Making Access Possible

Madagascar

Financial Inclusion

Diagnostic Report

2017

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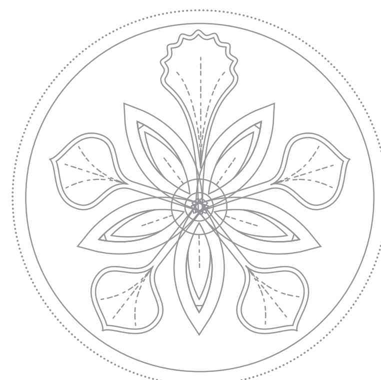
PARTNERING FOR A COMMON PURPOSE

Making Access Possible (MAP) is a multi-country initiative to support financial inclusion through a process of evidence-based country diagnostic and stakeholder dialogue, leading to the development of national financial inclusion roadmaps that identify key drivers of financial inclusion and recommended action. Through its design, MAP seeks to strengthen and focus the domestic development dialogue on financial inclusion. The global project seeks to engage with various other international platforms and entities impacting on financial inclusion, using the evidence gathered at the country level. The MAP methodology and process has been developed jointly by UNCDF, FinMark Trust (FMT) and the Centre for Financial Regulation and Inclusion (Cenfri) to foster inclusive financial sector growth.

At country level, the core MAP partners, collaborate with government, other key stakeholders and donors to ensure an inclusive, holistic process. MAP Madagascar was jointly funded by the government of Madagascar, UNDP Madagascar, UNCDF, AFI and FinMark Trust and produced by Cenfri.

This document sets out the comprehensive diagnostic findings which will feed into the Roadmap that will be developed in collaboration with the MAP Madagascar steering committee. This will form the basis of the national strategy on financial inclusion of Madagascar.



This report was produced by the Centre for Financial Regulation and Inclusion (CENFRI) in collaboration with FTHM Madagascar

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List of abbreviations and acronyms

ACH	Automated Clearing House
AFI	Alliance for Financial Inclusion
AML	Anti-Money Laundering
ARC	African Risk Capacity
ARO	Assurances Réassurances Omnibranches (Malagasy insurer)
ARTEC	Autorité de Régulation des Technologies de Communication (Telecommunications Regulation Agency)
ATM	Automated Teller Machine
AU	African Union
BFM	Banky Foiben'i Madagasikara (Central Bank of Madagascar)
BIANCO	Bureau Indépendant Anti-Corruption (Anti-corruption Bureau)
CCBG	Committee of Central Bank Governors
CECAM	Caisses d'Épargne et de Crédit Agricole Mutuels (Mutual Savings Banks and Agricultural Credit Funds)
CEM	Caisse d'Épargne de Madagascar (Savings Bank of Madagascar)
Cenfri	Centre for Financial Regulation and Inclusion
CFT	Combatting the Financing of Terrorism
CGAP	Consultative Group to Assist the Poor
CMA	Common Monetary Area
CMIL	Commission Malagasy sur L'informatique et des Libertés (Malagasy Commission on Informatics and Civil Liberties)
CNAPS	Caisse Nationale de Prévoyance Sociale (National Social Insurance Fund)
CNFI	Coordination Nationale de la Finance Inclusive (National Organisation for Inclusive Financing)
CNMF	Coordination Nationale de la MicroFinance (National Organisation for Microfinance)
CPL	Continuous Processing Line
CSBF	Commission de Supervision Bancaire et Financière (Council for Banking and Financial Supervision)
DFID	Department for International Development
EFT	Electronic Funds Transfer
FATF	Financial Action Task Force
FDGM	Fonds de Garantie Malgache (Guarantee Fund of Madagascar)
FMT	FinMark Trust
FSAP	Financial Sector Assessment Programme
FSP	Financial Service Provider
FTHM	Finances, Technologies, Human Resources and Management
G2P	Government to Person
GDP	Gross Domestic Product
GPF	Global Policy Forum
GPP	Garantie Partielle de Portefeuille (Partial Portfolio Guarantee)
ICT	Information and Communications Technology
ID	Identity Document
IMF	International Monetary Fund
IOM	International Organization for Migration
ISO	International Standards Organization

KYC	Know Your Customer
MAP	Making Access Possible
MFI	Micro Finance Institution
MGA	Malagasy Ariary
MIP	Mastercard Interface Processor
MIS	Management Information System
MMO	Mobile Money Operator
MNO	Mobile Network Operator
MoF	Ministry of Finance
MSME	Micro, Small and Medium Enterprise
MTO	Money Transfer Operator
OECD	Organisation for Economic Co-Operation and Development
OIF	Organisation internationale de la Francophonie
OTC	Over the counter
P2G	Person to Government
PAOMA	Paositra Malagasy (Post Office)
POS	Point of Sale
RoE	Return on Equity
RTGS	Real-time Gross Clearing and Settlement System
RTL	Real Time Line
SADC	Southern African Development Community
SAMIFIN	Service de Renseignement Financier (Financial Intelligence Service)
SIRESS	SADC Integrated Regional Settlement System
SSA	Sub-Saharan Africa
UNCDF	United Nations Capital Development Fund
UPU	Universal Postal Union
US	United States of America
USD	United States Dollar
USSD	Unstructured Supplementary Service Data
VAT	Value Added Tax
VIP	Visa Interface Processor
ZAR	South African Rand

USD/MGA exchange rate

Foreign exchange. The local currency in Madagascar is the Malagasy Ariary (MGA). The United States Dollar (USD) equivalent shown throughout this document was calculated using a 12-month average exchange rate (between 1 January 2016 and 31 December 2016) of MGA 3,021/USD (OANDA, 2017).

The MAP diagnostic in numbers

Key facts[1]

GDP of MGA 30 trillion (USD 10 billion)

Total population of 24 million

1.4 million adults are food insecure

17% (4 million) of people have access to electricity

4 million people own a mobile phone

65% (15.6 million) of adults are literate

Financial inclusion priorities

Priority Area 1: PAYMENTS FOR RESILIENCE AND TRADE

79% (8,946,560) of adults do not use formal payment mechanisms

Priority Area 2: SAVINGS TO MANAGE SHOCKS AND BUILD CAPITAL

Over 4.2 million adults experienced a climate-related shock in the past year but only one million had a formal savings product to cushion the shock

Priority Area 3: TARGETED CREDIT TO EXTEND ECONOMIC OPPORTUNITIES

More than a million small businesses and farmers who sell and earn at least the equivalent of USD 2 per day have never had formal credit

Priority Area 4: NICHE INSURANCE OPPORTUNITIES FOR RESILIENCE AND PRODUCTIVITY

Over two million adults suffered the death or loss of income of a breadwinner and 2.6 million adults suffered health-related risks in the past year

Priority Area 5: STRENGTHENING FINANCIAL INCLUSION POLICIES, REGULATION AND INSTITUTIONS

Overview of access to financial services in Madagascar

[1] Based on GSMA (2015), United Nations (2016), World Bank (2017a), World Bank (2017b) and World Bank (2017c).

29% (3,284,180) of adults have taken up at least one financial service from a formal financial service provider, but…

…only 4% (425,990) of adults use more than two formal financial services

…whilst **30% (3,397,428)** of adults make use of informal services only.

The result is that 41% (4,643,151) of adults use no financial services.

Breakdown of access to financial services in Madagascar by product market

17% (1,925,209) of adults make payments through a formal financial service provider

13% (1,472,218) of adults save with a formal financial service provider

5% (566,238) of adults access formal credit at the time of the Finscope survey, **13% (1,472,218)** of adults accessed credit in the preceding year

3%(339,742) of adults have insurance

Executive summary

Financial inclusion serves a real need. Financial services play a key role in any economy: in the first instance, to help people meet their financial needs, such as to send money and make transactions, smooth their consumption, deal with adverse shocks or plan for the future. More broadly, financial services assist in the efficient allocation of capital to support investment and, thereby, economic growth. These concepts may sound abstract, but are very real for the people of Madagascar. As with so many least developed countries, Madagascar has a largely rural, poor populace, most of whom earn their livelihood in the informal sector, with little prospect of economic advancement. Added to that, Madagascar faces frequent and severe climactic events with the result that, despite some of the most fertile soil on the planet, food security is a major concern. The bulk of poor households worry that they will not have enough food to eat.

Thus, in Madagascar, the financial sector serves a particularly important purpose to assist people to **cope with risks** and to empower them to help themselves, thereby **unlocking growth opportunities**. These household-level imperatives are mirrored at the national level: financial services can be a powerful policy tool towards national resilience, growth and development.

Setting strategic priorities for inclusion. The government of Madagascar acknowledges the role of financial inclusion. In 2013, Madagascar made three financial inclusion commitments as part of the Maya Declaration[2]. At the end of 2012, the National Strategy on Inclusive Finance was approved by the stakeholders, focused largely on microfinance. The Ministry of Finance has implemented the Making Access to financial services Possible (MAP) approach as input to the new financial inclusion strategy. MAP is a multi-country initiative to support financial inclusion through a process of evidence-based country analysis. It is a partnership between the United Nations Capital Development Fund (UNCDF), FinMark Trust and the Centre for Financial Regulation and Inclusion (Cenfri). In each country, it aligns stakeholders from within government, private sector and the donor community to create a set of practical actions aimed at extending financial inclusion tailored to that country. The comprehensive diagnostic methodology spans the country context, demand, supply and regulation of financial services. It allows MAP to analyse the barriers and opportunities for financial inclusion beyond just microfinance, and to define key priorities for the promotion of financial inclusion to meet consumers needs and serve broader policy objectives.

Challenging environment creates a gap. There are, however, structural challenges that constrain this role. The poor socioeconomic conditions mean that the bulk of the populace find it difficult to afford financial services. In addition, low literacy levels and a lack of familiarity with formal financial services, combined with severe infrastructure constraints and an underdeveloped payment eco-system, means that formal financial service providers find it difficult to reach most consumers**.** Frequent shocks, such as climate events, illness and theft further impact access, in that they render consumers more vulnerable and increase the risk that serving such consumers entails for financial institutions.

Madagascar is also recovering from a period of relative economic isolation, driven by the 2009 political crisis, which affected the ability of government to borrow, and hampered the implementation of key policy actions. And though the regulatory authorities are supported by well-written legislation, they are facing challenges implementing their mandates.

All of this makes for a generally challenging business environment, and a lack of trust in formal structures among the population as well as financial services providers.

The result is a situation where most Malagasy either do not use any financial services, or look to others in their community or use own devices to save, borrow or cope with risks. Only 29% of adults are formally served and 41% of adults do not use any financial services. Rural areas are most excluded and

[2] The Maya Declaration is an initiative of the Alliance for Financial Inclusion (AFI). It was launched in 2011 at the Global Policy Forum (GPF) in Riveria Maya, Mexico (AFI, 2017). To date, more than 80 Maya Declaration commitments have been made.

even higher income individuals are not yet fully served. Most Malagasy conduct their full financial lives in cash. This means that financial services are by and large not yet supporting resilience to shocks and that small businesses and farmer entrepreneurs often cannot access the required capital to support economic growth.

Significant successes, despite challenges. Madagascar, as a country, has three major financial inclusion-related advantages. First, Madagascar has a very effective and flexible legislative framework. This framework has created regulators who are independent and well-equipped to support financial inclusion. Second, industry players, notably mobile money providers, are very innovative and have created a system of interoperability among themselves that exists in only a small number of other countries around the world. Finally, Madagascar has a microfinance sector that is very large in comparison with the banking sector. This sector has a distribution network that reaches even the most rural areas and is endowed with various actors.

What can be done to bridge the gap? The diagnostic finds that, despite severe constraints, key opportunities exist to extend financial inclusion. This diagnostic identifies five priority areas to build a more inclusive financial services market that promotes resilience and inclusive growth:

1. *Payments for resilience and commerce:* Almost all Malagasy adults make payments on a day to day basis, and about half of them regularly need to transfer money over a distance. However, 81% do not use any formal payment instruments. A lack of trust in financial institutions and limited understanding of how formal payments work are critical barriers to formalisation. Furthermore, inadequate payments infrastructure, limited interoperability between existing infrastructure, a lack of use cases for formal payments and challenges around cash reticulation, all make it inconvenient and expensive to access formal payments. This means that the reliance on cash is maintained. People who only transact in cash cannot make or receive emergency remittance transfers when shocks arise. They also forfeit efficiency gains in conducting commercial activities, such as purchasing stock or engaging with other financial services such as credit and savings for business activities. Addressing these challenges will require a more convenient, secure and cost-effective payment ecosystem. This in turn will require extending the payment distribution footprint through more interoperable touch points (including leveraging mobile money and bank agents). In a cash-based society, extending the digital payment ecosystem requires paying particular attention to effective cash management. Lastly, there is scope to consider the digitisation of key value chains and payment streams, including government payments.

2. *Savings for resilience and growth:* 47% of adults save, yet only 15% of savers save in formal savings vehicles. As such, there exists a large untapped opportunity for the formal financial sector to extend savings as a much-needed safety net. Savings can also play a much greater role to drive investment to fuel economic opportunities. Savings are a critical resource for small business start-ups, yet only 42% of small businesses save formally. Furthermore, the savings of wealthier groups such as the formally employed, when intermediated, can be a critical source of capital, yet only 54% of the employed and wealthier groups save formally. Formal savings remain constrained due to the lack of trust in formal options, limited touchpoints for deposits and withdrawals, products that do not meet needs, as well as informal alternatives. The very low to negative real return provided on various formal savings options does not compensate for the additional costs incurred to access formal products vis-à-vis informal alternatives, implying that people prefer their traditional, informal ways of saving. In many rural areas, informal savings groups and home savings are the only real options for saving. The strengthened supervision of savings institutions, such as some more fragile microfinance institutions (MFIs), Caisse d'Épargne de Madagascar (Savings Bank of Madagascar – CEM), Paositra Malagasy (Post Office – PAOMA) and Caisse Nationale de Prévoyance Sociale (National Social Insurance Fund – CNAPS), is important to safeguard existing savings and build trust to attract further savings. Deposit insurance can also be considered. The promotion of partnerships between institutions such as MFIs and mobile money operators and facilitation of the agency model will allow savings products to reach further into rural areas. Where

other alternatives are less appropriate, informal savings groups should be promoted, with scope to partner with financial institutions to store savings or extend loans.

3. *Credit for targeted entrepreneurs:* Credit makes up only 13% of Gross Domestic Product (GDP) (World Bank, 2017a) and only 13% of adults have credit accounts[3], most of them via microfinance institutions. A lack of reliable information on client creditworthiness, coupled with the high costs associated with maintaining the distribution network, push up lending costs, as does a lack of access to capital for on-lending on the part of MFIs. Lending also relies heavily on collateral which has proven time-consuming and costly to realise due to limitations in the title deed system and a challenging relationship with the judiciary. Furthermore, loan terms may not match consumer realities. For example, if agricultural loan maturity does not coincide with the harvest cycle, meeting loan repayments may prompt farmers to harvest immature crops or to be unable to repay the loan within the agreed timeframe. From the client's perspective, full information on loan fees, terms and conditions is also difficult to obtain. These challenges call for interventions to increase efficiency and reduce costs, including access to more reliable information for lenders and borrowers alike, as well as targeted product design for niche market such as agriculture and micro, small and medium enterprises (MSMEs). Targeted capacity building and MIS system development will be key to improve governance, address operational constraints and reduce underserved populations' access costs.
4. *Niche insurance opportunities:* 4.2 million people faced agricultural risks in the past year and over two million people faced health risks. Yet only 2% of Malagasy adults are formally insured. The rural nature of the population, small formal employment base, limited infrastructure and small financial sector footprint all challenge mass market insurance distribution and premium collection. The ability of the low-income population to afford insurance is a significant constraint, meaning that savings, credit and remittances may be a more effective risk management mechanisms than insurance for poorer consumers. Insurers focus on corporates and a small, wealthier individual client base. Even for wealthier clients, however, most insurance is compulsory insurance such as motor vehicle insurance, credit life insurance and employer-based health cover. A limited understanding of insurance, lack of 'insurance culture' among Malagasy people, lack of trust and poverty and insufficient compulsory insurance products constrains most forms of voluntary take-up. At this stage of insurance market development, the biggest opportunity for retail insurance lies in better leveraging alternative distribution channels, such as bancassurance and mobile assurance, as well as in ensuring that compulsory insurance delivers client value. This requires a legal framework that explicitly allows for alternative distribution and provides recourse to consumers. There are also some targeted opportunities within the agricultural value chain to provide insurance to associations, agricultural processors or other aggregation points for smallholder farmers, or via MFIs that lend to key value chains. The extent of agricultural risk furthermore creates an imperative for a risk management strategy at the national level, including sovereign insurance interventions such as the African Risk Capacity (ARC).
5. *Strengthen policy and regulatory authorities:* Legislation in Madagascar is generally well-drafted. Nevertheless, some legislative challenges remain that, if addressed, could significantly strengthen the functioning and accessibility of the financial sector. Notably, trust in the judiciary is low and resources for implementation and enforcement are constrained. The result is a gap between *de facto* and *de jure* realities. Furthermore, the application of certain laws, such as for consumer protection and electronic money, is not forthcoming, thus creating a delay and uncertainty in the market. Other laws, such as the anti-money laundering and countering financing of terrorism (AML/CFT) frameworks require updates, and a comprehensive law on payment systems must be created to reflect the latest international norms. Though government is committed to financial inclusion and the CNFI has a mandate in this regard, this is not yet explicitly reflected in the

[3] In-depth analysis of FinScope (2015).

regulatory and supervisory mandates of financial service regulatory authorities. A comprehensive financial inclusion policy and appropriate monitoring approach will be critical.

From priorities to action. Table 1 below outlines the recommended interventions to bridge the gaps and capitalise on the opportunities in each of the five priority areas. The next step will be the development of a financial inclusion roadmap to set out the actions required to implement these interventions and to inform the National Financial Inclusion Strategy 2018-2022.

Priority area	Market interventions
Payments for resilience and commerce:	Public sector priorities: • Develop an appropriate, interoperable payments ecosystem to improve efficiency and affordability. • Develop a bank agency framework to enable alternative distribution. • Implement Financial Action Task Force (FATF) guidelines in a way that view financial exclusion as a key risk. Private sector priorities: • Extend use cases for formal payments by digitising key public sector, value chain and trade payments, including card payments in the tourism sector. • Improve mobile money agent liquidity management to ensure reliable access to funds for clients and viable business models for agents. • Improve cash reticulation and management to extend cash-in/-out points, improve economies of scale and reduce the cost of cash (necessary for adoption of digital payments). • Leverage MFI and Post Office footprint to extend reach of formal touch points.
Savings for resilience and to build capital for investment	Public sector priorities: • Strengthen the prudential supervision of key savings institutions, such as CEM, PAOMA, CNAPS and MFIs to safeguard existing savings. • In instances where the creation of formal institutions is not feasible, provide for a form of recognition of small local savings groups to allow proper legal recourse by members. • Implement payment system recommendations above to allow frequent deposits of small amounts. • Consider introducing deposit insurance to build trust and protect consumers. Private sector priorities: • Align product design with customer needs for flexibility, transparency and security.

	• Leverage community and church structures to build trust and educate consumers. • Build capacity of informal savings groups to protect group members. • Partner with informal savings groups to reach further down market and benefit from the scale of group engagements rather than individual interactions.
Enable credit to targeted entrepreneurs	Public sector priorities: • Improve credit information on clients (including credit bureaus) to reduce the cost and risk to lend. • Train judicial officers on financial and banking system matters to ensure effective implementation of the law. • Strengthen the role of Bureau Indépendant Anti-Corruption (Anti-corruption Bureau – BIANCO) to protect the financial sector from any negative effects of corruption. • Improve transparency of disclosure and address the extent of non-interest related costs. Private sector priorities: • Strengthen and digitise MFI information systems to improve efficiency and reduce risk. • Build capacity of MFIs to reduce non-performing loan portfolios and improve quality of financial information to access credit.
Niche insurance opportunities	Public sector priorities: • Develop the legal framework to support alternative distribution of insurance, through MFIs, mobile providers, local groups and farmer associations. • Reduce the tax burden on insurance premiums to improve affordability • Improve availability of insurance skills to facilitate market development, including actuarial skills. • Build capacity and dedicate resources to manage national climate and agricultural risks through ARC. Private-public partnership priorities: • Extend products to cover agricultural risks, such as through agricultural index insurance or meso-level insurance to manage MFI, value chain or supply chain risks affecting farmer productivity. Private sector priorities:

	• Partner with MFIs and health mutuals for health cover. • Collaborate with banks to insure customer risks and protect bank business cases and client welfare.
Strengthen financial inclusion policy, regulations and institutions	• Develop and implement a financial inclusion policy, including mechanisms for appropriate data collection and monitoring. • Strengthen the mandate of key institutions such as CNFI and CSBF to support financial inclusion. • Amend regulation where required to fill legal gaps and strengthen supervision of key areas relevant for financial inclusion, including mobile money, payment systems, consumer credit and the safeguarding of savings. • Create an appropriate legislative and regulatory space to enable small savings groups. • Implement targeted market conduct regulation to improve disclosure and consumer recourse. • Strengthen the judicial environment as relevant for the financial sector. • Develop a consumer education strategy to improve awareness, capacity and understanding. • Improve access to identity, proof of address and title deed processes and documentation to facilitate financial service access.

Table 1. Summary of recommended public and private interventions

Source: Authors' own, based on diagnostic analysis and as consulted in stakeholder workshop

About MAP

Making Access to Financial Services Possible (MAP) is a multi-country initiative to support financial inclusion through a process of evidence-based country analysis. It is a partnership between the United Nations Capital Development Fund[4] (UNCDF), FinMark Trust[5] and the Centre for Financial Regulation and Inclusion[6] (Cenfri). In each country, it aligns stakeholders from within government, private sector and the donor community to create a set of practical actions aimed at extending financial inclusion tailored to that country. In Madagascar, MAP is rolled out under the guidance of the MAP steering committee chaired by the Treasury department of the Ministry of Finance. The steering committee includes representatives from government, regulators, private sector, and donors.

[4] **UNCDF** (www.uncdf.org) is the UN's capital investment agency for the world's least-developed countries. It creates new opportunities for poor people and their communities by increasing access to microfinance and investment capital. UNCDF focuses on Africa and the poorest countries of Asia, with a special commitment to countries emerging from conflict or crisis. It provides seed capital – grants and loans – and technical support to help microfinance institutions reach more poor households and small businesses, and local governments finance the capital investments – water systems, feeder roads, schools, irrigation schemes – that will improve poor peoples' lives.
[5] **FinMark Trust** (www.finmark.org.za) was established in March 2002 with funding from the UK's Department for International Development (DFID). FinMark Trust is an independent non-profit trust whose purpose is 'Making financial markets work for the poor by promoting financial inclusion and regional financial integration'.
[6] **Cenfri** (www.cenfri.org) is a non-profit think-tank based in Cape Town, South Africa. Cenfri's mission is to support financial sector development and financial inclusion through facilitating better regulation and market provision of financial services. They do this by conducting research, providing advice and developing capacity building programmes for regulators, market players and other parties operating in the low-income market.

Comprehensive scope. MAP compiles a comprehensive picture of financial inclusion drivers, barriers and opportunities across the **country context**, the **demand** for and **supply** of financial services, and the **regulatory environment** in four core product markets: **savings**, **credit**, **payments** and **insurance**. Figure 1 below summarises the methodology followed and main sources:

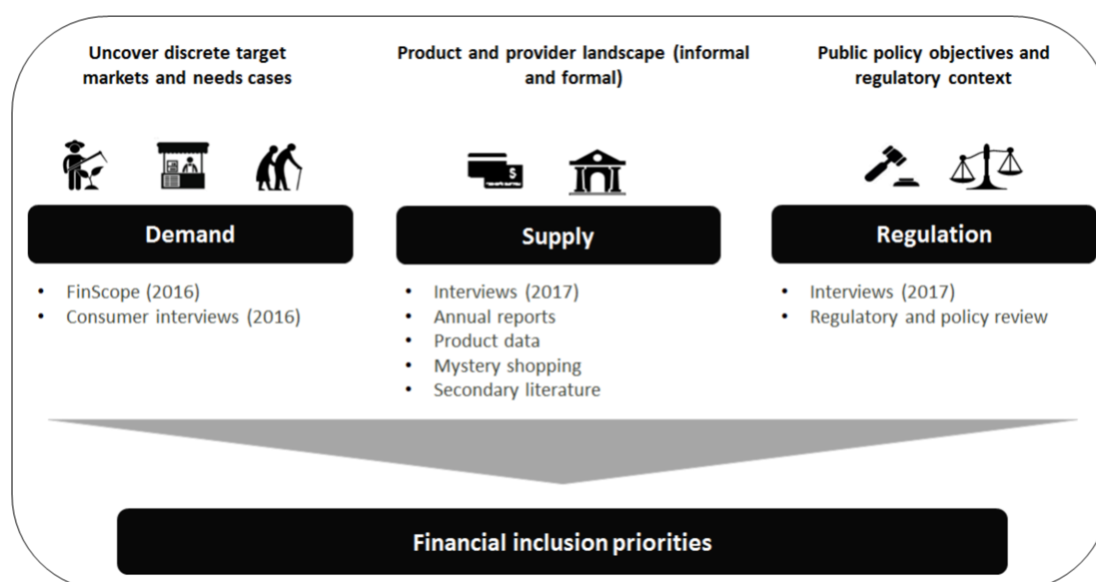

Figure 1. The MAP approach

Source: Authors' own

Data-driven approach. An important part of the MAP approach is to directly gather evidence. On the supply-side this is done through a range of stakeholder consultations conducted in early 2017 (see Annexure E: List of consultations for a consultation list) as well as a mystery shopping exercise at branches/outlets of various financial institutions and product and provider data provided by 28 institutions to the Finances, Technologies, Human Resources and Management consultancy (FTHM)[7]. On the demand-side, qualitative insights were gathered through a series of 28 in-depth consumer interviews conducted in Antananarivo and rural areas within a three-hour drive from the capital in 2016. These insights are used to add perspective and nuance to the quantitative consumer insights generated through the FinScope Madagascar consumer survey published by FinMark Trust in 2016. FinScope is a nationally representative demand-side survey of consumer behaviour and interaction with financial services, as well as consumers' financial realities and perceptions of financial services. FinScope Madagascar is based on a nationally representative sample of 5,040 adults (individuals aged 18 and older), which when weighted, is indicative of a total adult population of 11,324,760[8].

Box 1. Data constraints and interpretation

The FinScope financial access strand is used to enable comparison of levels of financial inclusion across countries or market segments. It is a stacked bar chart with six categories, as discussed below:

- Banked: The first block denotes the percentage of adults who have bank products. This is not necessarily exclusive usage – these individuals could also be using financial products from other formal financial institutions or informal products.
- Formal: To the right of the banked block comes the percentage of adults who have financial products from non-bank formal financial institutions such as microfinance institutions (MFI), the Post Office, or

[7] Referred to as the FTHM dataset in this diagnostic.

[8] Representative at the national and provincial level with a margin of error of 1% with a confidence level of at least 95%. For a detailed discussion of the research methodology and associated statistical properties, refer to FinScope's technical guide.

insurance companies, but do not have a bank account. These individuals could also be using informal products.

The banked and other formal segments together form the formally included population.

- Informal: Next comes the percentage of adults who are not formally served, but use informal financial products or mechanisms. This category thus looks at "informal only" uptake and excludes those individuals who are banked or use other formal categories in addition to informal services. They could also be turning to family and friends for services.
- Assets: A percentage of adults choose to convert their possessions into assets such as jewellery and livestock. This percentage is captured in the ''assets" category and excludes those adults who are included in any of the aforementioned categories.
- Family and friends: This category represents the percentage of adults that make use of their family and friends for financial services, but do not use any other formal or informal financial products or mechanisms. Once again, as it focuses on exclusive use of family and friends, it does not represent the total proportion of people turning to family and friends in addition to other types of financial services.

The five categories above form the financially included adult population.

- Excluded: Lastly, to the far right the access strand indicates the percentage of adults who do not use any financial products – formal or informal.

It is important to note that, in order to add up to 100% of the adult population, the access strand "hides" some overlaps between the various categories. For example: the "formal" or "informal" segments do not indicate total usage of non-bank formal or informal financial services. The "formal" category only depicts those individuals who have a non-bank financial service but not a bank account, while the "informal" category depicts those who use informal financial services but no formal financial services. An individual who uses both a formal and an informal financial product would only appear under formal take-up. The figures quoted are thus not the total proportion of adults with such services. Where relevant, total figures are also included in this report.

Customer needs at the core. What sets MAP apart from other scoping exercises is that the demand-side perspective is the point of departure. The rest of the analysis then evaluates the supply of financial services in Madagascar against the core customer needs identified. Importantly, these needs differ across parts of the country and target market segments.

Keeping the bigger picture in mind. MAP is a financial inclusion diagnostic. As such, the role of financial inclusion in serving public policy objectives takes centre stage. However, financial inclusion can never be seen in isolation. It forms part of the broader financial sector and economic landscape of the country.

