transforming deposits into loans, with the loan-to-deposit ratio increasing from 72 percent in 2009 to 86 percent in 2016. This is in excess of the SSA average and at roughly the same level as that recorded by regional peers within the WAEMU. While medium and large players retain some room to convert deposits into lending—their loan-to-deposit ratio stood at about 70–75 percent in 2015—small banks show a more limited capacity to attract deposits, and as such their loan-to-deposit ratio has reached 100 percent. As a whole, the loan-to-deposit ratio remains below 100 percent, suggesting a relatively liquid banking sector and thus failing to raise concerns at the system level.



Source: IMF (2017b), WBG (2017a), BCEAO, team analysis.

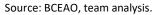
Source: BCEAO, team analysis.

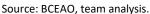
12. The short-term nature of the vast majority of deposits implicitly limits the tenure of credit that can be extended by banks. More than three-quarters of deposits have a duration of less than two years, with 60 percent being short-term, sight deposits (Figure 137). As Mali's banks have limited access to wholesale funding, deposits form the basis upon which they can extend credit. Therefore, the maturity of credit extended by banks closely reflects the maturity of deposits, with 60 percent of loans being for durations of less than one year (Figure 138).

Figure 137. Deposits duration breakdown (% of yearly new deposit amount, 2016)

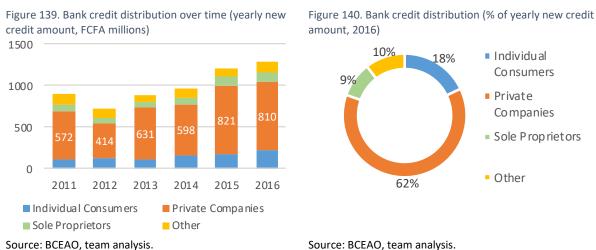
Figure 138. Credit duration breakdown (% of yearly new credit amount, 2016)







13. The majority of credit extended by banks is to medium and large enterprises, with individual entrepreneurs receiving a relatively small proportion. Wholesale credit captures the bulk of the bank portfolio. The majority of credit is provided to incorporated businesses, namely medium and large enterprises, which alone cover more than 60 percent of the loan portfolio. Smaller, unincorporated businesses (sole proprietors) receive less than 10 percent of total credit. Credit to individuals includes credit provided to informal sector: despite an acceleration over the past few years, this captures just 18 percent of the overall portfolio (Figure 139).



14. The lack of longer-term funding has negative implications for enterprise investment decisions and economic growth. As observed above, the short-term nature of the credit extended by banks has implications for the projects that can be financed through bank credit. Credit for durations of less than one year is appropriate only for financing working capital, not longer-term investments. Long-term debt provides enterprises with the predictability necessary to make medium- to long-term strategic business decisions. Sustainably extending the maturity structure would reduce credit rollover risks for firms and improve confidence in longer-term fixed investments, an important contributor to economic growth.

15. **Despite competitive pressure and the rapid growth in credit over recent years, credit remains highly concentrated among a limited number of wholesale borrowers**.⁸⁴ In Mali, banks have traditionally provided credit to a relatively limited number of companies, earning comfortable spreads on a narrow client base. This continues to be the case. The value of credit to the top 50 borrowers has declined from 60 percent of the credit portfolio in 2012 to 35 percent in December 2016. This high degree of concentration could be a result of the structure of Mali's enterprise sector, in which large family-owned trading businesses dominate the private sector (Chapter 2). It could also be explained, however, by risk aversion on the part of the banking sector and its reluctance, as a result, to diversify

⁸⁴ IMF (2017c) also expresses concerns regarding concentration.

to meet the needs of smaller (less well known) clients. This is a fairly common phenomenon in emerging countries, particularly in smaller countries ("the small country syndrome"). The high degree of credit concentration could also explain why, despite a remarkable increase in the volume of credit, a high proportion of businesses continue to be partially or fully credit constrained (Chapter 2).

16. The increasingly competitive nature of Mali's banking sector is forcing banks to actively compete for clients, which has had an impact on interest rate spread and lending rates. With the large number of new entrants to the banking sector creating increased competition, there has been downward pressure on nominal lending rates, although real lending rates have increased, with a high level of volatility, due to fluctuations in the inflation rate (Figure 141). In this context, banks are being forced to look for new and more profitable opportunities in the retail and business segments (for example, salaried employees and SMEs). As a result, both nominal rates and the interest rate spread have declined over time.

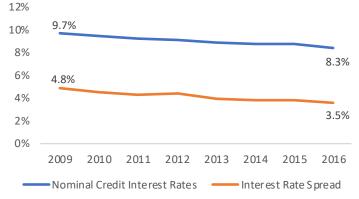


Figure 141. Nominal credit interest rates and interest rate spread over time (credit interest rate, %)

17. Over time, banks have increased their level of investment in government securities, with the effect of partially crowding out private sector lending. Since 2012, the government has increasingly relied on the banking sector to finance its deficit. As a result, the combined value of government securities and direct loans held by the sector has increased to around 5.6 percent of GDP, representing about 11.4 percent of the banking sector's assets (Figure 142). The combination of government needs and relatively high returns (about 150-200 basis points above the average deposit rate, and just 200 basis points below the returns on private sector lending) might result in a reduced willingness by banks to extend credit to the private sector, particularly if this involves diversifying their lending to include riskier, currently underserved customer segments, such as SMEs.

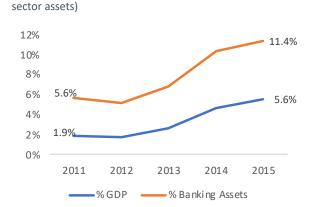


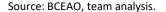
Figure 142. Public domestic debt from banks (including

treasury bills and direct lending) (% of GDP and banking

Figure 143. Interest rate of Mali treasury bills with duration of 12 months (interest rate, %)







Source: BCEAO, team analysis.

18. This effect may be exacerbated by the interest rate cap imposed by the BCEAO, which might discourage lending to segments of the market that are perceived to be high risk, where higher interest rates may be justified. In order to protect consumers' interests, the BCEAO imposes maximum interest rates (usury rate). While the cap is above the average rate charged to the formal enterprises that currently constitute the banks' main client base, this might have a negative impact on banks' willingness to go down market to serve businesses or individual customers that are perceived to be of higher risk.

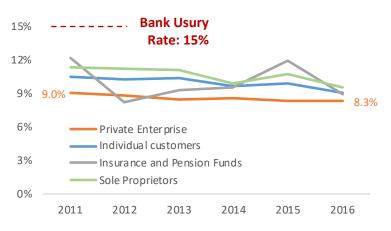
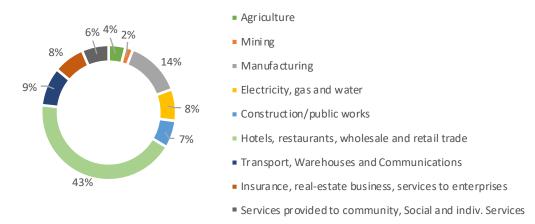


Figure 144. Bank credit interest rate to different segments (interest rate, %)

Source: BCEAO, team analysis.

19. The generally short maturity of the credit provided by Mali's banking sector is reflected in the composition of the economic sectors to which this credit is provided, with close to half of credit going to trade. The allocation of credit among economic sectors illustrates the typology of borrowers served by the banking sector and their needs. Close to half of the banking sector's credit portfolio goes to retail trade, in which credit is needed for credit for working capital and inventory financing, rather than for investments requiring credit with longer maturities. A much smaller portion of the credit portfolio goes to manufacturing (14 percent), and the remaining amount is divided among other sectors (Figure 145).

Figure 145. Credit distribution by sector (% total credit outstanding, 2017)



Source: BCEAO, team analysis.

20. The limited presence of banks in rural areas at least partially explains their limited propensity to serve agriculture, which, despite being a key sector in Mali's economy, received only a small proportion of the total credit portfolio. Despite the fact that agriculture contributes 40 percent of GDP, it receives only a tiny share of bank credit. As stated previously, banks tend to target an urban clientele. Given the limited relationship between most banks (with the exception of specific institutions such as BNDA, Box 38) and rural customers (particularly those engaged in agricultural activities), these

banks have difficulty understanding, assessing, and developing products that meet these customers' needs (Chapter 3). Agriculture thus receives only 4 percent of total credit, despite its high contribution to GDP and despite employing around 65 percent of the workforce.⁸⁵ The majority of this credit is channeled to the cotton sector via CMDT. The disproportionately low allocation of credit to the agricultural sector may also be explained by the unstructured nature and informality of the agricultural economy in Mali (Chapter 3).

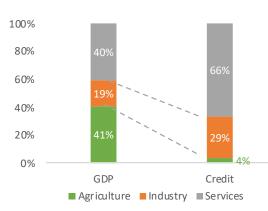


Figure 146. GDP contribution and credit allocation by sector

Source: BCEAO (2017), WDI (2016), team analysis.

Box 38. Banque Nationale de Développement Agricole

BNDA is the premier financier of Mali's rural and agricultural sector. BNDA was established as a joint-stock corporation "development bank" by a special law in 1981 in which the Government of Mali owned most of the shares. Since the early 2000s, the government has relinquished some of its ownership to foreign development partners and banks. As a result, the bank has become less vulnerable to political pressure and directives.

Breakdown of BNDA's Shareholdings

Shareholders	Shareholding (%)
Government of Mali	36.48
Banque Populaire Caisse d'Epargne (BPCE)	9.72
Credit Cooperatif	9.70
Agence Francaise de Developpement (AFD)	22.67
German Investment and Development Corporation (DEG)	21.43

Source: BCEAO Annuaire des Banques et Etablissements Financiers, 2016.

A sizable portion of BNDA's portfolio is made up of loans to the rural and agricultural sector. Although the bank has diversified recently into other sectors of the economy, loans to agriculture make up the bulk of BNDA's business. In 2016, approximately 44 percent of its total loan portfolio was to the agriculture sector, an increase from 34 percent in 2012. The bank is an important financier of the cotton sector in particular. Challenges in Mali's cotton sector in the mid- to late 2000s led to a profound change in BNDA's operations and business model. The bank shifted from providing direct financing to smallholders toward an indirect financing system through the sole cotton buyer, CMDT.

In addition to financing smallholder producers through CMDT, BNDA has developed a range of products for SME agribusinesses. BNDA has a well-established and well-executed diversification strategy, which includes financing other agricultural sectors outside of cotton, targeting SME farmers and processors, and expanding services to urban clients. The bank launched its recent expansion into rural SME lending with an extensive assessment of the agribusiness segment. With a technical assistance grant from the World Bank, it began retrofitting its client assessment and lending procedures and piloting new products for the new market. The strategy of targeting SME agribusinesses boosted the volume and profitability of its rural operations compared to previous years on which BNDA depended solely on cotton financing.

BNDA has been the main partner in the government's tractor financing scheme. The BNDA has financed 660 of the 1,000 tractors allocated by the government through this scheme. As discussed above, farmers with at least 20 hectares of land who can make a down payment of 20 percent are eligible to receive a tractor from the government at a 50 percent subsidy if they can secure bank financing for the remaining 30 percent. The government has asked partner banks to keep the

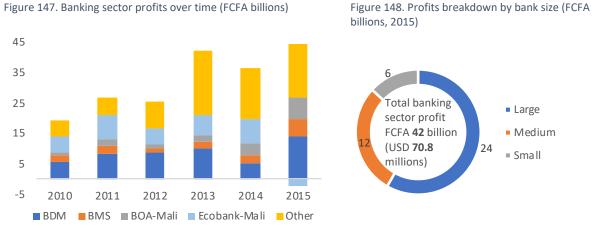
⁸⁵ This phenomenon could be explained in part by the way in which banks and regulators classify agriculture lending: the statistic considers only credit to producers and does not account for credit to other actors along the value chain, such as suppliers, aggregators, and processors. The 4 percent figure thus underrepresents the amount of credit that is actually going to the agricultural economy.

tractor loans at a fixed rate of 8.75 percent. In addition to the scheme's requirements, the BNDA requires farmers to be literate and well trained in farming, to have a minimum farm size of 30 hectares, and to be producing at a surplus and selling in local markets. As of June 2017, BNDA's tractor loan portfolio was performing well, with only 4 percent of NPLs.

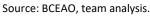
Source: Team analysis and interviews with BNDA leadership.

5.3 Banking sector performance and soundness: profitable and stable overall

21. **Mali's banking sector has remained consistently profitable**. The level of profitability of Mali's banking sector has been increasing since 2010, in spite of isolated cases of loss-making banks.⁸⁶ In 2015, the sector's total profits stood at FCFA 41.9 billion (US\$ 70.6 million), with the profitability of individual banks closely reflecting the value of their asset holdings. This increasing level of bank profitability reflects both the increased level of lending during the period and improved efficiency levels and declining staff salaries, overheads, and provisioning costs.



Source: BCEAO, team analysis.



22. **Despite the compression of interest spreads, the sector retains a positive return on assets**. In the period from 2009 to 2016, the average interest rate spread declined by about 1.3 percentage points, from 4.8 percent to 3.5 percent (Figure 141), in a reflection of more intense competition. Nevertheless, return on assets has remained constant over the years, at around 1.1 percent. There has been a significant degree of variation within the sector, however, reflecting differences in the performance of the various players.⁸⁷

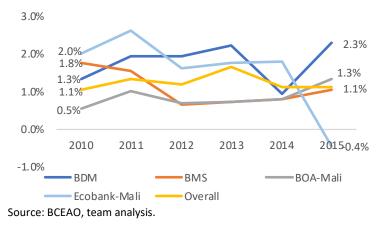


Figure 149. Return on assets among major Malian banks (yearly %)

⁸⁶ Such as Ecobank, which lost FCFA 2.4 billion (US\$ 4 million), and Orabank, which lost FCFA 677 million (US\$ 1 million) in 2015 (using an exchange rate of US\$ 1 = FCFA 593.

⁸⁷ For example, in 2015, Ecobank Mali suffered losses due to its overhaul of impairment loss booking processes, which resulted in additional losses due to added loan loss provisions (Ecobank 2016).

23. While the asset quality of bank portfolios has improved somewhat, it remains weak. In 2016, the proportion of gross NPLs stood at 15.8 percent, with net NPLs standing at 6.1 percent. This is an improvement from the NPL ratios recorded during the crisis in 2012, when gross NPLs stood at 21 percent and net NPLs at 8.7 percent (Figure 150), and is on par with the WAEMU average of 15.9 percent. NPL figures may be understated, however, as Mali's banks are known for leaving bad loans on their books while awaiting final resolution of lengthy legal proceedings, with no frequent write-offs (loans have a grace period of 180 days past due before being classified as NPLs, and banks have a maximum of four years to fully provision secured loans) (WBG 2015a).

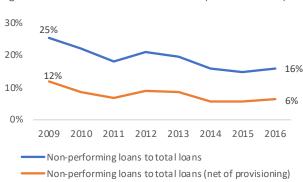


Figure 150. Gross and net NPLs over time (% of total loans)

Source: IMF, team analysis.

24. The cost-to-income ratio of Mali's banking sector is relatively high, but this could be driven in part by bank's need to sustain a capillary branch network. Cost-to-income ratios within the WAEMU region (except in Guinea-Bissau) show wide variation. The average level stands at around 60 percent, with Burkina Faso being the lowest (47 percent) and Mali being the highest (67 percent). This is likely to result from Mali's geographical characteristics, where there is a sprawling network of bank branches spread across a vast territory, implying higher operational costs on banks.

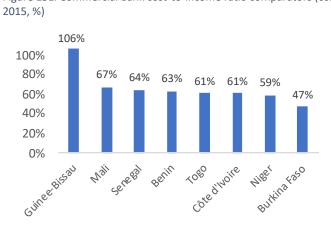


Figure 151. Commercial bank cost-to-income ratio comparators (cost-to-income ratio 2015. %)

Source: BCEAO, team analysis.

5.4 Financial infrastructure: basic elements upon which to improve

25. Limitations in the credit infrastructure available in Mali can explain some of the features of the credit landscape: concentration on a few, large borrowers and heavy reliance on collateral. Access to credit in Mali remains complicated, as shown by, among others, *Doing Business* (WBG 2016a), which ranks Mali 142nd among 190 economies around the world on the ease of "getting credit." To better understand the reluctance of banks to lend to new borrowers, especially SMEs and small businesses, and their high collateral requirements when extending credit, this section analyzes some of the institutions that could facilitate access to credit—namely, the private credit bureau and credit registry, and the collateral registry.

