MAP Madagascar

Financial inclusion diagnostic findings

Wednesday, 03 May 2017

Antananarivo

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Making financial markets work for the poor

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MAKING ACCESS POSSIBLE

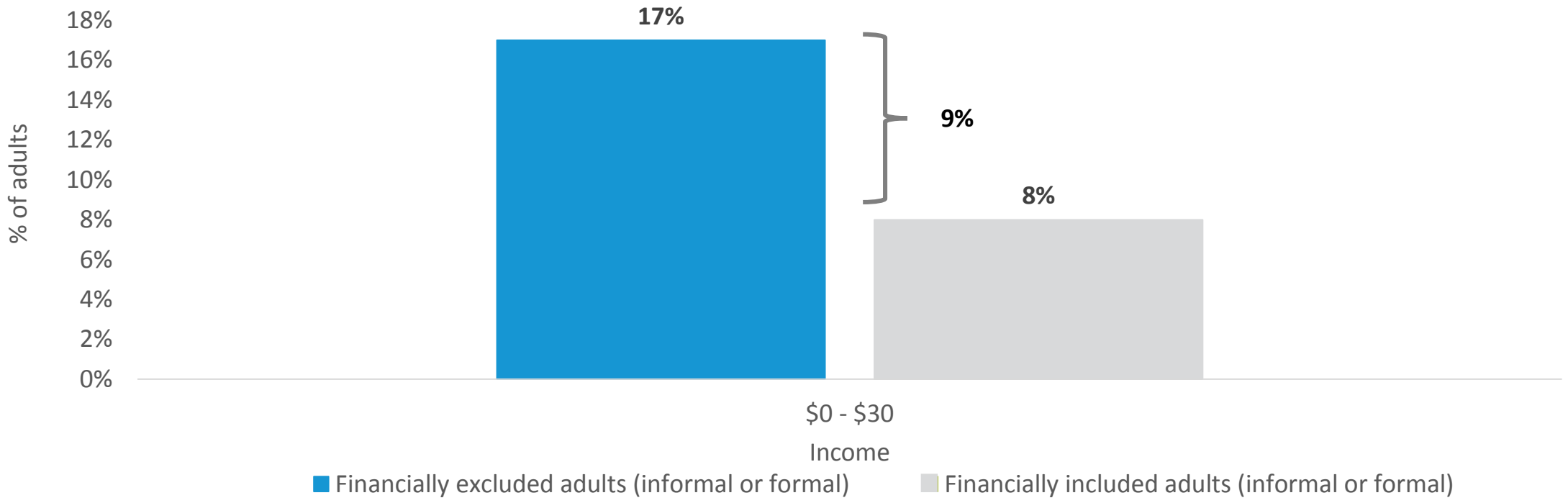
Agenda

1. Why financial inclusion?
2. Context and financial needs
3. Opportunities to extend inclusion
4. Priorities and actions

Why financial inclusion?

Why financial inclusion? Welfare improved with financial inclusion

A large proportion of adults surveyed, with revenues of less than a dollar a day, indicated that they had to miss a meal, not send their children to school, or have not been able to pay their healthcare fees.



Source: FinScope (2016)

Policy environment: Financial sector development programmes and role of MAP

Programme	Description
The National Strategy for Financial Inclusion (CNFI, 2013-2017)	Focus on microfinance development
FSAP (IMF, 2016)	Assessed stability of the financial system to identify sources of systematic risk
World Bank Aide Memoire (2017)	Assessed financial inclusion to determine WB financial inclusion priorities Current focus on access to transaction accounts, payment system modernisation, access to credit for MSMEs, strengthening institutional capacity and project management and impact evaluation
The Maya Declaration (2012)	Committed to: • Improve access to microfinance services for the population by increasing the household penetration rate from 22.6% in 2012 to 38% by 2017 • Reform current laws and regulations in order to support financial inclusion (especially in the field of mobile banking and customer protection) • Ensure availability of reliable and updated financial inclusion data in accordance with international standards, in particular those established by the Financial Inclusion Data Working Group

Role of MAP:

- Requested by MoF to develop its financial inclusion policy
- Analyse barriers, and opportunities (in the savings, credit, payments and insurance markets) and set out key priorities to improve financial inclusion to meet broader policy objectives
- Shape and influence the above programmes by providing inputs and evidence