1. Why financial inclusion?[9]

Food security and growth constrained. As an island state, Madagascar is a truly unique microcosm with a rich and diverse culture where Polynesia meets Africa and the ancestral land is respected. Its climate and island location means a world-renowned fauna and flora ecosystem, with many indigenous species and vast landscapes. But the very factors that make it unique are also its Achilles heel. Madagascar has a largely agrarian society vulnerable to the extremes of nature: 72% of adults depend on agriculture and more than 4.2 million adults experienced a climate-related shock in the past year. Madagascar ranks 158 out of 188 on the human development index (UNDP, 2016) and the GDP per

[9] Note that all statistics quoted on the Malagasy adult population and their realities and financial services interaction derive from FinScope Madagascar (2016) unless otherwise indicated.

capita is only MGA 1.2 million (USD 402 per year) (World Bank, 2017a). At least 40% of Malagasy adults report being uncertain about whether they will have enough food (World Bank, 2017d).

Financial inclusion can help manage deprivation. In a largely vulnerable society such as this, the role of financial services to help weather shocks and to smooth and grow income is particularly pronounced. Figure 2 below shows that 17% of adults who earn less than a dollar a day and who are financially excluded (that is, have no formal or informal financial services) indicate that they have missed a meal, could not send their children to school, or could not pay their health costs in the past year. This is shown by the blue bar. When considering the corresponding proportion among the financially included (those with any type of formal or informal financial service), the percentage drops to 8% (the orange bar). This indicates that, for people with similarly low income levels, whether they are financially included or not makes a significant difference to the likelihood of financial distress.

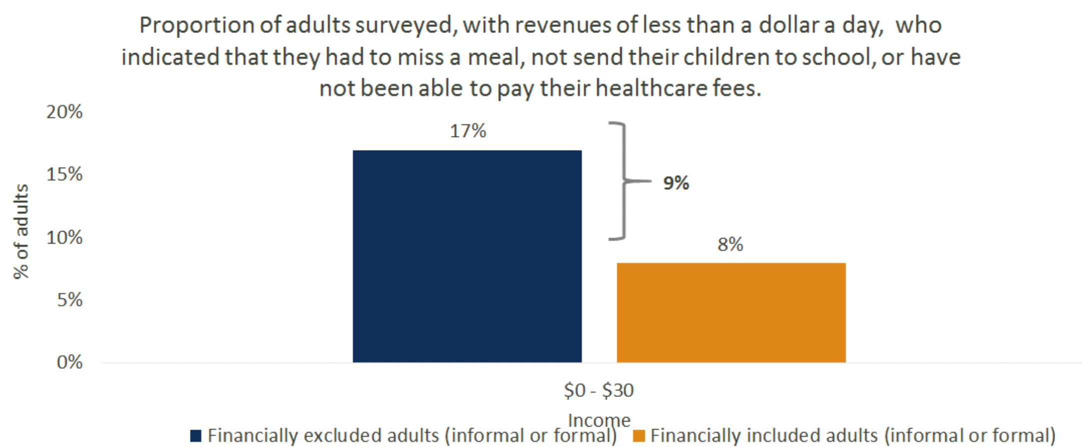

Figure 2. Financial distress among those with and without financial services

Source: FinScope (2016)

Financial inclusion important to achieve broader public policy goals. Financial inclusion also matters at the public policy level. Effective financial systems can fuel macroeconomic growth by mobilising savings for investment purposes (including capital allocation for business development), and by reducing transaction costs and increasing efficiency, contributing to employment generation[10]. At the microeconomic or household level, financial inclusion can impact people's welfare directly by reducing their transaction costs, enabling them to more efficiently manage risks, allocating capital for productive use and supporting the accumulation of wealth over time. Financial services can also facilitate access to core services, such as health or education. This can impact growth directly, by triggering service sectors, as well as indirectly, by enhancing productivity. See Annexure A: The role of various financial services in poverty alleviation and inclusive growth for a literature review on the role of specific types of financial services – credit, payments, savings and insurance – in poverty alleviation and growth.

Long-standing government commitment to financial inclusion. The Government of Madagascar acknowledges the role of financial inclusion in serving these public policy goals. Its commitment to the promotion of financial inclusion was first formalised in 2003 when it formed the National Council for Microfinance (CNMF), which has since become the Coordination Nationale de la Finance Inclusive (CNFI), housed within the Treasury Department of the Ministry of Finance. In 2013, Madagascar became a member of the Alliance for Financial Inclusion (AFI), the world's leading organisation for

[10] See, for example, Calderón & Liu (2003), King & Levine (1993), and Levine (1997).

financial inclusion policy and regulation and signatory to the Maya Declaration, a global commitment platform for countries to set their own concrete financial inclusion targets. Madagascar's Maya Declaration commitments focused on improving access to microfinance services, as well as on reforming the regulatory framework to support financial inclusion, especially in the field of mobile banking and consumer protection. Moreover, government committed to ensuring availability of reliable and updated financial inclusion data in accordance with international standards.

In 2013, the stakeholders in the financial inclusion sector validated the National Strategy on Financial Inclusion for the period 2013-2017. Taking over from previous microfinance strategies, this strategy focuses on the promotion and development of the microfinance sector. The Maya Declaration was conceived on the basis of this strategy. The International Monetary Fund (IMF) Financial Sector Assessment Programme (FSAP) report of 2016 and the 2017 World Bank Aide Memoire on financial inclusion[11] have provided important checkpoints along the way.

MAP to provide framework for strategy evolution. Building on the above programmes and initiatives, the Ministry of Finance has implemented the comprehensive diagnostic methodology of MAP to analyse the barriers and opportunities for financial inclusion beyond just microfinance, and to define key priorities for the promotion of financial inclusion to meet broader policy objectives.

The rest of this report summarises the key diagnostic findings:

- Section 2 outlines the realities facing consumers as backdrop for an analysis of the current level of financial inclusion. It also provides a high-level overview of the landscape of financial service provision and the legislative and regulatory parameters for market activity. The various parts of the market picture – country context, demand-side, supply-side and regulation – are then integrated to conclude on key financial service needs and gaps.

- Section 3 introduces and analyses five core priorities for bridging these gaps:
  1. Payments for resilience and trade.
  2. Savings to manage shocks and build capital.
  3. Targeted credit to extend economic opportunities.
  4. Niche insurance opportunities for resilience and productivity.
  5. Strengthening financial inclusion policies, regulation and institutions.

  For each, the analysis considers the rationale, the challenges to be overcome and what can be done to move from gap to opportunity.

- Section 4 summarises the actions towards each of the five core financial inclusion imperatives and explains the process from recommendation to action.

The main text is supported by detailed annexures for further reference:

- Annexure A: The role of various financial services in poverty alleviation and inclusive growth contains a literature review on the role of various financial services in poverty alleviation and growth.

- Annexure B: Consumer statistics provides consumer statistics to amplify the consumer realities and financial service usage discussion in Section 2.1 and 2.2.

[11] Focus areas include: access to transaction accounts, payment system modernisation, access to credit MSMEs, strengthening institutional capacity and project management and impact evaluation.

- Annexure C: Regulatory overview contains a detailed analysis of the applicable regulatory framework that forms the backbone for Section 2.4 and elsewhere.

2. Where are the gaps?

This section unpacks the needs for financial services in Madagascar considering the consumer and country realities, and compares the current state of financial services uptake, supply and regulation to these needs to conclude on the key gaps to overcome.

2.1. Consumer and country realities

Significant poverty with limited economic opportunities. The financial system needs to fit consumer realities, should it wish to increase retail penetration and actual use of accounts and other financial services. This reality is characterised by poverty, remoteness, reliance on agriculture and informal employment, as well as irregular incomes, with limited opportunities to diversify income streams:

- **Poverty and informality**: 5.3 million people (47% of all adults) earn less than the equivalent of USD 1 per day, and two out of every three adults (7.2 million) earn the equivalent of USD 2 or below. This situation corresponds to a small formal sector. 9.8 million earners (87% of all adults) generate the bulk of their income in the informal economy.
- **Rural, agriculture-dependent, irregular incomes**: Most informal activity is in the agricultural sector. 8.3 million adults (73%) live in rural areas and 72% of adults are involved in agricultural activities. While the influx into urban areas is steady, at 4.7% annually (CIA, 2017), most people still remain where they were born. 6.7 million farmers (60% of all adults) sell all or some of their produce, meaning that they are not mere subsistence farmers. Yet the income generated is irregular, a theme that also permeates other groups of society: 5.8 million adults (52%) receive their income less frequently than monthly[12].

Critical vulnerability to climate and agricultural risks. As outlined in Section 1, 4.3 million adults experienced a significant agricultural shock related to floods or drought in the past year. Figure 3 below shows the incidence of agricultural shocks for different types of farming activities in the past year. Poverty, irregular incomes and reliance on risk-prone agriculture combine to create high levels of vulnerability: 70% of the poorest people worry each week that they will not have enough food to eat (World Bank, 2017d).

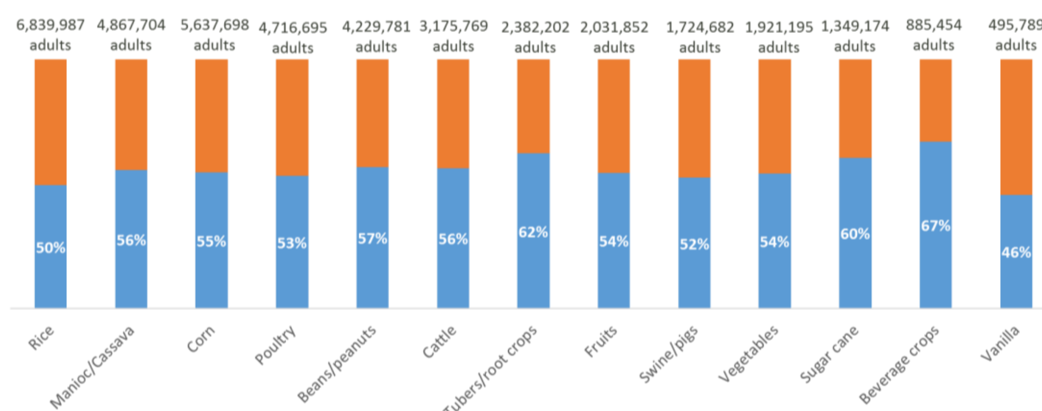

Figure 3. Of those adults involved in various types of farming, the % who experienced a shock in the past 12 months

[12] This also holds true for those depending on remittances: remittances are provided largely during emergencies to strengthen resilience, rather than as a regular source of income. According to FinScope (2016), more than 70% of remittances are received seasonally or less often. See Section 3 for more detail.

Source: FinScope (2016)

Ability to participate in the formal economy hamstrung by poor infrastructure and connectivity. The road network is poorly developed, with only 6,103km of paved road in a country with the 47th largest surface area in the world (CIA, 2017). Only 17% of the population has access to electricity (World Bank, 2017c) and according to FinScope (2016), 35% of adults use a mobile phone (low by regional standards). People living far from urban and business centres (as is the case for most Malagasy adults), without reliable electricity or mobile connectivity, are ill placed to participate in the formal economy or use formal financial services.

A very young society. 61% of Malagasy are under 25 years of age. This creates an imperative to build skills and create appropriate employment to absorb the growing labour force. The relatively young population also aggravates future food security concerns.

Low levels of education and limited use of French further constrain engagement with formal sector. Only around 65% of those aged 15 and above are considered literate (World Bank, 2017b). It is estimated that fewer than five million people understand French (OIF, 2017). As French is the official business language, this constrains interaction with the formal system for the majority of citizens.

Different realities for different target markets. Climate differs widely between regions, from monsoon regions in the East to desert regions in the South-West. Hence location plays an important role in resilience. There is also a significant difference in income and economic opportunities between wealthier urban groups and poorer and rural households. The formally employed, who mainly reside in urban areas, have a median income of MGA 150,000 (USD 50) a month. Farmers, on the other hand (who are 93% rural) have a monthly median income of only MGA 60,000 (USD 20). For three out of every four farmers, primary school is the highest form of education, but 63% of the formally employed have an education beyond primary school. 61% of the formally employed own a mobile phone, while only 16% of farmers do so. There are also gender differences. For example, the formally employed group is predominantly male, whereas small-scale entrepreneurs and dependents are largely female. More men reside in the plateau areas in the centre of the country as well as in the South-East (a difference of 5-10%), while the Northern part has slightly more female residents (2-9%). Lastly, cultural differences are also significant across regions.

Slow economic recovery after period of political isolation. The realities as listed above relate to the 'hand dealt' to Madagascar. But not all is outside of policy control. Some aspects of the realities facing consumers also stem from the political economy. The 2009 political crisis triggered economic sanctions and significant donor withdrawal, plus it affected government's ability to borrow, all of which constrained the economy (World Bank, 2013). Critical sectors are recovering, but growth remains slow and constraints on government borrowing limit the scope for fiscal support to development[13].

Limited global ties. The sanctions speak to a broader theme of relative isolation. Madagascar does not have a large diaspora population[14]. Consultations indicate that leaving Madagascar is expensive and the qualitative demand-side research shows a reluctance to move too far from the ancestral land.

[13] The economy has grown at around 3% per year on average for the past 4 years (World Bank, 2017b). In 2005, government debt was 70% of GDP. By 2015, this had dropped to 25% (IMF, 2017).
[14] According to the IOM (2017) only 0.63% of all Malagasy citizens live abroad. Despite such figures usually being understated due to data limitations, the diaspora population remains very small in international terms.

Madagascar is, in more respects than one, an island state – a situation compounded by the turbulent recent political economy history.

Ease of doing business constrained. Madagascar ranks 167th out of 180 countries according to the World Bank's Ease of Doing Business report (2016), indicating a constrained environment for business activity.

Trust in community structures and church, rather than official structures. Part of the low Ease of Doing Business ranking relates to the integrity of official structures. A 2015 report by Transparency International indicated that one in two Malagasy believe that most magistrates and police officers are corrupt. Business does not fare better, with one in three Malagasy believing the business sector to be corrupt. Only 13% said the same about their local counsellors and fewer than 5% distrust religious and traditional leaders. The demand-side research confirms that community structures and the church are the most trusted institutions outside the family.

Interviewer: Do you use mobile money?

Respondent: "No. You see, I'm not very interested in new technology. I don't know how to use mobile money yet and am not interested to. Sometimes when I need to use it, I just ask my brother and he does it for me, so I don't bother learning. For example, my husband once needed some money when he was travelling. And because he knows I don't use mobile money, he told me to give the money to my brother and asked him to send it."

- Female, urban, informally employed

Reluctance to modernise. The trust deficit is aggravated by a reluctance to modernise among many of the low-income population. The qualitative research indicates a generally suspicious attitude towards modernisation.

2.2. Use of financial services

Very low use of financial services. Most Malagasy manage their financial lives without using the financial system. FinScope (2016) shows that only 29% of adults use formal financial services and 41% do not use any form of financial services. Figure 4 illustrates by showing the access strand in Madagascar in regional context: 12% of Malagasy adults have access to banking services. A further 17% have a financial service from another formal provider (such as microfinance institutions and mobile money) and another 30% of adults, while not formally included, engage with informal financial services:

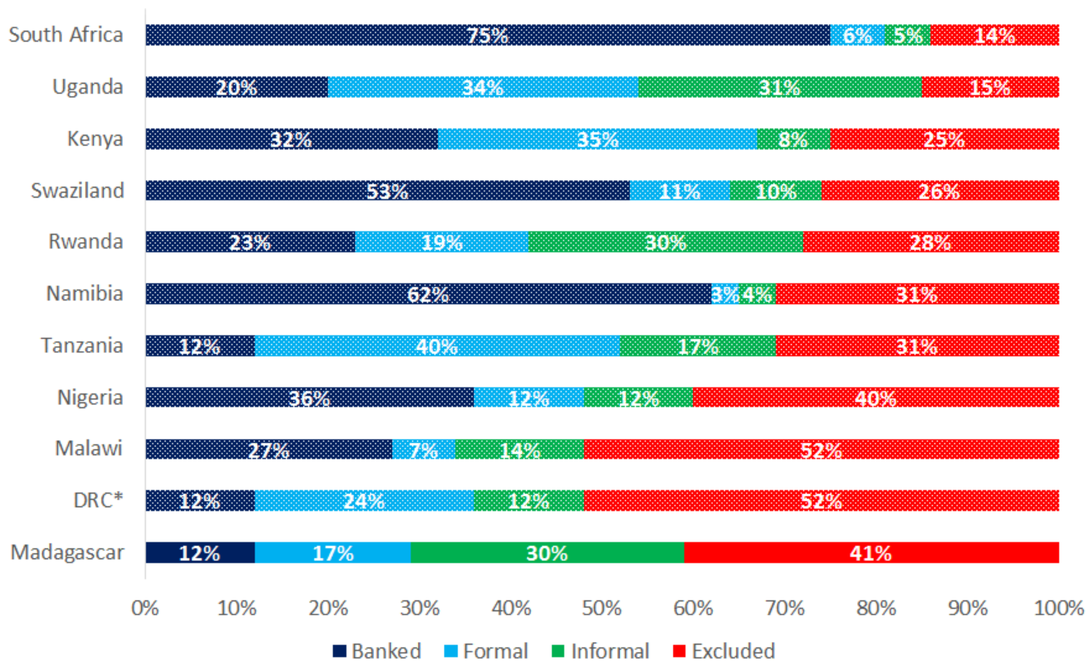

Figure 4. The Madagascar access strand, a regional comparison

Source: FinScope (2016)

Rural areas most excluded; even higher-income earners underserved. Figure 5 below shows that urban and wealthier groups are significantly more included than poorer people and those living in rural areas, though the latter two groups represent by far the biggest proportion of the population. Rural adults depend extensively on informal mechanisms to manage their financial lives. It is significant to note that even for the urban and wealthier cohorts, more than four out of every ten individuals are not formally served. There are no marked gender differences.

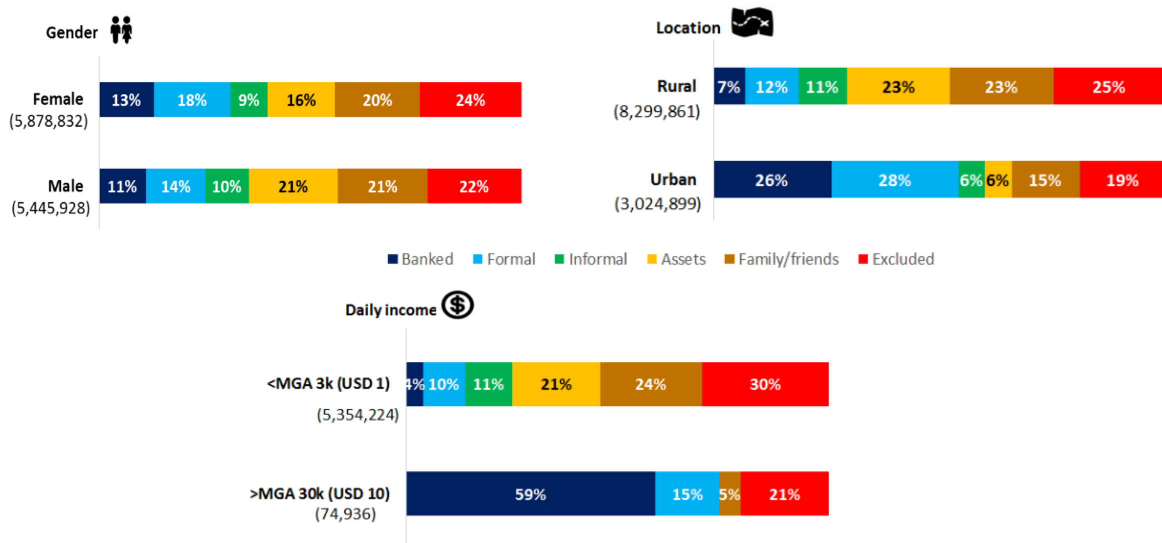

Figure 5. Access strand comparison between location, gender and income categories

Source: FinScope (2016)

Low usage persists across product markets. Figure 6 indicates the access strand for each of the five product markets. It is clear that payment vehicles are the most significant formal products used, with bank accounts playing a prominent role in facilitating transaction services at large, while non-bank formal services, notably mobile money, account for the bulk of remittance transfers. Savings is the

dominant product category when also considering informal provision, family and friends (which includes "do it yourself" saving such as saving in a savings pot) and the use of assets such as livestock as savings vehicle.

> *"I used to have a bank account. But my children often fall sick and we do not have money available at home. So we chose to take our money from the bank and we now keep it in a savings pot at home. And when there is an emergency, we can take it from the pot right away and we buy a new pot to change the broken one. When you break it, you have to buy a new one. We recently broke it to finish our home because we needed to buy building materials, and also for the school fees because times are not very good now so we had to break it."*
>
> - *Small business owner, male, Antananarivo*

Only 200,000 adults have insurance, largely motor vehicle insurance, and the demand-side research did not pick up any significant informal or community-based insurance mechanisms. Even when loans from family and friends are taken into account, 70% of Malagasy adults do not have any credit. This indicates not only an underdeveloped formal credit market, but a reluctance to take on debt in general – a theme that will be considered further in Section 3.3.

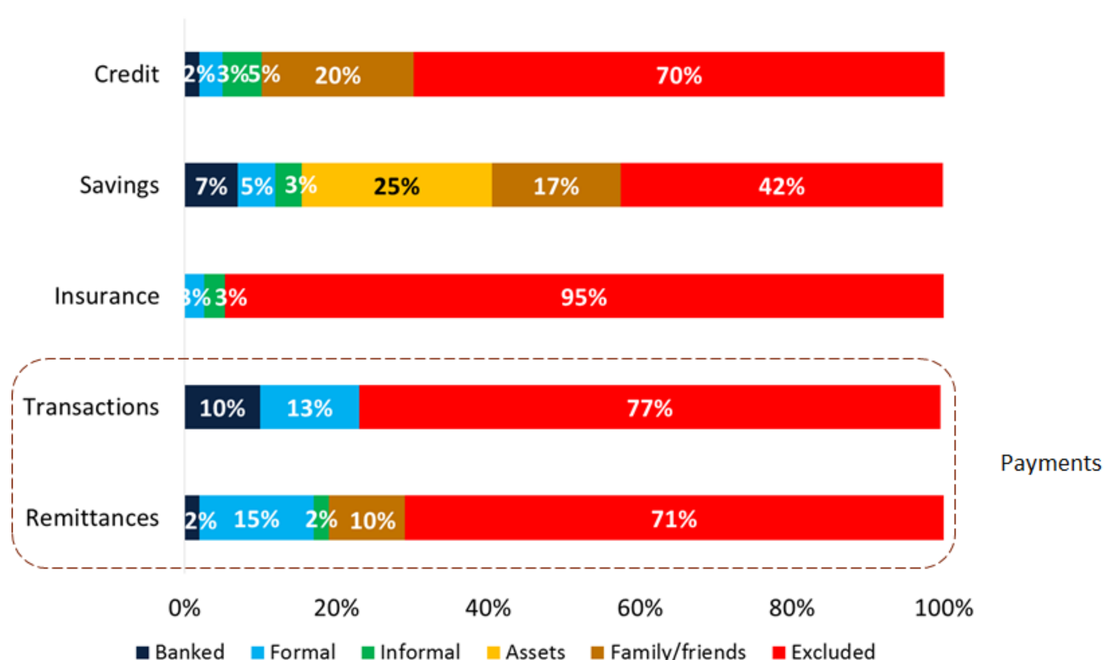

Figure 6. Product access strands[15]

Source: FinScope (2016)

Limited overlaps. Figure 6 shows that the majority of adults in Madagascar are thinly served by formal institutions. Furthermore, FinScope (2016) revealed that there are limited overlaps within the categories. The majority of Malagasies usually sticks to their preferred provider, i.e. they either use a bank or their savings pot for savings but not both.

Financial services mainly used to meet transfer of value and resilience needs. Financial services typically serve four functions: to pay somebody else (**transfer of value**), to meet expenses on an ongoing basis (**liquidity**); to meet large expenses resulting from shocks or other unpredictable events

[15] FinScope shows current use rather than the ownership of accounts. While the access strands show FinScope data, credit and savings figures in the rest of the document have been adjusted to reflect additional supply-side information.

(**resilience**); or to put together larger amounts of money to achieve objectives that cannot be funded from regular income (**meeting goals**). These four are universal functional needs for financial services, termed **financial needs**. **Use cases** are the discrete purposes for which people or customers use financial services. Examples include being able to send money to a relative in another part of the country, to pay monthly school fees, to purchase enough food, to pay for unexpected medical expenses, or to build a business. All use cases can be categorised into the four financial needs (i2i Facility, 2017).

The graph below illustrates the nine most prominent use cases identified in Madagascar and how individual use cases classify into each of the four needs[16]. The y-axis indicates the proportion of adults using different types of financial services towards each of the use cases identified on the x-axis:

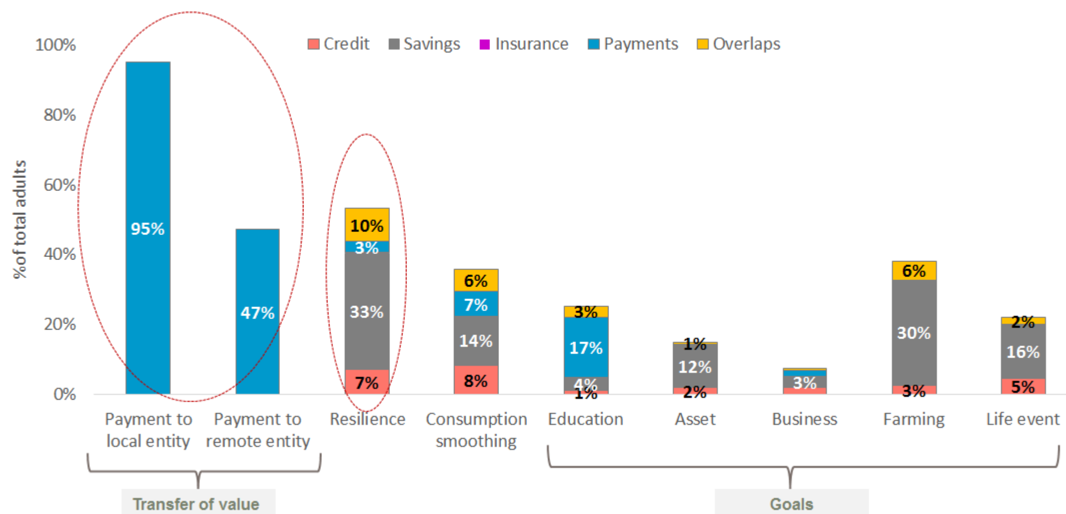

Figure 7. Products used for different financial needs in Madagascar

Source: FinScope (2016)

There are two prominent transfer of value use cases in Madagascar: to pay somebody in the vicinity, or to transfer money over a distance. 95% of adults use some payments instrument (cash or digital) to make local payments and almost half of them do so for distance payments.

The next most prominent use for financial services is to meet a resilience need. The diagram shows that 7% of adults use some form of credit to cope with the impact of risk events, a further 33% use savings and 3% use a payments service (for example when receiving a remittance to cope with the impact of a shock). 10% of individuals use more than one of the above means to respond to risks. The use of insurance is conspicuous in its absence.

Where consumption smoothing, as only significant liquidity use case picked up in the FinScope survey findings, is concerned: 8% of adults borrow to smooth their consumption, a further 14% draw on their savings and 7% make use of transfer of value/payments instruments. 6% of adults use more than one of these types of vehicles.

Lastly, there are a number of use cases that classify under the financial need to meet goals: the ability to pay for a better education, to build assets, to establish or grow a business, to farm or to provide for some life event, such as the *famadihana* ceremony. The diagram indicates that savings feature most

[16] Note that consumption smoothing was the only notable liquidity use case encountered in FinScope. The questionnaire did not allow enough granularity to break down the resilience need into discrete use cases.

prominently in each case, though in the case of paying for education many people also draw on payments vehicles.