5.4.1 Credit information: credit bureau and credit registry

26. In an economy characterized by high informality, the limited available information on new potential debtors impedes access to credit. A lack of information on borrower behavior is universally reported as a constraint on credit provision. This is particularly true in Mali, whose economy is highly informal. For example, only a limited share of individuals have an account at a financial institution. The majority of them work in the informal sector, making it difficult for a financial institution to assess their ability to repay a loan. Similarly, financial information on SMEs and self-employed workers is either nonexistent or unreliable, since most businesses operate either fully or partially in the informal sector. As a result, banks are more inclined to provide credit to salaried workers (most often government officials), whose creditworthiness is assessed based on the official certification of income received, or to a small number of corporate borrowers (Chapters 1, 2, and 3).

27. The recent introduction of the credit bureau (*bureau d'information sur le credit*, or BIC) at the BCEAO level is a positive development, but for it to be effective, coverage needs to be improved. In February 2016, a private regional BIC covering the WAEMU region started its activities. Although regional numbers show that 3,737,929 records have been included in the credit bureau, however, credit bureau coverage in Mali remains extremely limited: only data pertaining to 69,489 individuals and 1,397 firms are included in the BIC as of June 2017 (WBG 2016a), resulting in overall coverage of 0.8 percent of adults. Significant efforts are needed to increase the BIC's coverage of the adult population in order for the Malian economy to reap the benefits of improved debtor information sharing. Moreover, the data are only as good the data obtained from the source; as part of these efforts, therefore, data quality assessments and support for adequate and systematic data collection and storage on the part of each institution might be necessary.

28. The collection through the BIC of additional information related to SMEs may also be needed. The regional BIC includes a total of 16,859 records on legal entities for all participating countries. In Mali, as in many other countries, the high level of informality poses challenges to expanding this information base. As shown above (Figure 145), little credit (4 percent) is provided to the agricultural sector. In this context, it might be useful to understand whether there is information related to supply chain, trade credit, or other sources that would be relevant in evaluating the creditworthiness of SMEs, particularly those located in rural areas. Relevant information could include: (i) data on transactions from P2P lending platforms; invoices, accounts payable, and procurement data; and businesses' cash flow history, shipping history, bills of lading, economic indicators, and taxes paid; and (ii) data associated with assets (movable and fixed) that belong to SMEs, which could add value to current data on credit and loan repayment. The International Committee on Credit Reporting puts specific emphasis on the need for: (a) SMEs to be more transparent with their financial information; (b) banks and financial institutions to report positive and negative data on SMEs; (c) improvements in the quality of data on SMEs available in government-held databases; (d) clarification on the use of information obtained from government-held databases; (e) improved cooperation between BICs and commercial credit reporting companies; and (f) cooperation between authorities providing national ID services.

Box 39. Facilitating Improved SME Financing Through Improved Credit Reporting

Information asymmetries pose one of the most significant challenges faced by SMEs in obtaining adequate external financing to underpin their productive activities. Owing to information asymmetries between borrowers and lenders, not all information needed to assess the creditworthiness of applicants is available to creditors. In addition, gathering information that is not readily or easily available is extremely costly. These problems are normally exacerbated in the case of SMEs, which often lack accurate and reliable balance sheet data. This often causes loans to be denied, the cost of borrowing to increase, or heavy collateral requirements to be imposed.

Credit reporting systems address the problem of asymmetric information by providing lenders with access to accurate, meaningful, and sufficient information on SMEs, which enhances their ability to assess SME creditworthiness and to make well-founded, fact-based credit risk assessments. This may, in turn, be reflected in easier access to and lower cost of credit.

Even where one or more credit reporting systems are in place, however, these rarely include reliable and complete information on SMEs, thus exacerbating the SME "credit gap."

Source: International Committee on Credit Reporting, 2014.

29. **Enforcement and awareness are key to increasing credit bureau coverage**. The BCEAO and Banking Commission must enforce the provisions of the legislation, check compliance of users and data providers, and take measures in case of noncompliance. This will ensure that all regulated lenders covered by the credit reporting legislation share data with the BIC, as required, and inquire on all credits made. Active enforcement will ensure that the bureau database is sufficiently populated with high-quality data and that its reports are used as required by the law. The BCEAO could usefully engage in sustained consumer awareness-raising activities over a period of time, in conjunction with other regional, national, and local stakeholders from both the public and private sectors.

30. In achieving legal compliance, the BCEAO might consider issuing additional regulations to provide further details regarding consent. Based on article 53 of the uniform law88 on the regulation of credit bureaus in the member states of the West African Monetary Union, the collection of personal data on individuals and legal persons is subject to consent. In addition, article 57 includes an obligation to data providers when such consent is not given and data are shared with the private credit bureau. Finally, article 60 of the same text mandates that data providers submit data from all their respective clients on their full portfolio. As the law is currently worded, there is a conflict between article 53 and article 60 that calls for clarification. One potential solution could be to clarify that article 53 on data collection applies only to unregulated entities, whereas data access applies to all private credit bureau users. For data included under the credit portfolios of regulated entities, article 60 shall be applied. Another potential solution might be to amend article 53 by removing the word "collection."

31. Once banks contribute fully to the BIC, data collection from nontraditional data providers can then take place. As the information collected from banks grows in volume and improves in quality, the bureau can then focus on collecting data from nontraditional data providers, such as utility and telecommunications providers and nonbank financial institutions. The adoption in Mali of the harmonized law on credit bureaus, which includes mandatory provisions for data sharing and data access, is considered a positive measure, as it aims to broaden the credit bureau's coverage of individual adults and legal entities, while encouraging creditors to make inquiries prior to granting any loan. It is important to emphasize, however, that the establishment of a credit bureau requires coordination between the service provider and the data providers, which implies agreeing on data formats, connection mechanisms, and software applications and thus is likely to delay the amount of time needed between launching of the bureau and expected outcome to at least 18 months. It is also relevant to ensure the quality of information included in the system, which implies building capacity for improved data collection and storage practices among each participant (Box 40).

Box 40. Improving Credit Information Sharing in Mali

Under a new WAEMU regulation, private credit bureaus (*bureaux d'information sur le crédit*, or BICs), began operation in 2016. The revised regulation requires regulated financial institutions both to search the credit bureau held by BIC prior to extending credit, and to report to BIC on the repayment history of clients. Each of these reporting processes requires the client's consent. In practice, this occurs as clients approach financial institutions seeking credit, and in the future, this could become, for example, part of the process of establishing and holding utility accounts and other services. Notwithstanding, organic growth in the volume of records held by the credit bureau takes time.

⁸⁸ Article 53: "Any collection of information, any use and sharing and diffusion of personal data, including credit data are subordinated to the client's prior consent, be it a natural or legal person. The client's consent must form part of the credit application of the credit contract. Once the consent is obtained, users can proceed with the data inquiry to the PCB for the duration of the business relation and for the permissible purposes authorized by the present Law. The data in question cannot, in any instance, concern the client's deposits. The obligation to obtain the client's prior concern, for which provision is made in the first paragraph here above, is not applicable to public data. It doesn't apply either to the data requested by the Central Bank, the UMOA Banking Commission the fiscal administration or the judicial authority acting in the framework of criminal proceedings."

Searching the credit bureau helps to improve the speed and accuracy of lending decisions, not only by using information on consumer borrowing and payment behavior, but also by promoting responsible lending and systemic risk management.

As new information sources are added to the data that feed in to the database, the number of records and individuals covered by the credit bureau will increase, albeit at a slow pace initially.

As is typically the case, financial institutions across WAEMU are initially reluctant to share information on their clients, or prospective clients with the credit bureau, as this is seen as a competition risk. Over the medium to long term, experience across many countries is clear. The correlation between the existence of credit information and the depth of credit markets is widely documented. Credible information sharing on debtors encourages lenders, businesses, and other service providers to extend credit and services to consumers more willingly. Further, consumer credit culture is enhanced to the extent that debtors have an interest in preserving their "reputational collateral."

Concern about sharing client information is not peculiar to Mali or WAEMU; this is a common experience throughout developing markets. It takes years of awareness raising, training, and utilization of the credit bureau to change the risk management culture of lenders and for individuals to appreciate the benefits of having a good credit history, which translates into a good credit score.

To assist in overcoming these issues, consultation and reporting to the credit bureau is mandatory in WAEMU. However, compliance with these new requirements requires confirmation by the regulators and sanctioning of noncompliant behavior, together with targeted awareness raising and sensitization from an early stage to realize the benefits.

32. To ensure the functioning of a safe, reliable, and efficient credit reporting system, it is important that authorities put in place an oversight framework. Within this framework, the policy objectives should take into consideration all risks related to the credit reporting activity, including those related to: (i) operational risks, (ii) business-related risks, (iii) reputational risks, (iv) legal risks, and (v) cyber risks. The adoption of a strategy and subsequent instruments to identify, mitigate, and monitor these risks is critical to the adequate functioning of the credit bureau. The General Principles for Credit Reporting (WBG 2011) recognize five areas of particular relevance, including: (a) data and data quality, (b) data security and reliability, (c) governance and risk management, (d) legal framework and consumer protection, and (e) cross-border data flows.

33. **The public credit registry must also maintain accurate, timely data to monitor systemic risk**. More than 12,000 borrowers (including individuals and firms) are included in the public credit registry (WBG 2016a). A gap analysis undertaken in 2017 (IFC 2017) recommended changes to data collection and quality management procedures. Improvements are needed to ensure that timely and accurate information is available to the BCEAO for micro and macro prudential oversight, monitoring bank systemic risk within the financial system (Box 41).⁸⁹

Box 41. Public Credit Registry versus Private Credit Bureau

A credit registry is one of the two main types of credit reporting institutions. According to the General Principles for Credit Reporting, a credit registry is a "model of credit information exchange whose main objectives are assisting bank supervision and enabling data access to regulated financial institutions to improve the quality of their credit portfolios" (WBG 2011, 61). Credit registries are typically owned and operated by a central bank or other financial supervisor. In most countries, credit registries focus on collecting credit information from prudentially regulated financial institutions.

Credit registry data have been used extensively for many years to support the regulation and supervision of individual financial institutions. For example, credit data at the level of each reporting financial institution is a key input for off-site supervision. More recently, credit data have become important in areas such as the implementation of the internal ratings-based approach of the Basel regulatory capital framework for banks, for example by facilitating supervisory validation of internally estimated risk parameters. Credit data from these sources are crucial for the calibration of macro-prudential policy regulations or measures (such as counter-cyclical capital buffers or quantitative limits to certain key ratios in lending such as loan-to-value and loan-to-income).

A credit bureau is a "model of credit information exchange whose primary objective is to improve the quality and availability of data for creditors to make better-informed decisions" (WBG 2011, 61). Credit bureaus collect information from various sources and distribute this information to different users. Credit bureaus generally target retail credit and

⁸⁹ IFC (2017) further recommends creating a unique, fully automated public credit registry that becomes the repository of all information for all of the BCEAO's institutional functions—for use, for example, in monetary policy, financial stability, statistical reporting, and research.

small business lending markets, where average loan volumes are small and mass screening techniques using statistical analyses enable the processing of a large number of standard loan applications in a cost-effective manner.

In comparison to credit registries, credit bureaus—as privately owned commercial enterprises—tend to cater to the information requirements of all types of lenders and creditors, including insurance companies, retailers, and other real sector service providers (such as universities, telecommunication companies, and utility companies) that provide services based on deferred payments. Thus, they typically provide "credit scoring" and additional value-added services.

Sources: WBG (2011, 2016c)

5.4.2 Collateral registry for movable collateral

34. **The absence of a functioning digital collateral registry impedes access to secured credit**. One critical element of a modern secured transactions system is a well-functioning, readily accessible registry for creditors to assess their exposure risk, publicize their security rights, and gain priority (Box 42). The inability to complete these tasks and research the register in an efficient manner detracts from lenders confidence and is likely to contribute to a lack of diversification among credit clients, with a disproportionate impact on SMEs. A project is underway to address these issues in Mali, but concerns were raised by various stakeholders with regard to the host authority's capacity to run the registry and other technical aspects of its operations.⁹⁰

Box 42. Collateral Registries—An Essential Contributor to Inclusive Growth

Empirical studies have demonstrated the link between credit and economic growth (Mckinnon (1973), King and Levine (1993)).

Collateral is one of the quintessential "Five Cs of Credit," each contributing to the confidence of a lender in assessing the creditworthiness of the credit applicant. The remaining four Cs comprise character (or credit history), capacity, capital, and conditions.

With formal SMEs contributing up to 60 percent of total employment (including creating four out of five new jobs) and up to 40 percent of GDP in emerging economies (WBG SME Finance website), providing SMEs with access to finance is essential for the advancement of the global economy. With the overwhelming capital stock of SMEs categorized as "movable assets" and the majority of financial institutions preferring "immovable assets," according to the WBG's Enterprise Surveys, the WBG's secured transactions reform programs critically target this market failure.

A strong, modern secured transactions regime includes two equally important components: the law and the registry. The law establishes the rules for secured creditors—such as commercial banks, nonbank and microfinance institutions, leasing companies, and other security rights holders—to secure their rights over movable property when extending credit or entering into other arrangements. The second component is the registry itself. Registration in the collateral registry is the primary mechanism for secured creditors to protect their rights, including to ensure priority and protection in the event of default or insolvency by the debtor.

The registry is a critical component not only for parties to a security agreement, but also for nonconsensual creditors, such as judgment creditors and the relevant revenue authority whose rights must also be publicized by registration in the collateral registry.

As the introduction of a modern security interest regime usually abrogates preexisting security rights laws, understanding—and educating others about—the importance of the collateral registry is key to improving access to finance and supporting inclusive growth in the global economy.

35. The OHADA law on secured transactions might also require additions and/or amendments to improve the efficiency of the credit environment. OHADA modernized their secured transactions

⁹⁰ The development of the registry software has been undertaken by the same firm for all countries of the Organization for the Harmonization of Corporate Law in Africa (OHADA). The software has been installed on new hardware and has been delivered to the premises of the host authority, the Commercial Court. Training on usage of the system has been conducted with judges, administrators, and technology staff, but it has been reported that the Commercial Court team requires education on how to operationalize the registry. Furthermore, concerns have been raised with respect to the adequacy of Internet connectivity for user access to the registry (which reportedly failed a practical test during the training period), connectivity between the various registry offices around the country (to establish a single national database), and consistency of electricity supply at the facility in which the hardware is expected to be housed. Concerns have also been reported with respect to the fitness for purpose of the software, which may not include provision for critical elements such as Mali's national identifier for individuals.

legal framework in 2011. The operationalization of a digital collateral registry would require the creation of a new law or regulation that would further develop existing rules in the OHADA law (the Uniform Act on Organizing Securities, or UAS). The new legislative act is necessary because the UAS only contains general rules and principles for the introduction of a registry; detailed rules for its operations are missing, and the efficiency of enforcement provisions could be improved (Box 43). A full review of the credit bureau legislation and possibly of insolvency and creditor rights' might be advisable.

Box 43. OHADA Uniform Act on Organizing Securities

The current law governing security interests in Mali is the OHADA Uniform Act on Organizing Securities (UAS), which came into effect on May 16, 2011. Article 9 of the revised OHADA Treaty brings all Uniform Acts automatically into force in all OHADA jurisdictions 90 days after their adoption by the OHADA Council of Ministers. This process automatically overrides domestic laws where conflicts exist, rather than allowing each jurisdiction to systematically ratify the law.

The UAS diverges from other, internationally recognized leading secured transactions regimes, for example as represented by the UNCITRAL Model Law on Secured Transactions. Some areas of divergence suggest that supplementation of the UAS is necessary to boost the efficacy of the registry, while others would improve efficiency and reduce the cost of credit provision in Mali:

- The UAS provides for the use of names, not identifiers (such as the NINA).
- It does not provide for an "all assets" general collateral registration (one of the most commonly used collateral types in modern registries) or the possibility of registering multiple security interests with a single notice.
- It does not include a requirement for the grantor of the security right to consent to registration, nor require a notice to be provided to the grantor of the registration.
- Certain provisions (such as articles 57 and 64) suggest that some analysis or receipt of an agreement by the registry may be mandatory (notably in case of cancellation of a registration).
- The registry rules lack provisions pertaining to registry errors, update of personal identifiers in case of a change or a transfer of the asset, and general provisions organizing the registry functioning, which must be supplemented.

Furthermore, one of the most significant issues is the limitation on extrajudicial enforcement (for all but a limited number of specific exceptions). It has been reported that the determination and recovery of defaulting loans can take more than give years to resolve, in some cases. The introduction of alternate dispute resolution options would bring efficiency to the system and reduce costs.