Consumer experience on use of formal services mixed. In making sense of the usage patterns outlined above, especially the low uptake and use of formal services, it is important to keep the customer experience and perceptions of different types of services and providers in mind. The qualitative demand-side interviews sketch a clear picture of why people would use formal services or not: they allow quicker, safer, more convenient access to funds and allow users greater control over their finances to achieve their goals. However, many consider formal financial services to be “not for them”. Limited trust, lack of consumer education, the frustration of wasting time in queues and the restrictions that apply when funds are urgently needed for emergencies are all deterrents to using formal financial services:

Formal financial services – what works

It's convenient for me	*“**I can use [mobile money] even if I'm at home**. The bank is not practical for me to send money and it passes through the bank before it gets to the person. With [mobile money], it is like a hand-to-hand transaction; there is no intermediate. The higher cost that [mobile money] charges is worth it because it is more practical.”* Male, govt employee in Antananarivo
It's safer for me	*“**It's safer than cash**. When I have enough money in my account, I can just transfer it to my supplier for example. And many people also use [mobile money].”* Female, rural shopkeeper
It's quicker for me	*“They advised me at the bank to use a debit card because it's cheaper to check your balance. And they're right, it's much cheaper. Plus, **you're no longer obliged to queue** at the bank and waste time there.”* Male, dentist in Antananarivo
I have control	*“I prefer to save at the bank actually. One of the advantages of the bank have over mobile money [or cash], you are always tempted to use the money, so you save less. Whereas if you save money at the bank, when you want to get it, you have to go to the bank and queue and there are transportation fees too so **it's less tempting**.* Male, employed in Ambondrona
I can achieve my goal	*“I plan to build a house in the near future and I will borrow from [a MFI]. **It really helped me a lot to borrow money from here**. I have been able to upgrade my wooden house into a brick one and I could even build another wooden house that I also want to change into brick soon. I only trust the [MFI]. I have been here for years and I trust them.”* Female, has a business in Antananarivo

Formal financial services – what does not work

I waste my time	*“The problem is that there is always a **long queue** to access the bank services. And because I am a businesswoman, my time is precious. For example when I have to pay for stock. If I want to pay them, I have to wait for the bank to get the money.”* Female, rural business owner
I don't trust it	*“Banks and MFIs are scammers. When [a MFI branch] closed down, **my mother's money just disappeared** even though they still have an office in Tana. We don't know what happened. They didn't take responsibility. Also, I think that the Malagasy banks are interested in your deposits but not if you want to invest.”* Male, government employee in Antananarivo
Not for me	*“Only a few Malagasy people [have bank accounts]. First of all, because they do not have enough money. Secondly, **banks are for rich people**. That's what we Malagasy people think.”* Male, government employee in Antananarivo
I am confused	*“I don't see what are the advantages for using [the bank]. **I don't know how to use it**. I am an old school person. I don't like these systems. Even the number of my account, I don't know it. I use only the card to get money. If people ask to me the number, I don't know it.”* Male, employed in Antananarivo
I can't access it	*“Once, I brought money to the bank in the morning and my child fell sick that night. I didn't know how to pay. I asked the doctor to save my child's life and I promised to give his money the morning. So, after this we decided not to put our money in the bank anymore but to **keep it at home**.”* Male, has a small business in Antananarivo

Figure 8. Formal financial services: customer's views

Source: Qualitative demand-side interviews (2017)

2.3. Provision of financial services

Diverse provider landscape. Figure 9 below indicates the range of financial service providers in Madagascar and which providers operate in which product markets. Grey-shaded entities are formally

regulated, whereas those shaded in orange are outside of the supervision of the financial service regulatory authorities:

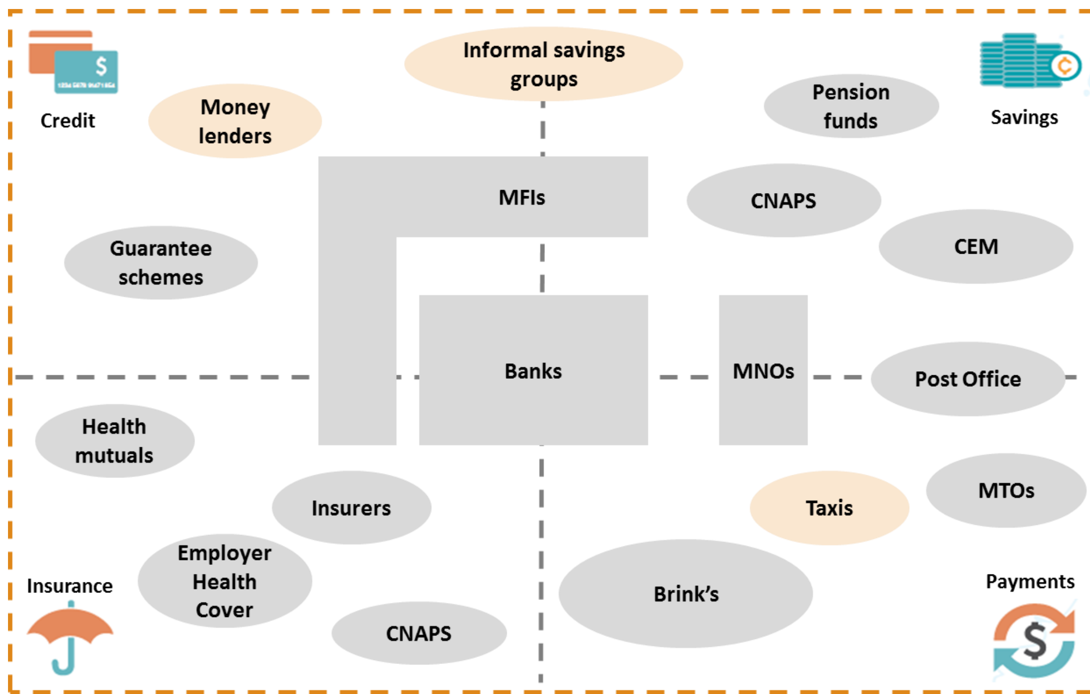

Figure 9. Provider overview

Source: Consultations (2017) and diagnostic analysis

Who provides what, to whom. Figure 10 below shows the total user base for each of the main categories of financial service providers or "do it yourself" financial services. To the right of the graph it indicates the mainstream providers of formal financial services, namely MFIs, mobile money operators (MMOs), insurers and banks. The left-hand side indicates three clusters: the use of assets as savings or transaction vehicle, family and friends or own devices (such as the pot for home savings) as channel for financial services, and informal financial service providers.

Each column indicates the total number of current users for that category and which types of financial services are used for each. The red line indicates the average monthly income of the users/client base in each category. The pie charts below the main graph indicate the gender and rural-urban spread of the users/client base for each category:

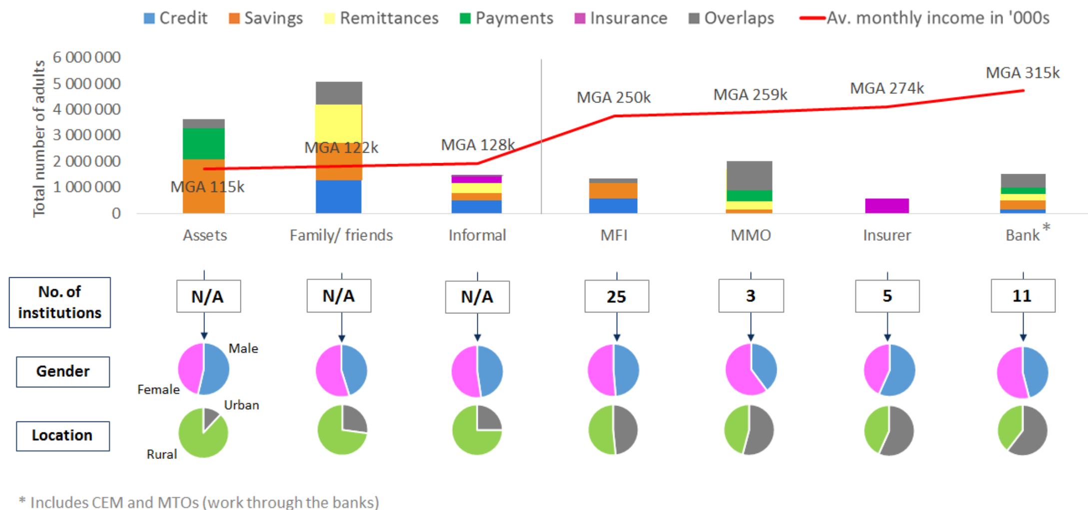

Figure 10. Who provides what, to whom? Client base overview of main provider categories

Source: BFM (2016), CNFI (2016), FinScope (2016)

Banks and MFIs at the core. There are eleven banks in Madagascar. Banks are at the heart of the Malagasy financial system and operate across all four product markets (in the case of insurance, as distribution channel rather than underwriter) (BFM, 2017a). MFIs also play a significant role in the market for credit, savings and insurance (for the latter, once again as distribution channel), notably in rural areas and in providing financial services for smaller amounts than those serviced by banks. At present, there are 25 registered MFIs (BFM, 2017b).

MFIs, mobile money providers and banks each serve over a million adults. The diagram shows that MFIs have a combined client base of around 1.4 million adults, spread largely between a relatively equal number of credit (blue) and savings (orange) clients. MMOs serve a total of just short of 1.1 million clients. Surprisingly, most mobile money clients use the service not just as payment mechanism, but also for savings or remittances (indicated by the grey overlap component). The number of bank customers is just slightly more than those of MFIs, at around 1.5 million, but with fewer credit clients and more clients using a combination of savings, remittances and payments services. Of the eleven banks, one bank accounts for half of all consumer accounts, a figure that rises to 80% for the largest four banks (IMF, 2016).

Box 2. MFI typology

Though MFIs are indicated as a single category above, not all MFIs in Madagascar are structured alike or operate under the same parameters. Under law, as discussed in Annexure C: Regulatory overview, there are three categories of MFIs. Within these categories there are significant variability in results and focus. To identify the financial inclusion support activities required, four types of MFIs were identified for the purpose of this analysis:

- **Niche MFIs** are MFIs specialising in agricultural or MSME loans in specific sectors.
- **Retail MFIs** focus on large-scale deposit collection and lending. They serve more than half of MFI consumers (Consultations, 2016).
- **Donor-funded MFIs**, due to their funding source, are in the first instance impact orientated, rather than profit orientated.
- Lastly, a group of **fragile MFIs** exhibit low profitability and are challenged by insufficient capital.

A distinct target market focus across formal categories. Most large MFIs are mutuals or have a specific mandate to serve lower-income consumers. They therefore achieve a deeper rural, lower income reach than banks and MMOs. Banks tend to focus on corporate clients and wealthier individuals. Mobile money clients are poorer and more rural than bank clients, but less so than MFI clients. Insurers serve a very small, largely wealthy client base.

Poorer, more rural people tend to rely on informal options and friends and family. There is a marked difference in the average income levels of clients/users to the left of the diagram versus the right. Those relying on family and friends, assets or informal providers are also much more likely to be based in rural areas than those making use of formal financial services. It is estimated that 300,000 people belong to informal savings groups.

Figure 11 reinforces the progression towards a wealthier, more urban client base from self (assets), family and friends at the bottom, to MFIs, to mobile money providers and, finally, to CEM and the banks.

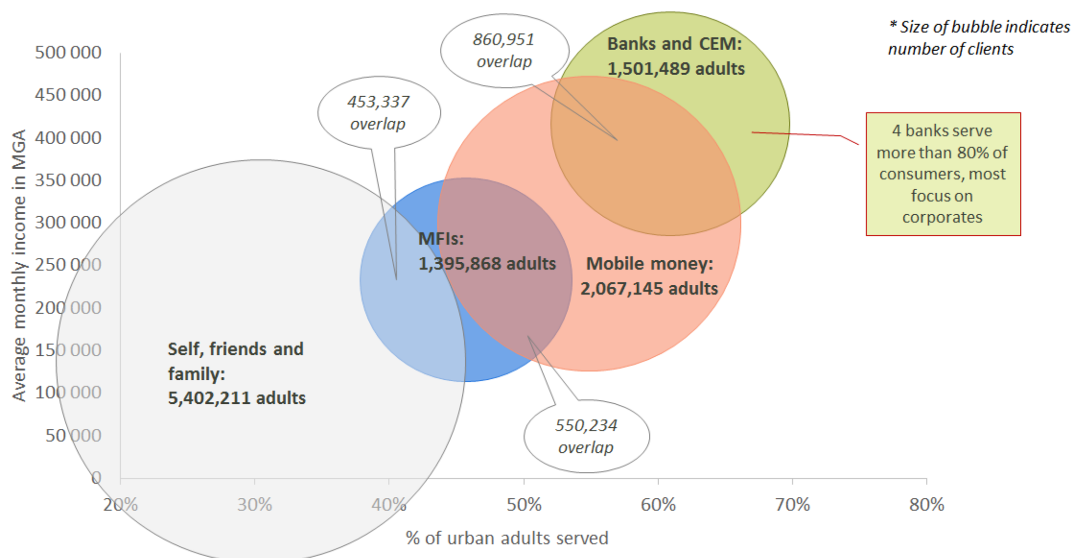

Figure 11. Customer focus across provider types, by income level and location

Source: CNFI (2016), FinScope (2016)

Large government stake in non-bank financial service provision. The government owns a stake in the largest insurer, Aro, and in a few of the larger banks. It also controls the largest savings institutions by number of savers or contributors (for contributions), namely Caisse Nationale de Prévoyance Sociale (CNAPS), the Post Office (PAOMA) and CEM. CEM is the oldest and largest savings bank, whereas CNAPS is the public pension scheme. Contribution is mandatory by all employed and, once fifteen years of contributions have been made, benefits are guaranteed at a multiple of the final salary.

Post Office significant footprint. The Post Office offers payment and savings services (including international transfers) and has an extensive distribution footprint, also covering rural areas[17].

Insurance development nascent, most insurance non-life and compulsory. Non-life insurance dominates the market (0.5% of GDP versus 0.2% of GDP for life insurance products (IMF, 2016)), including fire and motor vehicle insurance. Most insurers target corporates or the employed as customers. Consumer cover is largely compulsory, either linked to loans (credit life) or motor vehicle

[17] This makes it a potentially attractive distribution partner for financial services. However, it has constrained systems and skills.

ownership. No agricultural insurance cover is provided, although a number of health insurance options exist.

Health cover through mutuals, insurance and employers. Most health cover is obtained from health mutuals and through employer health schemes. Employers are required to contribute to health cover for their employees, generally from health providers such as Ostie. Such cover is not regulated under financial services law, but falls under the Ministry of Health. Health insurance is also provided by insurers and some innovative microfinance institutions, where it is linked to credit extension. Access to health services and the related financial services is restricted to urban areas with very few options to deal with health needs in rural regions (Unicef, nd).

Box 3. Enterprise medical services at a glance

The labour code 44-2003 of Madagascar compels all employers to ensure that their workers are registered for Workers' Medical Services. Benefits extend to the family of the worker, including their children under the age of 21. All beneficiaries are covered for preventative as well as curative medicine.

Medical services can either be provided directly by the employer, or by a third party known as an "Inter-enterprise medical service provider". A prominent example is Ostie, an Antananarivo-based third party provider. Coverage extends to the majority of salaried workers, serviced by over 550 doctors across 39 different locations (OSTIE, nd).

Ostie membership contributions are fixed by decree 1162-2003 as a percentage of the salary of the employee. The worker is responsible for paying 1% of their salary, whilst the employer is responsible for paying 6%.

Five institutions and credit guarantee schemes. The main financial institutions that provide guarantees are SOLIDIS and Fonds de Garantie Malgache (FDGM). The two main guarantee schemes are Garantie Partielle de Portefeuille (GPP) and ARIZ. These entities will struggle to sustainably meet the need for guarantees over the medium term. As such, the World Bank (2017) has advocated for an increase in the amount of capital available to guarantee loans in the Madagascar context, especially for loans for MSMEs. The institutions and guarantee schemes also struggle to raise funding due to the country risk profile of Madagascar and struggle to apply guarantees due to the level of collateral required for MSMEs to lend, which is often multiples of the amount of credit applied for (refer to Section 3.3).

2.4. Regulatory parameters

The last important element to understand in determining the key needs and priorities for financial inclusion is the regulatory framework that sets the parameters for market entry, exit and operation.

Civil law system. Madagascar has a civil law legal system. This implies that, unless an activity is explicitly prohibited, it is implicitly allowed. Such a system requires extensive legislative frameworks to ensure a well-functioning market, but may also be conducive to market innovation.

Regulatory framework spans various laws and authorities. There are six regulatory authorities with jurisdiction over financial service provision and related areas, each with a unique mandate. Table 2 below provides a summary of the areas of financial service regulation across regulatory authorities, and outlines the financial service provider categories established by regulation[18]:

[18] There are also different texts for each type of financial service provider.

Authority	Regulated entities	Key regulations / legislation[19]	Key mandate
CSBF **(Council for Banking and Financial Supervision)**	Credit establishments (banks, microfinance institutions), financial, intermediary and banking operations establishments, electronic money institutions	Credit establishments law Microfinance law Electronic money law (note: law not yet in force pending issue of the application texts)	Prudential regulation Licensing and accreditation of institutions
Ministry of Finance	Insurance companies	Insurance law	Licensing and accreditation of institutions Licensing of products Prudential regulation Limited market conduct elements
Ministry of Commerce	All companies	Law on consumer protection (note: law not yet in force pending issue of regulations)	All aspects pertaining to consumer protection.
SAMIFIN **(Financial intelligence service)**	All financial service providers, plus specific other professions conducting payments and designated to be accountable institutions by law.	Law on anti-money laundering Law on counter-financing of terrorism	To receive and deal with reports on all suspicious transactions and all transactions above a certain level. Customer due diligence ("know your customer") requirements for all accountable institutions[20].
BIANCO **(anti-corruption bureau)**	n/a	Anti-corruption law	Investigates all tip-offs related to corrupt activities. Financial service providers may periodically be required report on the activities of high ranking and profiled persons.
Central Bank	All participants in the payments system	Central Bank law	The central bank of Madagascar is responsible for

[19] See Annexure F: List of laws and regulations for a full reference of each law.
[20] Customers must be identified via the presentation of an appropriate identity document, which includes a photograph, as well as a proof of address. An exemption exists for low value (below MGA 3 million (USD 993)) transactions of customers that do not have a regular business relationship with a Financial Service Provider (FSP).

			ensuring the internal and external stability of the currency and contributes to the financial stability and soundness of the financial system system and all aspects related to it.

Table 2. What is regulated where, by whom?

Source: Authors' own, drawing on regulatory analysis in

Annexure C: Regulatory overview

Ministry of Finance key policymaker. The Ministry of Finance has an important relationship with the CSBF via the participation of its director as well as via an additional appointment. As such, the Ministry appoints two out of seven members of the council. It is also the principle regulator of the insurance market and houses the CNFI within the Department of the Treasury. The powers of the ministry include the ability to compel Financial Service Providers (FSPs) to disclose retail market data as well as to issues decrees on matters that are not sufficient covered by the Credit Establishments Act, upon the recommendation of the CSBF.

2.5. Financial inclusion needs and priorities

Two priority needs. The customer and country realities as outlined in Section 2.1 and the needs analysis in Section 2.2 suggest two cross-cutting needs where financial services can fulfil a particularly important role in reaching broader public policy objectives, but where there are still significant gaps in current provision as outlined in Section 2.3: food security and resilience on the one hand, and economic growth and opportunity on the other hand.

- *Food security and resilience.* The prevalence of agricultural shocks and the fact that a substantive proportion of the population is concerned about food security, places resilience centre stage at both the public policy level and as household-level financial need.
- *Economic growth and opportunity.* Almost half of all adults live in absolute poverty and without significant economic opportunities. Generating opportunities for people to grow their income and progress out of poverty is hence a first order financial need.

As indicated in Figure 7, Section 2.2, there is also a pronounced need for payments to allow people to live their daily lives. In fact, a well-functioning, accessible payment system is integral to the fulfilment of all financial needs, as well as to unlock the role of financial services in growth and other public policy objectives at the systems level. Hence, though payments are not indicated as a separate priority need, the need for effective payment solutions is assumed in each of the two priorities outlined above.

Corresponding financial service imperatives. These needs imply two core imperatives for the financial sector: to strengthen individual resilience and to enable economic opportunities. More specifically:

- At the **individual** level, it is critical to build **savings** and secure fast emergency **payments** for resilience and food security. Credit and insurance, though both in theory should play an important role in resilience, in practice fulfil only a limited role given the cost and other challenges to provide these services beyond the top-end of the retail market.
- For **MSMEs and farmers,** there is a pronounced need for **financial intermediation** (that is, to mobilise savings and allocate capital to those needing productive loans). Equally important is the need for **trade payments** over a distance to build opportunities for growth and exports.
- For **government,** there is an imperative for climate risk management strategies beyond a retail financial inclusion approach.

Reality does not match needs. Yet, it is clear from Section 2.2 that financial service usage is not yet fulfilling either of these two roles optimally. Constraints in financial service provision leave millions of Malagasy consumers unserved and, as result, unable to manage their risks or effectively build economic opportunities. Table 3 below summarises the main financial inclusion gaps for each of the two core financial needs:

	Relevant to?	Need	Gap (% of total adults)	Notes
Resilience	Individuals	**Payments** to receive family and community and donor support when shock hits	8.7m adults (79%)	do not use formal payment mechanisms
	Individuals	**Savings** to build a cushion to cope with shock	2.7m adults (24%)	earn at least 1 USD/day but do not save for shocks
	Government	Need for a **national intervention**, e.g. disaster risk management strategy and PPP for agricultural and disaster risks which leverages insurance	4.3m adults (39%)	experienced an agricultural shock in the past year
Growth	Wealthier individuals	**Savings** to be mobilised for investment capital	501k adults (5%)	are not formally saving despite being formally employed or earning more than 5 USD/day
	MSMEs and farmers who sell	**Savings** to be mobilised for business	1.8m adults (16%)	who sell and earn at least 1 USD/day do not save
	MSMEs and farmers who sell	**Formal credit** to be allocated to productive opportunities	1.1m adults (10%)	who sell and earn at least 2 USD/day have never had formal credit
	MSMEs and farmers who sell	**Payments** to facilitate trade and value chains	795k adults (7%)	who sell and earn at least 1 USD/day do not use formal payment mechanisms

Table 3. Gaps in coverage vis-à-vis core needs

Source: FinScope (2016)

3. Bridging the gap

Four priorities emerge to extend inclusion. This section identifies and discusses five main strategies for financial services to bridge the gaps in fulfilling the needs identified above:

1. Payments for resilience and trade
2. Savings to manage shocks and build productive capital
3. Targeted credit to grow economic opportunity
4. Niche insurance to manage risk and improve productivity
5. A stronger enabling environment

The remainder of this section sets out why these are significant priorities, what the main barriers are to be overcome and what can be done to bridge the gaps and capitalise on the opportunities. Each sub-section starts with a summary table to recap the specific needs and gaps to be addressed through each priority area as it relates to the two main goals of resilience and growth identified in Section 2.5.

3.1. Payments for resilience and trade

3.1.1. Why important?

In general, as outlined in Annexure A: The role of various financial services in poverty alleviation and inclusive growth, a national payment system is the lifeblood of an economy's financial system. Amongst others, it facilitates the exchange of goods and services and reduces costs and delays; enables smooth running of capital markets, the money market and interbank market; enables a higher level of intermediation and a more effective liquidity management; eliminates the risks associated with using cash such as theft and use of counterfeit currency; and helps in early detection of liquidity problems and challenges in the banking and non-bank financial system.

It is clear from the discussion above that in the case of Madagascar, payments are not only a tool for living one's daily economic life; they also fulfil a role in building resilience and in growing economic opportunities:

Goal	Target market	Need	Gap	Notes
Resilience	Individuals	Payments to receive family, community and donor support when shocks hit	8.7m adults (79%)	Do not use formal payment mechanisms
Economic opportunity	MSMEs and farmers who sell	Payments to facilitate production and trade	795k adults (7%)	Earn at least 1 USD/day and do not use formal payment mechanisms

Table 4. Payments imperative recapped

Source: FinScope (2016)

Payments already most used product. As indicated in Figure 6, Section 2.2, transactional payments and remittances are the formal financial services with the highest penetration among Malagasy adults. The needs analysis presented in Figure 7 confirms the prominence of the daily need to make payments. 95% of all adults regularly make local payments and almost half of adults use payments instruments to send money over a distance. Yet most of these transactions are in cash; 79% of adults (close to 9 million individuals) do not use any formal payment mechanisms.

Digitisation required for efficiency, speed and to reduce risk. Cash remains the most convenient and simple form of a payment instrument, but the use of cash is not without drawbacks. The supply-side consultations indicate that it is expensive and slow to move cash over distances in Madagascar. Cash is also prone to theft or destruction (with anecdotes shared in the qualitative interviews of cash being lost during a cyclone). Formal payments allow safe, swift transfers over a distance that can be a crucial lifeline when shocks hit, and that are essential to acquire inputs and make trade payments. Thus, promoting the adoption of digital payments – which in turn requires a pervasive network of touch points for cash-in and cash-out – is critical to improve resilience and build economic opportunity for individuals.

Progress to date. The Malagasy authorities, working with the World Bank and IMF[21], have already initiated a number of initiatives to modernise the payment system, including: a draft payments law, development of a payments strategy, gradual phasing out of manual clearing[22], initiatives to digitise public payments[23] and active consideration of a switch. The analysis and recommendations in this section are positioned to build on and inform these developments.

[21] As per World Bank Aide Memoire (2017e) and IMF's FSAP (2016).
[22] Instruction No.001/DSP/16 of 28 April 2016 closed 12 manual clearing houses in other places except Antananarivo
[23] The current Ministerial Order N-28429/2016 states: "…expenditure incurred by public bodies (State, decentralised territorial authorities, national and local public institutions) in favour of a contractor, in particular a provider of services and supplier, natural or legal person,

3.1.2. Why problematic?

This discussion draws on the following diagrams as inputs:

Box 4. Input diagrams: Section 3.1.2

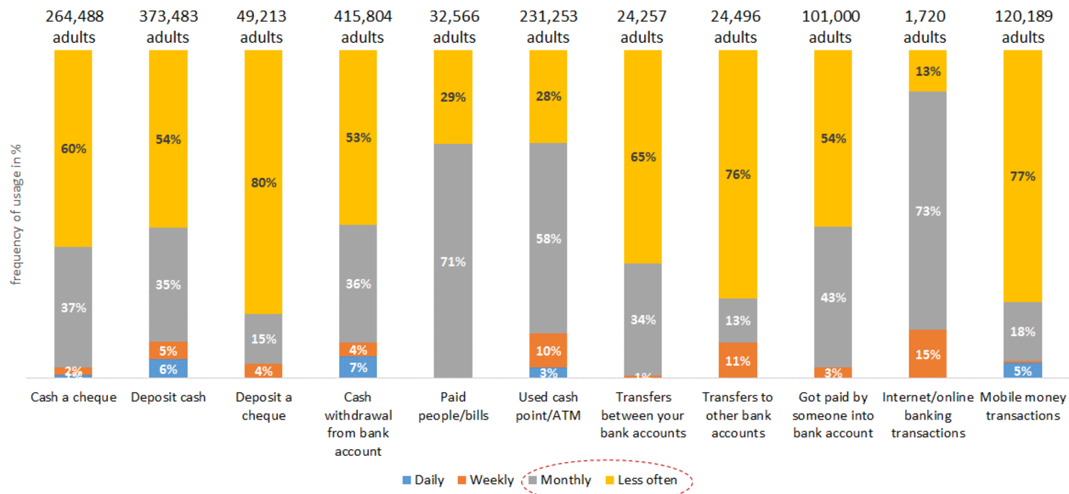

Figure 12. Use of cash across expense and receipt use cases

Source: FinScope (2016)

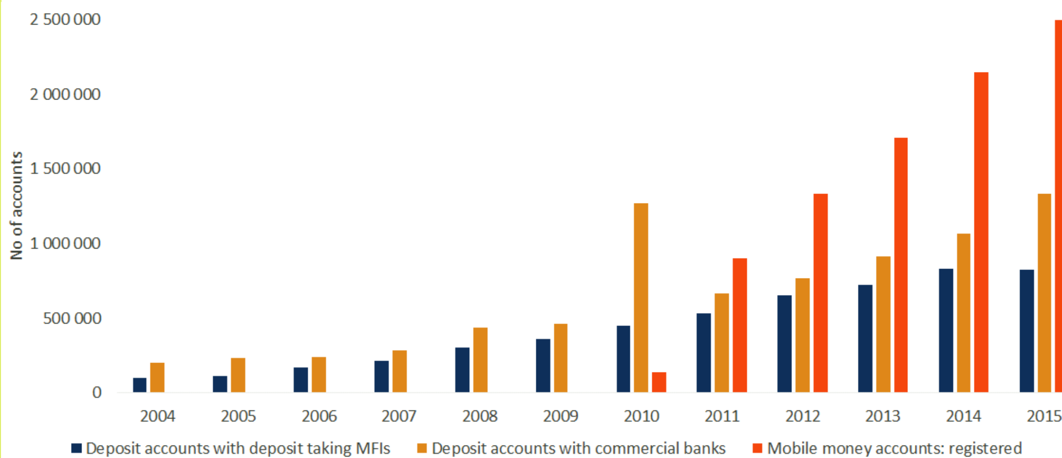

Figure 13. Growth in payment accounts

Source: CSBF (2016)

Figure 14. Frequency of usage of different types of payment instruments

Source: FinScope (2016)

must be paid by transfer to the account of the beneficiary at the level of a bank or financial institution". In addition, all receivables of a monthly amount exceeding MGA 600,000 (USD 199) to pensioners, civil servants, etc. are to be paid via a bank account.