Another issue is the vagueness of several provisions, which has caused challenges in practice (for example, Article 4(4) is too vague to provide with certainty which assets are excluded from the scope of the Uniform Act, compared to the UNCITRAL approach where States enacting the UNCITRAL Model Law are expected to specify the laws that govern the special types of assets).

Furthermore, the UAS is neither a fully functional, nor a unitary model, which falls short of international best practice, under which security interests on movables should be regulated with a single regime, preferably under a single legal figure (a "substance over form" approach). OHADA's multiple figures (pledge, retention of title, fiduciary transfer, and privileges) and multiple regimes are a source of confusion and of regulatory arbitration that could be avoided.

Since the OHADA law can only be amended at the OHADA level, the only option available to countries to is to introduce laws or regulations to complement and clarify the UAS, where possible, at the local level.

36. **The collateral required by lenders to be pledged for a loan has been increasing consistently in Mali**. With the possible exception of loans supported by the FGSP, it has been reported that no loans are extended using only movable assets as security, highlighting a strong preference for immovable collateral—in most cases, real estate. Notwithstanding this, collateral requirements in 2007 were reported at 173 percent of the loan value, increasing to 233 percent in 2016 (WBG Enterprise Surveys 2011 and 2016). Higher collateral requirements make it more difficult for smaller businesses to access credit. The increased collateral requirements in Mali are in line with regional experiences⁹¹ and with changes being introduced to upgrade the prudential regulatory framework to align it with Basel II/III, initiated in 2013 by the BCEAO (IMF 2015). The lack of a well-functioning collateral registry may also be putting upward pressure on collateral requirements, in Mali and across the region. Notably, even

⁹¹ For example, collateral requirements in Côte d'Ivoire increased from 56 percent in 2009 to 157 percent in 2016, in Kenya from 121 percent in 2007 to 188 percent in 2013, and in Senegal from 127 percent in 2007 to 272 percent in 2014.

with the increased collateral requirements, financial institutions have indicated a lower reliance on collateral in the lending decision, relating largely to asset identification, valuation, and efficiency of enforcement proceedings.

37. Low confidence in market-based asset valuations and enforcement risks affect the provision of credit to SMEs. Leasing and banking sector participants have highlighted challenges in asset valuation, supported by a secondary market, as a key issue. Transparent and competitive secondary markets are important to ensure that maximum value is extracted in the sale of an asset. Confidence in asset valuation supports the ability to gain certain values at specific points in time and assist in lowering the cost and increasing the availability of credit to SMEs. Furthermore, the ability for creditors to efficiently and cost-effectively enforce their rights in the event of debtor default is essential to give confidence for the provision of credit. Consideration should be given to further supplementing the UAS with lower-cost alternatives to court enforcement procedures, such as alternative dispute resolution and out-of-court mechanisms to improve the efficiency and cost-effectiveness of credit.

5.5 Conclusions and recommendations

38. **Over the past decade, Mali's banking sector has expanded its footprint, leading to an overall increase in the depth of the financial sector**. In particular, since the mid-2000, competition from new entrants and the organic development of incumbents has driven the growth of the sector. Starting from a relatively low base, the sector now reaches a significantly larger client base, contributing to increased access to financial services, particularly for larger formal enterprises. The banking sector has demonstrated its resilience to the economic and sociopolitical shocks affecting the country, remaining relatively stable and profitable even during periods of unrest.

39. Going forward, the banking sector's strategic priority should be to serve the investment needs of the business sector and to expand its customer base to reach a broader range of wholesale and retail customers. Holding more than 97 percent of Mali's total financial assets (WBG 2015a), the banking sector remains the backbone of the country's financial intermediation. Despite the significant increase in the number of clients, a large set of enterprises currently remain unserved or underserved. In particular, the sector's ability to support firms' investment activities is constrained by the short-term orientation of its lending operations.

40. **Expanding banks' customer base will require identifying new coverage models that allow them to reach new customers in a cost-effective manner**. This applies to retail clients as well as SMEs and small informal businesses. With the expansion of banking operations to locations outside urban areas, the cost of serving these new segments may be inherently higher. In addition, potential customers may often lack basic literacy and the official identification documents needed to meet KYC requirements. While banks need to increase their proximity to their customers, they must also adapt their operating model to meet the needs of their clientele. Partnerships between banks and other financial sector providers such as MNOs should be explored, in particular to cover rural areas.

41. Broadening the lending portfolio and extending its duration will require banks to improve their risk assessment tools and access long-term resources. To be able to lend to new customers, banks should be provided with the appropriate tools to mitigate their risks. Banks also need access to longer-term financial resources to enable them to provide longer-term loans.

42. The public sector can play an important role by establishing a conducive policy environment and providing the necessary financial and infrastructural resources to facilitate an expansion of its mandate. The government could put in place policy actions and supporting interventions to support banks in pursuing this strategy and achieving these goals. These actions could be grouped into three areas:

a. Area 1: Develop a supportive regulatory framework and implement policies that are conducive to expanding the banking sector's customer base to include new market segments and underserved geographical areas. For banks to expand their clientele, appropriate regulations must

exist to facilitate the inclusion of new market segments, particularly in underserved regions. While the more intensive rollout of a digital identification system (Chapter 4, Recommendation a.1.3) will facilitate the inclusion of new customers, the public sector should consider additional policies and interventions to facilitate their efforts:

- i. Recommendation b.1.1: The BCEAO could consider enabling banks and other financial institutions to introduce a range of products with simplified KYC requirements. The current AML/CFT regime does not foresee the opportunity for banks and other financial institutions to introduce mitigating factors and adopt a simplified or tiered KYC regime for relatively low-risk products and/or customers (Chapter 1). At present, only e-money issuers are allowed to offer products with defined ceilings using simplified KYC regimes. The extension to banks and other financial institutions of similar low-risk/low-KYC customer due diligence requirements (with adequate provisions to mitigate risks regarding money laundering and the financing of terrorism), could facilitate an expansion in banks' outreach and a reduction in the use of cash in the economy, particularly in rural areas and among customer segments that are less likely to have official documentation.
- ii. Recommendation b.1.2: The government could consider providing support to banks to expand outreach to rural areas by reducing the cost of setup infrastructure. The limited availability of public infrastructure, including roads and electricity, in rural areas increases banks' costs in underserved zones and discourages them from opening new branches. For example, the lack of a reliable electricity network in rural areas requires banks to deploy power generation facilities, which increase fixed and variable costs in more remote areas. Public support could be provided to improve basic infrastructure in priority locations and through targeted support to extend coverage into underserved areas. Certain forms of grants can be mobilized to encourage the use of renewable energy, one of the biggest infrastructure constraints facing financial institutions. For example, a public fund to support the use of offgrid, solar electricity solutions to support bank branch operations could facilitate increased coverage in unserved and underserved areas.
- iii. Recommendation b.1.3: The BCEAO could consider amending the agent banking regulatory framework to allow banks and other financial institutions to fully leverage an agent banking model. One of the reasons for the success of mobile money is that it is built on the deployment of a capillary network of agents. The current regulatory framework for agent banking only enables the deployment of specialized institutions (*intermediaires en operations de banque*) that can provide services for multiple banks, but that cannot operate multiple activities. Furthermore, the regulation requires each individual agent to be authorized, with high security deposits for each agent. The framework does not distinguish between primary and secondary agents, which means that all agents must have a direct relationship with the bank. In other countries, banks are permitted to develop an agent network according to terms defined by the agent contract. This enables banks and other financial institutions to enter into contracts with super agents, who can then develop the agent network. Finally, the current agent model applies only to banks, not MFIs. The current framework could be revised to develop a level playing field for various financial sector providers (including banks, MFIs, and mobile money operators), thus enabling the distribution of services in a cost-effective fashion.
- b. Area 2: Increase the resources available to financial institutions to extend credit for longer terms and to a wider range of clients. In Mali, banks derive their funding mostly from a limited deposit base. In order for banks to extend greater volumes of credit, particularly to new market segments, they must have access to increased sources and have incentives to provide a greater proportion of loans to the private sector, rather than to the public sector. In particular, for them to offer longer-term loans to meet clients' investment needs, they must have access to longer-term funding sources. To achieve these objectives, the following priority recommendations are proposed:

- i. Recommendation b.2.1: The BCEAO could fully implement the deposit insurance scheme to raise confidence in the banking sector and stimulate formal savings. The large proportion of informal savings and the relatively high deposit rates demonstrate that public confidence in the financial sector remains limited, which is likely to be connected to the crisis that recently affected the MFI sector. While the low level of public confidence may result in part from general limitations in financial literacy and could increase if financial literacy were improved, full implementation of the deposit insurance scheme at the regional level could result in increased levels of confidence, particularly if accompanied by appropriate awareness campaigns at the national level.
- ii. Recommendation b.2.2: The government could monitor the impact of public sector borrowing in crowding out the private sector and take measures to limit it. Public sector financing by banks could be closely monitored, not only to ensure financial stability but also to limit its crowding-out effect on private lending. This crowding-out effect may occur both as a direct result of public borrowing, since bank resources are taken away from lending activities, and as a result of the relatively high rates on government securities, which may increase lending rates to the private sector.
- iii. Recommendation b.2.3: The government could consider providing banks with long-term funding resources. With the banking sector's sustained profitability, the government could consider supporting banks' access to longer-term sources of funding to supplement deposits, which are characterized by a short-term maturity cycle. Wholesale credit line arrangements by development finance institutions could be used to provide this access.
- c. Area 3: Expand the customer base for lending by improving tools for screening borrowers and secured lending. For banks to lend to new customers—and, in particular, to new and riskier segments such as SMEs and smaller businesses—they will need support through instruments to manage and reduce the risk connected to their portfolios. Improving their ability to analyze *ex ante* a borrower's creditworthiness, to monitor it over time, and at the same time to leverage risk mitigation tools will be critical to incentivize banks to reach new customers. The following set of policies and interventions is suggested:
 - i. Recommendation b.3.1: The BCEAO could enforce provisions to improve the coverage and quality of credit bureau data. Authorities have taken remarkable steps toward establishing a credit bureau in Mali, but there is a need to continue supporting these efforts by ensuring that sufficient information is collected by the credit bureau on individuals and SMEs, thereby enabling banks and financial institutions to evaluate the creditworthiness of individuals effectively. Some potential actions include:
 - 1. Conducting data quality assessments on all BIC participants and supporting the collection and storage of data on a systematic basis and in a digital form by all lenders;
 - 2. Fostering the adequate identification of individuals and legal entities by data providers (for example, lenders) through digital identification systems; and
 - 3. Enabling the collection of SME-related data from different sources, including governmentheld databases such as companies' registries and courts.
 - ii. Recommendation b.3.2: The BCEAO could foster collaboration between banks and Fintech companies to provide them with additional tools to screen borrowers, in particular SMEs and individual entrepreneurs. In leveraging the digital footprint of borrowers, Fintech companies have the ability to introduce innovative ways to evaluate customers' risk. Appropriate policies should be in place to foster collaboration between banks and Fintech companies in identifying new data and efficient methodologies to evaluate the creditworthiness of individuals and SMEs. In this context, key aspects might include: (i) identification of a data controller and proper accountability to ensure the reliability of data used for the creditworthiness evaluation; (ii) verification of the soundness of models (such as

credit scoring) used for the evaluation of creditworthiness; and (iii) a redress mechanism to help consumers understand the data included in the credit score and challenge potential errors in the attributes used to calculate the scores.

iii. Recommendation b.3.3: The government could improve on the functioning of risk mitigation instruments and on the legal and regulatory framework for secured lending, including leasing. Support is required to install the technology supplied and establish effective operational governance procedures for the new secured lending system. Consideration should be given by OHADA to adopting secured transactions practices that align more closely with international best practice. Leasing regulation support should proceed without violating the norms upheld by the International Financial Reporting Standards.

5.6 References

- Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). 2015a. Annuaire Des Banques et Etablissements Financiers de l'umoa.
 - ———. 2015b. Bilans et Comptes de Resultats des Banques et Etablissements Financiers.

———. 2016. Rapport Sur les Conditions de Banque Dans l'uemoa.

- . 2017. Bulletin de Statistiques Monetaires et Financieres.
- Castellano, Giuliano G., and Marek Dubovec. 2017. "Coordinating Secured Transactions Law and Capital Requirements." Conference Paper for *Modernizing International Trade Law to Support Innovation and Sustainable Development* (UNCITRAL 50th Anniversary Congress, Vienna, Austria,July 4–6, 2017). Available at:

https://www.researchgate.net/publication/321292789 Coordinating Secured Transactions Law and Capital Requirements (accessed June 13, 2018).

- Ecobank. 2016. "News Release on Profit Warning: Ecobank Accounces that Full Year 2015 Profit Will be Materially Lower than Expected" (March).
- International Finance Corporation (IFC). 2017. «*Diagnostic de la Centrale des Risques gérée par la Banque des Etats de l'Afrique de l'Ouest.*» Washington, DC: IFC.
- International Monetary Fund (IMF). 2015. "West African Economic and Monetary Union: Common Policies of Member Countries." IMF Country Report No. 15/100 (April). Washington, DC: IMF. Available at: <u>http://www.imf.org/en/Publications/CR/Issues/2016/12/31/West-African-Economicand-Monetary-Union-Staff-Report-on-Common-Policies-of-Member-Countries-42860</u> (accessed June 12, 2018).

———. 2017a. Financial Access Survey (FAS) Database.

——. 2017b. Regional Economic Outlook: Sub-Saharan Africa, Restarting the Growth Engine. Washington D.C. May 2017.

 2017c. "West African Economic and Monetary Union: Common Policies of Member Countries." IMF Country Report No. 17/99 (April). Washington, DC: IMF. Available at: <u>https://www.imf.org/en/Publications/CR/Issues/2017/04/26/West-African-Economic-and-Monetary-Union-Common-Policies-of-Member-Countries-Press-Release-44867</u> (accessed June 12, 2018).

- King, R.G., and Levine, R. 1993. "Finance and Growth: Schumpeter Might Be Right." *Quarterly Journal* of Economics 108 (1993): 717-738
- Mazer, Rafe, and Kate McKee. 2017. "Consumer Protection in Digital Credit." *CGAP Focus Note* No. 108 (August). Washington, DC: CGAP. Available at: <u>http://www.cgap.org/publications/consumer-protection-digital-credit</u> (accessed June 13, 2018).
- McKinnon R. 1973. "Money and Capital in Economic Development." Washington, DC: The Brookings Institute.

World Bank Group (WBG). 2008. "Mali Rural Finance Study." Washington, DC: World Bank (June).

——. 2011. *General Principles for Credit Reporting*. Washington, DC: World Bank (September). Available at: http://hdl.handle.net/10986/12792 (accessed June 12, 2018).

_____. 2015a. "Financial Sector Assessment Program—Development Module: Mali—The Banking System and Credit to The Economy, Technical Note." Washington, DC: World Bank (December). Available at: http://documents.worldbank.org/curated/en/894621467999119269/Mali-Financial-sector-assessment-program-development-module-the-banking-system-and-credit-to-the-economy-technical-note (accessed June 13, 2018).

. 2015b. Facilitating SME Financing Through Improved Credit Reporting. International Committee on Credit Reporting. Washington, DC: World Bank (May). Available at: http://hdl.handle.net/10986/21810 (accessed June 13, 2018).

——. 2016a. *Doing Business 2017: Equal Opportunity for All*. Washington, DC: World Bank. Available at: <u>http://www.doingbusiness.org/reports/global-reports/doing-business-2017</u> (accessed June 13, 2018).

—. 2016b. Enterprise Survey Mali Full Survey Data. Available at: <u>https://www.enterprisesurveys.org/portal/login.aspx</u> (accessed October 2, 2017).

——. 2016c. The Role of Credit Reporting in Supporting Financial Sector Regulation and Supervision. International Committee on Credit Reporting. Washington, DC: World Bank (January). Available at: http://pubdocs.worldbank.org/en/954571479312890728/CR-2016-role-credit-reporting-in-supporting-financial-regulation.pdf (accessed June 12, 2018).

——. 2017a. Global Financial Development Database (June). Available at: <u>http://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database</u> (accessed June 12, 2018).

. 2017b. World Development Indicators Database. Available at: <u>https://datacatalog.worldbank.org/dataset/world-development-indicators</u> (accessed June 4, 2018).