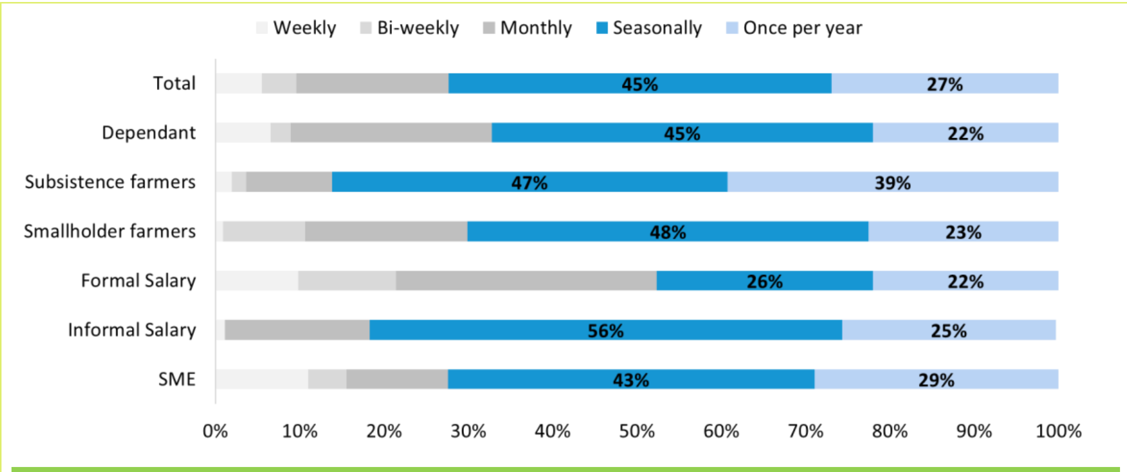

Figure 15. Frequency of remittance receipts across target markets

Source: FinScope (2016)

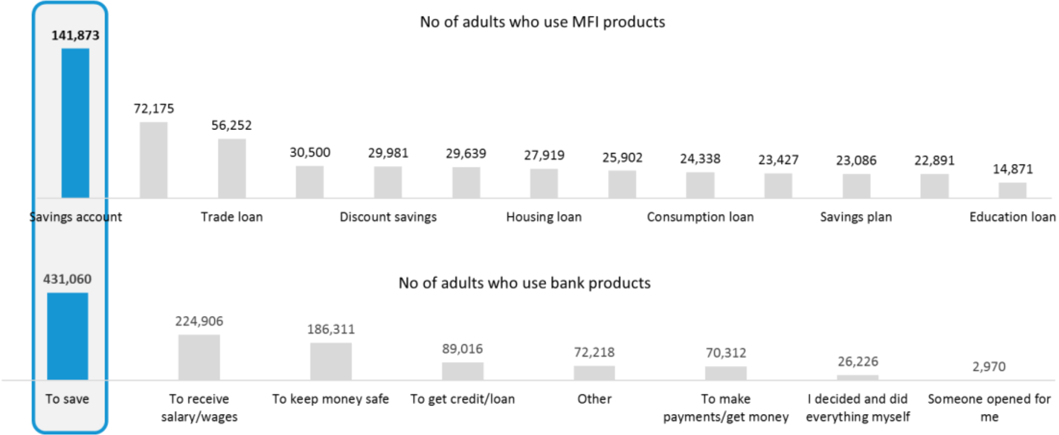

Figure 16. Number of adults with different types of MFI and bank products

Source: FinScope (2016)

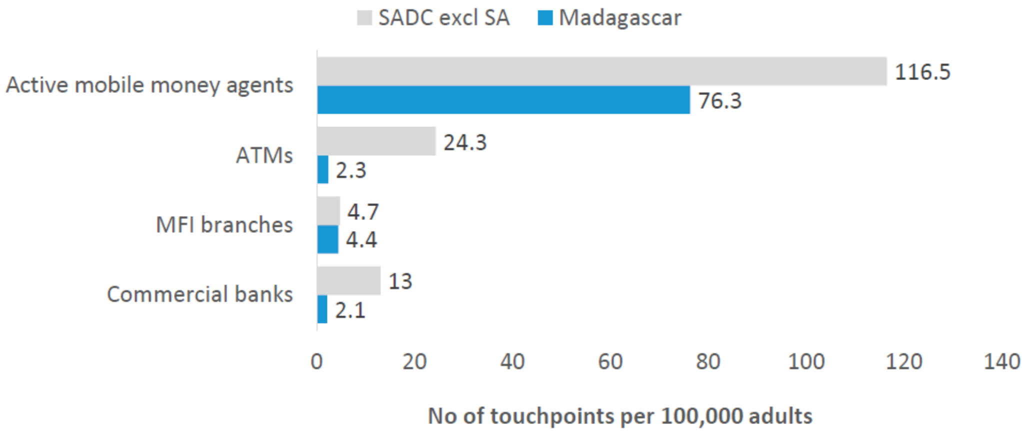

Figure 17. Number of financial touchpoints per 100,000 adults SADC vs. Madagascar

Source: World Bank (2017b)

Swift growth in accounts, especially MFI and mobile money accounts. Figure 13 shows the rapid increase in the number of accounts over the past decade. In 2005 there were fewer than 250,000 bank accounts and just more than 100,000 MFI accounts. By 2015 this number had risen to more than 1.3 million bank accounts and 826,000 MFI accounts. Mobile money grew rapidly after its introduction in 2010 to reach 2.5 million accounts by 2015.

But high dormancy across products. The seemingly rapid growth in account uptake does, however, not mean that people are transacting digitally. Across providers around 80% of accounts are not used more than twice a month, as indicated in Figure 14.

Cash dominates payments and receipts. The low active use of accounts confirms the finding, established in Section 3.1.1, that most Malagasy live their financial lives almost entirely in cash. Figure 12 indicates that cash accounts for virtually all payments for daily necessities such as groceries, food, rent, utilities, transportation and communication. Provider consultations indicate that mobile money is still largely used for airtime and some trade payments. Most receipts of income are also in cash.

Elaborate and costly cash transit system. The upshot of an economy operating largely in cash is the need for cash to be reticulated through the system. There is no central coordination on cash reticulation and this increases the cost of transporting cash (Consultations, 2017). The only private company involved in cash reticulation and movement is Brink's[24]. However, they only service areas they deem profitable, less costly and more secure. Furthermore, the central bank provides a number of hubs throughout Madagascar for cash in transit. Banks use these hubs, but also move their own cash, largely leveraging the services of Brink's. MFIs and mobile agents draw on these hubs for liquidity management. Beyond these hubs, cash is managed on an ad hoc basis at great cost. The supply-side interviews indicate that cash is flown to remote areas when needed by larger institutions. Mobile agents are often expected to manage their own liquidity within their community. People also club together to transport cash from the nearest town, often requiring a few days for a round trip. Anecdotally, cash runs out in more remote areas, which constrains economic activity.

High digital adoption barriers. The use of digital payments remains constrained by a number of factors, including:

- *Not enough encashment points.* People will only use digital payments if it makes practical sense for them to do so. And, as Figure 17 indicates, in a cash-based society, money in a bank account has no value if it cannot readily be converted to cash. Madagascar has only 2.1 bank branches, 2.4 Automated Teller Machines (ATMs) and 76.3 active mobile money agents per 100,000 people, compared to an average of 13, 24.3 and 116.5, respectively, for Southern African Development Community (SADC) countries excluding South Africa (World Bank, 2017b)[25]. Most ATMs are located at a bank branch, so do not extend the footprint of the banking network. Though mobile money agents have significantly broadened the reach of the payments footprint, the fact that only 35% of adults own a mobile phone (and only 44% use a mobile phone) limits the potential for mobile phones as alternative distribution channel.
  Supply-side consultations indicate that setting up and maintaining distribution points is expensive and difficult due to poor and limited road infrastructure, lack of electricity in rural areas and high chances of cash heists in isolated areas. Rent and other costs related to setting up of branches

[24] Brink's Madagascar forms part of the Brink's Indian Ocean group. The only other entities that conduct similar activities are the banks themselves for their own account.

[25] Madagascar fares better where MFI branch penetration is concerned, at on average 4.4 MFI branches per 100,000 adults, compared to 4.7 for SADC excluding South Africa.

were indicated as the largest cost outlay by some of the banks and as second only to human resources by others.

- *More expensive than cash.* The qualitative demand-side interviews suggest that using cards and mobile money is regarded as expensive by people used to transacting entirely in cash. Though cash management comes at a high expense for financial institutions, this cost is not borne by individuals transacting in cash, who perceive cash to be "free".
- *A "waste of time".* The fact that there are so few ATMs and branches means that it is typical to see long queues outside banks and ATMs. As illustrated by the quote in Figure 8, Section 2.2, qualitative interviews show significant consumer frustration at losing productive time to queueing.
- *Familiarity and trust.* As also indicated by the consumer quotes in Figure 8, Section 2.2, people are not yet convinced of the value of digital payments. This speaks to a lack of familiarity, but also to a broader culture of mistrust of institutions outside of community structures as discussed in Section 2.1. It takes time to build trust and familiarity and unless the tipping point is reached where a large enough part of the population transacts digitally that it benefits others to follow suit (the so-called network effect), it will remain the path of least resistance to transact in cash.
- *Limited use cases for digital payment functionality.* Salary payments are the biggest driver of formal bank payments and remittances the biggest driver of mobile payments. Yet, as indicated in Figure 12, only 17% of government employee salaries and 11% of private salaries are paid into a bank account and mobile money is used for only 20% of remittance receipts. For the rest, salary receipts, pension payments and remittances are all largely in cash. Where accounts are used, it is mostly for cash in and -out transactions (FinScope, 2016). Only a small group of people regularly use online banking and ATM or Point of Sale (POS) transactions[26].

As indicated in Figure 16, MFI and bank accounts are used largely for savings, not payments, followed by salary receipts for bank accounts and loans for MFI accounts. Remittance receipts also do not present a substantial use case for digital payments on the back of the funds received. Though two million people receive remittances, 67% of recipients receive remittances only seasonally or less often. This indicates that remittances are used for emergencies or towards growth or lifestyle goals, rather than as regular income stream. Hence they do not form a springboard for regular payment transactions. Furthermore, as noted in Section 2.1, the Malagasy diaspora population is very small. This limits the potential for leveraging international remittances for the digitisation of domestic payments. The above limited use cases, combined with relatively high costs significantly limit the value proposition for merchant acceptance.

Underdeveloped payment system with inefficient clearing and settlement. The "front-end" challenges to greater digital adoption as outlined above are underpinned by structural challenges at the system level. The volume and value of transactions flowing through the Real-time Gross Clearing and Settlement System (RTGS) and retail system is very low given the size of GDP, at MGA 38.5 billion (USD 12.8 million) in 2014 and MGA 42.9 billion (USD 14.1 million) in 2015. As illustrated the Box **5** below, most clearing and settling is done overseas, often with foreign parent banks or through Visa and MasterCard (BFM, 2016). This significantly increases cost, mostly due to international perceptions of Madagascar as a high-risk country (Consultations, 2017). The three mobile money providers are interoperable bilaterally in terms of their platform (nostro-vostro[27]) and there is no central clearing

[26] No official data is available on Point of Sale (POS) device numbers, but the supply-side consultations suggest that POS penetration is low even in urban centres, and virtually zero beyond. FinScope (2016) shows that only 0.12% of adults use credit cards while 1.57% use debit cards.

[27] Nostro and vostro are two different terms to describe the reciprocal bank accounts used for setting off obligations and in doing so achieving clearing and settlement. The terms are used when one bank has another bank's money on deposit, typically in relation to international trading or other financial transactions (Investopedia, 2017).

and settlement system, but these providers depend on banks for the management of their trust accounts. The implications of this type of interoperability is that MMOs are required to lock up significant capital and liquidity on bilateral platforms.

Box 5. Overview of the Madagascar payment system

Figure 18 provides an illustration of Madagascar's payments system infrastructure. The automated payments system consists of a real-time gross settlement system (RTGS) and an Automated Clearing House (ACH), both of which were introduced in 2009. In addition, a manual compensation system is still operational for the processing of checks and bills of exchange that can not be scanned. The Central Bank (BFM) administers both the manual and automated system. Currently, the payment system has the following players; 10 commercial banks, PAOMA and BFM, the latter of which also represents the public Treasury.

Clearing between banks is done through the ACH for cheques, effectsand low-value electronic fund transfers, as well as a provision for manually cleared cheques outside the ACH. High value or urgent interbank fund transfers are settled via the RTGS. There is no local switch for card or mobile payments, although BFM is currently considering options.

International clearing and settlement is all done offshore via the MasterCard/Visa platforms, as well as via bilateral clearing in France. Cross border transactions are facilitated via the Post Office (through use of the Universal Postal Union (UPU) system and Money Transfer Operators (MTOs) (through over the counter transactions (OTC)). MMOs clear among each other bilaterally via nostro-vostro accounts and clearing with banks is also bilateral and via trust accounts. The current interoperability arrangement among MMOs is quite limited in scope (hence the use of nostro-vostro accounts), but, according to supply-side consultations, the interoperability agreement is effective given the current volumes.

MFIs are currently not part of the payments system and need to be actively involved. However, it would require significant upgrades to some of the MFI core systems to meet the requirements in becoming a participant in the payment system.

Clearing of securities and other secondary instruments is yet to be developed in the Madagascar payments system.

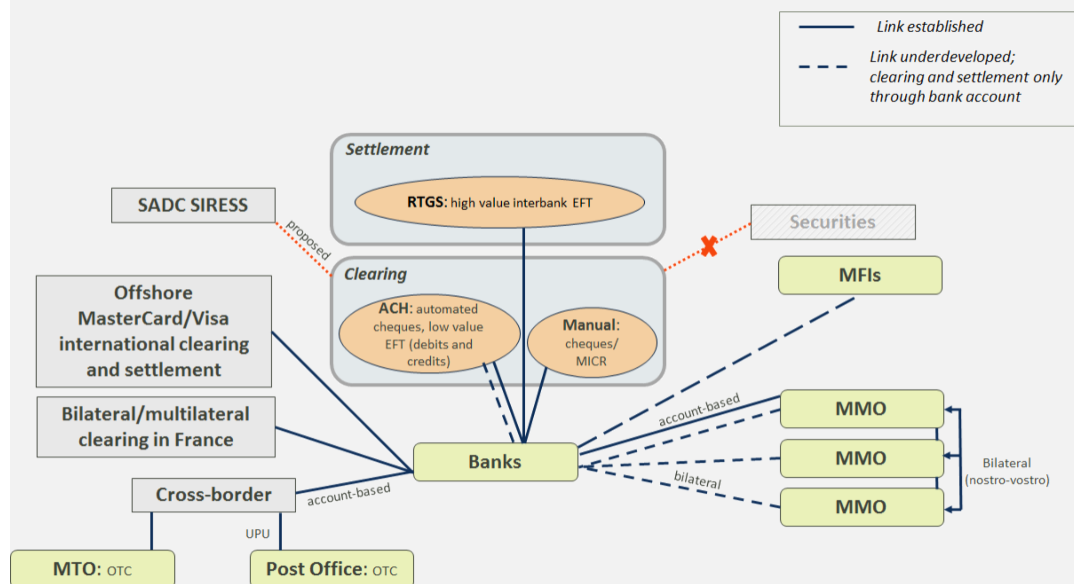

Figure 18. The Madagascar payment system

Source: Author's own as per interviews

New regional switch potential. The SADC Committee of Central Bank Governors (CCBG) agreed to the development of SADC regional payments structure in 2009 in the interests of more effective financial integration in the SADC region. The Integrated Regional Settlement System (SIRESS) was

developed under the auspices of the CCBG. SIRESS provides an option for regional but it also has a latent capability for national switching. The regional payment system accommodates Continuous Processing Line (CPL), and Real Time Line (RTL) processing of high value irrevocable settlements directly between regional banks. Initially rolled out between banks in the Common Monetary Area (CMA) between South Africa, Lesotho, Namibia and Swaziland and denominated in South African Rand (ZAR), non-CMA countries have already started testing the adoption of SIRESS, first clearing in ZAR and later in regional currency ZAR-equivalents and is intended to become a multi-currency system. SIRESS is the core settlement system which will underpin regional payment clearing houses, initially for mobile payments and then on to low value Electronic Funds Transfer (EFT) credits and debits. It is also used for other payment instruments such as card-based payments. While Madagascar is a signatory to SIRESS, it has yet to implement its provisions. Information gathered during stakeholder consultations indicate that this may not happen in the short term.

3.1.3. What can be done

Distinct imperatives for public and private sector. The analysis above suggests a number of key priorities for policymakers/regulators and market players, respectively, to bridge the gaps and harness the opportunities for leveraging digital payments to build resilience and trade.

Recommendations for policymakers and regulators:

1. Develop an appropriate payment eco-system for interoperability, security and efficiency. This recommendation builds on the existing payments modernisation initiative in Madagascar rolled by BFM with the support of the World Bank and IMF. It is clear from the analysis above that consumers will not start to transact digitally unless the whole ecosystem makes it convenient, secure, and cost-effective for them to do so when compared to their default alternative of transacting in cash. An important way of extending the ecosystem for cash-in, cash-out and point of sale touchpoints is through interoperability between the infrastructure of different financial service providers. Achieving interoperability requires cost-effective switching. Given the current low volumes (at only USD 4.5 million as of 2015 according to BFM, 2016), infrequent transaction use and limited fiscal resources, any switching solution implemented has to be “fit for purpose” to address current and future payment needs in a sustainable manner. Box 6 below elaborates.

Box 6. Selection criteria for a fit-for-purpose switch

The current conversation of a switch in Madagascar is taking place against the background of exorbitant fees charged for offshore switching (Stakeholder consultations, 2017), the nascent, low-volume payment system, limited payments use cases, limited local interoperability, very limited infrastructure and connectivity, widespread mistrust between consumers and financial service providers and high costs of using financial services. Implementing a switch will go a long way in addressing some of these issues.

Recognising this need and the overall importance of a payment switch to facilitate efficient and less costly payments, BFM has taken the commendable step of engaging partners including the World Bank to explore the switch options. This engagement culminated in a public Aide Memoire which captured the agreement between World Bank and BFM in terms of how to proceed on the switch, amongst other key issues.

However, according to the current MAP analysis as well as stakeholder interviews, important considerations need to be taken into account before settling on a switch. The above contextual situation of Madagascar’s payment system, the business case of the switch (in terms of cost and financing options) and the goal or objective of the switch are all important overarching considerations. Ultimately, the modernisation of Madagascar’s payment system has less to do with the adoption of the most sophisticated switch with the most functionality, and more with finding a switching solution that is able to address current constraints in a way that is cost-effective over the long term. Based on MAP analysis, in-country consultations, review of current World Bank-BFM proposal (as contained in the Aide Memoire), the following criteria should be considered in determining which switch to adopt:

- ***Functionality***. The switch should facilitate payment convergence and interoperability—both multiple instrument and multiple channel (that is, it should be able to process different types of payments; POS, ATM, mobile, cards, non-card including vouchers, and low value EFT (debit and credit).
- ***Infrastructure considerations***: The switch should operate sustainably in an environment currently characterised by limited infrastructure and poor network and internet connectivity.
- ***Cost effectiveness and value to consumer*****:** The switch should be cost effective (in terms of procurement, deployment, use and maintenance), thereby fostering consumer trust and confidence. This is a key financial inclusion imperative because consumer affordability and use of affordable payment products are critical. In addition, the financing and business case for the switch should be suitable for Madagascar's level of development.
- ***Easy to operate and maintain*****:** Operating and maintaining the switch should not drain limited capacity in the financial sector. It should also have a very brief testing and implementation phase to ensure that project contingency costs and compounded interest are not unsustainable to the operator and ultimately to the consumer.
- ***Disaster Recovery*****:** There should be an effective disaster recovery and escalations particularly with an offshore mirror site given then extent of cyclone impact in Madagascar. Disaster recovery is vital to instil trust, particularly during times of shocks and dire need.
- ***Technologically interoperable***. The switch should be interoperable with future technologies, including biometrics (since Identity Document (ID) and other Know Your Customer (KYC) requirements are a key issue limiting inclusion). It should also seamlessly integrate with mobile (given Madagascar's mobile potential) to enhance reach.
- ***Minimise risks***. The switch should be able to minimise risks and increase security for consumers and players in the payments system
- ***Fit for purpose*****:** The switch should be appropriate for Madagascar's current payments landscape and raise and stimulate currently limited use cases.

An additional way of extending the payment ecosystem is to allow MFIs to clear and settle among themselves, either directly or indirectly via a sponsor bank. This broadens the payment system and raises use cases. MFIs should meet standard payment requirements to guard against introducing systemic risks into the system.

2. Implement a comprehensive payments system law to enable the payment eco-system. A comprehensive law dedicated to the national payment system is needed to integrate the current payments system-related regulatory aspects and ensure a coherent approach to the development of the payment system. It is recommended that such a law should create a national payments regulator with the specific mission to manage all payments-related aspects in Madagascar and should provide such a regulator with appropriate powers to determine payment standards and service levels, as well as to determine which activities payments providers may conduct and under what conditions. It should mandate the regulator to pursue consumer welfare in the first instance. The act should furthermore establish payments bodies for different channels. These must work in a cooperative manner in the interests of expanding the payments system in Madagascar. The law must also encourage interoperability between all payment channels, payment devices, payment instruments and payment systems to ensure alignment with international standards and best practice, as well as to efficiently leverage the payments infrastructure in Madagascar.

3. Reduce cash management costs. Poor banknote quality due to high velocity is an important cash management cost driver. This often jams ATMs and increases maintenance costs. To address costs related to note quality and cash transit, BFM could consider the following amongst other measures:

- Consider polymer notes as a way of reducing ATM jamming costs.
- Explore the possibility of engaging gas stations and other outlets with a high cash turnover to manage and reduce the cost of cash.
- Explore the possibility of using vaults at commercial banks as an agency for the central bank to accept regional deposits. This reduces costs of physically moving cash around.

4. Develop a bank agency framework to allow banks and MFIs to extend their reach. The limited financial sector footprint and structural challenges to expanding the reach are one of the main impediments to the development of a payments market that helps to improve resilience and facilitate trade. Besides interoperability, a key way of extending the footprint is through the use of bank agents. Bank agency merits being better incorporated into a framework and developed since such operations are not currently supported in legislation – instead they are only covered by the legislation on intermediaries in bank operations (refer to the regulatory analysis in Annexure C: Regulatory overview). A framework that encourages banks to extend their distribution through cheaper agents in a responsible manner can improve distribution. In addition, regulators should remain flexible to considering alternative, innovative approaches by financial service providers. A facilitative environment (sandbox) should be created for service providers to innovate and explore agency networks as long as doing so does not violate any regulations and "does no harm". Exchange visits to other African and non-African developing countries (such as Tanzania) who have made significant progress in cultivating enabling environments for operators in new areas will be informative.

5. Incentivise financial service providers to extend their distribution footprint. A third way of building the ecosystem is to introduce investment incentives for financial institutions to expand their distribution network. The cost of implementing distribution infrastructure in rural areas outweighs the medium-term benefit to banks and other cash distributors. However, the economic benefit of an extended cash footprint in the longer term warrants this investment. Government also incurs significant costs to move cash itself. This justifies the implementation of investment incentives to catalyse role out of financial service infrastructure.

6. Strengthen capacity and mandate of BFM to be proactively involved in the payment system. Proactive participation by BFM will provide much needed impetus and guidance to the nascent payment system. BFM can also consider charging for cheque usage for small transactions and an ad valorem for high transactions to fund its enhanced role, which services the dual purpose of limiting cheque usage. In addition, BFM could develop price benchmarks as a way of increasing transparency of banking costs. Lastly, the BFM's mandate and capacity should be strengthened to enable it to efficiently implement the payments law (once it takes effect). This can be done in close collaboration with CSBF. There is also a need to balance resource and capacity support between CSBF and BFM to ensure a balance between financial inclusion and stability objectives

7. Consider digitisation of government payments (Government to Person (G2P) and Person to Government (P2G)), but caution against unintended consequences. Government salary payments, judicial fines and other payments to government provide a first-order opportunity for digitisation, as it enables government to "force" consumer adoption. However, it would be important to sequence implementation to avoid shifting costs on the consumer and overloading existing strained infrastructure. Digitisation of payments requires expansion in encashment points as an interim measure. However, the current limited financial infrastructure (ATMs, etc.) challenges smooth encashment and hence gives rise to long queues. Digitisation of government payments without extending cash-out points will mean hardship for consumers who would need to travel far to obtain their salaries, or will further extend queues on payment days in places where cash points are present.

Furthermore, measures should be put in place to guard against mailbox usage of accounts (merely for cash in-cash out), appropriate governance structures should be developed, and proper targeting of beneficiaries should be ensured. Making G2P effective also requires enhancing the business case among merchants to make it attractive for them to accept digital payments and hence maintain the digital cycle. Lastly, extending G2P over mobile in a fair manner to all operators will increase use cases, enhance digitisation and significantly expand mobile money prospects (given consumers trust in mobile money as well as flexibility, accessibility and the relatively lower costs associated with its use). To add to that prospects of person to P2G can also be enhanced, especially payment of municipal bills.

8. Promote inclusive integrity by implementing Financial Action Task Force (FATF) 2012 guidelines in an inclusive manner. The lack of inclusion is identified as a significant risk to the integrity of the financial system by the Service de Renseignement Financier (SAMIFIN), the authority responsible for Anti-Money Laundering/ Combatting the Financing of Terrorism (AML/CFT) implementation. Lack of identity documents in both urban and rural areas is flagged by mobile money providers as a constraint to formal financial inclusion. Consideration should be given to proportionate implementation of Know-Your-Customer (KYC) requirements to allow low-value, low-risk transactions with reduced KYC requirements. In addition, a switch that has built-in biometrics could be key in addressing this challenge. Consideration should also be given to biometric options that are interoperable with current and future technologies, run on the same rails as SADC or AADHAR and that are ISO20022 compatible.

As will be discussed in Section 3.5, inclusive integrity can be further promoted by developing common frameworks and tools to enable stakeholders to have a common understanding of financial exclusion risk, common methodology to report and address financial exclusion risk, among others. Complimentary technical assistance can be sought from development partners in this regard.

9. Targeted consumer education. To facilitate uptake and increase use cases, targeted consumer education is needed focusing on connecting the consumer experience of current products and use cases with knowledge on available and potential payment products. These efforts should support other efforts already present in the Malagasy market, such as those of the World Bank and UNCDF, and should also support general financial literacy.

It is recommended that this campaign be coordinated by CNFI, working closely with the bankers' association and consumer associations (where applicable). The campaign should not focus on marketing of payment products or on teaching consumers about financial products. It should be more about information sharing, listening and generating useful feedback that financial service providers and policy makers can act on to improve transparency, pricing and product offerings. Overall, it should it should build trust and increase use cases for payments. It will also be important for this campaign to be ongoing and institutionalised within CNFI, the financial service providers and other stakeholders involved.

Recommendations for providers:

1. Enable niche payment use cases – key value chains and trade payments on key routes. As explained in Section 3.1, various structural challenges prevent retail payments from changing the way that Malagasy citizens transact on a daily basis. These challenges are likely to persist at least in the short to medium-term. That, however, does not mean that there are no opportunities for digitisation. A number of defined opportunities exist to digitise existing regular payment streams, notably the payment streams in key value chains and trade payments on key routes.

Two examples illustrate:

- A small shop needs to pay a wholesaler to buy its products, for example bread. If the bread wholesaler requires payment in mobile money, then the shop owner will want to encourage payment in mobile money from its customers. If the wholesaler insists on receipts in cash, the shop owner needs to first convert any mobile money received into cash to pay the wholesaler which is less convenient and incurs costs. Once the small shop starts operating in mobile money it will also be easier to pay for other inputs and staff costs in mobile money. In this manner, supply chains can be digitised starting at the wholesale level.
- Vanilla is a significant export product, but most of the operations occur fully in cash, which has to be flown back and forth from the north of Madagascar. The high use of cash also results in significant spending post-harvest, instead of saving for leaner periods. Digitising the value chain by starting with the export buyers can reduce the cost of moving cash and improve how people save.

2. Expand mobile money potential. In the short to medium term, it is important to unlock the true potential of mobile money[28]. Collaboration among Mobile Network Operators (MNOs), the Autorité de Régulation des Technologies de Communication (ARTEC) and CNFI to standardise scheme rules within the interoperability arrangement will go a long way in modernising the mobile payments system and increasing the volumes to make it sustainable. To add to that, regulatory flexibility in the use of trust accounts to pay interest to customers will enhance liquidity and can stimulate the use of payments systems. However, the fact that access to mobile phones is still limited among Malagasy citizens reduces mobile money uptake (Supply-side consultations, 2017).

3. Improve mobile money liquidity management. Most mobile money agents are required to manage their own liquidity. This is a tall order in more remote areas. There is potential to extend the super-agent role, whereby certain agents are nominated to provide a management function to other agents in the network, to assist in this regard. Super agents take on recruitment, operational support and management of general agents on behalf of the network aggregator and may help agents to balance their liquidity. Most commonly, they will earn a commission based on the earnings of the agents that they manage. The super agents can continue to provide their own agent services whilst managing other agents, or switch to a pure management role (CGAP, 2011). Other methods for liquidity management are set out in Box 7 below.

Box 7. Staying liquid: the role of liquidity balancing support

Mobile money provides the ability to convert physical cash into digital capital that can be channelled to payments or other financial services. The issue for agents is that this demand is often unbalanced. The agents can leverage their core retail business to assist with equalisation, but this is often not enough. Ways to assist with the digital deficit include short-term credit lines for the agents and proactive targeting of bulk payments to agents equipped to handle them. Liquidity may also be managed indirectly through compiling a product portfolio that naturally balances liquidity demands (for example, in a country such as Kenya the extensive digital payments product suite of M-Pesa reduces the need to draw cash). However, international experience shows that assisting agents to balance cash needs remains challenging (Denoon-Stevens et al., 2017).

4. Improve capacity to manage and reticulate cash throughout the country. The cost of cash is not well understood and, as result, not always well managed by private sector players. As discussed, limited

[28] The following puts mobile money in good stead to drive payments and financial inclusion in Madagascar: budding and potential partnerships with banks and MFIs in widening products, expand agency network, distribution and reach; scope for building on the current Interoperability arrangement among the three MNOs; opportunity for cardless transactions via Unstructured Supplementary Service Data (USSD); enhanced flexibility and use cases; among others.

road infrastructure and security concerns make it expensive to move around cash. MFIs and agents manage their own cash at significant cost. There is potential for partnership and the use of central providers such as Brink's to reduce cost[29] and to reduce the flow of cash from rural to urban areas (which currently necessitates continuous and costly replenishment of the rural areas).