Chapter 6 The microfinance sector

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Key findings

- Despite recent setbacks, Mali's microfinance sector, which serves over one million clients, plays a key role in increasing financial inclusion.
- After a period of robust growth in the 2000s, the microfinance sector experienced a prolonged period of crisis, which continues to have an impact on the sector.
- National cleanup actions, enforcement of stricter prudential norms, and closer supervision by the BCEAO has helped the sector stabilize and recover from the crisis, but many governance and supervision challenges remain.
- New entrants, limited liability companies (LLCs), account for a sizable proportion of the rebound in the volume of loans and deposits. However, older microfinance institutions (MFIs) such as large financial cooperatives remain stagnant and struggle to modernize their systems.
- The sector's capacity to expand is limited by its increasing funding needs, but banks remain hesitant to finance MFIs given losses endured during the recent crisis.
- Most MFIs consider mobile channels to reduce costs, but required system upgrades to enable such functionality are beyond the means of most MFIs.
- Going forward, the sector's strategic priority could be to better serve the needs of low-income people. Actions in three policy areas are suggested to achieve this objective:
 - Restore confidence in the sector by strengthening MFI supervision, ensuring that defunct and nonviable entities exit the market, and enhancing the sector's governance structures. To this end, the BCEAO will need to strengthen its capacity to fulfill its supervisory role over large MFIs. The government could develop a resolution framework for MFIs and allocate resources to strengthen national supervision capacity.
 - Strengthen MFIs' operational capacities by facilitating the establishment of shared management information systems (MIS) and information technology (IT) systems and by enhancing access to finance. To accomplish this, the government would need to subsidize the establishment of a "mutualized" shared services platform for MFIs. The government could also support systems that encourage the use of mobile money in order to reduce the need to establish brick-and-mortar facilities.
 - Foster innovation by expanding MFIs' access to the Unstructured Supplementary Service Data (USSD) channel by sharing costs related to product development and by developing partnerships with mobile network operators (MNOs). To this end, Mali's development partners could provide assistance to: (i) develop affordable pricing for non-MNOs' access to the USSD channel; and (ii) offset the costs related to product innovation and partnerships between MFIs and MNOs.

6.1 Microfinance sector overview

1. **Despite its relatively small size, Mali's microfinance sector serves a disproportionately large segment of the population**. In total, the value of the microfinance sector's total assets stood at only 1.6 percent of GDP, much smaller than the total assets of the banking sector, at 51.3 percent of GDP in 2016 (IMF 2017). The microfinance sector controlled only 3.2 percent of the banking sector's total assets, 4.4 percent of total loans, and 2.6 of total deposits (Table 7). As of 2016, Mali's MFIs were serving just over a million people.⁹²

⁹² The Malian Ministry of Economy and Finance's MFI Control and Supervision Unit estimates that, in 2016, there were roughly 1,007,100 clients in the microfinance market.

Table 7. Size of the microfinance sector compared to the banking sector

2015	MFIs	Banks	MFIs to banking sector (%)
Total Assets (FCFA billions)	123	3,798	3.2
Total Loans (FCFA billions)	82	1,844	4.4
Total Deposits (FCFA billions)	63	2,377	2.6

Source: BCEAO, team analysis.

2. The microfinance sector consists of a diverse range of institutions, of widely varying size and legal status. In total, 100 MFIs are licensed to operate in Mali, of which approximately 30 are currently operating and meeting reporting requirements. Mali's banking laws recognize four different legal categories of MFIs (Box 44). The traditional providers of microfinance services include three of these four categories: financial cooperatives, solidarity credit associations, and village-level savings and credit institutions. These institutions have existed since 1987, mainly with the support of international donors and national NGOs. Some financial cooperatives have expanded to become large networks, with total assets comparable to those of small banks. Since 2006, LLCs have begun to provide microfinance services, including Premiere Agence de Microfinance and Microcred. Many of these LLCs are supported by international investors. With a clear business model, streamlined operational processes, and a clear strategic vision, the LLCs' share of the market has grown consistently despite an overall stagnation in the size of the market (Section 6.4).

Box 44. Institutional Types of MFIs in Mali

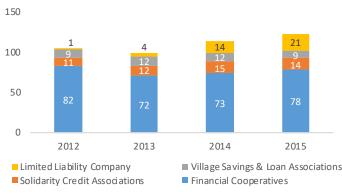
- **Financial cooperatives:** These institutions are not-for-profit financial institutions, owned and operated by their members to serve and protect members' interests. In Mali, financial cooperatives can be stand-alone entities or part of a federated network of financial cooperatives that share services and branding and benefit from economies of scale. In Mali, financial cooperatives are the dominant microfinance model.
- Village-level savings and credit institutions: These institutions, referred to as CVECAs (from the French Caisse Villageoise d'Epargne et de Crédit Autogérée), are autonomous village savings and credit institutions. CVECAs are designed to operate in rural areas to serve clients consisting primarily of subsistence farmers. To achieve service flexibility and economies of scale, CVECAs organize themselves into regional federations. CVECA are the second largest MFI group after financial cooperatives.
- **Solidarity credit associations**: These institutions are based on the Grameen Bank model, in which small solidarity groups borrow collectively. Each member's loan is backed by mutual guarantees provided by the group as a whole, with the group taking collective responsibility for the repayment of individual members' loans.
- Limited liability companies: These institutions are for-profit MFIs that operate in a manner similar to a commercial bank, with growth and performance driven by equity investments and shareholder returns. The biggest challenge for microfinance LLCs in Mali is to achieve a balance between financial sustainability and the poverty-alleviation mission of the microfinance sector.

It should be noted that informal savings clubs, including rotating savings and credit associations and village savings and loan associations (VSLAs), are not legally recognized as MFIs in Mali. Most operate with an informal associative structure, although some register with local district authorities as associations.

3. **Financial cooperatives still dominate the microfinance market, despite the strong growth of microfinance LLCs.** In Mali, financial cooperatives have the longest history of any form of MFI. They continue to dominate the market in terms of total assets, savings volumes, and number of clients. As of 2015, according to the Microfinance Supervision Unit of the Ministry of Economy and Finance (CCS-SFD), financial cooperatives managed assets valuing approximately FCFA 78 billion (US\$ 132 million) in total, representing 64 percent of the total assets managed by the MFI sector as a whole (Figure 152). They accounted for 73 percent of total clients, 60 percent of total loans, and 78 percent of total deposits.⁹³

⁹³MFI data provided by the Ministry of Economy and Finance's Microfinance Supervision Unit, *Cellule pour le Contrôle et la Supervision des Systèmes Financiers Décentralisés* (CCS-SFD).

Figure 152. MFI sector assets by institutional type (FCFA billions)



Source: CCS-SFD, team analysis.

4. **A small number of large MFIs dominate the market**. Of the 100 or so MFIs that are registered and licensed by the MEF, the seven largest dominate the market. Each of these seven MFIs manages assets in excess of FCFA 4.5 billion (US\$ 7.6 million). As of end-2015, these large MFIs accounted for 82 percent of the MFI sector's total assets, 87 percent of total outstanding loans, 84 percent of total deposits, and 72 percent of clients. In addition, there are 10 medium-sized MFIs, classified as those managing assets ranging from FCFA 500 million to 4.5 billion (roughly US\$ 843,000 to US\$ 7.6 million) in value. Together, these 17 medium- and large-sized MFIs account for almost the totality of the market (Table 8).

Table 8. Overview of the MFI sector by size of MFIs, 2015

	Total Mar	ket Value	Medium and Large MFIs	Large MFIs only
	(FCFA billions) (US\$ millions)		(% of market)	(% of market)
Assets	123	207	98	82
Loans outstanding	82	138	99	87
Deposits outstanding	63	106	98	84
Number of clients	979,000	n/a	98	72

Source: CCS-SFD, team analysis.

5. While MFIs operate in most regions of Mali, the rate of penetration remains low. In total, approximately 313 MFI branches and small outlets are in operation throughout the country.⁹⁴ A high proportion of these are concentrated in the key agricultural zones in the Sikasso and Segou regions, where Mali's first MFIs commenced operations. In terms of the rate of penetration, there are approximately 3.3 MFI branches or outlets per 100,000 adults in Mali. This is slightly lower than the banks' penetration rate of 3.8 branches per 100,000 adults (Chapter 5).

Table 9: Penetration of to	n seven MEIs by region	(number of branches and	d small outlets 2015)
Table 9. Perietration of to	p seven iviris by region	(indifiber of branches and	u sinali outlets, 2015)

	Kafo	Kondo	RMCR	Soro	Nuosigico	Microcred	CAECE	Total
	Jiginew	Jigima	RIVICR	Yiriwaso	Nyesigiso	WIICI OCI EU	CAECE	TOLAT
Bamako	18	27	-	6	8	7	n.d.	66
Koulikoro	-	26	5	2	-	-	n.d.	33
Kayes	5	23	1	-	4	1	n.d.	34
Sikasso	66	-	-	4	-	2	n.d.	72
Segou	23	9	12	2	4	1	n.d.	51
Mopti	-	9	5	1	-	1	n.d.	16
Gao	-	5	-	-	-	-	n.d.	5
Kidal	-	3	-	-	-	-	n.d.	3
Timbuktu	-	-	-	-	-	-	n.d.	0
Total	112	102	23	15	16	12	33	313

Source: CCS-SFD, team analysis.

Note: Data for Nyesigiso do not include small outlets. Only total number of outlets was available for CAECE.

⁹⁴The actual total number of branches and outlets is slightly higher, as data on small outlets are missing from one large financial cooperative.

6.2 Growth and performance of the microfinance sector

6. The microfinance sector's evolution over the past 25 years can be characterized by three distinct phases of development. The first phase, from 1993–2009, was a period of high growth. This growth was fueled by large and sustained investments from donors, a lenient licensing environment, and conducive national microfinance strategies intended to foster the sector's development. During this period, the total value of the microfinance sector's loans grew by 19 percent per year, on average, while deposits grew by 32 percent (Figure 153). The second phase, from 2009–2013, was a period of crisis in which several MFIs experienced significant operational challenges. During this period, two of the five largest MFIs went bankrupt. Deposit and loan volumes retracted significantly, with the volume of loans experiencing negative growth and deposits growing at only 1 percent per year, on average. This arose in response to a number of factors, including—but not limited to—weak capacity to supervise the sector, a lenient licensing environment, insufficient prudential and reporting requirements, and weak MFI management and board capacity. The third phase, from 2014 on, has been a period of recovery, with both deposit and credit volumes rebounding. During this period, approximately 30 MFIs have closed following revocation of their licenses.

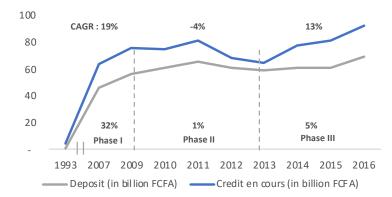
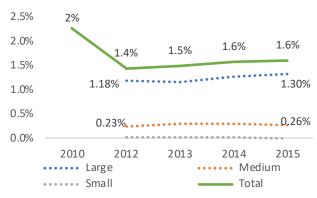


Figure 153. Overall MFI sector deposit and credit growth (FCFA billions)

Source: BCEAO, team analysis.

7. The microfinance sector's assets experienced steady growth between 2012 and 2015, despite falling short of the pre-crisis level. Between 2010 and 2012, the sector's total assets as a percentage of GDP declined by 0.6 percentage points, reflecting the negative impact of the crisis on the sector. After this period of decline, however, the sector appears to have rebounded, with total assets reaching 1.6 percent of GDP in 2015. This recent growth has been driven mostly by the growth of large MFIs. By contrast, the value of the total assets of small- and medium-sized MFIs has not increased significantly since 2013 (Figure 154).

Figure 154. MFI sector total assets by MFI size (% of GDP)



Source: CCS-SFD, team analysis.

6.3 The health of the microfinance sector

8. During the sector's high-growth phase, especially from 2000 to 2010, MFIs continued to operate in spite of operational and performance anomalies. As a result, the microfinance sector experienced a major crisis in 2009/10, when two of the largest MFIs could no longer meet their obligations. An independent assessment ordered by the MEF identified the following factors for the crisis (Poursat and Assouline 2014):

- The lax licensing environment resulted in the establishment of several new MFIs, especially from 2000 to 2010.
- The supervisory system could not keep up with the rapid growth of the sector. It lacked the capacity to ensure the necessary auditing and control functions, such that anomalies were not always addressed appropriately. Irregularities were left to persist without sanction or remedy.⁹⁵
- Sufficient attention was not given to the quality and capacity of the MFI senior management teams and board members, most of whom lacked prior banking, microfinance or business experience.
- MFIs' management information systems were unable to adequately address the specificities of the microfinance model. In many cases, such systems could not produce the basic financial statements needed to effectively monitor MFI performance and soundness.
- Internal MFI decision-making processes were marred by weak controls and low staff capacity. Decision making and systems were therefore vulnerable to manipulation and misuse.
- External auditors and accountants did not have sufficient capacity to adequately assess the validity of financial data.
- MFIs faced challenges in conforming to new microfinance laws adopted in Mali in July 2010, which emphasized stricter controls on key prudential ratios.

9. **The crisis had a cumulative negative effect on the microfinance sector**. The fallout from the crisis had a severe impact on the microfinance: (i) clients and the public lost confidence in MFIs as a safe place to hold savings; (ii) banks reduced refinancing to MFIs; and (iii) development partners decreased their support. As a result, the sector contracted and deteriorated. Several MFIs went bankrupt. The NPL ratio increased from 6 percent in 2009 to 10 percent in 2013. By that time, the national authorities had called for an independent review of the sector. In 2014, based on the results of that review, the government enacted several measures to clean up the sector (Box 45).

Box 45. Mali's Plan for Cleaning Up the Microfinance Sector

In 2014, the government and regional authorities intervened to clean up and strengthen the microfinance sector through the following actions:

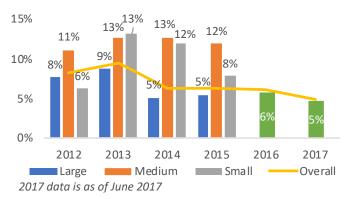
Audit and emergency action plan: The authorities conducted an audit and implemented an emergency action
plan that focused on: (i) the closure or consolidation of MFIs; (ii) promoting implementation of the new law for
MFIs; (iii) strengthening the capacities of the institutions mandated to supervise, promote, and professionalize
the sector, including the CCS-SFD, the Center for the Promotion and Support of Decentralized Financial Systems
(CPA-SFD), and the Decentralized Financial Systems (APSFD-Mali).

⁹⁵As part of the cleanup activities, the MEF's MFI supervision unit received technical assistance to strengthen its capacity in 2014–15. While helpful, it is evident that the body and the future role it should play is in question. To evaluate the situation, the MEF, along with development partners, conducted an independent study in 2016 to review the functions and institutional capacity of the supervision unit. The provisional recommendation from the study is to separate the supervision body from the decision-making body of the MEF into an independent agency. To date, the MEF has not taken a decision on the path forward for the MFI supervision unit.

- Improved regulatory environment: To improve the stability of the microfinance sector, the MEF and regional authorities required the BCEAO (through its Banking Commission) to supervise the largest MFIs, including all whose total value of loans or deposits outstanding stood in excess of FCFA 2 billion (US\$ 3.4 million) for a period of two years, as stipulated in Article 44 of the microfinance law.
- Measures to restore consumer confidence: The MEF intervened to compensate clients of Jemini, the largest of
 the failed MFIs. According to the MEF, approximately 42 percent of savings (FCFA 1,135,586,449, or US\$ 1.9
 million, out of FCFA 2,692,919,229, or US\$ 4.5 million) has been reimbursed. In addition, in 2014, WAMU member
 states promulgated a new law to establish a depositors' insurance system for banks and MFIs. While
 implementation has been slow to date, the Ministers of WAMU recently established guidelines for tariffs and
 insured deposit levels for MFIs and banks. MFIs' clients will pay a fee equivalent to 0.29 percent of their savings
 to insure these savings to a maximum level of FCFA 200,000 (about US\$ 337). The scheme will be implemented
 first for large MFIs, then expand at a later stage to include other MFIs that are in good health.
- A new national microfinance policy and action plan (2016–2020): This plan places significant emphasis on strengthening the microfinance sector's governance systems and consumer protection mechanisms.

10. **The overall health of the microfinance sector has improved significantly**. Since 2013, the total NPL ratio has been on a downward trend, declining from 10 percent in 2013 to approximately 4.9 percent by June 2017 (Figure 155). This trend can be attributed to: (i) MEF's initiative to revoke the licenses of poorly performing or defunct MFIs;⁹⁶ (ii) the rapid growth and increasing market share of well-performing new entrants; (iii) the enforcement of stricter prudential norms; and (iv) the BCEAO's closer supervision of large MFIs, as mandated by Article 44 of the microfinance law (Box 46) (Rique and Poursat 2013).

Figure 155. NPL ratio by MFI size over time (% of outstanding loans)



Source: CCS-SFD, BCEAO, team analysis.

Box 46: The New Microfinance Law for the BCEAO Region

WAMU member states enacted a new microfinance law in 2007 to deal with several limitations in the original microfinance law enacted of 1994. Specifically, the new law intended to address lenient licensing requirements, the lack of an independent supervisory authority, and weaknesses in prudential and reporting requirements. Major amendments included the following:

- 1. An extension of the law to all microfinance institutions, irrespective of their legal form. Previously, the law applied only to financial cooperatives.
- 2. The establishment of a single licensing regime for three types of MFIs (cooperatives, associations, and LLCs), with a requirement for the BCEAO to review and approve any new MFI licensing applications.
- 3. *More stringent controls by the BCEAO*. Article 44 of the new law specifies that large MFIs (those with deposits or outstanding loans exceeding a value of FCFA 2 billion, or roughly US\$ 3.4 million) must be supervised by the BCEAO and the Banking Commission.
- 4. *More stringent reporting requirements.* Article 44 of the new law requires MFIs to prepare and submit certified financial accounts and annual financial statements.
- 5. Strengthened prudential ratios for MFIs in all categories, with applicable sanctions.

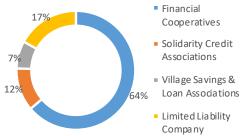
⁹⁶ Per the CCS-SFD, since the start of cleanup activities in 2014, the MEF has retracted licenses from 23 MFIs. Of the 70 entities that do not report on a regular basis, the CCS-SFD estimates that approximately 50 MFIs, mainly small, have ceased operating.

	Initial Law 1994	New Law 2007
Legal status for MFIs	Cooperatives only; other types can obtain five-year operation authorization from Ministry of Finance	Cooperatives, associations, and LLCs
Licensing	Ministry of Finance only	Ministry of Finance with approval from the BCEAO
Prudential requirements	No solvency norms Annual financial statements	Nine prudential ratios similar to banking norms; new accounting framework specific to microfinance; monthly indicator reports and certified annual statements for large MFIs and quarterly reporting for smaller MFIs; certified accounts required for large MFIs
Supervision	Ministry of Finance only	BCEAO via Banking Commission for large MFIs – Article 44; Ministry of Finance for others

6.4 The new face of Mali's microfinance sector

11. Since 2003, Mali's microfinance sector has been transformed by new entrants, who are playing an increasingly significant role. While their entrance has been recent, microfinance LLCs have recorded rapid growth, accounting for an increasing share of the market in terms of total assets. In 2012, microfinance LLCs accounted for only 1 percent of the microfinance sector's total assets. By 2015, this figure had grown to 17 percent (Figure 156). In 2015 and 2016, an additional three microfinance LLCs entered the market, which will further increase the market share of this type of institution. It should be noted that microfinance LLCs have a disproportionate tendency to operate in urban areas rather than rural areas, which has implications for access.

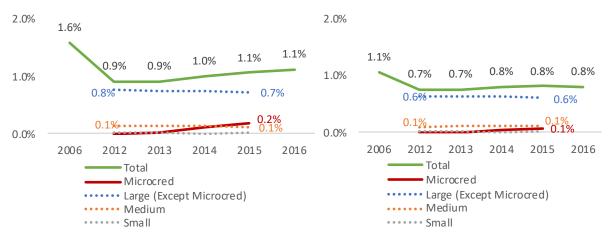
Figure 156: Total MFI sector assets breakdown by institutional type (% of total sector assets)



Source: CCS-SFD, BCEAO, team analysis.

12. These new entrants account for a significant proportion of the rebound in the microfinance sector's loans and deposits. Since 2013, the accelerated growth of the sector's loans and deposits can be attributed largely to the rapid growth of a single institution, while the rest of the sector's growth stagnated or even declined. This institution accounted for 66 percent of the growth in the sector's total loans and 37 percent of total growth in deposit volumes in the period from 2013 to 2015 (Figure 157).

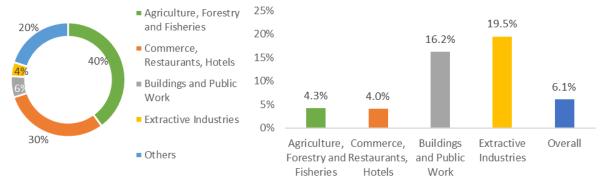
Figure 157. Amount of loans (% of GDP, left) and deposits (% of GDP, right) by MFI size



Source: CCS-SFD, BCEAO, WBG (2017), team analysis.

13. **MFIs serve the agriculture and trade sectors**. Experience in Mali shows that MFIs tend to perform well when they lend to clients they understand well, such as in the agriculture and trade sectors. Examining the breakdown of NPLs by sector, loans to agriculture and trade/commerce sectors exhibit healthy NPLs at 4.3 percent and 4.0 percent, respectively. By comparison, NPLs in the construction and extractive industries, which involve more complex loan structuring and longer tenures, are significantly higher, at 16.2 percent and 19.5 percent, respectively (Figure 158). Indeed, overexposure to the construction sector has been cited as the main reason for MFI failure during the crisis.





Source: CCS-SFD, BCEAO, team analysis.

14. **Women remain relatively underserved by the microfinance sector**. Individual males account for most of the credit provided by MFIs (63 percent in 2015), with women accounting for only 23 percent of credit volumes (Figure 159). Microfinance professionals in Mali attribute this to the following causes: (i) women are less likely to meet the requirements for the typical microfinance product provided by large MFIs; (ii) the economic activities in which women typically engage require less credit, so that the average value of women's loans is lower than that of men;⁹⁷ (iii) the average level of financial literacy among women is low, particularly in rural areas; and (iv) there is a cultural bias that makes it more likely for men to try new things, such as accessing microfinance products provided by new entrants.

Figure 159. Credit volume (FCFA billions, left) and percentage (% of outstanding credit, right), breakdown by gender, 2015 100



Source: CCS-SFD, team analysis.

15. **The capacity of the microfinance sector to expand is limited by its growing funding needs**. As stated above, loan and deposit volumes have started to rebound since 2013, with the total volume of loans increasing at a more rapid pace (with a compound annual growth rate of 6.9 percent) than total deposit volumes (with a compound annual growth rate of 4.9 percent) in the period from 2011 to 2016 (Figure 160). In 2016, the total value of the sector's loans was roughly 1.4 times the total value of its deposits. The funding gap is filled primarily by the local banking sector and by donors. Many MFIs

⁹⁷ Data on the number of loans by gender were unavailable.

complain, however, about the prohibitive cost of commercial bank financing. With MFIs being required to pay rates of around 8 percent for this funding, many MFIs claim that it is barely viable, given the BCEAO annual interest rate cap of 24 percent on microfinance loans (Box 47).



Figure 160. Loan and deposit volumes over time (FCFA billions)

Source: CCS-SFD, team analysis.

Box 47. Interest Caps in West Africa

The use of interest rate caps has become popular again in some countries since the 2008 financial crisis. A recent World Bank study (Maimbo and Henriquez Gallegos, 2014) found that 76 countries around the world use some form of interest rate cap. The main reasons cited are to: (i) protect the consumer from excessive rates; (ii) expand financial access among the disenfranchised; and (iii) make credit more affordable.

In Africa, 24 countries currently cap interest rates, including the eight countries of the WAEMU. As a WAEMU member, Mali shares a common central bank (BCEAO) with other member states. As such, financial institutions in Mali are subject to WAEMU regional banking regulations and are supervised by the WAEMU Banking Commission. WAEMU established interest rate controls in 1997. At that time, interest rates were reduced from 36 percent to 27 percent for microfinance loans. In 2013, interest rates were reduced again by 3 percentage points, capping the maximum interest rates for MFIs at 24 percent.

Maimbo and Henriquez Gallegos (2014) found that interest rate caps did not have the intended impact. For example, in 2012, 78 percent of the countries with interest rate caps in Africa had a lower credit-to-GDP ratio than the regional average, and 83 percent had scored lower on their financial inclusion indicator than the regional average. Helms and Reille (2004) found that the imposition of interest caps on microfinance loans in the WAEMU region caused MFIs to withdraw from rural and remote areas and increase average loan sizes to improve efficiency and returns. In Mali, one of the largest MFIs with a significant presence in rural areas complained of the high operating costs of its rural agencies and was looking for ways to reduce these costs.

It is difficult to determine the effect of the interest rate cap on the microfinance sector in Mali. It appears to have had a more negative impact on the operational efficiency of medium and small MFIs compared with larger ones, given the downward trend in their operational self-sufficiency ratio from 2014 to 2015 (Figure 161). Indeed, medium and small MFIs have less capacity to earn additional revenue on other services beyond loans and less flexibility to invest in new efficiency-enhancing technologies. A rigorous examination of the impact of the interest rate cap on operational sufficiency and outreach is merited in the BCEAO region.

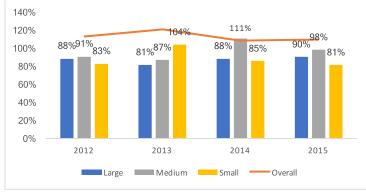


Figure 161. Total MFI sector operational self-sufficiency ratio (% of operating revenue as a share of operating expenses)

Source: CCS-SFD, team analysis.

6.5 Microfinance products and services

16. Mali's microfinance sector is mature, having evolved in many important ways over the last 25 years. First, the sector offers a full range of products and services, from basic transaction services to a variety of savings, microinsurance, and credit products. MFIs offer a wide variety of services to meet diverse needs, from the most basic (such as current accounts and payment/cash transfer services) to the more complex (such as insurance and credit products). Second, MFIs use a range of different delivery channels to bring their services closer to clients, including branches, kiosks and small outlets, roving MFI staff to serve clients directly, and ATMs. Third, more recently, MFIs have established partnerships with third parties to extend services they cannot provide on their own, such as microinsurance and cash transfer services. This section presents a description of the main products and services offered by Mali's large MFIs—those covered by Article 44.

17. A client's first entry point into other MFI products is through the opening of a current account. As a prerequisite to accessing other services, a client is required to open a current account. With this account, clients can make deposits and withdrawals and make transfers from the current account to other accounts they may hold with the institution. Clients must pay a fee to open the account (for example, FCFA 5,000 to 10,000, or US\$ 8.4 to US\$ 17), after which a monthly maintenance fee is usually imposed, ranging up to FCFA 2,500 (US\$ 4.20). Some large MFIs also offer *bons de paiement*, or payment vouchers, linked to the current account. These are slips that the account holder can use to transact a payment from his or her account to a third party. It allows holders to pay suppliers without having to handle cash or to incur travel costs to deliver cash. Clients usually pay a small fee for a book of payment voucher slips (a book of 50 payment slips may cost US\$ 4.40, for example).

18. Several large MFIs have established partnerships with money transfer companies to offer cash transfer and payment services to their clients. The three largest MFIs have well-established partnerships with the three major money transfer and payment service companies: Western Union, MoneyGram, and Orange Money. People in Mali use these services primarily to transact P2P transfers. With the recent introduction of Orange Money, however, people can use this service to deposit and withdraw funds into or from their Orange Money account, to check their account balance, and to pay bills (Chapter 4). Money transfer services are available not only to account holders, but also to the public. This broadens MFIs' access to a base of potential new customers. In addition, most large MFIs with automated systems provide intra-MFI services and transfers free of charge. This allows clients to use their accounts easily wherever the MFI is represented, except in the case of some remote financial cooperative outlets that are not computerized or connected to the network and are unable to conduct real-time processing.

19. **MFIs offer a range of savings products to their clients**. Except for credit-only MFIs, most MFIs offer a range of demand and term deposit accounts. While there is a high degree of standardization across the deposit account offerings of different MFIs, there are some variances. For example, Microcred is the only MFI that offers an interest-bearing, demand deposit account, while other MFIs do not pay interest for such accounts. Savings held in Microcred's demand deposit accounts attract interest at the rate of 4 percent per year. These accounts are available to everyone, with no fees, and holders are able to conduct an unlimited number of deposits and withdrawals. Microcred also offers term deposit accounts for individuals, enterprises, and institutions for periods ranging from six to 60 months, with savings held in such accounts drawing interest of 5 to 8 percent per year. By contrast, Kafo Jiginew does not pay interest on demand deposit accounts, and pays interest rates of 4 to 5.5 percent per year on savings held in term accounts, for periods ranging from three to 12 months.

20. **Mali's microfinance sector has recently begun to offer microinsurance products**. A fledgling microinsurance market exists in Mali, with insurers leveraging MFI and MNO networks to distribute their products. Some of these insurance products, such as the agri-insurance product offered by PlaNet Guarantee, have failed to achieve financial viability due to the low rate of uptake by the target market. A few notable microinsurance products are described in Box 48.

Box 48: Microinsurance Products Available in Mali

Asset insurance: Microcred offers a fire and water damage insurance product known as Jigitugu, which is underwritten by Allianz. Clients contracting business loans from Microcred are required to hold the policy. Annual premiums start from FCFA 6,000 (US\$ 10). For SMEs, the coverage provided these policies ranges from FCFA 1 million (US\$ 1,773) to FCFA 60 million (US\$ 106,384), with premiums ranging from FCFA 7,200 (US\$ 12) to FCFA 73,200 (US\$ 123). Microcred also offers accidental death and dismemberment insurance with hospital cash coveager, with premiums as low as FCFA 5,000 (US\$ 8.4).

Life and disability insurance: In partnership with Orange, NSIA Assurances offers a life and disability insurance and medical expense insurance product known as Sini Tonon, which is provided to clients whose mobile savings reach FCFA 40,000 (US\$ 67). The initial savings deposit must be at least FCFA 3,000 (US\$ 5), with a minimum value of subsequent deposits standing at FCFA 100 (US\$ 0.17). This product has not been successful, however, due to a lack of appropriate marketing and insufficient engagement by NSIA Assurance. The product is being redesigned and will be relaunched.

Accident insurance: Sonavie offers total and permanent disability and medical expense insurance for accidents, known as Lakana, with premiums as low as FCFA 10,000 (US\$ 17). The maximum coverage in case of death or disability is FCFA 250,000 (US\$ 420). The maximum coverage for medical expenses is FCFA 100,000 (US\$ 170).

Agri-insurance: PlaNet Guarantee offers farmers in Mali a crop insurance product underwritten by Allianz. Since its introduction seven years ago, however, this product has not achieved financial viability. The product is intended to protect farmers of maize, sesame, sorghum, millet, and all rainfed crops against the risk of drought. Payouts are triggered by a satellite-based weather index, rather than actual losses incurred by individual farmers. Premiums range from 6 to 12 percent of the total coverage. A typical insurance premium for one growing season, or roughly one year, would be FCFA 12,600 (US\$ 21) per farmer. The product is distributed by Soro Yiriwaso, input suppliers, and producer cooperatives. In 2017, only 10 percent of the 15,000 subscribers paid their premiums. The company estimates that it would need to sell 40,000 policies to achieve financial viability.

21. **MFIs offer a range of tailored credit products to meet the needs of target clients**. There appears to be a trend toward specialization among MFIs offering credit products. Kafo Jiginew, a typical financial cooperative that primarily serves clients in farming and agricultural zones, offers a range of credit products for small and medium agricultural producers. By contrast, Microcred, a typical LLC serving primarily microbusinesses and SMEs operating in urban markets, offers products under terms and conditions intended to meet the needs of their target market.

Box 49. Credit Product Offerings—Kafo Jiginew and Microcred

Kafo Jiginew: The value of loans offered by Kafo Jiginew ranges from FCFA 25,000 (US\$ 44.40) to FCFA 100 million (US\$ 170,000). Offerings include the following types of loans:

- *Very short-term loans*: Short-term credit for durations of one to five months to finance income-generating activities, with interest rates of 1.5 percent per month (18 percent per year).
- Short-term loans: Short-term credit for durations of six to 12 months to finance farm operating needs, working capital, and cash flow, with interest rates of 1.5 percent per month. The interest rate for inventory credit is 12 percent flat for credit of a nine-month duration, while the interest rate for agricultural input credit is 12 percent flat for credit of a ten-month duration.
- *Medium-term credit*: Equipment credit is provided for durations of three years, with interest rates at 1.5 percent per month (18 percent per year).
- Long-term credit: Heavy equipment credit is provided for durations of three to five years, with interest rates at 1.5 percent per month (18 percent per year).

Microcred: Microcred offers loans that range from ten to 12 months, on average, with a maximum duration of 36 months, and are targeted to small businesses.