5. Leverage MFI and Post Office footprint to extend payments. The high cost of distribution makes it imperative to leverage existing touch points for encashment. MFIs should be enabled to play a more significant role in payments and cash management (between their branches and for other providers). Opportunities for partnership with the Post Office to extend payment services given its significant rural footprint can also extend rural touchpoints for payments.

6. Strengthen value proposition for consumers and merchants to enhance digitisation. For consumers, the value proposition for digital transactions can be strengthened through reduced costs, flexibility and revocability. For merchants, the value proposition can be strengthened through reduced costs of acquiring POS, low interchange fees, increased use cases and volumes, and offline functionality to accommodate connectivity challenges, amongst others.

3.2. Savings to manage shocks and build capital

3.2.1. Why important?

Goal	Target market	Need	Gap	Notes
Resilience	Individuals	Savings to build a cushion to cope with shock	2.7m adults (24%)	Earn at least 1 USD/day but do not save for shocks
Economic opportunity	Wealthier individuals	Savings to be mobilised for investment capital	501k adults (5%)	Are not formally saving despite being formally employed or earning more than 5 USD/day
	MSMEs and farmers who sell	Savings to be mobilised for business	1.8m adults (16%)	Who sell and earn at least 1 USD/day do not save

Table 5. Savings imperative recapped

Source: FinScope (2016)

As discussed in Section 2.2, Malagasy's first port of call in the face of risks and deprivation is to try and save in some way – be it in a savings pot at home, by buying livestock, or under the mattress. Yet only a small proportion of adults save in the formal financial sector. As indicated in Table 5, this creates a clear imperative for building the savings market:

A much-needed safety net. The first savings opportunity is one for resilience. As shown in Section 2, the Malagasy population is subject to significant risks, but few people have the financial tools to cope with the impact of such risks. FinScope shows that many people draw on savings in times of need: 75% of those who experienced a health risk in the past year used savings to cope and just more than 40% of those experiencing a death in the family or household did the same. Worryingly, however, millions of adults

[29] However, the supply-side consultations indicate that this is perceived as expensive by MFIs, because they do not price the cost of cash.

have no recourse other than to reduce their consumption in the face of theft, agricultural risk or destruction of property.

Source of economic opportunity. Secondly, savings are key for domestic investment and growth at the local as well as national level. Informal savings group funds are often used in farming activities, thereby boosting productivity, while formal savings can be pooled at scale to invest in larger projects to enable growth and employment. However, most savings are through informal mechanisms and in assets. Only 17% of those who save do so with formal institutions such as banks or MFIs. This formal savings gap creates two main imperatives:

- *Mobilising savings for small businesses and cash farmers.* There are 1.8 million MSMEs or farmers who sell their produce and earn at least 1 USD/day, but do not save. Encouraging them to save through appropriately tailored vehicles could unlock savings to drive business growth.
- *Mobilising savings for investment capital.* 500,000 adults are not formally saving despite being formally employed or earning more than 5 USD/day. These relatively wealthier individuals' savings, if intermediated through the financial sector, could be a significant pool of investment capital.

3.2.2. Why problematic?

This discussion draws on the following diagrams and tables as inputs:

Box 8. Input diagrams and tables: Section 3.2.2

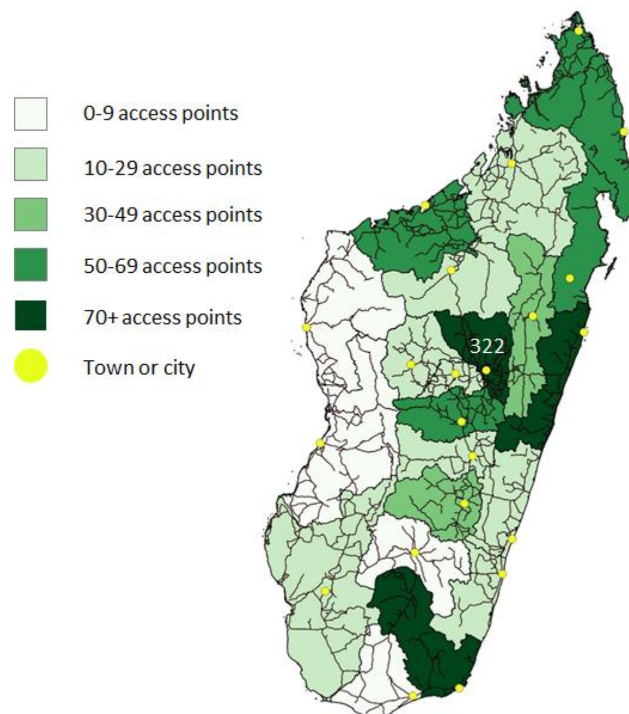

Figure 19. Distribution footprint

Source: CNFI (2016)

Provider	No of savings customers	Interest rate (per year)	Amount of savings/deposits (MGA)	No of branches
MFIs	300,000	0% - 10%	401bn	850
Banks	700,000	0% - 11%	7,010bn	320
CEM	600,000	2.5%	329bn	25
PAOMA	400,000	5.25%	351bn	250
CNAPS	1,600,000**	n/a – guaranteed benefit	600bn	39
Mobile money	2,000,000*	0%	X	26,800

* Accounts held, not limited to savings
** Total affiliated members
X Not provided

Table 6. Main savings institutions

Source: CNFI (2016), FinScope (2016), IMF (2016), FTHM (2016), provider interviews (2017)[30]

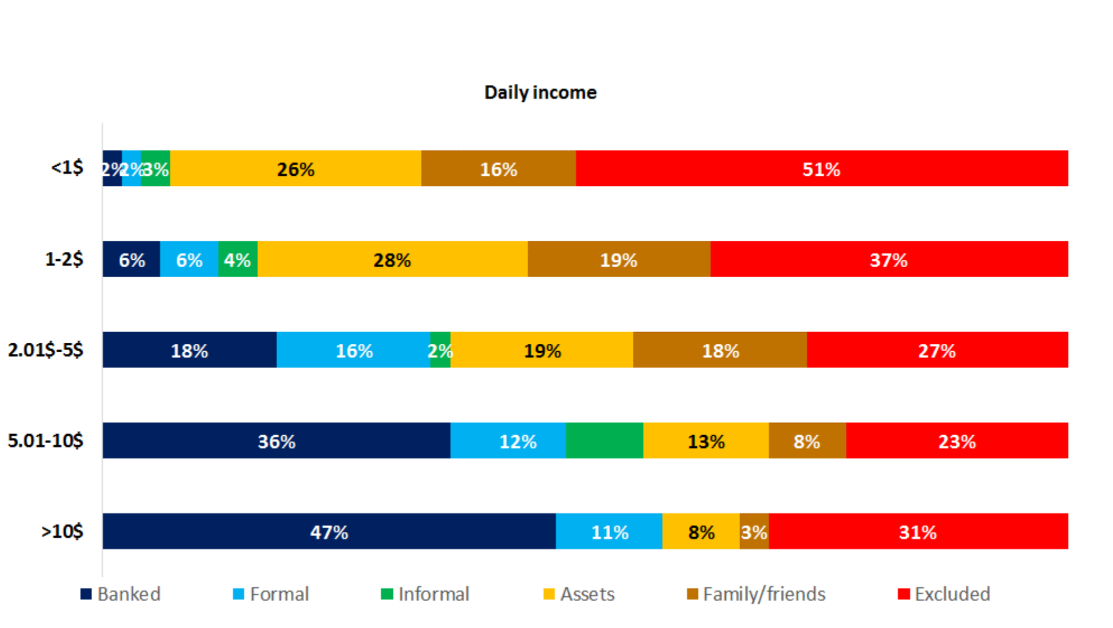

Figure 20. Uptake of savings across different income brackets

Source: FinScope (2016)

A trust deficit. Trust is critical for savings, as saving with a third party literally entails *entrusting* others with your hard-won earnings. As discussed, the demand-side research indicates that trust in the legal system, government and business is limited in Madagascar. Only 36% of adults indicate that they trust a formal institution with their savings. In particular, previous MFI failures have affected how people view formal institutions.

> *"Banks and MFIs are scammers. When [a MFI branch] closed down, my mother's money just disappeared even though they still have an office in Tana. We don't know what happened. They didn't take responsibility. Also, I think that the Malagasy banks are interested in your deposits but not if you want to invest."*

[30] The figures available in the market are vastly different in some cases. These figures therefore represent the most precise figures available and which seem to be the most correct to the authors. The figure of 300,000 saving customers is probably underestimated, but other figures were not available, as there are about 450,000 active customers according to FinScope.

- Male, government employee, Antananarivo

People also associate corruption with the formal system. When asked who they believe to be least corrupt, local community leaders and churches are shown to be most trusted, with business leaders and magistrates ranking lowest (Transparency International, 2015). It is not surprising, then, that 61% of adults feel that it is better to save at home or in the community than with a formal institution.

Distribution footprint makes low value frequent deposits difficult. Figure 19 indicates the distribution footprint of banks and MFIs in Madagascar. Of all access points, defined as bank or MFI branches and ATMs, over one third is in Antananarivo. Some provinces in the West and South have fewer than ten access points. The limited distribution footprint makes low value, frequent deposits difficult, especially for remote consumers. Most people have small incomes which they receive irregularly. They need products that accommodate frequent low value deposits close to where they are. But, as is clear from the map, limited cash-in points are available to consumers, which makes them expensive to use. This situation is exacerbated by the limited interoperability between institutions and branches. Instead of sharing the infrastructure that is available, each financial institution's customers are limited to that particular institution's infrastructure.

Informal savings groups only option for many. Formal savings mechanisms therefore clearly are not a viable option for most. Most rural inhabitants have few other savings options than to save in livestock and assets. Informal savings groups and the Post Office, as well as a few MFIs with rural outreach, are the only viable options in rural areas. 80% of those that save do so informally or at home. 30% save only in assets. As will be discussed below, the reach of mobile money provides potential for store of value in mobile money accounts, but even there the rural reach is limited.

Mobile money has the largest number of clients and biggest footprint. Table 6 compares the interest rates, branch network, total value of deposits and number of customers across the six categories of formal savings providers: MFIs, banks, CEM, PAOMA, CNAPS and mobile money. CNAPS, as public pension scheme, has the largest client base, but the banking sector intermediates a far larger deposit base, at around MGA 7 billion (USD 2.3 million) in 2016. Mobile money has the second largest client base, at around two million, followed by the banks at 700,000, CEM at 600,000, PAOMA at 400,000 and, lastly, MFIs at an aggregate client base of 300,000. While MFIs have the largest branch network, at 850, compared to banks at 320 and PAOMA at 250, the large number of mobile money agents, at close to 27,000, means that the reach of mobile money dwarfs that of all the other channels, combined. PAOMA provides an attractive interest rate when compared to most other institutions, at 5.25%, though the interest offered across providers and product options vary greatly betweeen banks and MFIs, and can be as high as 10-11%. Overall, the rational choice of formal savings option for a typical rural consumer would be mobile money, as it's most likely to be within reach, but for those living close enough to an MFI, bank or PAOMA, there may be more attractive options, especially if they are in a position to compare options and charges and "shop around" for the best interest rate. In practice, however, even these options offer limited real return.

Real return on bank, MFI and mobile accounts low or negative. The real return on different savings options for two hypothetical monthly savings scenarios: a deposit of MGA 15,000 (USD 5) or MGA 30,000 (USD 10) per month, respectively, amounting to a base deposit of either MGA 181,000 (USD 60) or MGA 363,000 (USD 120) per year. The real return on such deposits, after adding average interest earned and accounting for the effect of inflation is then compared between four formal savings channels: (i) banks and CEM; (ii) MFI banks; (iii) MFIs; and (iv) mobile money. Neither option renders

a positive real return, not due to costs, but due to low interest rates earned which fail to exceed inflation.

The take-away from this analysis is that, in weighing up their savings options, the low-income market does not necessarily compare different product options between banks or even between banks and other formal channels. Rather, the effort of reaching formal infrastructure to deposit or withdraw money, the return and costs are compared to alternative, traditional ways of saving such as in livestock, at home or in informal groups. In light of the negative real returns offered, the two main benefits indicated in the qualitative demand-side research for using a formal savings vehicle are security from theft and self-discipline beyond what is possible at home.

Single largest savings institutions have limited oversight. Another notable point from Table 6 is that CEM, CNAPS and PAOMA are the institutions with the largest client bases. They all have limited prudential oversight and are not regulated by the financial service regulatory authorities. They operate under their own legal frameworks, without sufficient prudential requirements. Given scarce domestic capital, a critical step to building investment capital is to protect existing capital. If their assets fail, it will significantly impact a large number of consumers and productive capital for growth will be lost.

Wealthier consumers driving formal capital pool, but have limited savings options. Figure 20 compares uptake of savings across income brackets. It is clear that wealthier consumers, defined as those earning more than the equivalent of USD 5 per day, have the highest formal penetration. It is largely these customers that drive the formal capital pool. Intermediating wealthier consumers' savings is critical to mobilise formal capital for investment. Yet close to half of them do not save in the formal sector. The supply-side consultations and product scan indicate a dearth of longer-term, higher-return savings options to meet their needs. Products are limited to deposits, pensions and some retail bonds. A broader suite of investment products are needed for longer term investment with positive real returns.

3.2.3. What can be done

Three imperatives each for regulators and market players. The analysis in Section 3.2.2 shows structural limitations in the formal savings market: poor real returns and a limited footprint place formal options at a disadvantage vis-à-vis informal and "do it yourself" savings methods. Yet intermediating existing savings through the financial system is crucial for capital mobilisation for the development of the credit market, small business development and investment. What can be done to encourage more people to entrust formal providers with their savings? Three imperatives each arise for policymakers and financial institutions, respectively.

Recommendations for policymakers and regulators:

1. Secure systemic savings for intermediation and growth. As highlighted throughout this report, trust forms the bedrock of financial decisions. Ensuring that financial institutions are sound and, in the case of collapse, can still meet their obligations towards clients is crucial in building long term trust in the financial sector in Madagascar. The systemic importance of CEM, CNAPS and PAOMA represents a first-order priority for strengthened supervision to safeguard consumers and protect the integrity of and trust in the system. This can be done by introducing prudential requirements for these institutions and incorporating them under the supervisory mandate of the CSBF. MFI supervision should also be strengthened to safeguard consumer savings. Furthermore, the potential for deposit insurance can be

explored[31]. Recent MFI and bank failures have contributed to the eroded trust in the market. Deposit insurance can ensure that some deposits remain available even if institutions fail.

2. Extend deposit and withdrawal options for savings by enabling bank and mobile agency. The recommendations around payment system development in Section 3.1.3 will also serve to make formal savings options more accessible and affordable.

3. Formally recognise informal savings groups to enable local access and use to be leveraged. Section 2.3 indicated that an estimated 300,000 individuals belong to savings groups. Under current legal frameworks these groups are technically illegal, although the CSBF are aware of them and engages frequently with the informal savings group promoters. A legal space should be carved out to allow small groups to exist, through an exemption to current legislation or registration as an association that is monitored, but not supervised.

Recommendations for providers:

1. Align product design with customer needs. The analysis suggests that current savings account options do not provide attractive options for wealthier groups. The qualitative demand-side research suggests a need for easy access for emergencies, plus targeted savings options for housing, land and business purposes.

2. Collaborate to build trust and educate consumers. The trust deficit and financial capability limitations are significant and beyond the scope of one provider to address by itself. Providers should work together to build trust in the formal financial sector, for example through joint public awareness campaigns focusing on key trust messages and by developing industry codes of conduct on how to treat customers. Community and church groups should be leveraged as channels for consumer communication and/or education, given the high levels of trust in these institutions and their deep ties to rural people.

3. Build capacity to extend informal savings groups. Although informal savings groups are effective at building small-scale savings, the management of informal savings groups can be difficult and governance can fail. Training of informal savings groups is ongoing and will be required in the medium term to extend the number of people that can benefit from such groups. There is also scope for financial institutions to partner with growing informal savings groups to store savings or extend loans. Such partnerships also provide effective platforms to improve financial literacy.

3.3. Targeted credit to extend economic opportunities

3.3.1. Why important?

The effective allocation of capital for productive purposes is a fundamental goal of the financial system. Credit is a product of this intermediation process. If used for purposes such as building businesses, funding education, funding larger assets and preventing people from falling into poverty after a shock, it can boost productivity, support employment generation and growth, and improve welfare[32]. However, credit can also trap people in a cycle of debt that causes severe hardship. Getting

[31] At the time of writing, the authors were not able to identify the presence of deposit insurance in Madagascar. There appears to be no legislative or regulatory discussion on the topic. In terms of justification, deposit insurance would be required insofar it protects the value of the currency and ensures the stability of credit establishments by preventing runs on these banks. The prior falls under the mandate of the BFM whilst the latter falls under the mandate of the CSBF. Given that only the CSBF has the power to compel credit establishments to comply, this latter institution may consider the topic in the future.
[32] See Bagehot (1873), Schumpeter (1934), Gurley and Shaw (1955), Goldsmith (1969), McKinnon (1973), and Levine (2005).

the balance right between improved access to credit and protection against over-indebtedness is difficult and requires a comprehensive view of the market from the consumer and provider's perspective[33].

Big gap in potential need for productive credit. In Madagascar, the analysis focuses in the first instance on the scope for productive credit. While, as indicated in Section 2.2, consumptive credit is also very low, even for wealthier individuals, the biggest need emerging from the consultations and demand-side interviews alike is for formal credit to enable productive opportunities. There are more than a million small businesspeople and farmers who sell and earn at least the equivalent of USD 2 per day, yet have never had formal credit.

Goal	Target market	Need	Gap	Notes
Growth	MSMEs and farmers who sell	Formal credit for productive opportunities	1.1m adults (10%)	who sell and earn at least 2 USD/day have never had formal credit

Table 7. Credit imperative recapped

Source: FinScope (2016)

3.3.2. Why problematic?

This discussion draws on the following diagrams and table as inputs:

Box 9. Input diagrams and table: Section 3.3.2

Level of institution	Loan book (billion MGA)	Profitability (RoE)	NPL (30 days)	Farmers and MSMEs served	Interest charged to client (per year)	Branches
Bank	4,500	4% - 48%	10.5%	367,000 (37%)	9% - 18%	~320
MFI 3	383	-7% - 19%	6%	530,000 (63%)	18% - 36%	~850
MFI 2	548	-10% - 23%	21%			
MFI 1	9	1% - 6%	15%			

Table 8. Main credit providers

Source: FTHM (2016), provider interviews (2017), CNFI (2016), FinScope (2016)

[33] See Braucher (2006) and Gloukoviezoff (2006).

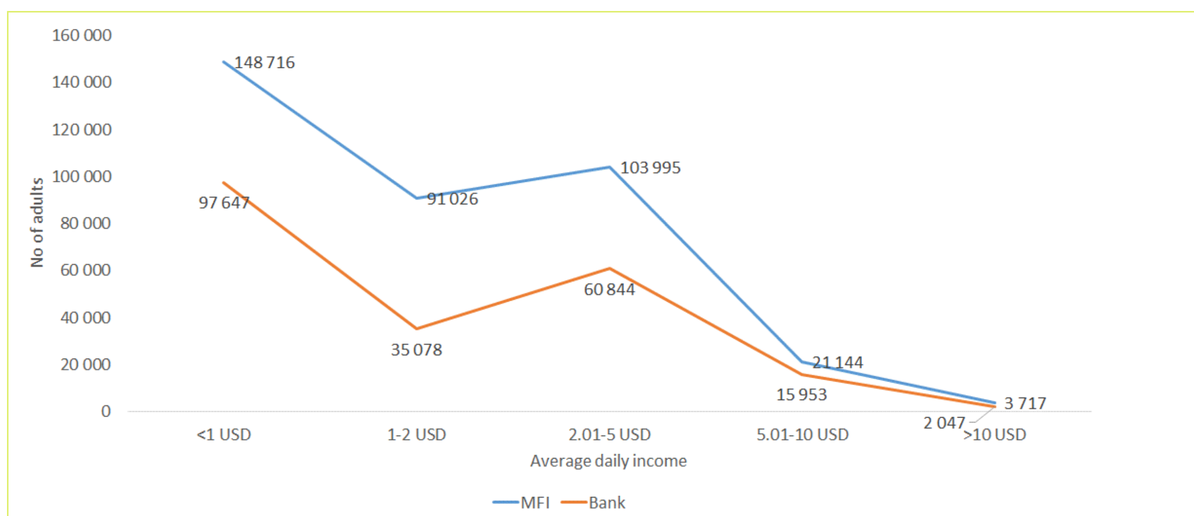

Figure 21. Number of farmers and MSMEs with MFI and bank loans

Source: FinScope (2016)

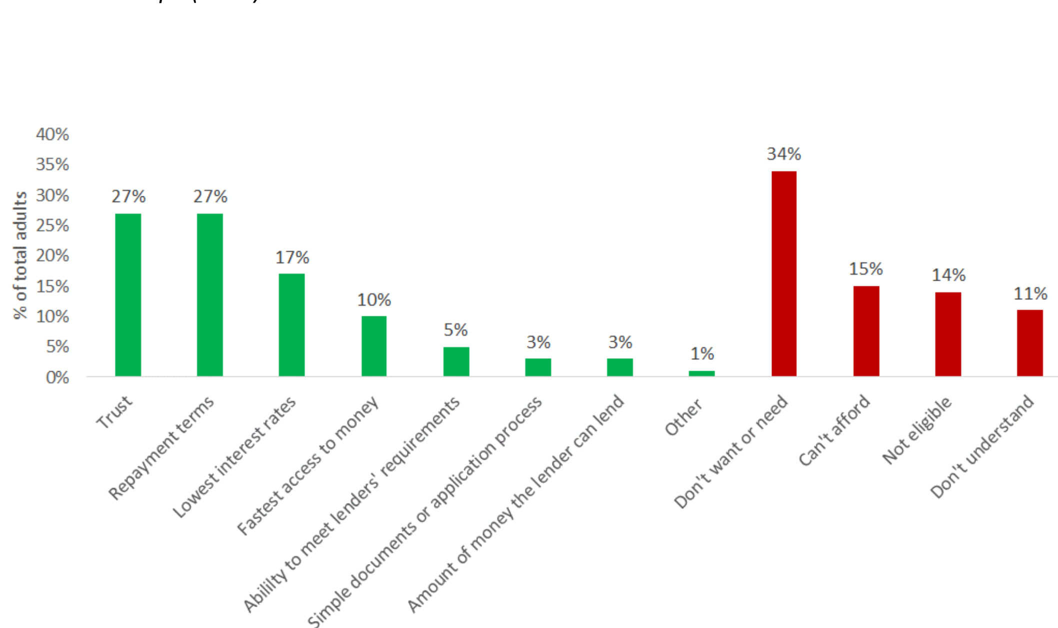

Figure 22. Reasons for and against borrowing

Source: FinScope (2016)

Banks and MFIs main credit providers. Banks and MFIs are the only formal credit providers in Madagascar. In addition, credit is also provided by informal moneylenders, retailers and friends and family. Table 8 lists key indicators for the banking sector as well as the three regulatory types of MFIs[34]:

- The banking sector has a combined loan book of MGA 4.5 billion (USD 1.5 million). The banks are generally profitable, though the return on equity ranges significantly between banks, from 4% to 48%. The non-performing loan rate is relatively high at 10.5%. Interest rates vary between 9% and 18%, depending on the bank and type of loan. With the exception of a few retail and MFI banks, most banks focus on corporates and wealthier clients.

[34] Three MFI categories exist in law, Level 1, Level 2 and Level 3 MFIs. The level determines the requirements and permissible activities. See Annexure C: Regulatory overview for an overview.

- MFIs have an explicit mandate to focus to individuals who are not served by the formal banking system, but incur significant costs to serve them. Operating costs are high and, as indicated in Table 8, profitability ranges quite widely. MFIs tend to have a much lower return on equity than banks. With the exception of level 3 MFIs, the non-performing loan ratio is also higher than for banks. As a result, MFIs charge a higher interest rate than banks, with the lowest MFI interest rate being the same as the highest interest rate in the banking sector. From a client perspective, however, MFI loans remain attractive as they have a wider branch network than banks, plus lower eligibility requirements.

MFIs serve higher number of poor MSMEs and farmers. Figure 21 maps the farmer and MSME client base of banks and MFIs, respectively, by income bracket. While both types of institutions are present in the low-income market, MFIs serve significantly more individuals in the lower-income brackets. For those earning above the equivalent of USD 5 per day, the spread between bank and MFI loans is more equal.

Business of lending is risky and costly. As indicated above, bank and MFI credit books alike are characterised by high non-performing loans, which in turn reflect the dire economic circumstances and vulnerability to risks faced by the target market. The risk of non-performing loans is particularly high for niche MFIs that are attached to agricultural value chains, where climatic risks may see large numbers of clients unable to repay loans. Given their limited profitability and reserves, they would struggle to absorb such a shock. Credit risk is further increased by such institutions' inability to access adequate information on their clients via an up to date credit bureau. There is also no title deeds or collateral registry, and the typically low-income target market base limits the scope for financial services providers to demand collateral to mitigate credit risk. Lastly, the legal process for contract enforcement and, hence, debt collection is very challenging: The World Bank Ease of Doing Business report (2016) finds that debt recovering proceedings manage to recover only 11% of debt and that this can take up to three years. The supply-side interviewees confirm that it is very difficult to realise collateral or recover debt. This further contributes to credit risk. Interviews with guarantee funds suggest that the difficulties in debt recovery give rise to collateral requirements of a multiple of up to 600% of the loan value.

Reluctance to borrow due to trust deficit, lack of need and inability to meet the terms of the loan. Figure 22 lists the main reasons for and against borrowing noted in FinScope. When deciding whether to take out a loan, trust is a first-order consideration, indicated by 27% of adults. As discussed throughout this report, trust in financial service providers is generally constrained in Madagascar. A lack of transparency in the disclosure of credit terms contributes to the culture of distrust, along with limited consumer recourse. This situation is exacerbated by the fact that the Usury Law of 62-016 of 10 August 1962 is not enforced and the consumer protection regulations in terms of Law 2015-014 of 19 June 2015 remain unissued.

However, the fact that 70% of adults do not have any loan, even from family and friends, suggests that there may be more than trust at play. As also indicated in Figure 22, an equally important consideration is the repayment terms, and the most often-quoted reason for not borrowing is the perception that there is no need for it. The qualitative demand-side research confirms that many people try to avoid debt, or argue that they do not have a need for credit. Other considerations in deciding whether to take out a loan – or from whom – include the interest rate, affordability, the ability to meet eligibility requirements and whether the person understands the nature and terms of the loan.

Below, the main barriers to productive credit uptake as emerged from the supply-side analysis, the FinScope analysis and the qualitative demand-side interview are unpacked in more detail:

- *Information asymmetries.* Information is hard to come by for both the consumer and the credit provider. Consumers report a general lack of transparency on credit terms, which makes it difficult to compare different loan options across institutions. Hidden costs also make it difficult to understand the effective interest rate they will pay, and hence to compare prices between providers. For providers, as discussed, a lack of credit information increases the risk to extend credit, which reduces lending and increases exposure to default.
- *Credit not affordable.* Nominal interest rates range from a low of 9% per annum encountered in the banking sector, to 36% for some MFIs (Table 8). These interest rates do not take fees into account, which are often not disclosed to the customer until the loan is taken out. This lack of transparency – the 'hidden costs' referred to above – increases effective interest rates.
- *Terms of repayment do not intersect with consumer realities.* The second most cited factor to consider in taking up credit is the terms of the loan. An analysis of product features compared to consumer realities suggests that loan terms generally do not match consumer needs. Supply-side interviews reveal that the timing of the harvest of cash crops such as vanilla is sometimes dictated by the term of the loan. Where farmers have harvested early to meet repayment deadlines, it has resulted in lower quality vanilla being produced. A situation where the maturity of the loan determines the quality of the produce is inefficient at a systems level.

Specific MFI challenges

Where the provision of credit is concerned, the MFI sector in particular faces a number of substantial challenges[35]:

High operating costs. The higher interest rates in the MFI space reflect the generally higher costs incurred by MFIs than by banks. Operating expenses for MFIs are generally between 75% and 85% of revenue, with loss-making MFIs reporting operating expenses of up to 130%[36]. Main cost drivers include:

- *Maintaining a large footprint.* MFIs have the most extensive distribution footprint in Madagascar but there is limited interoperability between MFIs or even between branches of the same MFI. This raises the cost of maintaining a broad branch network and reduces the synergies reaped at industry level. Yet MFIs are not able to reduce their branch infrastructure without undermining their business model, as a broad enough footprint remains crucial for rural penetration. Cash management, particularly during key harvesting seasons, is also a key cost driver.
- *Limited skills and ineffective MIS systems.*[37] Many MFIs operate on paper based systems and therefore struggle to form an up to date view across their network of the state of the business. Consolidating this information is both time-consuming and costly. The weak Management Information Systems (MIS) have also resulted in high levels of fraud. Furthermore, MFIs – as many other institutions – are challenged by a deficit of skilled staff.
- *High cost of capital.* Where MFIs seek to source bank funding, they compete with other institutions, including the national government, for funds. This implies that their terms must be at least on par with the sovereign treasury rates. The funds available from CNAPS and CEM are priced at between 6% and 12%, and bank loans come at an interest of between 10% and 14%. Given the typical interest rates charged by MFIs, this leaves a margin of only 0% to 7% above inflation (which is currently at 6-7%).