- Very small enterprises: The value of loans ranges from FCFA 100,000 (US\$ 170) to FCFA 12 million (US\$ 20,000), with interest rates at 1.68 percent per month.
- Small enterprises: The value of loans ranges from FCFA 12 million (US\$ 20,000) to FCFA 60 million (US\$ 101,000), with interest rates at 1.68 percent per month.
- Medium enterprises: The value of loans ranges from FCFA 60 million (US\$ 101,000) to FCFA 100 million (US\$ 170,000), with interest rates at 1.68 percent per month.

• Emergency Credit: The value of loans ranges from FCFA 500,000 (US\$ 840) to FCFA 20 million (US\$ 34,000), with interest rates at 1.68 percent per month.

In 2015, Kafo Jiginew reported that it had granted US\$ 33.5 million in consumer loans; US\$ 15.3 million in equipment loans, and US\$ 4.5 million in working capital loans. This compares to Microcred, which granted US\$ 2.5 million in equipment loans and USD\$ 24.5 million in working capital loans for the same year. In addition, approximately 70 percent of Microcred's loan portfolio is allocated to very small enterprises, for an average loan duration of 10 to 12 months. In terms of outreach, approximately 50 percent of Kafo Jiginew's loans go to the rural sector, whereas Microcred operates solely in urban areas.

Source: CCS-SFD, BCEAO, MFI interviews.

22. To expand their reach in a cost-efficient manner, particularly in rural areas, MFIs can leverage MNO networks. It is costly for MFIs to extend their microfinance services into remote locations through traditional means. Some MFIs offer mobile money products as a cost-effective means of serving clients they would not otherwise be able to reach. With the support of Mercy Corps, the MFI Soro Yiriwaso has partnered with Orange Money to pilot a project to increase financial inclusion among rural clients who live far from MFI or bank outlets. The pilot showed promising results. By linking savings and credit groups to mobile money accounts to manage their transactions, Soro Yiriwaso could reach more (and more remote) clients using fewer credit agents. With this innovative approach, Soro Yiriwaso penetratedeven those rural areas that were experiencing political unrest and insecurity, such as the Mopti and Gao regions. The 18-month pilot, completed in April 2017, reached 103 savings and credit groups, with a total of approximately 5,200 members located in villages with high economic potential. The groups conducted 20,328 CICO transactions and made 1,344 transfers, for a total cumulative value of FCFA 191.5 million (US\$ 323,000).

6.6 Enduring challenges facing the sector

23. Many defunct MFIs have not yet been dealt with appropriately, and some with severe anomalies continuing to operate in the market. The authorities have been slow to deal with the roughly two-thirds of MFIs that are defunct or nonoperational. There has been a lack of urgency and clarity in efforts to liquidate even the smallest MFIs. More worrisome is that one large MFI, deemed bankrupt at the height of the crisis in 2009/10, continues to operate despite a very high NPL ratio (Figure 162). Another large MFI that went bankrupt in 2009 has still not been liquidated and remains stuck in the commercial courts system.

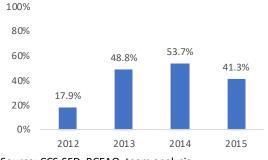


Figure 162. Kondo Jigima NPL ratio over time (% NPL of Kondo Jigima) 100%

24. While MFIs have made progress toward addressing severe corporate governance weaknesses, challenges remain. Unchecked corporate governance issues have been cited as the main cause of MFI failure in the WAEMU region. While efforts have been made to build the capacity of elected officials, their ability to effectively manage the cooperatives that dominate the MFI market in Mali remains limited, with elected representatives often having limited education or relevant experience. While the quality and composition of the management teams of large MFIs has improved, strategic management capacity needs to be reinforced. Risk management systems also need to be improved, considering the size of some of the networks. In addition, MIS weaknesses have hampered

Source: CCS-SFD, BCEAO, team analysis.

internal control systems, causing delays in the production of information and in decision-making processes. Best practices in MFI corporate governance are highlighted in Box 49.

Box 50. Corporate Governance in Microfinance Institutions

Governance affects the way an organization is directed, administered, and controlled. Good governance can go a long way in preparing an MFI to better handle the risks that are inherent in managing an institution. Risk taking is at the heart of financial intermediation, and the board of directors is ultimately responsible for the level of risk assumed by the institution.

Boards should be making decisions that will result in financial and organizational health, maintain mission focus, and assure institutional reputation and market positioning. The board should not only appoint and review the performance of the chief executive officer, but also decide which business opportunities to pursue, which market niches are of interest, which products to introduce, and which policies and procedures best support the organization.

Why does it matter?

Governance has been one of the most neglected subjects in the microfinance sector. Attention to sector governance has increased recently, however. In today's more commercialized environment, several factors give rise to governance concerns:

- *Growth and scale of MFIs:* In several poorer countries such as Mexico, Bolivia, Peru, Cambodia, Bangladesh, and Kenya, MFIs have become systemically important in serving poor or underserved populations.
- Emergence of legal and regulatory gaps: Many MFIs have transformed, becoming microfinance banks that mobilize deposits. Banking supervisors need to understand how best to regulate these institutions to ensure sound governance practices, to safeguard the safety and soundness of these institutions, and to protect their depositors, who are usually the poorest of the poor.
- Increasing industry risk: Beyond standard risks such as credit and liquidity, new risks have emerged in the MFI industry such as: (i) foreign exchange risk (MFIs borrow from international debt funds); (ii) product diversification risk (in addition to capital loans, MFIs are progressively adding new types of products, including small business loans, housing rehabilitation, and agricultural finance products that carry different maturities and bring new types of risks); (iii) political risk (state intervention and nonpayment movements); and (iv) client risk (overlending, high interest rates, and crises resulting in demand for client protection).
- *Diversification of MFI structures:* Several groups of networks have expanded substantially, to the point where they are systemically important to the sector (grouping of MFIs).
- Entry of institutional investors: Over the past 10 years, some 70 debt funds and 30 equity funds—primarily a mix of public development finance institutions and private investors—have emerged and are requiring that more attention be paid to the quality of governance in MFIs.
- The double bottom line: MFIs are viewed as having an important social purpose, providing resources for the working poor. Therefore, the performance of MFIs must be judged not only on financial terms, but also with respect to their social impact on poverty alleviation.

What are the reform priorities?

Mandate and composition of the board

Boards of MFIs are not fulfilling their expected roles. The board of directors is where the key responsibilities of an institution converge. Given that financial institutions are considered to be special interest entities that play a key role in all economies, MFI boards are charged with the public's trust to act responsibly and with integrity. Boards have special duties to act in the best interest of all stakeholders, rather than only their owners. The board must set the appropriate "tone at the top," through which it directs the manner in which the MFI conducts its business—through strategic planning, risk parameters, and policies. It must set clear risk parameters within which management and staff execute the business plan. It must ensure that key control functions are established and independent so that it can monitor the MFI's existing and prospective risks, the overall success of its business strategy, and its financial performance and soundness.

Boards must comprise a balanced mix of skills and experience, be objective, and fulfill their fiduciary duty by prudently guiding the institution. Boards must be composed of professionals who are fit and proper for the job, meeting requirements with regard to ethics, professional experience, education, and financial soundness. These professionals must be vetted by the relevant MFI regulator. In addition, the board must have an internal structure that includes an audit, risk, and corporate governance committees to professionalize its operations.

Risk governance

Solid corporate governance for financial institutions, especially those that collects deposits, requires constant vigilance regarding risk. Based on their financing structures, risk management systems in the MFI sector face a number of

challenges. Thus far, the most common risks relate to the scale of the client base, collection resulting from overlending and overborrowing, product diversification, and operational and reputational risks caused by political interference.

The development of a risk strategy, effective risk oversight, and a sound control framework is one of the most critical roles for which boards are responsible. Independent risk oversight processes (such as internal audit, risk management, and compliance) are an important instrument of the board to ensure that its strategies, risk thresholds, and policies are communicated, monitored, and respected. If boards are adequately empowered to set business strategy and the risk parameters necessary to accomplish that strategy, then the risk management function becomes an important tool for it to understand the success of its directions and the soundness of the institution. Having a strong risk management function then allows the board to discharge its duty to oversee the performance of the institution.

Conflicts of interest regulation

Hidden or inappropriate relationships between board members (and their friends, relations, and business partners) and the institutions for which they are responsible may be the single largest cause of the demise of financial institutions. Despite the smaller size of loans offered by MFIs, these institutions are still vulnerable to related-party transactions and related lending. This issue is more problematic when MFIs are deposit-taking institutions. For that reason, it is key for the MFI legal framework and MFI internal regulations to clearly regulate related-party transactions and related lending to prevent misuse of account holders' deposits and mismanagement of shareholder capital. Strict approval procedures and limits must be laid out to protect the institution from mismanagement.

Transparency and disclosure

Reliable financial and nonfinancial information is a fundamental pillar of good governance. A solid disclosure environment faciliates the regulator's oversight and allows key stakeholders to monitor performance and the acheivement of social objectives. The quality of financial and nonfinancial information remains an important challenge for MFIs. Audited financial statements are among the most effective means through which shareholders can monitor the performance of an institution and evaluate the performance of the board of directors and management team. In addition, disclosure of nonfinancial information—such as the ownership structure of the bank, conflicts of interest, risk and audit policies, and related-party transactions and related lending—strengthens the governance of the institution and enhances the accountability of the board and key management positions.

In a recent study on the management of failing deposit-taking institutions in the WAEMU region, poor corporate governance was cited as the main reason for these institutions' failure. The following issues cited by the study were prevalent in Mali and explain in large part the downfall of the largest MFIs: (i) serious weaknesses at the board level in terms of capacity and fraud; (ii) lack of enforcement of regulatory requirements and MFIs' bylaws to comply with prudential requirements, such as loan ceilings and the maximum percentage of aggregate principal amount of outstanding loans granted to managers and board members; and (iii) fraud committed by board members, shareholders, and/or managers, for example in granting large loans to elected representatives and their relatives. Weak governance and control mechanisms at both MFI and supervisory authority levels can lead to massive fraud, as many cases demonstrate (for example, Jemini and Kondo Jemini in Mali).

25. **MFIs' capacity to implement the stringent prudential norms required by the new microfinance law remains weak**. While the capacity to implement prudential norms related to certain parameters has improved (as evidenced, for example, by a reduction in the NPL rate over time) it remains limited according to other parameters. Some large MFIs, for example, have found it difficult to meet the new capital adequacy and liquidity ratios. Mobilizing sufficient capital for MFIs to meet these requirements, especially in the case of large financial cooperatives whose capital base is derived from member owners, is challenging. Member shares can be reimbursed at any time, with the low income level of most members limiting opportunities to increase capital among existing members. However, some financial cooperatives have recently instituted so-called "investment shares" (for example, FCFA 10,000 per share with interest of 5 percent per year) to mobilize additional capital.

26. Additional measures are needed to clean up the sector. While significant weaknesses remain in the resolution framework, the authorities already have adequate powers to take control of failing entities.⁹⁸ However, defunct MFIs are still being dealt with in an *ad hoc* manner, with consumers having

⁹⁸ While the law specifies that the license withdrawal application must include a liquidation plan, depositor repayment plan, staff compensation plan, and creditor plan, a more precise legal framework is needed on required protocols for the intervention, merger, or liquidation of troubled entities.

no way of determining whether and how their savings will be reimbursed.⁹⁹ Efforts have been made to reimburse clients from the largest MFIs that went bankrupt in 2009, but the reimbursement regime favored larger depositors over smaller ones. The wealthiest 5 percent of clients, numbering roughly 480, received 67 percent of the reimbursement resources. Moreover, the transaction costs for small depositors to reclaim their savings outweighed the benefits. As such, many clients never claimed their small balances. It is essential to develop an official resolution framework to ensure the indemnification of account holders, with measures to protect the needs of low-value account holders. Measures to raise client awareness regarding their rights and obligations in the event of MFI bankruptcy are essential to build confidence in the microfinance sector and alleviate confusion in the event of a crisis.

27. The sector suffers from a lack of timely and reliable data on the state and performance of MFIs. Currently, Article 44 of the new microfinance law requires MFIs to report to both the BCEAO and CCS-SFD. This arrangement results in regular discrepancies in data, which creates confusion and a lack of clarity regarding the state of the sector. With the implementation of the SICSS (*Systeme d'information Centralise du Suivi des SFDs*) in 2015, the BCEAO is moving toward a fully automated system to enable MFIs to upload financial reports electronically. By contrast, the MEF's system remains paper-based and rigid, requiring considerable time and resources to manage. Even the largest MFIs, most of which would have the capability to submit reports to the MEF in an electronic format, are nonetheless required to deliver numerous copies each month in hard copy format. Due to these inefficiencies, there is more than a two-year lag in the official reporting of data related to the microfinance sector.

6.7 Recommendations

28. **Despite recent setbacks, Mali's microfinance sector is playing a strong and increasingly important role in increasing financial inclusion**. Mali's microfinance sector is a mature market, serving around one million clients. The sector has played a significant role in bringing previously excluded people into the financial sector. MFIs remain the main provider of financial services for the rural population. However, the sector is still recovering from the crisis of 2009/10, during which two large MFIs failed. This crisis revealed severe weaknesses in internal and external governance structures. At the same time, the sector is facing headwinds from new entrants in the market (such as large private MFI networks and MNOs). This report recommends several priority actions to enable the sector to regain its footing and face the challenge of increased competition. These actions can be grouped around three main areas:

- a. Area 1: Restore confidence in the sector by strengthening MFI supervision, ensuring that defunct and nonviable entities exit the market, and enhancing the sector's governance structures. While the authorities' initiatives to clean up the sector are ongoing, many issues are not being adequately addressed. Some MFIs are struggling and failing to meet the licensing requirements, yet continue to operate without being sanctioned by the BCEAO or the MEF. Skepticism remains high among the general public and other important stakeholders, such as banks and MNOs, regarding the health of the sector. To address these issues, it is recommended that the authorities urgently implement a number of actions to restore confidence in the sector, including the following:
 - i. Recommendation c.1.1: The BCEAO could strengthen the capacity, resources, and quality of MFI supervision. Article 44 of the microfinance law assigns the BCEAO an expanded mandate to supervise the microfinance sector, especially in the case of large MFIs. While the BCEAO has begun to fulfill this mandate, it is evident that it continues to lack the resources and capacities required to fully implement supervision actions. In particular, regional authorities could be provided with support to address the following inadequacies: (i) insufficient capacity to implement onsite inspections, due to limited resources and staff; (ii) a lack of tools and methods for supervision and control; (iii) limited resources to implement

⁹⁹ BCEAO law implicitly requires the government to repay depositors in the event of liquidation if the MFI does not have enough money to repay its debts.

and follow up on remedial actions, based on inspection reports; and (iv) weak reporting systems and follow up. Support should also be provided to accelerate implementation of the BCEAO's new automated reporting system, SICSS.

- ii. Recommendation c.1.2: The government could restore or close failing MFIs and establish a formal resolution framework to address MFI bankruptcy. To restore MFIs, the authorities may need to recapitalize them, make accounting adjustments, and establish a new management structure. In cases where the restoration of a failing MFI is not justified, the authorities could proceed with the liquidation of the institution and the speedy reimbursement of deposited funds. To date, initiatives to resolve the crisis have been carried out in an *ad hoc* fashion, with significant delays and limited action toward repaying depositors. The authorities could be provided with support to enable them to develop and formalize an effective resolution framework for the microfinance sector.
- iii. Recommendation c.1.3: The BCEAO could accelerate implementation of the deposit insurance scheme and scale it up to include MFIs that meet the BCEAO's prudential requirements. The new deposit insurance scheme for banks and MFIs is being implemented for large MFIs. The BCEAO requires investment and technical support to roll the scheme out at the national level. Promotional campaigns, didactic materials, and training programs should be developed to assist the relevant entities, including the BCEAO's microfinance unit, the CCS-SFD, MFI Promotion (CPA), and the MFI Professional Association. It is advisable to include only MFIs that comply fully with prudential requirements and are regularly supervised by BCEAO, so as not to place excessive burdens on the fund if a number of MFIs fail. Public awareness activities should be implemented to publicly communicate details of the deposit insurance scheme to so that people are aware not only of their rights, but also of the scheme's limitations, including maximum coverage.
- b. Area 2: Strengthen MFIs' operational capacities by facilitating the establishment of shared MIS and IT systems and enhancing access to funding. MFIs face many operational challenges that constrain their ability to provide adequate services, especially in remote areas. While an effective MIS is essential to enhance the internal capacity of MFIs, the investment cost of developing such a system would be too high for most MFIs, especially small and medium ones. It is recommended that the following actions are implemented to address this issue:
 - i. Recommendation c.2.1: Donors could support the establishment of a shared IT platform to enable viable small and medium MFIs to automate their accounting and information management systems. Many small and medium MFIs, including affiliated financial cooperatives, lack an adequate MIS, which hampers their ability to manage and expand their operations. It is too costly for most small and medium MFIs to purchase an effective MIS on their own. Therefore, investment and support should be provided to develop a shared IT platform that can provide these MFIs with access to an MIS to facilitate the effective management of back office operations. Financial support and technical assistance should be provided to reduce the costs of establishing a shared IT platform and associated services. The authorities could facilitate a study of good practice examples from the region, such as the case of Senegal, which has already established an effective shared IT platform.
 - ii. Recommendation c.2.2: The government could provide incentives and support for reducing operational costs, especially those associated with MFIs' expansion into rural areas. High operating costs may constrain MFIs from expanding their services to meet the needs of clients in remote, rural locations. Incentives could be provided to help defray the fixed costs associated with extending an MFI's operations into these areas. The government and donors could provide support for pilots that encourage the use of mobile money systems to reduce the costs associated with transactions that involve interaction with staff. This could reduce the need to establish brick-and-mortar facilities in all locations.

- iii. Recommendation c.2.3: Donors and development finance institutions could support the establishment of a refinancing facility for MFIs. Mali's MFIs face severe funding constraints, with refinancing from commercial banks being expensive and unreliable. Moreover, owing to negative experiences in past engagements with the microfinance sector, commercial banks are reluctant to re-engage with the sector. To address this constraint, a privately managed refinancing facility could be established to meet the funding needs of viable MFIs. Financial and technical support could be provided to establish such a facility. Support could be channeled to the pipeline project that envisages the establishment of a refinancing facility for the microfinance sector.¹⁰⁰ The refinancing should be accompanied with MFI governance and management training. Indeed, establishing a high-quality training institute for microfinance professionals, including supervisors, board members, and managers, could help address ongoing governance and operational challenges.
- c. Area 3: Foster innovation by expanding MFIs' access to the USSD channel, sharing costs related to product development, and developing partnerships with MNOs.
 - i. Recommendation c.3.1: The government could encourage opening up USSD channels to MFIs to facilitate their delivery of new, innovative services . At present, restrictive access to the USSD channel constrains the development of DFS in Mali. The USSD channel is the preferred channel for DFS providers, as it is universally accessible through all mobile phones and associated technologies. Efforts should be made to open access to this channel to a range of providers in addition to MNOs. The authorities could be provided with guidance and assistance to develop affordable pricing for non-MNOs' access to this channel.
 - **ii.** Recommendation c.3.2: Donors and development finance institutions can play a pivotal role in promoting innovative microfinance products, including cash transfer, savings, insurance, and credit products. The cost of developing new microfinance products and services is high and often beyond the technical and financial capacity of individual MFIs. Investment costs related to the development of next-generation products and services could be supported by the government and development partners, with benefits shared equally among a consortium of MFIs. The authorities could provide incentives to develop new products and services for MFIs, with a focus on developing DFS—for example, supporting competitions, conducting training on product development, and hosting exposure tours. The government could remove obstacles that preclude the development of new products and services, such as strict limits on fee income.
 - iii. Recommendation c.3.3: Donors can play a catalytic role by providing incentives that promote partnerships between MFIs and MNOs, especially those that scale up services in remote areas. In Mali, MNOs have a vast network of agents that MFIs can utilize to reach potential clients. Indeed, initial pilots to facilitate collaboration between MFIs and MNOs have successfully expanded outreach to clients in remote rural areas, even in locations with significant security issues. Support could be provided to, for example, (i) facilitate dialogue and partnerships between MFIs and MNOs; (ii) subsidize MFIs' system upgrades and (iii) design financial education materials.

¹⁰⁰ The International Fund for Agriculture Development is providing support to the Government of Mali for the design of the second phase of the *Projet du Microfinance Rurale*, which includes the establishment of a refinance facility that could be managed by a local private sector entity like Microfinance Creance S.A. Donors and the authorities are considering different institutional forms for the refinancing facility.

6.8 References

- Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). 2016. Principaux indicateurs des SFD de l'UMOA.
- Decentralized Financial Systems Control and Surveillance Unit (CCS-SFD). 2012–2016. *Cellule de Controlee et de Supervision des Systemes Financiers Decentralises*.
- Council of Microfinance Equity Fund. 2012. "The Practice of Corporate Governance in Microfinance Institutions: Consensus Statement of the Council of Microfinance Equity Funds." Available at: <u>https://www.centerforfinancialinclusion.org/publications-a-resources/browse-publications/384-</u> <u>corporate-governance-in-microfinance-institutions-cmef</u> (accessed June 13, 2018).
- Di Benedetta, Pasquale, Ira W. Lieberman, and Laura Ard. 2015. *Corporate Governance in Microfinance Institutions.* Washington, DC: World Bank. Available at: <u>http://hdl.handle.net/10986/22059</u> (accessed June 13, 2018).
- Helms, Brigit, and Xavier Reille. 2004. "Interest Rate Ceilings and Microfinance: The Story So Far."
 CGAP Occasional Paper No. 9. Washington, DC: CGAP (September). Available at: <u>http://www.cgap.org/publications/interest-rate-ceilings-and-microfinance-story-so-far</u> (accessed June 13, 2018).
- International Monetary Fund (IMF). 2017. "Regional Economic Outlook—Sub-Saharan Africa: Restarting the Growth Engine. Washington, DC: IMF (May). Available at: <u>https://www.imf.org/en/Publications/REO/SSA/Issues/2017/05/03/sreo0517</u> (accessed June 13, 2018).
- Maimbo, Samuel Munzele, Claudia Alejandra Henriquez Gallegos. 2014. "Interest Rate Caps around the World: Still Popular, but a Blunt Instrument." *Policy Research Working Paper* No. 7070 (October). Washington, DC: World Bank. Available at: <u>http://hdl.handle.net/10986/20494</u> (accessed June 13, 2018).
- Poursat, Christine, and Nathalie Assouline. 2014. « Etats des lieux du secteur de la microfinance au Mali. » Alia Development (May).
- Riquet, Corinne, and Christine Poursat. 2013. "Managing Failing Deposit-Taking Institutions: Regulatory Experience from Africa." *CGAP Focus Note* No. 91 (December). Washington, DC: CGAP. Available at: <u>http://www.cgap.org/publications/managing-failing-deposit-taking-institutions</u> (accessed June 13, 2108).
- World Bank Group (WBG). 2017. World Development Indicators Database. Available at: https://datacatalog.worldbank.org/dataset/world-development-indicators (accessed June 4, 2018).

Report Annex

Table A-1. Mali Demographic and Socioeconomic Data

	2010	2011	2012	2013	2014	2015	2016
Population, total (in Million)	15.1	15.5	16.0	16.5	17.0	17.5	18.0
Population, adult (in Million)	7.9	8.1	8.3	8.6	8.8	9.1	9.4
Employment Breakdown - Among Working Age Population	2016						
Population, Active Working Age* (in Million)	5.8						
Public Sector + NGOs	3.7%						
Formal Enterprises	1.7%						
informal Enterprises	71.3%						
Domestic Workers**	13.4%						
Unemployed	9.9%						
	2010	2011	2012	2013	2014	2015	2016
GDP (current FCFA, in Trillion)	5.3	6.1	6.4	6.3	6.9	7.5	8.3
GDP (current US\$, in Billion)	10.7	13.0	12.4	12.8	14.0	12.7	14.0
GDP per Capita (current FCFA, in Thousand)	350.8	394.1	396.9	384.2	408.2	431.6	462.8
GDP per Capita (current US\$)	708.4	835.1	777.3	777.6	825.6	729.7	780.5
GDP growth (annual %)	5.4	3.2	(0.8)	2.3	7.0	6.0	5.3
Services, etc., value added (% of GDP)	38.9	39.9	37.1	40.0	39.2	39.8	40.2
Industry, value added (% of GDP)	24.9	22.5	21.5	20.2	20.5	19.3	19.0
Agriculture, value added (% of GDP)	36.2	37.6	41.3	39.8	40.3	41.0	40.7
	2001	2006	2009				
Income share held by lowest 20%	6.3	6.5	8.0				
Income share held by second 20%	10.3	10.9	12.1				
Income share held by third 20%	14.7	14.9	16.2				
Income share held by fourth 20%	22.2	21.6	22.5				

Source: World Bank World Development Indicators, INSTAT EMOP

Income share held by highest 20%

*Defined by EMOP as the population that engaged in, or was actively looking for, any activity aiming to produce goods or provide services in return for remuneration or profit in the 7 days preceding the survey. It excludes the majority of students and retirees. **Domestic workers include housemaids, cooks, guards etc., which are relatively common among households (at least in urban areas).

46.1

41.3

46.5

Table A_{-2} The top 5(enternrises in Mali	according to the	number of employees
TUDIE A-2. THE LOP SC	i enterprises în iviun	according to the	number of employees

Company Name	Sector	Location	Employee
STE D'ETUDES ET DE REALISATION	Services (HR)	Bamako	2,59
SOGEA SA T O M	Construction	Bamako	1,61
SEMOS SA*	Energy & Mining	Kayes	1,55
ENERGIE DU MALI*	Energy & Mining	Bamako	1,46
SAER EMPLOI	Services	Bamako	1,43
G4S MALI	Services (Security)	Bamako	1,41
SECURICOM PROTECT SARL	Services (Security)	Kayes	1,19
SEGALA MINING CORPORATION*	Energy & Mining	Kayes	1,16
SOCIETE DES INDUS DE LOULO*	Energy & Mining	Kayes	1,11
RMO MALI SARL	Services (HR)	Bamako	97
AGENCE MALI MANAGEMENT	Services (Security)	Bamako	92
UNIVERSEL PRESTATIONS SERVICE	Services (HR)	Bamako	78
OZONE ENVIRONNEMENT ET SERVICE	Services (Hygiene)	Kayes	71
L T A INDUSUCTION DIVISION	Construction	Bamako	66
STAFF SERVICES SARL	Services (HR)	Kayes	61
GRAND MOULIN DU MALI	Agriprocessing	Bamako	31
SOMIKA -SA*	Energy & Mining	Sikasso	56
SAHELIENNE D'ENTREPRISES	Construction	Bamako	56
ORANGE SA	Services	Bamako	51
GRANDE CONFISSERIE	Agriprocessing	Bamako	51
STE DE FORAGE ET DES TP	Construction	Kayes	49
ITEMA	Industry (Textile)	Bamako	48
MEDECINS SANS FRONTIERES FRA	Services (NGO)	Bamako	48
SOCIETE COLAS AGENCE CII	Construction	Bamako	43
BIM SA*	Financial Sector	Bamako	42
SOMAGES	Services (Security)	Bamako	41
MANUTENTION AFRICAINE	Construction	Bamako	4:
TRANSRAIL*	Services (transports)	Bamako	43
TEAM CALL CENTER TCC	Services	COMMUNE IV	29
KAFO JIGINEW	Financial Sector	Bamako	39
SOMISY SA SIAMA KADIOLO*	Energy & Mining	Sikasso	39
UPS RESSOURCES HUMAINES C3	Services (HR)	Kayes	38
BNDA*	Financial Sector	Bamako	36
CHINA ROAD AND BRIDGE	Construction	Bamako	36
VILLAGE D'ENFANT SOS DU MALI	Services (NGO)	Bamako	36
BANK OF AFRICA	Financial Sector	Bamako	35
UPS PC RANDGOLD*	Energy & Mining	Kayes	34
ASAM SA CVI*	Services (Airport)	Bamako	34
ENTR. MALIENNE HYDRAULIQUES	Energy & Mining	Bamako	28
APPM ENTREPRISE CONSULTANT	Services (HR)	Bamako	34
PSI Mali	Services (NGO)	Bamako	34
STE DES INDUS D'OR DE MORILA*	Energy & Mining	Bamako	33
GROUPEMENT CDE EGBAK	Construction	Koulikoro	32
ECOBANK MALI	Financial Sector	Bamako	32
COGEB INTERNATIONAL SAU	Construction	SYAMA	28
LT A /SOGEA/SATOM JV	Construction	Kayes	32
COGEB INTERNATIONAL SAU	Construction	Bamako	28
ENTR. MALIENNE HYDRAULIQUES	Energy & Mining	Bamako	28
MOULIN MODERNE DU MALI	Agriprocessing	Segou	26
DID RESEAU NYESIGISO	Financial Sector	Bamako	26

Table A-3. The sample distribution of the Mali Enterprise Survey by size, sector, and location

							Outside	
	Small	Medium	Large	Manufacturing	Service	Bamako	Bamako	Total
2007	408	75	7	301	189	321	169	490
2010	250	98	12	162	198	260	100	360
2016	79	71	35	99	86	133	52	185

Source: Enterprise survey data.

Table A-4. Sample Household Distribution by Zone and Farm Size

	Micro	Small	Medium	Large	Total
High Productivity Zone	52	158	327	211	748
Irrigated Zone	49	147	42	30	268
Low Productivity Zone	175	322	418	252	1,167
Total	276	627	787	493	2,183

Source: LSMS-ISA 2014.