[35] This analysis draws on provider interviews (2017) and World Bank (2017e).
[36] A situation that is only sustainable due to significant donor funding.
[37] This analysis draws on provider interviews (2017) and the World Bank Aide Memoire (2017e).

Scarce capital not optimally allocated. Currently, most MFI funding stems from deposits (MGA 220bn (USD 72.8 million) out of a total of MGA 250bn (USD 82.8 million) of funding), with some funding by CNAPS and CEM. Other capital sources include limited use of donor funding [MGA 10bn (USD 3.3 million)], loans from a small number of banks, and a refinancing fund (MGA 5bn (USD 1.7 million)). However, these sources are insufficient to meet MFIs' lending requirements and the sector reported a funding gap of MGA 265 billion (USD 87.7 million) in 2016. MFI lending from banks is constrained due to a lack of reliable information on MFI activities[38] and the perceived risky nature of MFI lending versus banks' other options for capital allocation, including treasury bills. Banks will typically only engage with large MFIs and even then, view them as "clients" rather than partner institutions.

Limited MFI profitability compared to banks. In light of the above, it is not surprising that the MFI sector does not make a significant profit. On average, the return on equity is only 4.5% across the sector. The aggregate figure masks significant differences, however: level 1 MFIs generally make large losses (average -50% return on equity (RoE)) but can afford to do so due to large-scale donor funding. Levels 2 and 3 are profitable with a return on equity of 11.6 and 5%, respectively. Level 2 profitability is driven by large federations, which record an ROE of up to 20%.

Slim profit margins limit capital allocation, which further undermines profitability. Overall, with some exceptions, low profitability constrains MFIs' ability to afford the lending rates offered by banks and other capital sources. This gives rise to a vicious cycle where lack of funding further undermines profitability. In contrast, banks generally have access to low-cost capital from corporate and high income client deposits. They are also able to draw on foreign capital via their offshore parent companies, if required. They predominantly target more urban, wealthier consumers, resulting in low operating costs relative to institutions that have to maintain a rural footprint. This has resulted in generally high profitability for banks despite lower interest rates than those charged by MFIs.

Limited market intelligence. Supply-side interviews reveal that MFIs are not aware of where to source bank funding. They also do not know what other MFIs are charged, or even what the prevalent market rates are. On the retail side, mystery shopping as well as supply side interviews indicated that consumers and other industry players do not know the interest rates and fees that are charged by different establishments, including MFIs and banks, and hence are unable to effectively weigh up different offerings. The result has been destructive competition on the part of MFIs and real effective credit prices that are significantly higher than the nominal interest rates charged on a loan.

Inconsistent governance practices. Governance practices vary significantly across the sector, with some MFIs being well governed and others struggling. The supervision requirements vary across the levels, with level 1 MFIs (non-deposit taking) not required to formally report to the CSBF, whereas levels 2 and 3 are required to declare and submit returns. Market conduct requirements are currently present in law only, and not yet supervised in practice.

3.3.3. What can be done

Distinct imperatives for public and private sector. The analysis above suggests three key priorities for policymakers/regulators to bridge the gaps and harness the opportunities for leveraging credit for

[38] This is driven in part by the inability of stakeholders to access financial statements of particular MFIs, but also by the lack of adherence to international accounting standards.

growth. From a market perspective, the main recommendation is to strengthen MFIs in a tailored way, depending on the type of MFI.

Recommendations for policymakers and regulators:

1. Effective consumer protection framework to build trust. Effective consumer protection requires sufficient information on the terms, conditions and total cost associated with the loan, as well as regarding the legal protection and recourse options against consumer abuse. Specific actions that can be taken to address these two challenges include:

- Strengthening governance and supervision for MFIs and;
- Implementing market conduct requirements, particularly for disclosure and recourse. This includes updating the dispositions of the Usury Law. However, the imposition of credit interest rate caps is not recommended as current rates are based on operational constraints rather than profiteering.

2. Stronger data collection mandate and capacity. Part of the above would be to empower the CNFI with a broader mandate to collect the data required to ensure transparency in retail credit provision. To do so, the CSBF mandate and capacity to implement would need to be strengthened.

3. Address key cost drivers. There are at least two policy levers to address some of the important cost drivers undermining the extension of credit to a broader client base:

- *Credit information sharing.* Systemic interventions to assist with the sharing of client credit information will assist providers to control their non-performing loans by ensuring that clients do not become over-indebted. Such an approach will only work if any credit bureau has a comprehensive view of a client. This would require seamless information sharing between the current two bureaux (one for banks and one for MFIs). Alternatively, providers will need to have access to both bureaux. Further opportunities include improving the implementation of a title deed registry as well as access to title deeds.
- *Contract enforcement.* Building judicial capacity, particularly in assessing credit agreements, will assist providers in recouping collateral. These will in turn reduce the premiums currently charged to offset anticipated losses due to judicial inefficiency.

Recommendations for providers:

Tailored MFI strategies. Different types of microfinance institutions require a different approach in line with their distinct features. Table 9 summarises the unique opportunities for each type of MFI[39]:

[39] These categories were created by the authors based on two principle sources of information. The first is interviews with various MFIs, regulators and other entities within this space (such as donors). The second is the financial statements of individual MFI institutions. By using these sources, the authors have created a classification that describes the different business models that exist in the market. Most microfinance institutions in Madagascar can be located within one of these categories.

	Niche MFIs	Retail MFIs	Donor-funded MFIs	Fragile MFIs
Description	• Targets agriculture & MSMEs	• Focuses on large-scale deposit collection	• Donor-driven, impact-oriented	• Insufficient capital and low profitability
Opportunities	• MIS systems tailored to target market • Facilitate cash management	• Facilitate access to affordable capital e.g. refinancing • MIS systems and digitisation to enable efficiency at scale • Improve disclosure and governance to access bank loans	• Facilitate peer learning to inform Retail & Niche operators • Potential feeder to graduate to bigger loans	• Protect deposits • Manage failures to retain trust

Table 9. Madagascar MFI typology

Source: Authors' own, based on stakeholder consultations and analysis of financial statements

- For **niche MFIs**, the main opportunities lie in supporting the development of management information system (MIS) tailored to the specific target market. There is also a need for improved cash management as these MFIs are often rural and incur high costs to manage cash[40]. Furthermore, the vulnerability of the client base to climatic shocks creates an imperative for wholesale insurance to cover their books in the event of a disaster.
- The main need for **retail MFIs** is access to affordable capital (refinancing). They will also benefit from MIS systems and digitisation to increase efficiency and scale. Lastly, to access bank credit, they would need improved disclosure and governance.
- There is an opportunity for retail and niche operators to tap peer-to-peer learning from **donor-funded** MFIs on innovative ways that they are designing their products to deliver real value to their clients[41]. They are also a potential feeder for clients to graduate to bigger loans with other institutions[42].
- The biggest imperative where **fragile MFIs** are concerned is to protect deposits and to manage any failures that do occur to retain trust in the system. Supervision should be strengthened to identify and monitor such MFIs and where required put them under administration to avoid loss of assets by consumers.

3.4. Niche insurance opportunities for resilience and productivity

3.4.1. Why important?

Insurance supports resilience. Section 2.1 showed that many Malagasy are vulnerable to shocks that severely affect their livelihoods. Over 4.3 million people suffered from agricultural shocks in the past year. Over two million suffered the death or loss of income of a breadwinner and a further 2.6 million suffered a severe health risk. Insurance, by its nature, is designed to help people cope with the impact of risk events.

[40] With cash in and outflows often being cyclical: during harvest season a lot of liquidity is required to extend loans.
[41] For example, by providing training to clients, finding out why people default, how to avoid it, and how to "walk the journey" with the client. They are also using crowdfunding to raise more capital for on-lending.
[42] Donor MFI clients may not be eligible for a loan from another institution from the outset. However, through the donor MFI relationship, they are able to build up a credit record. They also become more educated and "practice wielding credit" in a safe environment.

Insurance key for economic growth. As discussed in Appendix A, insurers are also critical institutions to mobilise domestic assets for investments. Insurer assets amounted to MGA 705 billion (USD 233 million) in 2015, double the assets of the two largest non-bank savings institutions, CEM or PAOMA (IMF, 2016). Prudent productive investment of such assets is critical for growth.

3.4.2. Why problematic?

Not living up to its resilience promise. In practice, however, few people turn to insurance to manage the impact of risks. Figure 23 shows that only a negligible proportion of those who have experienced various risk events in the past year claimed insurance as coping strategy. Instead, as discussed in Section 2.1, people draw on savings, rely on family or community support, or simply absorb the financial loss:

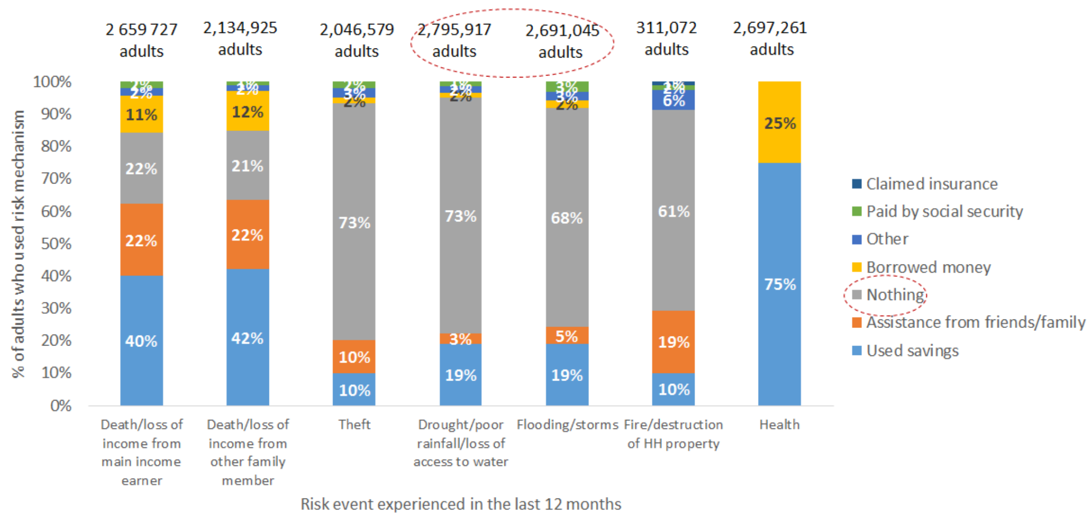

Figure 23. Coping strategies for various risk events

Source: FinScope (2016)

Out of reach for most. The rural nature of the population, small formal employment base, limited infrastructure and small financial sector footprint as discussed in Section 2 all challenge mass market insurance distribution and premium collection. Insurers focus on corporates and a very small, wealthier individual client base – it simply does not make business sense to expand the low-income target market for small-premium policies. Most products are compulsory products linked to employment (health and pensions), credit or vehicle ownership (as set out in Section 2.3). FinScope indicates that only 200,000 adults have insurance, although this is likely understated due to a lack of awareness among users that they have such insurance, or because people see it as part of the "loan package" (a condition to their loan rather than an insurance product in its own right), or as a requirement to own a vehicle.

Limited understanding, lack of trust and poverty constrain take-up. 42% of people indicate that they do not have insurance due to lack of understanding of the product, followed by 30% that say they do not have enough income and 25% that do not feel they need or want insurance. Only 28% of people think that insurers can be trusted. Difficulty in realising claims is a big driver of this distrust.

> *"Because the insurance companies will always find reasons not to cover you. That's why people do not trust them."*
>
> - Male, urban, formally employed

Low claims ratios suggest limited client value, indicative of structural market challenges.[43] The insurance market is featured by inefficient systems and constrained investments. An insurance premium is made up of the risk premium (or expected claims), plus a mark-up for operating expenses, commission and profit. The claims ratio, also referred to as the loss ratio, is an indicator of consumer value as it states the proportion of premiums that is paid back to customers in the form of claims. A low claims ratio can be indicative of a lack of competition (for example in the case of compulsory insurance where the client is essentially captive) or, most often, high operating costs, including distribution costs. On average, the claims ratio (life and non-life) as reported in the 2016 FSAP report was only 41% in Madagascar (compared to an internationally accepted rule of thumb benchmark of around 60%[44]). Management expenses represented 25% of premiums.

Limited insurance capacity. Insurance-specific skills are lacking in industry and regulatory authorities alike. There are no qualified actuaries in Madagascar and no insurance training institutions.

Most insurance policies sold through brokers and tied agents. There are five insurers, of which two are government owned. The bulk of sales is through brokers and agents employed by the insurer. Such traditional sales channels are often too expensive to reach poorer clients with affordable products.

Bancassurance nascent. Banks sell credit life policies in partnership with insurers, and charge insurers a fee to access the distribution channel. Consultations with insurers indicate that bancassurance processes are complex, with premiums often not paid over to the insurer timeously, which impacts how insurers pay out claims.

No legal framework for insurance distribution by MFIs, mobile money providers or non-tied agents. Alternative distribution channels such as insurance sales through MFIs and mobile money providers can make products more affordable, as these channels are closer to the client and can more cheaply collect premiums. Such initiatives are not currently encouraged by legislation. Some microfinance institutions have experimented with microinsurance, especially for credit life and so-called credit-healthy products[45]. Consultations with microfinance institutions indicate that they are interested to expand such operations, although no legal frameworks exist to encourage that. Mobile insurance (m-insurance) is not provided.

Tax burden on life products affects affordability. The value-added tax (VAT) code requires tax to be levied on life premiums. Consultations indicated that this impacts premium levels and, hence, reduces affordability.

Premium collection expensive for small premiums. Some innovations have been introduced to manage the cost of premium collection, including mobile money payment of premiums and internet transfers. However, there is still very limited take-up of these options, and cash payments remain prevalent. To minimise premium collection cost and complexity, many individual contracts therefore require upfront payment of annual contract premiums, which is unlikely to be feasible for poorer consumers.

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[43] This analysis is based on consultations with industry (2017) and the IMF FSAP (2016).

[44] According to the Microinsurance Network's international microinsurance performance indicators (Wipf & Garrand, 2008), organisations with a claims ratio less than 60% should review their benefits or premiums charged, as the value that is offered to clients can be questioned.

[45] Health events are a key reason why borrowers fail to settle their debt, either because they can no longer earn income to make repayments or because they need to incur expenses which reduce the funds available for debt repayment. Credit healthy products settle an outstanding loan amount when a borrower falls ill, reduce the amount that should be repaid or provide for a payment holiday. Credit healthy products can also provide access to healthcare to manage the cost aspect of falling ill, as is the case with the microfinance institution Cefor in Madagascar.

Local underwriting requirements potential to affect cost and risk. The insurance code covers all insurance activities on the Malagasy territory. It requires all insurers to have their head office located within the country. These arrangements can be effective to mobilise domestic assets through local insurers, but, unless carefully managed, may push up costs or deter foreign investment, especially for larger risks such as infrastructure projects.

No agricultural insurance available. Despite the high incidence of agricultural risk, no targeted agricultural insurance products were identified during the diagnostic, despite the importance of this type of insurance in the Malagasy market The role of this type of insurance in the granting of credit remains an important contribution to make and the protection afforded by agricultural insurance is crucial for the protection of populations in rural areas.

Innovations in health cover only reaching a minority. As discussed in Section 2.3, health or disability risks are covered by insurance products, health mutuals, employer health schemes and CNAPS. The credit healthy products referred to above are one instance of innovation. Yet health cover is largely restricted to urban areas and employee groups, with very few options available to rural people or those operating in the informal sector. FinScope indicates just over 70,000 people to be covered by health products. Most health cover is provided through employers and is not regulated as insurance or even regarded as insurance by consumers.

3.4.3. What can be done

Distinct imperatives for public and private sector. The analysis above suggests five key priorities for policymakers/regulators and three for market players to bridge the gaps and harness the opportunities for insurance to build resilience and support growth.

Recommendations for policymakers and regulators:

1. Develop legal frameworks that encourage alternative distribution. The current insurance regulatory framework does not explicitly allow for MFI and m-insurance models as well as aggregator[46] models beyond tied or employed agents. While distribution through such channels is not prohibited, the lack of a legal framework creates uncertainty in the market on how such models should be rolled out and what functions various parties may permit under what conditions. The ongoing revision of the microfinance law provides for the distribution of microinsurance as one of the services MFIs are authorised to provide.

2. Revisit tax on insurance premiums. Reducing or removing the tax on insurance premiums will make insurance more affordable and, in the short-term at least, is unlikely to have a substantial fiscal impact.

3. Introduce market conduct requirements to improve trust. Clear consumer protection measures around disclosure, recourse, governance and claims processing are required to build trust. In this regard, the initiative to establish an independent insurance regulator is welcomed (IMF (2016) and consultations with regulators).

[46]Aggregators can be defined as entities that bring together people for non-insurance purposes (for example retailers, service providers, utility companies, membership based organizations or civil society organisations) and that are then utilised by insurers, with or without the intervention of agents or brokers, to distribute insurance and, depending on the model, fulfil additional functions such as administration and/or claims pay-out (IAIS, 2015).

4. Improve capacity in insurance specific skills. Building up the requisite local skills base will take time. It is important to connect with the global community and encourage peer learning on effective strategies in this regard.

5. Consumer education in partnership with private sector. Low consumer awareness of insurance requires targeted education strategies. Broader awareness raising is useful, but has limited impact to drive more appropriate usage. Rather, targeted education during decision moments is needed, which requires the involvement of the private sector.

Recommendations for providers:

1. Product innovations needed in agriculture. The extent of agricultural risks faced suggest a need for agricultural insurance, such as index insurance. However, global experience suggests that agricultural insurance for small-scale farmers will likely require some subsidy to be affordable and sustainable, either by a development partner or government. This may be undermined by the fiscal constraints facing the country. African Risk Capacity (ARC) membership[47] is in place to manage the impact of climate risk at government level, but premiums are not yet funded. There are also some targeted opportunities within the agricultural value chain to provide insurance to associations, agricultural processors or other aggregation points for smallholder farmers, or via MFIs that lend to key value chains.

2. Potential to leverage MFIs for health cover. Health mutuals provide most of the voluntary health cover at present. Mutual MFIs could consider extending their services to health cover, in partnership with health providers or underwritten by insurers.

3. Boost efficiency and innovation in bancassurance. Banks have relationships with clients that allow them to be effective distributors of a broad suite of financial services, including insurance. However, this also provides banks with power over the client relationship that can be difficult for insurers to manage. As insurance becomes a more attractive product the need for bank/ insurer collaboration will increase. Bancassurance arrangements should be reviewed to see how efficiency can be improved and to consider the potential to distribute a broader suite of insurance products through this relationship.

3.5. Strengthening financial inclusion policies, regulation and institutions

3.5.1. Why important?

The financial sector policy and regulatory framework sets the parameters for the operation of the market. It determines who may enter and operate, under which conditions, how they should treat their customers, what safeguards against failure and what recourse mechanisms are in place. A sound and complete regulatory framework that is properly enforced therefore forms the foundation for all the other strategic recommendations. Legislation in Madagascar is generally well-drafted and regulatory authorities are granted significant discretion by law to set norms and requirements to fit the context. Such flexibility is important, as legislative amendments can often take several years to make their way through the legislature. Nevertheless, some legislative challenges remain that, if addressed, could significantly strengthen the functioning and accessibility of the financial sector.

[47] The African Risk Capacity was established as a Specialised Agency of the African Union (AU) to help Member States improve their capacities to better plan, prepare and respond to extreme weather events and natural disasters, therefore protecting the food security of their vulnerable populations. For more detail, see http://www.africanriskcapacity.org/.

3.5.2. Why problematic?

Trust in judiciary low. Nearly half of Malagasy view most or all magistrates as corrupt (Transparency International, 2015). They view the police in the same fashion. Persons of authority that are more closely related to the community, such as local councillors or local chiefs, are viewed more favourably.

Dependence on informal law, but no legal standing. Given the trust deficit and capacity constraints in the formal legal system (only 659 advocates for a population of more than 22 million, most of them practicing in Antananarivo[48]), most people access justice via informal, community-based legal structures, or *dina.* These structures currently have no legal standing in financial service matters as they are not explicitly empowered to act on these matters in terms of the law.

De facto reality different from de jure[49]. Even well-drafted legislation is only as strong as its implementation. As indicated in Table 10 below, some key financial sector laws in Madagascar are in force, but not yet enforced pending the issue of subordinate regulation[50]. The most prominent of these are the electronic money framework and the consumer protection framework. The elaboration of texts implementing the law on electronic money, as well as the revision of the law on microfinance are among the main npriorities of the CSBF for the year 2017. In the expectation of these texts, e-money activities are currently governed by the Banking Act (Articles 62 and 63) on intermediaries in banking operations. Entities offering electronic money services are thus mandated by banks and under the supervision of banks for their activities. The regulatory review or supply-side consultations did not identify any specific plans regarding the development of regulations to give effect to the consumer protection law.

Law	Enforcement status
Usury ordonnance 62-016	Regulations not implemented
Consumer protection law	Regulations outstanding or in progress
Electronic money law 2016-056	Law not yet published in the official journal – awaiting the implementation orders
Personal Information Law 2014-038	Regulator not established

Table 10. Unenforced legislation

Source: Regulatory review, in-country consultations (2017)

[48] http://www.madagascar-tribune.com/460-avocats-sur-659-a-Tana,6080.html
[49] Based on, or according to the law.
[50] This reflects the state within the market from supply side interviews at the time of writing of the diagnostic.

Functional payments framework, but no overarching payments system development agenda for financial inclusion. In its mission to monitor the national payments system, the Central Bank of Madagascar has the power to accredit all private payments providers and clearing houses. The Central Bank Law establishes the BFM as the exclusive regulator of the national payments system[51]. The BFM also has the authority to issue instructions on the functionality of private payments providers and private clearing houses. However, neither regulatory framework outlines the role of these entities in the overall development of the country's payment system as it pertains to financial inclusion. Other core payments system development aspects, such as considerations around interoperability, payment-specific industry bodies and best practice are also not explicitly addressed.

Constrained regulatory capacity. The generally well-drafted laws in Madagascar sufficiently empower the various financial sector regulatory authorities to act in the best interests of the financial sector. However, regulators often cannot pursue these objectives fully, due to capacity constraints in terms of financial resources as well as access to a skilled labour pool (Consultations, 2017). This is exacerbated by their weak links to other regulators and international bodies, which limits peer learning on best practices.

No official financial inclusion mandate. Government's strong policy commitment to financial inclusion does not translate into an official financial inclusion mandate for key regulatory authorities apart from that of the CNFI within the Ministry of Finance. Notably, neither the Ministry of Commerce nor the CSBF has a legislative mandate to pursue financial inclusion interventions. Rather, their mandates focus on consumer protection and prudential matters (Credit Establishments and Consumer Protection Law; see Annexure D: Prudential requirements for full reference). One upshot is that regulators do not explicitly monitor financial inclusion-related indicators as part of their ongoing reporting requirements, resulting in insufficient financial inclusion data within the market.

Prudential requirements not consistently applied. Some large government and parastatal entities do not operate according to the prudential norms required by law (Supply-side consultations, 2017). Others are subject to prudential requirements, yet remain in a prudentially precarious position. This poses a systemic risk to their customers' assets and the financial sector more broadly.

KYC and other documentation challenging. The financial sector requires individuals to readily have access to an official identity document and proof of address to meet KYC requirements. Should they be required to undergo a creditworthiness check, proof of income is also required. In Madagascar, access to these documents is limited, particularly in rural areas[52].

3.5.3. What can be done

The regulatory recommendations can be grouped under three core themes:

- Measures that will extend access to financial services;
- Measures to build trust and ensure stability; and
- Measures to acknowledge the role and facilitate the functioning of currently informal institutions and legal systems.

An overview of regulatory recommendations outlined in other sections are provided in Table 11 below. For the main discussion, see the relevant section.

[51] The fact that two different authorities have payment system mandates may lead to mandate uncertainty in the market.
[52] Supply-side interviews.

Section	Recommendation
Payments	• Develop a comprehensive payment system law (refer Section 3.1.3) • Develop a framework for bank agency (refer Section 3.1.3) • Create a mandate for the CNFI to support the payments authorities (BFM and CSBF) to ensure that the payments system is developed in a manner that encourages financial inclusion.
Savings	• Secure systemic savings for intermediation and growth (refer Section 3.2.3)
Credit	• Embed, operationalise and validate credit information sharing in regulation (refer Section 3.3) • Strengthen contract enforcement (refer Section 3.3.3)
Insurance	• Develop legal framework to encourage alternative distribution (refer Section 3.4.3) • Revisit tax code for insurance premiums (refer Section 3.4.3)

Table 11. Product market specific regulatory recommendations

Source: Authors' own

Strengthen financial inclusion mandate – policy, capacity and data. Strengthening the CNFI via a broad-based national financial inclusion strategy and ensuring collaboration with the Ministry of Commerce and the CSBF is an important first step. Beyond this, collaboration between the key regulators in the industry and the CNFI should be supported, particularly as consumer protection regulations are drafted and promulgated.

Further recommendations for extending **access** are:

- *Develop and implement electronic money regulation.* The CSBF should be supported to ensure that the implementation of the electronic money law is done in a manner that augments the role that mobile money currently plays in Madagascar. Furthermore, technical assistance is required to issue regulations, an important step to reduce uncertainty in the market
- *Enable market conduct regulator.* The Ministry of Commerce should be supported to set up and implement the consumer protection law in such a manner that it balances the needs of providers with effective protection of consumers in a manner conducive to financial inclusion. It should cover topics such as anti-competitive behaviour, pricing transparency and prohibitions on exploitative practices, amongst others.

  The CNFI expertise should be leveraged in the development of the electronic money regulations as well as the creation of market conduct regulations for financial services.
- *Improve access to identity documents and title deeds.* Further investigation is needed of required improvements to the deeds registry and in the issuing of identity documents to assist individuals to meet KYC requirements for proof of address and identity.
- *Implement the 2012 FATF guidelines in a manner that supports financial inclusion.* This includes implementing the risk-based approach in an inclusion-sensitive manner. Given the large size of the informal economy in Madagascar, the point of departure for such an approach is to acknowledge that financial exclusion heightens money laundering and financing of terrorism risks, as informal transactions cannot be monitored for AML/CFT purposes. Thus, the facilitation of

financial inclusion as part of the risk-based approach becomes a tool for managing money laundering/terrorist financing risk. Such an exercise, including the definitions and classification of risks required, is complex and likely to require substantial technical assistance. It will also benefit from a centralised database to store and continuously update client information.

Where the **trust** and **stability** theme is concerned, the following recommendations apply:

- *Design and implement market conduct requirements for financial services.* This includes promulgating and implementing the regulations for consumer protection. Developing a market conduct framework across the financial services sector probably requires a dedicated CNFI/CSBF team to be assigned to the task.
- *Strengthen supervision/enforcement of existing requirements.* Trust in the system requires certainty that whatever requirements are put in place, will be enforced. It also requires transparency in the process that renders a decision or judgement. Part of the solution is to ensure that consumers are aware of what the regulatory requirements are and can hold officials accountable.
- *Improve judicial system for contract enforcement and recourse.* As outlined above, the challenging relationship between FSPs and the judiciary has a number of negative outcomes. Two specific actions can assist in solving this problem:
    - Creation of a financial sector-specific court, with appropriate jurisdiction. The court should be created with expertise from the banking sector to ensure that its rulings are made in a manner that is in line with best practice within the sector[53].
    - Creation of a specialised ombudsman – funded by the private sector – for consumer protection matters, to ensure effective recourse in financial services disputes with clients. Such an ombud system should follow international norms and draw on the expertise of the banking sector to ensure effective implementation.
    - Creation of an arbitrator for larger financial services disputes. with appropriate skills and funding from the financial sector.
- *Strengthen prudential requirements for systemically important savings institutions* – as outlined in Section 3.2.3.
- *Comprehensively protect trust accounts of mobile money providers*. Mobile money institution trust accounts must be protected from the creditors of the bank in addition to being protected from the creditors of the institution[54].
- *Strengthen reporting and auditing requirements for MFIs.* Reliable information forms the bedrock of financial intermediation. Strengthening auditing requirements throughout the financial sector will ensure that: (i) prudential requirements are consistently complied with; (ii) reported information meets the minimum standards set by many international financial institutions, thereby enabling these to invest in the Malagasy financial sector; and (iii) Malagasy institutions can effectively lend to each other, thereby facilitating capital allocation.

In terms of **informality**, the recommendations are:

- *Create an appropriate legal home for savings groups.* Carve out a low-compliance space[55], with defined roles, to bestow informal savings groups with a legal identity and allow their users access to recourse mechanisms. The space must be accompanied by appropriate limits to prevent such

[53] This court could be independent, or a specialised section of another court.
[54]The only creditor that may claim from the trust account is a client, and only up to the limit of his outstanding mobile money balance.
[55] Noting that it may not be feasible or desirable to comprehensively supervise them or subject them to extensive prudential or monitoring requirements.

groups from creating a systemic risk as well as to protect the business models of players already in this space.

Build a space for role of traditional law. Creating an appropriate and strictly demarcated jurisdiction for financial matters resolved via *dina* will ensure that rulings are legally binding and enforceable. It will also ensure that rulings are subject to magisterial oversight and that formal legal recourse mechanisms are available where required.