Table A-5. BCEAO data on mobile money in Mali

Nb of MM accounts 2 290 456 3 955 494 6 873 453 74% Nb of active MM accounts (%) 51% 49% 32% 13% Agent network 71% 2193 892 13% Total nb of agents 10 804 34 138 43 842 28% Agent network 0 20 26 911 33% Rate of active agents (%) nk 20 92 61% Merchant payment 59% 61% 33% Nb of mcrichants MM acceptors nk 617 921 49% Nb of mcrichants MM acceptors nk 617 921 49% Nb of active merchants (%) nk 77 241 213% Rate of active merchants (%) nk 12% 26% 74% Value (blint crefA) 811 144 327 2192,900 34% Average Volume per day ¹ (million FCFA) 2,253 4,559 6,091 34% Average Value per day ² (million FCFA) 2,123 4,559 6,091 34% Volume (Nb of trans	Indicators	2014	2015	2016	Increase 2015- 2016 (%)
Nb of active MM accounts 1 163 997 1 944 774 2 193 892 13% Rate of active MM accounts (%) 51% 49% 32% Agent network 7 2 193 892 28% Total nb of agents 10 804 34 138 43 842 28% Total nb of active agents (%) nk 20 192 26 911 33% Rate of active agents (%) nk 59% 61% Merchant payment Nb of active merchants MM acceptors nk 617 921 49% Nb of active merchants (%) nk 12% 26% 26% Total of transactions nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (billion FCFA) 2,253 4,559 6,091 34% Value (billion FCFA) 2,253 338 62 494 989 42 253 619 -32% % / total in WAEMU 21,44 37,78 20,72 Value (billion FCFA) 291,304 638,297 742,833 <td< td=""><td>Mobile Money Accounts</td><td></td><td></td><td></td><td></td></td<>	Mobile Money Accounts				
Rate of active MM accounts (%) 51% 49% 32% Agent network	Nb of MM accounts	2 290 456	3 955 494	6 873 453	74%
Agent network 10 804 34 138 43 842 28% Total nb of agents nk 20 192 26 911 33% Rate of active agents (%) nk 59% 61% 33% Marchant payment 617 921 49% Nb of active agents (%) nk 617 921 49% Nb of active merchants MM acceptors nk 617 921 49% (90 days - at least one transaction) nk 12% 26% Total of Transactions 7 241 213% (90 lodys - at least one transactions) nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (billion FCFA) 2,253 4,559 6,091 34% Cash in ³ 42 253 619 -32% Value (billion FCFA) 2,1,44 37,78 20,72 -20% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers	Nb of active MM accounts	1 163 997	1 944 774	2 193 892	13%
Total nb of agents 10 804 34 138 43 842 28% Total nb of active agents nk 20 192 26 911 33% Rate of active agents (%) nk 59% 61% 33% Marchant payment 59% 617 921 49% Nb of active merchants MM acceptors nk 617 921 49% Q0 days - at least one transaction) nk 12% 266% 213% Total nb f transactions nk 12% 26% 26% Volume (Nb of transactions) nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374027 408 993 9% Value (billion FCFA) 2,253 4,559 6,091 34% Cash in ³ 0 2494 989 42 253 619 -32% Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total in WAEMU 17,51 21,12 16,17 21 Payment3' 0 20,303 1	Rate of active MM accounts (%)	51%	49%	32%	
Total nb of active agents nk 20 192 26 911 33% Rate of active agents (%) nk 59% 61% Merchant payment 40% 61% Nb of merchants MM acceptors nk 617 921 49% Nb of active merchants MM acceptors nk 77 241 213% Rate of active merchants (%) nk 12% 26% Total of Transactions nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (Nb of transactions) nk 134 649 789 147 237 436 9% Average Volume per day ² (million FCFA) 2,553 4,559 6,091 34% Average Value per day ² (million FCFA) 2,123 4,559 6,091 34% Cash in ³ 21,44 37,78 20,72 Value (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total	Agent network				
Rate of active agents (%) nk 59% 61% Merchant payment	Total nb of agents	10 804	34 138	43 842	28%
Merchant payment Nb of merchants MM acceptors nk 617 921 49% Nb of active merchants MM acceptors nk 77 241 213% (90 days - at least one transaction) nk 77 241 213% Rate of active merchants (%) nk 12% 26% 7 Total of Transactions Volume (Nb of transactions) nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (billion FCFA) 811 1641,327 2 192,000 34% Average Value per day ² (million FCFA) 2,253 4,559 6,091 34% Value (billion FCFA) 21,44 37,78 20,72 7 Value (billion FCFA) 291,304 638,297 742,833 16% % / total in WAEMU 17,51 21,12 16,17 7 Payments ⁴ 7 742,833 16% 764,2833 16% % / total in WAEMU 17,51 21,12	Total nb of active agents	nk	20 192	26 911	33%
Nb of merchants MM acceptors nk 617 921 49% Nb of active merchants MM acceptors (90 days - at least one transaction) nk 77 241 213% Rate of active merchants (%) nk 12% 26% 7 Total of Transactions nk 12% 26% 7 Volume (Nb of transactions) nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (billion FCFA) 811 1 641,327 2 192,900 34% Cash in ³ Cash in ³ 20,72 408 993 9.42 Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total in WAEMU 21,44 37,78 20,72 20 Value (billion FCFA) 291,304 638,297 742,833 16% Yolume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% Payme	Rate of active agents (%)	nk	59%	61%	
Nb of active merchants MM acceptors (90 days - at least one transaction) nk 77 241 213% Rate of active merchants (%) nk 12% 26% 70 Total of Transactions 70 128 26% 70 Volume (Nb of transactions) nk 134 649 789 147 237 436 9% Average Volume per day1 nk 374 027 408 993 9% Value (billion FCFA) 2,253 4,559 6,091 34% Average Value per day2 (million FCFA) 2,253 4,559 6,091 34% Cash in ³ 0 70 241 37,78 20,72 Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total in WAEMU 21,44 37,78 20,72 742,833 16% Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers 70 244 340,992 630,309	Merchant payment				
nk // 241 213x Rate of active merchants (%) nk 12% 26% Total of Transactions	Nb of merchants MM acceptors	nk	617	921	49%
Rate of active merchants (%) nk 12% 26% Total of Transactions Volume (Nb of transactions) nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (billion FCFA) 811 1 641,327 2 192,900 34% Average Value per day ² (million FCFA) 2,253 4,559 6,091 34% Average Value per day ² (million FCFA) 2,253 34,559 6,091 34% Average Value per day ² (million FCFA) 2,253 34,559 6,091 34% Cash in ³ 2 164,1327 2 192,900 34% Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% Value (billion FCFA) 291,304 638,297 742,833 16% Value (billion FCFA) 23,003 14,606 37,056 154% Value (Nb of transactions) 511 385 937 575 2 583 618 176% Value (Nb of transactions) 6 959 346 14 058 311 <	Nb of active merchants MM acceptors	nk	77	241	213%
Total of Transactions nk 134 649 789 147 237 436 9% Average Volume per day ¹ nk 374 027 408 993 9% Value (billion FCFA) 811 1 641,327 2 192,900 34% Average Value per day ² (million FCFA) 2,253 4,559 6,091 34% Cash in ³ Cash in ³ Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total in WAEMU 21,44 37,78 20,72 Value (billion FCFA) 291,304 638,297 742,833 16% % / total in WAEMU 17,51 21,12 16,17 Payments ⁴ Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% Value (billion FCFA) 217,334 404,962 630,309 56% Value (billion FCFA) 217,334 404,962 630,309 56% Value (billion FCFA) nk 50,476 75,003 49%			100/	2.001	
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Average Value per day ² (million FCFA) 2,253 4,559 6,091 34% Cash in ³ <thcash in<sup="">3 Cash in³ Cash in³</thcash>					
Cash in ³ Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total in WAEMU 21,44 37,78 20,72 Value (billion FCFA) 291,304 638,297 742,833 16% Value (billion FCFA) 291,304 638,297 742,833 16% % / total in WAEMU 17,51 21,12 16,17 Payments ⁴ Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Volume (Nb of transactions) nk 1157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 32 955 499			1 641,327	2 192,900	34%
Volume (Nb of transactions) 17 653 338 62 494 989 42 253 619 -32% % / total in WAEMU 21,44 37,78 20,72 Value (billion FCFA) 291,304 638,297 742,833 16% % / total in WAEMU 17,51 21,12 16,17 Payments4 % / total in WAEMU 17,51 21,12 16,17 Payments4 Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Volume (Nb of transactions) nk 1157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% </td <td></td> <td>2,253</td> <td>4,559</td> <td>6,091</td> <td>34%</td>		2,253	4,559	6,091	34%
% / total in WAEMU 21,44 37,78 20,72 Value (billion FCFA) 291,304 638,297 742,833 16% % / total in WAEMU 17,51 21,12 16,17 Payments ⁴ Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers 20/22 630,309 56% Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁶ (within WAEMU) Volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%					
Value (billion FCFA) 291,304 638,297 742,833 16% % / total in WAEMU 17,51 21,12 16,17 Payments ⁴ Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 22,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Volume (Nb of transactions)	17 653 338	62 494 989	42 253 619	-32%
% / total in WAEMU 17,51 21,12 16,17 Payments ⁴ Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers 57% Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) 57,403 49% Volume (Nb of transactions) nk 1157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% </td <td>% / total in WAEMU</td> <td>21,44</td> <td>37,78</td> <td>20,72</td> <td></td>	% / total in WAEMU	21,44	37,78	20,72	
Payments ⁴ Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Value (billion FCFA)	291,304	638,297	742,833	16%
Volume (Nb of transactions) 511 385 937 575 2 583 618 176% Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out volume (Nb of transactions) nk 23 027 114 35 559 270 54%	% / total in WAEMU	17,51	21,12	16,17	
Value (billion FCFA) 23,003 14,606 37,056 154% P2P transfers Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 50,476 75,003 49% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 23,027 114 35 559 270 54%	Payments ⁴				
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Volume (Nb of transactions) 6 959 346 14 058 311 22 040 398 57% Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% AIR Time purchase Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Value (billion FCFA)	23,003	14,606	37,056	154%
Value (billion FCFA) 217,334 404,962 630,309 56% Cross border transfers ⁵ (within WAEMU) Nk 1157 900 1 780 490 54% Volume (Nb of transactions) nk 1157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% AIR Time purchase Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	P2P transfers				
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Volume (Nb of transactions) nk 1 157 900 1 780 490 54% Value (billion FCFA) nk 50,476 75,003 49% AIR Time purchase Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Value (billion FCFA)	217,334	404,962	630,309	56%
Value (billion FCFA) nk 50,476 75,003 49% AIR Time purchase Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Cross border transfers ⁵ (within WAEMU)				
AIR Time purchase Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Volume (Nb of transactions)	nk	1 157 900	1 780 490	54%
Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Value (billion FCFA)	nk	50,476	75,003	49%
Volume (Nb of transactions) nk 32 955 499 42 907 329 30% Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	AIR Time purchase			· ·	
Value (billion FCFA) nk 25,555 34,479 35% Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%		nk	32 955 499	42 907 329	30%
Cash Out Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Value (billion FCFA)	nk		34,479	35%
Volume (Nb of transactions) nk 23 027 114 35 559 270 54%	Cash Out				
	· · · · · · · · · · · · · · · · · · ·	nk	23 027 114	35 559 270	54%
					32%

1- average volume per day : Total volume/360 days for the year; 2- average value per day : Total volue/360 days for the year; 3- cash-in including bank to wallet transfers; 4- bill payment, merchants , salaries, G2P & P2G ; 5- transactions within WAEMU + international transfers received on mobile money accounts.

	Cost of a mobile money P2P transfer within the same network for the sender, the receiver and in total											
		Exchange rate as S	ept 26									
Mobile Mon	iey providers	Amount (\$20 in local currency)	Cash-in*	P2P	Cash-out	Fees for sender	Fees regarding the amount (Sender)	Fees for receiver	Fees regarding the amount (Receiver)	Total fees (in local currency)	Fees regarding the amount	
Tanzania	tiçõ pesa	TZS 44 501	Free	400	2 250	400	0,9%	2 250	5,1%	2 650	6,0%	
Talizallia	m-pesa	TZS 44 501	Free	400	2 250	400	0,9%	2 250	5,1%	2 650	6,0%	
	m-pesa	KSH 2 032,45	Free	40	27	40	2,0%	27	1,3%	67	3,3%	
Kenya	🔊 airtet	KSH 2 032,45	Free	-	27	-	0,0%	27	1,3%	27	1,3%	
	Equito	KSH 2 032,45	Free	-	27,5	-	0,0%	28	1,4%	28	1,4%	
Ghana	tigō cash 🐲	GHS 88,0805	Free	1,0	1,5	1,0	1,1%	1,5	1,7%	2,5	2,8%	
Gilalla	MIN	GHS 88,0805	Free	1%	1%	0,88	1,0%	0,88	1,0%	1,76	2,0%	
Mali		FCFA 11 037,8	Free	50	900	50	0,5%	900	8,2%	950	8,6%	
Ividii		FCFA 11 037,8	Free	-	900	-	0,0%	900	8,2%	900	8,2%	
		FCFA 11 037,8	100	300	500	400	3,6%	500	4,5%	900	8,2%	
Côte d'Ivoire	MIN P	FCFA 11 037,8	100	250	500	350	3,2%	500	4,5%	850	7,7%	
		FCFA 11 037,8	100	200	500	300	2,7%	500	4,5%	800	7,2%	
Burkina Faso		FCFA 11 037,8	Free	-	700	-	0,0%	700	6,3%	700	6,3%	
Burkina Paso	Mobicash	FCFA 11 037,8	Free	-	500	-	0,0%	500	4,5%	500	4,5%	
Senegal		FCFA 11 037,8	Free	-	500	-	0,0%	500	4,5%	500	4,5%	
Nines		FCFA 11 037,8	na	na	na	na	na	na	na	na	na	
Niger	🔊 airtet	FCFA 11 037,8	Free	60	450	60	0,5%	450	4,1%	510	4,6%	

Table A-6. Cost of a Mobile Money P2P Transfer within the Same Network

*: In Côte d'Ivoire a tax of 100 f is paid for cash-in over 5 000 FCFA

MNO	Products	Total	Estimated			
mobile money offer	Bill payments and merchant payments	Bank account- MM link	Cross-border transfer within WAEMU	Other products	number of MM accounts ^a	agent network ^a
	(water, electricity, TV, university school fees, bulk payments from NGOs to beneficiaries and for salaries) A diveres range of merchants' acceptors like pharmacy, shops, restaurants and transport Cies	(Ecobank, BICIM, Banque Atlantique)	(Côte d'Ivoire, Senegal, Burkina Faso)	 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 (need to be re- designed) Platform Sènèkéla which allows farmers to have access to agronomists and prices of certain commodities. A pilot with Soro Yiriwaso for the digitization of group credits using Orange Money accounts. A pilot in preparation with support of GSMA to increase access to MM for women 	6.8 million (~32% active)	26,900 active agents
CASH Automatics	operational ^b	but no links between accounts				
a. BCEAO (20 b. Bill payme	16). nts are reported	1	MobiCash	1	1	L

Table A-7. MNOs Mobile Money offers in Mali

Table A-8. Key Indicators for 13 Malian Banks

2015	Total Assets (in billions FCFA)	Total Deposit (in billions FCFA)	Total Loan Outstanding (in billions FCFA)	Total Profit (in billions FCFA)		Total Deposit (in millions USD)	Total Loan Outstanding (in millions USD)	Total Profit (in millions USD)	ROA	C/I Ratio	Number of Branches	Size
BDM	609	387	279	14	1,028	652	470	23	2.3%	72.0%	44	Large
BMS	543	341	278	6	916	575	469	10	1.1%	71.7%	42	Large
BOA-Mali	536	320	259	7	903	540	436	12	1.3%	58.1%	27	Large
Ecobank-Mali	531	302	203	(2)	896	509	342	(4)	-0.4%	74.4%	40	Large
BNDA	369	230	196	8	622	388	331	13	2.2%	53.7%	41	Medium
BIM	353	291	140	0	595	490	235	1	0.1%	76.8%	73	Medium
BAM	273	156	144	4	461	263	242	6	1.3%	53.6%	25	Medium
BICIM	117	90	68	2	197	152	115	4	1.8%	89.7%	8	Small
BSIC-Mali	117	53	78	2	197	90	131	3	1.3%	53.6%	13	Small
BCS	116	54	62	1	195	91	104	2	1.2%	79.1%	14	Small
BCI-Mali	93	68	59	1	157	115	99	1	0.8%	65.1%	12	Small
CBI-Mali	85	48	38	0	143	80	64	1	0.5%	69.7%	6	Small
Orabank	56	36	43	(1)	95	61	72	(1)	-1.2%	87.9%	8	Small
Total	3,798	2,377	1,844	42	6,406	4,008	3,110	71	1.1%	67.1%	353	

Source: BCEAO, team analysis.

Table A-9. Nonbank Financial Institutions in Mali, 2015

Name	Type	Year of	Total Asset 2015		Total Capital 2015		Branch
Name		Establishment	Million FCFA	Million USD	Million FCFA	Million USD	Information
Alios Finance Mali	Leasing Company	1997	8,708	14.7	1,900	3.2	Bamako (1)
Fonds de Garantie Hypothecaire Du Mali (FGHM-SA)	Mortgage Guarantee Fund	2000	3,016	5.1	1,156	1.9	Bamako (1)
Fonds de Garantie Pour le Secteur Prive (FGSP-SA)	SME Guarantee Fund	2014	15,067	25.4	4,883	8.2	Bamako (1)

Source: BCEAO, company websites.

Table A-10. National and regional regulatory institutions

	Regional Competencies	National Competencies
Prudential regulation	Both credit institutions and MFIs are regulated by uniform laws. ¹⁰¹ The BCEAO is responsible for prudential regulation of credit institutions and larger MFIs (Article 44 regime), and the Banking Commission is responsible for supervising the application of these requirements. E-money issuers are regulated by a BCEAO instruction.	National authorities are responsible for licensing, regulating, and supervising smaller MFIs. National ministries of finance are responsible for licensing (or delicensing) credit institutions and larger MFIs following recommendations from regional authorities.
Financial consumer protection / market conduct	Consumer protection and market conduct regulation and supervision follow the same repartition of prudential supervision.	National authorities in certain countries have established institutions (<i>Observatoires de la Qualite</i> <i>des Services Financiers</i>) with a mandate to monitor market practices and financial consumer protection, and to operate alternative dispute resolution schemes for financial services.
Financial integrity (AML/CFT)	With regard to financial service providers, the BCEAO is responsible for issuing rules concerning AML/CFT (also by developing uniform laws). The Banking Commission is responsible for supervising the application of the above-mentioned requirements for credit institutions, large MFIs, and e-money issuers.	The national Cellules Nationales de Traitement de l'Informations Financières are responsible for receiving, analyzing, and disseminating to law enforcement authorities reports on suspicious transactions, as well as for issuing typology exercises on money laundering and terrorism financing risks, trends, and methods. National authorities are responsible for supervising and monitoring the application of AML/CFT rules by smaller MFIs, money remitters, and foreign exchange bureaus. National authorities are responsible for issuing IDs.
Payment systems	The BCEAO is responsible for regulating and overseeing payment systems and payment service providers (including e-money issuers). The BCEAO operates regional systems such as STAR (RTGS), SICA (ACH), and GIM (SWITCH), together with the national departments of the BCEAO.	National departments of the BCEAO contribute to the definition of policies and their implementation, as well as the oversight of payment systems (in particular their national component).
Telecom		National telecommunications authorities are responsible for regulating telecommunications at the national level, including access to the USSD system.
Competition	The WAEMU Commission is responsible overall for competition issues.	At the national level, national telecommunications authorities are responsible for competition-related issues.

Source: team analysis.

¹⁰¹ Uniform laws pertaining to the financial sector are generally developed by the WAEMU Commission, in consultation with the BCEAO and national authorities. They need to be adopted by the Council of Ministers of the WAEMU and then become effective once transposed into national legislation by national parliaments.