4. Priorities for action

Critical constraints drive gap between use and needs. To improve welfare, Madagascar needs to build the resilience of its population in the face of climatic risks, especially with regards to food security. Access to more diversified economic opportunities outside of agriculture will also be critical. The financial system can play an important role to support these objectives. However, there is a stark gap between the very real need for financial services to help individuals and households cope with shocks and grow their livelihoods (and for the country at large to better manage climate change risks, improve food security and support growth and development) and the on-the-ground reality of low financial service usage. The analysis has shown that there is no one reason for such low usage: it is the result of a number of structural barriers related to the country context, regulatory framework and provision of financial services, compounded by demand-side drivers such as a lack of trust in formal systems.

Targeted opportunities for bridging the gap. Yet these barriers are not insurmountable. A number of significant opportunities exist to bridge the gap between needs and usage of key financial services:

- Payments systems can provide swift access to emergency payments and facilitate more efficient and reliable transfers of funds for small businesses.
- Savings can provide a cushion to manage shocks and provide capital for investment.
- Credit is key to grow small businesses to provide employment.
- Insurance has a niche role to help manage risks and build capital for investment.

Table 12 below recaps the key needs and the corresponding gaps and opportunities for each as identified in Section 2.5:

	Relevant to?	Need	Gap (% of total adults)	Notes
Resilience	Individuals	**Payments** to receive family and community and donor support when shock hits	8.7m adults (79%)	do not use formal payment mechanisms
	Individuals	**Savings** to build a cushion to cope with shock	2.7m adults (24%)	earn at least 1 USD/day but do not save for shocks
	Government	Need for a **national intervention**, e.g. disaster risk management strategy and PPP for agricultural and disaster risks which leverages insurance	4.3m adults (39%)	experienced an agricultural shock in the past year
	Relevant to?	**Need**	**Gap (% of total adults)**	**Notes**
Growth	Wealthier individuals	**Savings** to be mobilised for investment capital	501k adults (5%)	are not formally saving despite being formally employed or earning more than 5 USD/day
	MSMEs and farmers who sell	**Savings** to be mobilised for business	1.8m adults (16%)	who sell and earn at least 1 USD/day do not save
	MSMEs and farmers who sell	**Formal credit** to be allocated to productive opportunities	1.1m adults (10%)	who sell and earn at least 2 USD/day have never had formal credit
	MSMEs and farmers who sell	**Payments** to facilitate trade and value chains	795k adults (7%)	who sell and earn at least 1 USD/day do not use formal payment mechanisms

Table 12. Mapping key opportunities to identified needs and gaps

Source: Authors' own, drawing on FinScope (2016)

Five key priority areas to realise inclusion opportunities. Section 3 outlines the five priority areas identified through the MAP diagnostic process to bridge the gaps. Table 13 below summarises the recommended actions to capitalise on each of these opportunities for government and public sector officials, on the one hand, and the private sector on the other hand. Development partners can support interventions across both spheres.

Each potential action was chosen to link to the broader market interventions required to support increased resilience of individual Malagasy citizens, whilst allowing the financial sector to directly and indirectly support economic growth.

Priority Area	Market interventions
Payments for resilience and commerce	Public sector priorities: • Develop an appropriate, interoperable payments ecosystem to improve efficiency and affordability. • Develop a bank agency framework to enable alternative distribution. • Implement FATF guidelines in a way that view financial exclusion as a key risk. Private sector priorities: • Extend use cases for formal payments by digitising key public sector, value chain and trade payments, including card payments in the tourism sector. • Improve mobile money agent liquidity management to ensure reliable access to funds for clients and viable business models for agents. • Improve cash reticulation and management to extend cash in/out points, improve economies of scale and reduce the cost of cash (necessary for adoption of digital payments). • Leverage MFI and Post Office footprint to extend reach of the formal touch points.
Savings for resilience and to build capital for investment	Public sector priorities: • Strengthen the prudential supervision of key savings institutions, such as CEM, PAOMA, CNAPS and MFIs to safeguard existing savings. • In instances where the creation of formal institutions is not feasible, provide for a form of recognition of small local savings groups to allow proper legal recourse by members. • Implement payment system recommendations above to allow frequent deposits of small amounts. • Consider introducing deposit insurance to build trust and protect consumers. Private sector priorities: • Align product design with customer needs for flexibility, transparency and security. • Leverage community and church structures to build trust and educate consumers. • Build capacity of informal savings groups to protect group members. • Partner with informal savings groups to reach further down market and benefit from the scale of group engagements rather than individual interactions.
Enable credit to targeted entrepreneurs	Public sector priorities: • Improve credit information on clients (including credit bureaus) to reduce the cost and risk to lend. • Train judicial officers on financial and banking system matters to ensure effective implementation of the law. • Strengthen the role of BIANCO to protect the financial sector from any negative effects of corruption.

	• Improve transparency of disclosure and address extent of non-interest related costs. Private sector priorities: • Strengthen and digitise MFI information systems to improve efficiency and reduce risk. • Build capacity with MFIs to improve the quality of their loan portfolios and financial information to access credit.
Niche insurance opportunities	Public sector: • Develop legal framework to support alternative distribution of insurance, through MFIs, mobile providers, burial societies and farmer associations. • Reduce tax burden in insurance premiums to improve affordability • Improve availability of skills for insurance to facilitate market development, including actuarial skills. • Build capacity and dedicate resources to manage sovereign climate and agricultural risks through ARC. Private-public partnership priorities: • Extend products to cover agricultural risks, such as through agricultural index insurance or meso-level insurance to manage MFI, value chain or supply chain risks affecting farmer productivity. Private sector actions: • Extend products to cover agricultural risks, through e.g. agricultural index insurance or meso level insurance to manage MFIs, value chain or supply chain risks affecting farmer productivity. • Partner with MFIs for health cover. • Collaborate with banks to insure customer risks and protect bank business cases and client welfare.
Strengthen financial inclusion policy, regulations and institutions	• Develop and implement a financial inclusion policy, including appropriate data collection and monitoring. • Strengthen the mandate of key institutions such as CNFI, and CSBF to support financial inclusion. • Amend regulation where required to fill legal gaps and strengthen supervision and to improve financial inclusion on items such as the regulation affecting mobile money, payment systems, consumer credit. • Create an appropriate legislative and regulatory space to deal with informal financial services, including the safety of savings in informal savings groups. • Implement targeted market conduct regulation to improve disclosure and recourse to consumers. • Strengthen the financial sector relevant judicial environment. • Develop a consumer education strategy to improve awareness, capacity and understanding. • Improve access to identity, proof of address and title deed processes and documentation to facilitate financial services access.

Table 13. Summary of recommended public and private interventions

Source: Authors' own, based on diagnostic analysis and as consulted in stakeholder workshop

Towards a roadmap. This diagnostic sets out the key barriers and drivers of financial inclusion as basis for determining the priorities for action. The next step is to develop a roadmap to turn these priorities into action. The roadmap will be developed through a consultative process to identify specific actions, mapped to stakeholders, to unlock the opportunities identified in the diagnostic. The roadmap will, in turn, inform a national strategy to support financial inclusion in a cohesive manner.

Annexure A: The role of various financial services in poverty alleviation and inclusive growth

Why focus on payments? Effective payments mechanisms are a requirement for the efficient provision of all other financial services and form a vital backbone for the provision of goods and services in the broader economy. Payments allows for the transfer of value between individuals and businesses. Given the frequency with which every member of society makes payments, optimising the efficiency and affordability of payments mechanisms is directly welfare improving[56].

Why focus on credit? The effective allocation of capital for productive purposes is a fundamental goal of the financial system. Credit is a product of this intermediation process and can contribute to productivity through spurring economic growth, employment and improved welfare if used for purposes such as building businesses, funding education, funding larger assets and preventing people from falling into poverty after a shock[57]. However, it can also trap people in a cycle of debt that causes severe hardship. Getting the balance right between improved access to credit and protection against over-indebtedness is difficult and requires a comprehensive view of the market from the consumer and provider's perspective[58].

Why focus on savings? Mobilisation of savings to provide capital for growth and development is one of the key roles the financial sector plays (Levine, 1997). At the household level, the research of amongst others Collins, et al. (2009) shows that low-income people want to save and can save. Formal savings, and to an extent informal savings, offers the benefit of security from crime, wealth accumulation and hedging against inflation, if returns are possible. Most significant might be the built-in self-control mechanism. Funds at home are easier to spend; removing that temptation is a significant first step to building up assets (Banerjee & Duflo, 2011).

Why focus on insurance? In the absence of formal insurance, low-income households cope with risks in various ways (formal and informal) that are often inefficient, perverse and expensive (Dercon & Christiaensen, 2007), whereas studies have shown that where insurance is available, it lessens welfare-reducing behaviour (Carter, 2008). Welfare-reducing risk-coping strategies could include, for example, disposing of productive assets or disposing of assets at a loss, taking children out of school, depleting savings, and taking expensive informal credit (Carter & Barrett, 2006). Such strategies hinder capital formation, limit productivity growth and may result in a "poverty trap" (Carter, 2008)[59]. The absence of insurance has also been shown to cause businesses and farmers tend to accept low returns by engaging in low-risk and low-return activities (Dercon & Christiaensen, 2007). Conversely, studies have shown[60] that insurance allows and incentivises businesses and farmers to make riskier investments and to focus their efforts on higher-yielding and/or more specialised activities. Insurance furthermore opens up business opportunities otherwise considered too risky. It facilitates trade and access to credit by securing transactions through products such as product liability insurance, and

[56] See Jain & Hall (2012), Radcliffe & Voorhies (2012), and Jain, et al. (2014).
[57] See Bagehot (1873), Schumpeter (1934), Gurley and Shaw (1955), Goldsmith (1969), McKinnon (1973), and Levine (2005).
[58] See Braucher (2006) and Gloukoviezoff (2006).
[59] See Janzen & Carter (2013) for a discussion on the literature.
[60] See, for example, Dercon (1996), Hill (2009) and Morduch (1991).

insurance products against political[61] or trade risks, which reduce the costs of doing business (Lester, 2014)[62].

Insurance also enables access to critical services, including healthcare, credit for MSMEs and businesses, and legal services, which would otherwise not have been available. Insurance, for example, contributes to the development of the health services sector by guaranteeing payment for services, thereby making timely and quality healthcare viable [A2ii (2014); Liedtke (2007); Lester (2014)].

Moreover, at the macro level insurers are often the largest institutional investors in a country and, particularly in developing markets, the only domestic source of longer-term capital (Kong & Singh, 2005). This role has been emphasised by various organisations such as the Organisation for Economic Co-Operation and Development (OECD), the World Bank, and the International Monetary Fund (IMF) (OECD, 2014).

From both a microeconomic and a macroeconomic perspective, it is therefore important to unpack the key drivers of the insurance market in order to identify the gaps and opportunities for extending the reach of the market.

[61] The political risks covered frequently include (i) losses caused by currency transfer restrictions, (ii) confiscation, expropriation and nationalization of property or funds, and (iii) losses caused by war, civil disturbance or terrorism. An example of the use of political risk insurance that has recently become more common is the securitisation of debt used in capital market financing for infrastructure projects.

[62] Liedtke (2007) argues that we can easily identify numerous instances of economic activity that would not occur in the absence of insurance: for example, many ships would not leave the harbour uninsured, trucks would not depart to deliver cargo, and contracts would not be signed to secure high-value deals, particularly with respect to real estate or infrastructure projects.

Annexure B: Consumer statistics

The following table and graph provide further insight in the life of Malagasy citizens. Table 14 shows the majority of adults divided by their main source of income. This segmentation allows for the differentiation between different target markets and the different realities that these target markets face. Figure 24 provides an overview over the access strands by target market based on FinScope (2016) data.

Table 14.

	MSMEs	Formally employed	Informally employed	Smallholder farmers	Subsistence farmers	Depen-dents	Total
Number of adults	1,927,788	1,282,939	923,634	2,358,583	2,767,157	1,773,206	11,324,760
% of adults	17%	12%	8%	21%	25%	16%	100%
% female	64%	36%	53%	43%	48%	69%	52%
Median monthly income (MGA)	MGA 120,000	MGA 150,000	MGA 48,000	MGA 60,000	MGA 50,000	MGA 70,000	MGA 70,000
Median monthly income (USD)	USD 40	USD 50	USD 16	USD 20	USD 17	USD 23	USD 23
% with less than USD 1 per day	33%	23%	64%	54%	59%	45%	47%
% with >1 income source	44%	36%	40%	36%	39%	22%	36%
% of rural	56%	47%	75%	93%	93%	50%	73%
% younger than 30 years	31%	34%	38%	36%	33%	56%	38%
% with primary education or less	45%	27%	64%	73%	75%	37%	57%
% use mobile phone	63%	74%	39%	29%	22%	62%	35%
% heard of mobile money	83%	92%	69%	59%	50%	81%	69%
% use mobile money	22%	23%	11%	6%	4%	19%	13%

Target market statistics

Source: FinScope (2016)

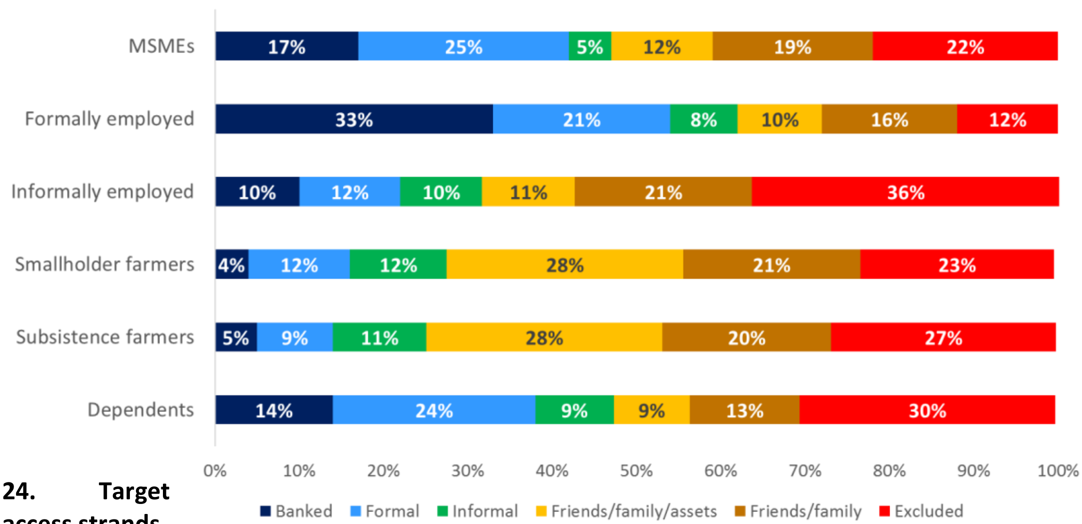

Figure 24. Target market access strands

Source: FinScope (2016)

Annexure C: Regulatory overview

This annexure provides an overview of the Malagasy legal system as it pertains to financial services. The overview is split into two parts:

- **Context**: An overview of the Malagasy legal system.
- **Regulatory framework:** A summary overview of the financial sector laws in Madagascar, as well as an analysis of the key provisions of each.

C.1. Context of the Malagasy legal system

Civil law system. Madagascar has a civil law legal system. This implies that, unless an activity is explicitly prohibited, it is implicitly allowed. Such a system requires extensive legislative frameworks to ensure a well-functioning market, but may also be conducive to market innovation.

A turbulent legal history. The Malagasy legal system has seen a number of changes over the past three decades, with the latest changes to the constitution coming about in 2010. Throughout these changes, successive regimes consistently removed safeguards to power to subject both the legislature as well as the judiciary to increasing pressure and oversight by the executive. This has taken many forms, such as the ability of the executive to dissolve the national assembly as well as to appoint a third of the judges to the constitutional court without ratification being required by the legislature[63].

Trust in the law a challenge. As discussed in the main text, the Malagasy judiciary faces challenges. A Transparency International report (2015) indicated that one in two Malagasy do not believe in the integrity of magistrates and judges.

Under-resourced legal system. These challenges have been compounded by severe human and financial resource constraints[64]. Only 659 advocates are practicing in Madagascar, 460 of which are in Antananarivo, and only 884 Magistrates were registered with the Syndicate of Magistrates in Madagascar[65] in 2016. Between them, these two professions are the only legally recognised recourse to justice for Malagasy citizens.

Traditional law principal source of justice for many. Driven by the resource constraints and lack of trust in the formal system, many individuals approach traditional courts for enforcement based on local or customary law (or *dina*). Rulings issued by a customary court have no legal standing. They may however be legitimised in a magistrate's court[66]. This legitimisation allows for formal legal protection under the constitution and the judiciary and opens the ruling up to the usual appeals process[67]. Even though most rulings are legally invalid, customary courts rule on both civil and criminal matters on the basis of the *dina.* These rulings have often been severe, including rulings on capital punishment[68].

[63] https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/87885/100324/F1780692018/Madagascar,%20Constitution%20de%20la%20IVe%20Republique%202010.pdf
[64] https://freedomhouse.org/report/freedom-world/2016/madagascar
[65] http://www.midi-madagasikara.mg/politique/2016/12/09/fanirisoa-ernaivo-premiere-femme-a-tete-smm/
[66] http://tropicalconservationscience.mongabay.com/content/v3/10-12-20_447-472_Andriamalala_&_Gardner.pdf
[67] http://tropicalconservationscience.mongabay.com/content/v3/10-12-20_447-472_Andriamalala_&_Gardner.pdf
[68] http://www.nyulawglobal.org/globalex/Madagascar1.html

Dina main recourse channel for informal financial services. The *dina* may be the only recourse that informal financial services users have, yet rulings appealed here may face severe challenges in the formal legal system

C.2. The legislative and regulatory environment for financial services in Madagascar

Legislation well written, but some gaps, inconsistent implementation. High quality legislation is essential to the provision of financial services. The legislation and regulations analysed for MAP, particularly from financial services specific entities such as the CSBF and Ministry of Finance, are generally well drafted. These pertain largely to prudential supervision and, as a result, financial institutions, particularly the large banks, are largely sound and well capitalised. See Annexure D: Prudential requirements for an overview of prudential requirements applicable to various types of financial institutions in Madagascar. Nonetheless, some legislative and regulatory challenges remain[69] and the market is at times unaware of the latest regulations and legislation[70].

The main regulatory authorities and areas of legislation were introduced in Section 2.4, Table 2. Below, we outline the key features of the following laws and regulatory frameworks relevant for financial services provision:

- The Central Bank law
- The Credit Establishments law
- The Microfinance law
- The Anti-Money Laundering law
- The CEM law
- The Electronic Signatures law
- The Consumer Protection law and related regulatory provisions
- The Electronic Money law
- Insurance law

C.2.1. The Central Bank law

Overview

The Central Bank law establishes the Central Bank of Madagascar. The mission of the bank is to protect the value of the national currency and it is given full policy independence to pursue any monetary policy that it deems fit to pursue this objective.

The Central Bank also holds accounts of banks and financial establishments. It fixes the interest rates that it pays for positive balances in these accounts and this constitutes one of the principal monetary policy tools at its disposal. The Bank may also intervene in the government bond market by conducting open market transactions with banks and other credit establishments.

[69] For example, regarding consumer protection and AML/CFT legislation. The prior is too broad to be applied to financial services directly in the absence of dedicated regulations. The latter suffers from legislative inflexibility whereby the limits defined within the legislation cannot be amended in regulation and will, eventually, require legislative amendment to ensure that they do not become constraints to economic growth.

[70] For example, anecdotes were recounted in the consultations of insurers applying electronic contracting, but consumers then being penalised by roadside police for not having hard copy vehicle insurance certificates.

The Central Bank has two powers that are specifically relevant to financial inclusion. These pertain to credit extension and payment systems:

- In the case of credit, the bank may set general conditions that govern the extension of credit by any credit establishment.
- As for payments, the bank is charged with the oversight of the national payments system. It can create and house any part of the payments system itself. It may change and wind down any or all the system by instruction. Any banking or financial establishment that has a relationship with the central bank may adhere to the system.

Beyond these mandates, the Central Bank also exercises considerable control over foreign exchange activities in line with its currency protection mandate. It is permitted to give any instruction and require any information pertaining to foreign exchange in Madagascar. As such, it supervises all foreign exchange activities conducted by any credit establishment.

C.2.2. The credit establishments law

Overview

The credit establishments law is the foundation of the financial sector in Madagascar. It is the source in law for several important concepts and entities, most notably:

- Credit establishments
- Banking operations and;
- Activities attached to banking operations;
- *Commission de Supervision Bancaire et Financiere* (CSBF)
- The professional association of banks.

The first crucial provision is the definition of a **credit establishment**. This is defined as "Organisms that:

- Habitually conduct banking operations;
- Manage third party portfolios and securities and receive funds with a management mandate; or
- Compete in the securities market.

The law goes further to elaborate that **banking operations** include the receipt of funds from the public; the extension of credit; and/or the making available, or managing of payment means. These definitions are crucial since no entity, other than those which have been granted approval by the CSBF, may *habitually* conduct banking operations, which include deposit-taking, credit provision and payment service[71].

Public funds in Madagascar (**collection of deposits**) are those funds that are received from the public, whether that person be a legal or natural person. The ownership of these funds transfers to the bank that obtains the right to dispose of these funds on its own account. The bank however remains under obligation to refund these funds[72]. Certain, limited exceptions to this definition are applied. An

[71] As such, most informal financial services in Madagascar, including informal savings groups, appear to be running afoul of the credit establishments law and/or microfinance law. Mobile money operators do not have a banking license (they are operating under an exemption until the electronic money licensing come into effect. However, they operate on the basis of trust accounts at the banks, which means that mobile money transactions are backed by a bank account.
[72] See article 4 of the Law 95-030.

example is when firms retain or receive some of the earnings from their employees, but do not become the owner of the funds to dispose of for their own account.

Credit operations are broadly defined as an activity whereby a legal or natural person puts, or promises to put, funds at the disposition of another, or takes interest in this activity by a signature, a security bond or a guarantee. Hire-purchase agreements are specifically included within this definition[73].

Payment means are considered to be instruments that, whatever the support or technical processes required or used, permit a person to transfer funds. [74]

Credit establishments are authorised in terms of the law to conduct connected activities such as:

- **Exchange operations** as well as the trade in precious metals, subject to any legislative and regulatory activities in place;
- **Renting of a safe**;
- Placement, sale, subscription and management of **securities** as well as all financial products;
- **Advisory services** as well as assistance in inheritance or financial management, and in general, all services required for the creation and development of an enterprise, subject to any legislative requirements that render specific professional activities illegal
- **Lease** assets for movable and immovable goods (for credit establishments that have been specifically authorised to do so).

Implications of the definitions. The definitions discussed above are crucial, as credit establishments may not *habitually* conduct activities other than those that are outlined in the discussions above *unless* the CSBF grants explicit permission as well as sets a maximum limit for these operations.

Furthermore, it is forbidden for any legal or natural person, other than a credit establishment, to conduct banking operations in a *habitual* manner[75]. There are two exceptions to this. The first is for specific entities, notably:

- Insurance and reinsurance entities,
- Social security entities,
- The public treasury,
- The central bank,
- Financial services attached to the Post Office,
- Foreign public financial institutions
- Multilateral institutions that are authorised via treaty.

The second is for specific activities, whereby any enterprise:

- Allows advances or delays of payments in terms of an established contract;
- Concludes a rental agreement with the right of purchase,
- Conducts treasury operations with societies, provided one firm directly or indirectly controls the other.
- Issues short term securities, bonds or bills that are negotiable on a regulated market

[73] See Article 5 of the Law 95-030.
[74] See Article 6 of the Law 95-030.
[75] Banking operations are *by default* disallowed in terms of the credit establishment law for insurers, however the law explicitly allows other laws that govern the activities of insurance entities to permit specific activities that would be considered banking operations. Any insurer that is conducting activities permitted to it in the sense of another law, will not be considered to be running afoul of the credit establishments law.

- Emits a voucher or a card that is delivered specifically for the purpose of facilitating the purchasing of goods or services from the emitter.

Exemptions are also allowed for *credit activities* to non-profit entities that have a social mission to constitute credit to their members (provided the credit is provided from their own proper funding), deferred payments that are conducted *only* as an ancillary activity as well as enterprises that offer advances on the salaries of their employees under exceptional circumstances.

Analysis

Law draws on concepts for flexibility, covers all substantive issues. The credit establishments law in Madagascar is a well drafted law. It addresses the issues that are typically addressed in laws of its kind, such as considerations around stability as well as appropriate regulation of the sector. Inclusion of the term "*habitually"* in many of the activity definitions also allows for some flexibility to entities that conduct activities on an ad-hoc basis that would otherwise be forbidden.

Regulatory authority has sufficient power and a proper mission statement. The law allocates significant power to the industry regulator, the CSBF, in determining the good conduct within the profession as well as the prudential norms that are to be followed by credit establishments. Specifically, the ability of the CSBF to allow credit establishments to conduct activities outside those that are defined within the legislation, subject to straight oversight, it allows for significant flexibility of the financial sector and prevents the legislation from being unnecessarily constrictive.

The flexibility outlined above is important, as legislative amendments can often take several years to make their way through the legislature. In this sense, Madagascar presents a prime example of well drafted laws.

Despite well written law, some gaps remain. Whilst the law is well drafted and the regulation adequate, the law is mute on issues of consumer protection. A future amendment to this law that allows for a consumer protection and market conduct angle as a specific mandate to the CSBF should be considered. This specific mandate would ensure that the entities governed by the CSBF, which constitute the majority of players in the financial services space, would conduct themselves in a manner conducive to the wellbeing of their consumers.

C.2.3. The microfinance law

Overview

The microfinance law was passed in 2005. Its introduction changed the regulatory regime of microfinance institutions such as OTIV and CEFOR that were functioning in Madagascar at the time. The new law placed microfinance activities under the purview of the CSBF and also amended the credit establishments law to specifically allow for MFIs to be classified as credit establishments.

The microfinance law defines microfinance as the habitual supply of financial services in locations of physical or moral persons that do not generally have access to the traditional banking system. These activities are necessary to augment or support the development of this population. Thus MFIs' mandate is per definition to serve underserved locations, rather than being defined by types of activities rendered.

The activities of microfinance institutions are split into three categories: Credit activities, savings activities and activities connected to microfinance. Credit activities are defined in the same way in the banking law and therefore no further discussion is given here.

Savings are defined as funds received from their members, in the form of deposits, other than capital, fees and contributions. The microfinance institution has the right to dispose of those funds for its own account, but remains under the obligation to return the funds to their owner. In this sense, the savings definition is identical the definition of funds received from the public in the credit establishments law. Notable exemptions are made for what is not considered savings:

- **Mandatory deposits** required for credit-extension
- **Guarantee deposits**. These funds are deposited by a client only after a credit extension decision;
- **Credit funds**. Funds made available to the institution with the purpose of being extended as credit.

Services connected to microfinance include:

- **Internal transfers** on behalf of the clientele, conducted within a microfinance institution or within its network or federation.
- **Rental of a safe**;
- **Advice and training**;
- **Funds transfer**, not in foreign currency, with credit establishments permitted to undertake these operations in Madagascar

The law requires that MFIs in Madagascar be classified into one of three categories:

- **Level one MFI:** Level one MFIs may only extend short term micro-credit and may not collect savings from the public. In terms of connected activities, they may only conduct training. They are unsupervised in that they are not required to submit returns. However, they are required to declare their existence to the CSBF and to obtain a license to operate.
- **Level two MFI:** They may collect savings as well as extend short and medium-term credit. They may also conduct any activity related to microfinance defined above.
- **Level three MFI**: Have the same abilities as a level two MFIs, but may also extend long term credit.

Level two and three MFIs are required to follow prudential norms. However, the CSBF is given a broad remit to define what these norms should be. Wherever the CSBF does not have power over a specific prudential requirement, these are set by decree. Furthermore, what is considered as short, medium and long term credit is defined by the CSBF.

Microfinance institutions in Madagascar can be either mutualist or non-mutualist. Mutualist MFIs are only allowed to collect savings and extend credit to their members, where non-mutualist MFIs may also have business relationships with non-members. Only mutualist MFIs are expressly permitted in terms of the law to group themselves into superstructures called unions. These unions, in turn, may regroup themselves into a federation.

When a union or federation is formed, the accounts of the microfinance institutions are consolidated. This process is overseen by the CSBF that issues instructions on how exactly this is to take place. The reading of the law suggests that unions and federations are liable for each other's financial activities. In this sense, microfinance institutions can be said to provide some limited form of private deposit insurance to clients as these clients have potential recourse to the other institutions within the network.

The union or federation is charged, in terms of the law, with the oversight of the members that constitute it. Unions or federations are also required to provide assistance to their member MFIs or unions, in order to ensure that they remain functional and stable. This extends to direct financial assistance to any of the members that require it, but within the limits authorised by the CSBF.

The law does not discuss forbidden activities at length, but articles 75-77 are worth mentioning. Read together, they prohibit MFIs from undertaking any operations in foreign currency or to finance any international commerce. Furthermore, any entity that conducts the business of an MFI as defined above without authorisation will be penalised. Finally, any microfinance institution that operates outside of the instructions issued by the CSBF will be penalised.

Analysis

High quality law covering all substantive issues. The microfinance law is of a high quality. Notably, it has significant flexibility built in via the use of the concept of a *habitual* activity to demarcate who is and is not subject to the law. Furthermore, the CSBF is given a broad mandate to define prudential and conduct norms for the profession. This extends to the ability of the CSBF to determine what is considered as a short, medium and long-term loan.

Proper proportionate principles. The way that MFIs of different levels are regulated is conducive to the development of this sector. The fact that MFIs of level one, which are not deposit-taking, are not subject to prudential requirements is in line with best practice insofar these pose little-to-no systemic risk to the profession. The regulatory framework created for MFIs of level two and three is proportionate and adequately manages the stability risk of these institutions without contributing additional stability risks.

Networks and federations a welcome innovation. The innovative way in which microfinance institutions can group together to form networks or federations is of particular note. This approach allows them to extend their footprint and deepen access to the individuals they serve by providing, for example, a legal foundation for payment services that are effected by other entities. It also allows individuals to access their savings at more locations. The flexibility of the law is once again noticed, insofar as the CSBF is given a broad mandate to specify exactly how the union and federation is to be set up and to go about its activities. This ensures that the benefits of the federation and union do not present a systemic risk to the system, provided the CSBF proactively and effectively regulates any risks that do arise.

C.2.4. Anti-money laundering law

Overview

The anti-money laundering legislation lays out a number of important concepts, rules and limitations. The law furthermore gives the authority to government to create, via decree, the authority that receives, analyses and deals with all declarations made by institutions within Madagascar in terms of the current law.

Cash payments that exceed MGA 10 million are forbidden[76] and transfers abroad of more than MGA 6 million must be conducted via a credit establishment or a financial institution, or by their

[76] See Article 4 of the Law 20 of 2005. Note that the only exemption to this article is by decree and whenever a payment is done that operates under this exemption, the identity and all other operational information must be reported to SAMIFIN.

intermediaries[77]. Financial institutions, including credit establishments, must report any suspicious[78] transaction that exceeds MGA 50 million.

Simplified KYC requirements, requiring only a valid identification document, are only available if the client is an occasional client and the transaction amount is known and does not exceed MGA 3 million.

Normal KYC requirements apply for all transactions above these limits and consist of:

- The verification of the identity of the client, via an official, valid photographic ID.
- The verification of the address of the client.

Copies of the above documentation, as well as all supporting documents for suspicious transactions, must be preserved for at least five years.

In terms of any physical foreign currency exchange, any person that engages in these activities must declare their activities to the Ministry of Finance as well as the CSBF. They must furthermore identify their customers before engaging in any exchange activities exceeding MGA 3 million and the documentation must be stored for at least five years. These documents must be recorded in a systemic manner and reported to the responsible authorities.

All individuals, whether moral or physical, are required to report all transactions that appear to result as the product of a crime[79]. The obligation to report exists regardless of whether or not it was possible to prevent the transaction or whether or not the suspicions resulted before or after the transaction. All information in relation to the suspect transaction must also be shared, whether this supports or diminishes the suspicions.

Any person that makes a declaration regarding a suspicious transaction outlined above is protected from all civil or criminal liability provided the declaration was made in good faith and the framework outlined in this law. Professional secrets are specifically dealt with and any person can raise a statutory defence in terms of the current law to any action taken on the basis of breach of professional secrecy. Any resulting damages based on a good faith declaration that are unfounded will be covered by the state.

Any money-laundered transactions that are completed, except in the case of fraud, will not result in any criminal prosecution of any financial sector professional if the declarations were made in a manner consistent with the current law.

Analysis

Lowered KYC requirement for low income individuals. The AML legislation in Madagascar allows for the fact that few low-income individuals have access to address verification documents. It explicitly allows for lowered KYC requirements to cater to those customers that engage only occasionally with the financial sector. However, there is an absolute barrier to the uptake of account based financial services for those without the requisite documents.

[77] See Article 5 of the law 20 of 2005. This limit may be modified by a government decree.
[78] Suspicious here is a simplification for the purposes of the discussion. In the original law it includes “in conditions of inhabitual complexity, or in an unjustified manner, or it does not appear to have an economic justification, or does not appear to have a lawful origin”
[79] The product of a crime is defined broadly for the purposes of the current law as “any good or economic benefit that is the result, both directly or indirectly, of a delict or a crime”.

Inflexible legislation may become problematic. The principle constraint within the legislation pertains to the fact that the law has fixed limits set within it. It does not provide for any manner by which these limits may be amended by any regulatory authority, such as SAMIFIN or the Minister responsible for the sector. Whilst these limits do not, as of present, present challenges to financial inclusion, they may present such challenges in the future.

Identity of whistle-blowers not protected. The legislation provides comprehensive protection to whistle-blowers from criminal and civil prosecution, but it does not provide any protection in terms of privacy. Often the reputational damage to whistle-blowers can be prohibitive and result in situations where these are reluctant to come forward. Amendments to ensure the protection of the identity of whistle-blowers would go a long way in reducing this disincentive.

C.2.5. CEM Law

Overview

Law 2001-001 of 23 May 2001 repeals the previous law governing CEM (law 95-019 of 18 September 1995) in its entirety. It has three articles, whereby the CEM is created as a company (*Societe anonyme*) with the state as the majority shareholder. The law also grants broad regulatory authority in terms of how the law is to be applied, however it does not specify who this authority will be.

Decree 1553 of 2002 consists of seven articles and is the legal basis for the functioning of CEM. It grants authority to the relevant ministries to appoint the management of CEM and empowers these to oversee it. Subsequent regulations have been passed, however none that have been identified pertain directly to the prudential requirements of CEM.

Analysis

CEM appears to be a credit establishment in the eyes of the law. From the discussion of the credit establishments law above, CEM conducts the business of a credit establishment. CEM furthermore does not qualify for any of the exemptions outlined in the credit establishments law[80]. Therefore, CEM is *de jure* subject to the oversight of the CSBF, would require a licence from the CSBF to operate, and may be bound by any regulations it issues.

No clarity on regulatory oversight. The law is vague in terms of who the regulatory authority is that oversees CEM. It may be argued that the decree issued is *ultra vires* as the legislation upon which it is based is vague. The law and current decree furthermore do not outline the principles that CEM is to follow and the functions that it is to fulfil in Malagasy society. There is therefore no legal accountability in legislation or regulation for the activities of the firm.

C.2.6. Electronic signatures law

A simple, yet sufficient law to regularise electronic signatures. Law 25 of 2014 is the basis of electronic signatures. The law is brief but fundamental in creating the foundation upon which electronic signatures may take place *in lieu* of physical signatures. This law enables financial service providers to enter into electronic contracts.

[80] See Article 2 of Law 030 of 1995.

C.2.7. Consumer protection framework

Three laws relate to consumer protection within the financial services space. The first is a general law which sets out the principles of consumer protection for all goods and services. The second is the law against cyber-criminality and the third is the law on the protection of personal information.

Consumer protection law

The consumer protection law confers a number of rights on all residents in the national territory. One of the most important is the right to competitive and fair prices[81]. How exactly a fair price is determined is not specified in the law, with the law stating only that this will be done by the laws of supply and demand[82]. The Ministry of Commerce is, however, granted broad powers to issue regulations regarding how the law is to be applied.

Beyond these general principles, the only mention of specific financial services related consumer protection measures are those pertaining to credit, whereby credit provision is subject to current and in-force regulation[83]. *De jure,* this implies that credit would be legally capped at 6% interest rate per annum as per ordonnance 62 of 1962. *De facto,* providers simply ignore the limit. Whether or not the ordonnance is still in force after the enactment of the Consumer Protection Law has not been tested in court.

Abusive contracts are dealt with in the law. These are defined as contracts that contain abusive clauses that create, to the detriment of a person that is not a professional of that sector, a significant disequilibrium between rights and obligations of the contracting parties[84]. No further specification is given of the definitions of the terms used in this discussion. However, the Ministry of Commerce is empowered to pass regulation to clarify the meaning.

The law grants government specific regulatory powers. These include the ability to create associations that are responsible for the defence of consumer rights[85]. However, these would be limited in their ability to protect rights insofar as they would be required to pass via the judiciary and motivate for criminal penalties under the current law.

Government is furthermore allowed to, via regulation, dictate the required information that must be displayed and provided to consumers. To date, these regulations have not been issued or, if they have, are not readily available and are not followed by financial services providers.

Infractions in terms of the current law are primarily dealt with in terms of *process verbaux,* or written proceedings. The infractions are acted on by either government or the judiciary, or both. The minister responsible for commerce may issue several temporary penalties, such as the suspension of any professional licenses, as well as monetary penalties, whilst the justice authorities may impose criminal penalties.

Cybercrime law

The law on cybercriminality is broad, criminalising the use of Information and Communications Technology (ICT) to conduct various activities. It expressly criminalises various actions, ranging from

[81] See Article 3 of Law 014 of 2015
[82] See article 14 of Law 014 of 2015. Note, as discussed below, that no consumer protection authority within financial services is established in terms of the law to issue such regulations thus the article *prima facie* moot.
[83] See article 37 on Law 014 of 2015.
[84] See article 43 of Law 014 of 2015.
[85] See Article 46 of Law 19 of 2014

the slander of public officials through to the production of offensive materials. For the purposes of this discussion, there are a few points within this law that are worth mentioning. The first is the criminalisation of any illegal acts committed via the use of ICT[86]. The second is the express provision that renders identity theft using electronic means illegal[87]. The third is the broad obligations it places on any telecommunications or communications firm to render the traffic passing on its networks anonymous[88]. The most notable implication is that under no circumstances the content of the messages may be stored.

Data protection law

The law on data protection applies to all personal data apart from journalism and activities that are exclusively personal. Personal data is defined as any data that allows identification of an individual either directly or indirectly[89]. This broad definition certainly extends to activities conducted by financial services providers.

In terms of the law, individuals are awarded broad rights with regards to their data. Consumers may request a copy of all personal data that is held on them, free of charge, by approaching the concerned data processor[90]. They may also request amendments or deletions of any data that is not precise, complete or permitted. Penalties are prescribed for any data processor that does not comply with such requests[91].

Furthermore, personal data may not be collected without providing a comprehensive declaration to a consumer[92]. When this data is collected, providers are prohibited from sharing this data with third parties without the express consent of consumers. The data may also not be sent offshore to countries that do not possess legislation that awards protections similar, equal or superior to those outlined under Malagasy legislation[93]. Exemptions to this rule exist for specific circumstances only[94]:

- where, after being informed of the lack of protection in the receiving country, the individual consents to their data being shared with an entity in the offshore jurisdiction; or
- to allow for the execution of a contract between the person concerned, the data processor and a third party; or
- where transfer is requited for public interest or for the dispute or defence of a legal claim.

Finally, the law creates a regulator (*Commission Malagasy sur L'informatique et des Libertés*, CMLL) that is charged with the implementation of the law. All data processors are required to register with the CMIL and those that have special risks are required to obtain authorisation prior to their operation. The CMIL has broad powers that include the development and promulgation of regulation that data processors will be required to follow[95].

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[86] See Article 1 of Law 006 of 2014

[87] See Article 19 of Law 006 of 2014.

[88] See article Chapter III of Law 006 of 2014. Note that throughout the chapter there are exemptions provided for particular cases. For example, to enable the good functioning of the network, the identity of particular devices on it may be stored.

[89] See Article 7 of Law 38 of 2014

[90] See Article 23 of Law 38 of 2014. Furthermore note that the only exception, as per Article 24 of the law is in cases where successive and abusive requests are made or where public security is concerned.

[91] See Article 25 of law 38 of 2014.

[92] See Article 27 of Law 38 of 2014

[93] Article 20 of Law 38 of 2014

[94] A comprehensive review is available in Article 20 of law 38 of 2014. Those outlined for the present discussion are the most likely to affect the business of a financial services provider.

[95] In law 38 of 2014, Article 45 creates the obligation to register and during such process to illustrate compliance with the law. Read in conjunction with article 37 on the attributions and article 40 which lays the foundation for legally binding instructions of the CMLL, data

Analysis of consumer protection laws

Malagasy consumers enjoy broad and modern protections in terms of data protection and identity theft issues, with well thought through regulation and an empowered regulator created to oversee this aspect of the law. The provisions pertaining to this are well drafted in principle as they deal with the matters required of such laws without being unduly rigid. This is illustrated by the fact that most protections may be waived by consumers, if the provider has duly informed the consumer of exactly how their data will be used.

The concepts of pricing, transparency and control of predatory behaviour on the part of providers are at the core of effective consumer protection legislation and regulation within a country, particularly as it pertains to financial services. Whilst these issues are dealt with in the consumer protection law, there does not appear to exist an authority that is charged with a consumer protection mandate for financial services. The result is that, whilst the legal authority to set regulations pertaining to issues around pricing and transparency is provided for in the legislation, there exists no authority to identify what such regulation should look like to ensure that financial inclusion does not result in financial exploitation. The result is that financial services providers are required to adhere to general regulations with regards to consumer protection that may be inadequate.

C.2.8. Electronic money law

Overview

Law 2016-056 on electronic money and electronic money establishments 2016-056 ratified by Parliament in 2016 and promulgated in 2017. As such, the law was still relatively new at the time of writing and the subordinate regulation to give meaning to the law has not yet been promulgated.

The law defines **electronic money** as fiduciary money held in trust, against which electronic monetary value exists, and an electronic money emitter (EME) as an entity that provides electronic money. Electronic money may take the form of a card, value held on a mobile phone, or online. The electronic value, or electronic money, may be accepted by other entities in exchange for payments. The definition is important since it does not allow for electronic money providers to dispose of the funds for their own account, as is the case in the banking and microfinance law, but rather EMEs must hold the funds received from clients in a trust account. This point is further reinforced as the law expressly prohibits electronic money emitters from receiving deposits as defined in the credit establishments law.

Electronic money emitters are also prohibited from conducting specific activities by law. These include:

- Extending credit
- Granting or charging interest on any electronic money that is issued
- Creating the belief that the electronic money may be considered as deposits or savings in terms of the credit establishment or microfinance laws.

processors must *by extension* comply with all regulation issued by the CMLL. Article 46 contains the obligation to obtain permission in terms of specific risks and this permission must be indicated prior to the commencement of activities.

The EME may be exempted from the last point, upon authorisation of the CSBF, where EMEs have partnered with credit establishments linked to the products provided by the credit establishment. As such, the CSBF is the principle regulatory authority for electronic money in Madagascar.

The trust account of electronic money providers has several specific clauses that protect it. Firstly, EMEs are required by law to protect against the risk of failure of a credit establishment by placing their trust account with several credit establishments, thereby reducing risk. Secondly, the trust account is comprehensively protected against the creditors of the electronic money provider, but not against those of the credit establishment that holds the account. Creditors of customers are able to claim from the trust account held at a credit establishment, but only up to the limit of the electronic money that the customer was entitled to. Thirdly, the value of the trust account and the value of electronic money in circulation must always balance.

In terms of the relationship with the customer, EMEs are expressly allowed to leverage electronic contracts and these contracts will be governed by the law of electronic contracts. The customer is given the right to access the funds stored in his or her account at all times. Customers also have the right to access electronic money and if several providers have refused to provide a customer with electronic money, they may approach the CSBF which will designate a specific provider that will be required to open an electronic money account for the customer.

All merchants with more than a specific turnover per year, which shall be set by regulation, are required to accept electronic money. Failure to comply with this requirement may result in stiff penalties for every day that the merchant does not comply. The only exemption that exists is where technological considerations are such that they prohibit the merchant from being able to accept electronic money.

Finally, the electronic money law addresses the topic of agency. The CSBF shall set the criteria required for consideration as an electronic money agent. The CSBF shall also verify contracts that are extended to agents prior to any contract entering into force. If no protests exist, an agent may be appointed to undertake the business of an EME on their behalf. Importantly, EME must comply with all AML/CFT laws in force and legally takes responsibility for the actions of its agents. As such, it is required to periodically follow up on agent activities.

Analysis

Limited ringfencing of clients' funds. The law grants EME trust accounts extensive protection from the EME's creditors and prescribes numerous actions an EME must take to actively manage its trust account risk. However, it is necessary to strengthen this protection at the level of the credit institution by explicit provisions against the creditors of the credit establishment with which the trust account is held, should such credit establishment collapse.

Regulations required to give effect to framework. The regulations specifying how the law will be applied are not yet in place. These regulations are necessary to allow market players to effectively leverage the provisions in the new law, including around agency. In the meantime, mobile money providers function in a regulatory grey space, under regulations issued before the passage of the law.

C.2.9. Insurance law

The insurance law in Madagascar was passed in 1999. It applies to all insurance activities conducted in the national territory. The law, in its entirety, does however not apply to reinsurance activities.

These are governed in terms of the general law of contract in Madagascar. As such the insurance law is effectively a *retail* insurance law.

The definition of an insurance contract is any contract whereby one party promises remuneration for a beneficiary or a third party upon the realisation of a risk, in line with the laws of statistics. The law sets out specific requirements that must be followed for a contract to be valid and outlines the principles that must be followed by consumers when declaring their risks before entering into a contract.

The law prescribes certain indiginisation requirements. It is explicitly forbidden to subscribe to any foreign insurance that covers a person (with resident status) or business that is located in Madagascar (Article 192). The law also requires that all insurance firms must have sufficient capital and reserves in order to cover its activities and mandates that these must be kept in Madagascar.

The law sets the Ministry of Finance up as the central authority to regulate insurance. It has authority over minimum capital requirements, licensing as well as product approval. The Ministry is mandated to ensure the stability of the insurance sector as well as to ensure that all of the requirements in terms of legislation and regulation are respected. In order to conduct its functions, it is given significant investigative power.

Annexure D: Prudential requirements

This annex contains an overview of parameters within the regulation that pertain to financial inclusion. It provides the key requirements for entry, and key activities and limits allowed to various credit establishments. It is not meant as an exhaustive list of prudential and market conduct requirements, and does not treat issues such as risk ratios, which are outlined in great length in the regulations in Madagascar. Further information and analysis which is too cumbersome to present here, such as a comprehensive matrix of laws and regulations that apply to each type of institution, is available on the author's website.

<table>
<tr><th colspan="2" rowspan="2"></th><th colspan="2">Credit establishment</th><th colspan="3" rowspan="2">MFI1</th><th colspan="3" rowspan="2">MFI2</th><th colspan="2" rowspan="2">MFI3</th><th rowspan="2">Financial establishment</th><th rowspan="2">Specialised financial institution</th></tr>
<tr><th>Territorial bank</th><th>Non-territorial bank</th></tr>
<tr><td rowspan="3">Minimum capital required on date of incorporation</td><td rowspan="2">Mutualist</td><td colspan="2" rowspan="3">MGA 3 bn (USD 100 m)</td><td colspan="3" rowspan="3">MGA 0</td><td>"mutualiste de base"</td><td>Union</td><td>Federation</td><td colspan="2" rowspan="2">MGA 300 m (USD 100 k)</td><td rowspan="3">MGA 1 bn (USD 333 k)</td><td rowspan="3">MGA 3 bn (USD 100 m)</td></tr>
<tr><td>MGA 15 m (USD 5 k)</td><td>MGA 500 m (USD 166 k)</td><td>MGA 1 bn (USD 333 k)</td></tr>
<tr><td>Non mutualist</td><td colspan="3">60-200 million AR depending on legal form</td><td colspan="2">MGA 700 m (USD 233 k)</td></tr>
<tr><td rowspan="2">Minimum nominal value of shares</td><td>Mutualist</td><td colspan="2" rowspan="2">MGA 20 k (USD 7)</td><td colspan="3" rowspan="2"></td><td colspan="3" rowspan="2">MGA 5 k (USD 2) for cooperatives</td><td colspan="2" rowspan="2">MGA 20 k (USD 7) for cooperatives</td><td rowspan="2">MGA 20 k (USD 7)</td><td rowspan="2">MGA 20 k (USD 7)</td></tr>
<tr><td>Non mutualist</td></tr>
<tr><td rowspan="2">Minimum solvency ratio</td><td>Mutualist</td><td colspan="2" rowspan="2">8%</td><td colspan="3" rowspan="2"></td><td colspan="3" rowspan="2">15%</td><td colspan="2" rowspan="2">12%</td><td></td><td></td></tr>
<tr><td>Non mutualist</td><td></td><td></td></tr>
<tr><td>Maximum amount of risk incurred on one beneficiary</td><td>Mutualist</td><td></td><td></td><td colspan="3"></td><td colspan="3">10% of available own funds (fonds propres disponibles)</td><td colspan="2">10% of available own funds (fonds propres disponibles)</td><td></td><td></td></tr>
<tr><td rowspan="2">Operational limits: credit</td><td>Mutualist</td><td></td><td></td><td rowspan="2">Can only extend short term credit</td><td rowspan="2">Max. credit to an individual: MGA 6 m (USD 2 k)</td><td rowspan="2">Max. credit to credit group: MGA 24 m (USD 8 k)</td><td colspan="3" rowspan="2">Can provide short- and medium-term loans, including lease-purchase/leasing (le crédit-bail)</td><td colspan="2" rowspan="2">Can provide short-, medium- and long-term loans, including lease-purchase/leasing (le crédit-bail)</td><td></td><td></td></tr>
<tr><td>Non mutualist</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Operational limits: savings/deposit</td><td>Mutualist</td><td></td><td></td><td>May receive guarantee deposits linked to the credits defined in the glossary</td><td colspan="2">May collect the savings of their members, as defined in the glossary, without exceeding MGA 1 m (USD 333) per member</td><td>Can collect only the savings of their members</td><td>May receive term deposits from other MFIs and other bodies (subject to prior authorisation of the CSBF)</td><td></td><td>Can collect only the savings of their members</td><td>May receive term deposits from other MFIs and other bodies (subject to prior authorization of the CSBFs</td><td></td><td></td></tr>
<tr><td>Non mutualist</td><td></td><td></td><td>May receive mandatory deposits or guarantee deposits linked to the credits defined in the glossary</td><td colspan="2">Cannot collect public deposits, as defined in the glossary</td><td colspan="2">Authorised to collect public deposits when:
- they are incorporated as a société anonyme with several shareholders
- they have the minimum capital legally required</td><td>May collect the deposits of other MFIs with prior authorisation from the CSBF</td><td>Authorised to collect public deposits when:
- they are incorporated as a société anonyme with several shareholders
- they have the minimum capital legally required</td><td>May collect the deposits of other MFIs with prior authorisation from the CSBF</td><td></td><td></td></tr>
<tr><td rowspan="2">Reserve requirement ratio</td><td>Mutualist</td><td rowspan="2">13%</td><td rowspan="2">Not applicable (non present)</td><td colspan="3"></td><td></td><td></td><td></td><td></td><td rowspan="2"></td><td></td><td></td></tr>
<tr><td>Non mutualist</td><td colspan="3"></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Annexure E: List of consultations

Access Banque

Autorité de Régulation des Technologies de Communication (ARTEC)

Agence Française de Développement (AFD)

Airtel Money

Association de Développement et d'Entraide Fitsimbinana

Association Professionnelle des Banques (A.P.B)

Association Professionnelle des Institutions de Microfinance (APIMF)

Assurance ARO

Bank of Africa (BOA)

MadagascarBanky Foiben'i Madagasikara (BFM)

Banque Nationale d'Investissement (BNI)

Brink's Madagascar

Bureau Indépendant Anti-Corruption (BIANCO)

Caisse d'Épargne de Madagascar (CEM)

Caisse Nationale de Prévoyance Sociale (CNAPS)

Caisses d'Épargne et de Crédit Agricole Mutuels (CECAM)

Catholic Relief Services (CRS)

Commission de Supervision Bancaire et Financiere (CSBF)

Coordination Nationale de la Finance Inclusive (CNFI)

Crédit-Épargne et Formation (CEFOR)

CSO: ROHY

European Union

Fonds de Garantie Malgache (FDGM)

Former Minister of Justice

Groupement des Entreprises de Madagascar (GEM)

International Fund for Agricultural Development (IFAD)

Microcred

Ministry of Agriculture and Livestock: Direction d'Appui aux Organisations Professionnelles du Monde Rural (DAOPMR)

Ministry of Economy and Planning

Ministry of Finance and Budget: Service de Contrôle des Assurances

Ministry of Finance: Treasury Department

Orange Money Madagascar

OTIV Antananarivo (OTIV Tana)

Paositra Malagasy (PAOMA)

Première Agence de Micro Finance (PAMF)

Programme d’Appui à l’Emploi et à l’Intégration Régionale (PROCOM)

Service de renseignement Financier (SAMIFIN)

SOLIDIS

Telma

United Nations Development Program (UNDP)

University of Antananarivo Department of Economics

World Bank

Annexure F: List of laws and regulations

List of laws referred to in text	Referred to as
Order 62-016 of 10 AUGUST 1962 establishing the rate of legal interest and the maximum rate of conventional interest, loan regulation and control of usury	Usury Law
Law 68-023 of 17 December 1968 establishing a pension scheme and creating the Caisse Nationale de Prévoyance Sociale (CNAPS, the national social welfare fund)	CNAPS Law
Law 95-019 establishing the constitution of the public company Caisse d'Épargne de Madagascar (CEM)	CEM Law
Law 95-030 relative to the activities and control of credit establishments	Credit Establishments Law
Insurance Code applicable to Madagascar Law 99 013 of 02 August 1999	Insurance Code or Insurance Law
Law 2003-044 concerning the Labour Code	Labour Code
Law 2004-020 on laundering, tracing, confiscation and international cooperation with regard to the proceeds from crime	AML Law
Law 2004-030 of 09 September 2004 on the fight against corruption	Anti-Corruption Law
Law 2005-016 of 29 September 2005 on the activity and supervision of microfinance institutions	Microfinance Law
Law 2014-006 on the fight against cybercrime	Cybercrime Law
Law 2014-038 on the protection of personal data	Data Protection Laaw
Decree 2014-1003 of 16 July 2014 on the application of Law 99-004 of 21 April 1999 relating to cooperatives	Cooperatives Law
General Code on Taxes (following the Finance Act/Law 2015)	Tax Law/Tax Code
Law 2015-014 on guarantees and consumer protection	Consumer Protection Law
Instruction 001/DSP/16 of 28 April 2016	Closing the manual clearing houses outside Antananarivo and fixing the operating procedures of the manual clearing house located in Antananarivo
Law 2016-056 on electronic money and electronic money institutions	Electronic Money Law

Additional Laws
Ordonnance 60-133 of 03 October 1960 General rules applicable to associations (modified by Ordonnance 75-017 of 13 August 1975)
Decree 60-383 of 05 October 1960 Decree implementing the Associations Ordonnance
Ordonnance 62-078 of 29 September 1962 establishing the National Fund for Family Allowances and Workmen's Compensation
Decree 69-145 of 8 April 1969 establishing the Social Welfare Code (modified by Decree 69-233 of 17 June 1969)
Law 93-001 concerning institutional reform of the Telecommunications Sector and the Postal Sector (postal services, servicing of mandates and postal checks)
Law 94-026 concerning the Code of Social Protection
Decree 2001-1121 of 28 December 2001 relating to the legal and financial systems of insurance undertakings
Law 2003-041 on securities
Law 2003-041 on securities, modified and completed by Law 2014-016 amending and supplementing certain provisions of Law 2003-041 of 03 September 2004 on securities
Law 2003-042 of 03 September 2004 on collective procedures for the clearance of liabilities
Notice 9620/04 specifying the definition and details concerning the implementation of category 23 of the Life and Capitalisation branch planned in Decree 2001-1120 of 28 December 2001
Notice 16280/2004 of 27 August 2004 laying down detailed rules for the application of Decree 2000/986 of 20 December 2000 relating to insurance operations
Decree 2005-088 of 15 February 2005 relating to general agents, brokers and other insurance intermediaries
Law 2005-023 of 17 October 2005 concerning the redesign of Law 96-034 of 27 January 1997 concerning institutional reform of the Telecommunications Sector
Notice 12 591/06 MEFB/SG/DGT/DOF/ASS of 24 July 2006 concerning the application of Decree 2005-088 of 15 February 2005 on general agents, brokers and other insurance intermediaries
Law 2006-008 concerning the Exchange Code
Law 2007-036 of 14 January 2008 on investments in Madagascar
Decree 2007-012 setting the legal forms of microfinance institutions and the procedures for their registration in the Register of Commerce and Companies
Law 2007-018 of 27 July 2007 amending and supplementing certain provisions of Law 2003-042 of 03 September 2004 on collective procedures for the clearance of liabilities
Law 2012-013 amending and supplementing certain provisions of the Code of Civil Procedure on mediation
Law 2014-016 modifying and completing certain provisions of Law 2003-041 of 03 September 2004 on securities
Law 2016-021 on anti-corruption divisions
Decree 2000-986 of 20 December 2000 relating to insurance operations
Decree 2001-1120 of 28 December 2001 relating to State control and the institutional framework of the insurance sector
Decree 2002-1553 of 3 December 2002 laying down detailed rules for Law 2001-001 of 14 June 2001 on the establishment of the public company Caisse d'Épargne de Madagascar (CEM)
Decree 2003-1162 of 17 December 2003 organizing occupational health

Additional Laws
Law 2005-007 of 22 August 2005 providing for the creation and relating to the regulation and operation of supplementary or basic pension funds
Decree 2006-213 instituting the Communications Technologies Regulatory of Madagascar (ARTEC)
Notice 2814/2013 MFB/SG/DGT/DRSFP/SASS specifying the details concerning the implementation of section 2 of title I of Decree 2001-1120 of 28 December 2001 on the control of the State and of title II of Decree 2001-1121 of 28 December 2001 on legal and financial systems of insurance companies
Notice 28429/2016 sets out the procedures for the payment of public expenditure

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