MAP approach: Diagnostic inputs – data collected

Uncover discrete target markets and needs cases

Demand

- FinScope (2016)
- Consumer interviews (2016)

Product and provider landscape (informal and formal)

Supply

- Interviews (2017)
- Annual reports
- Product data
- Mystery shopping
- Secondary literature

Public policy objectives and regulatory context

Regulation

- Interviews (2017)
- Regulatory and policy review

Financial inclusion priorities

Methodology: Details and contraints of the analysis

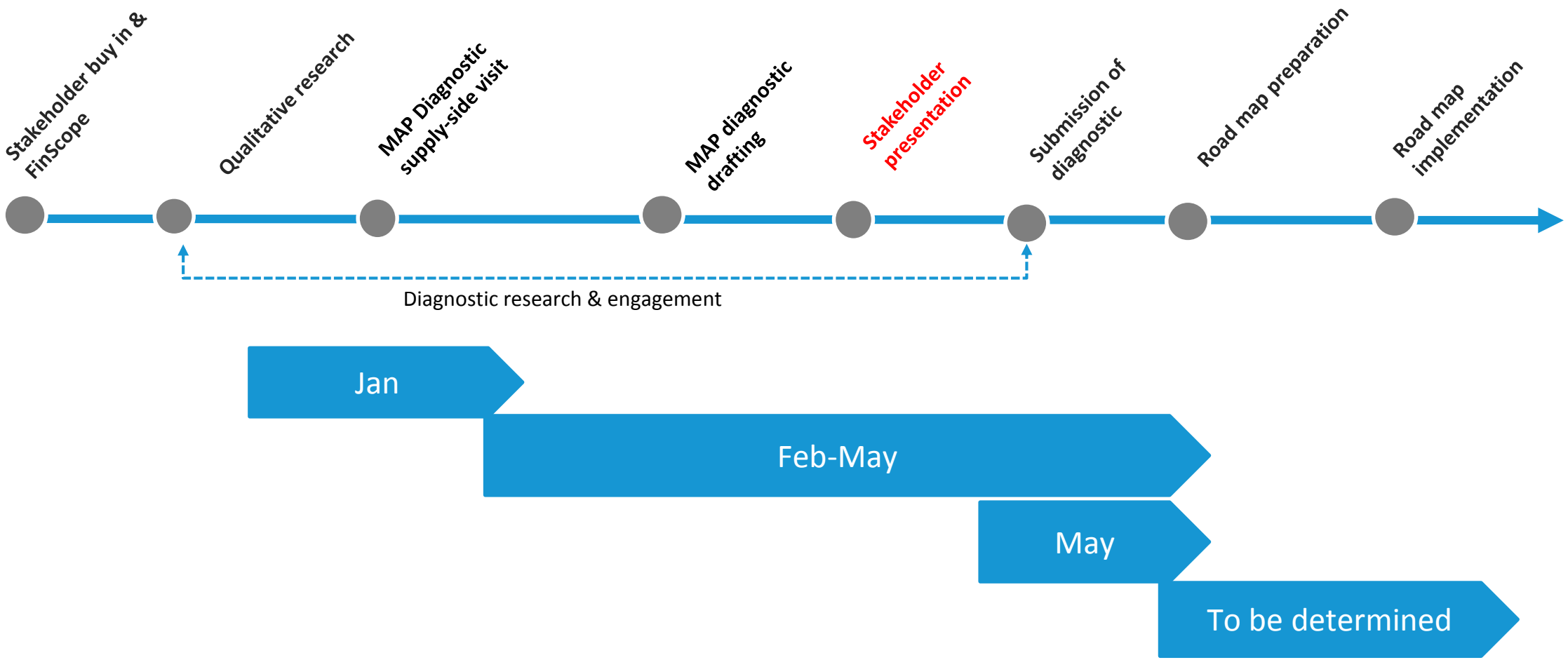
Demand

- FinScope based on 5,000 individuals – a survey that is representative at the national and provincial level with a margin of error of 1%
- For sub-questions: a sample of at least 100 respondents required – which results in a margin of error of 10% or less
- For every analysis: a confidence level of at least 95%

Supply

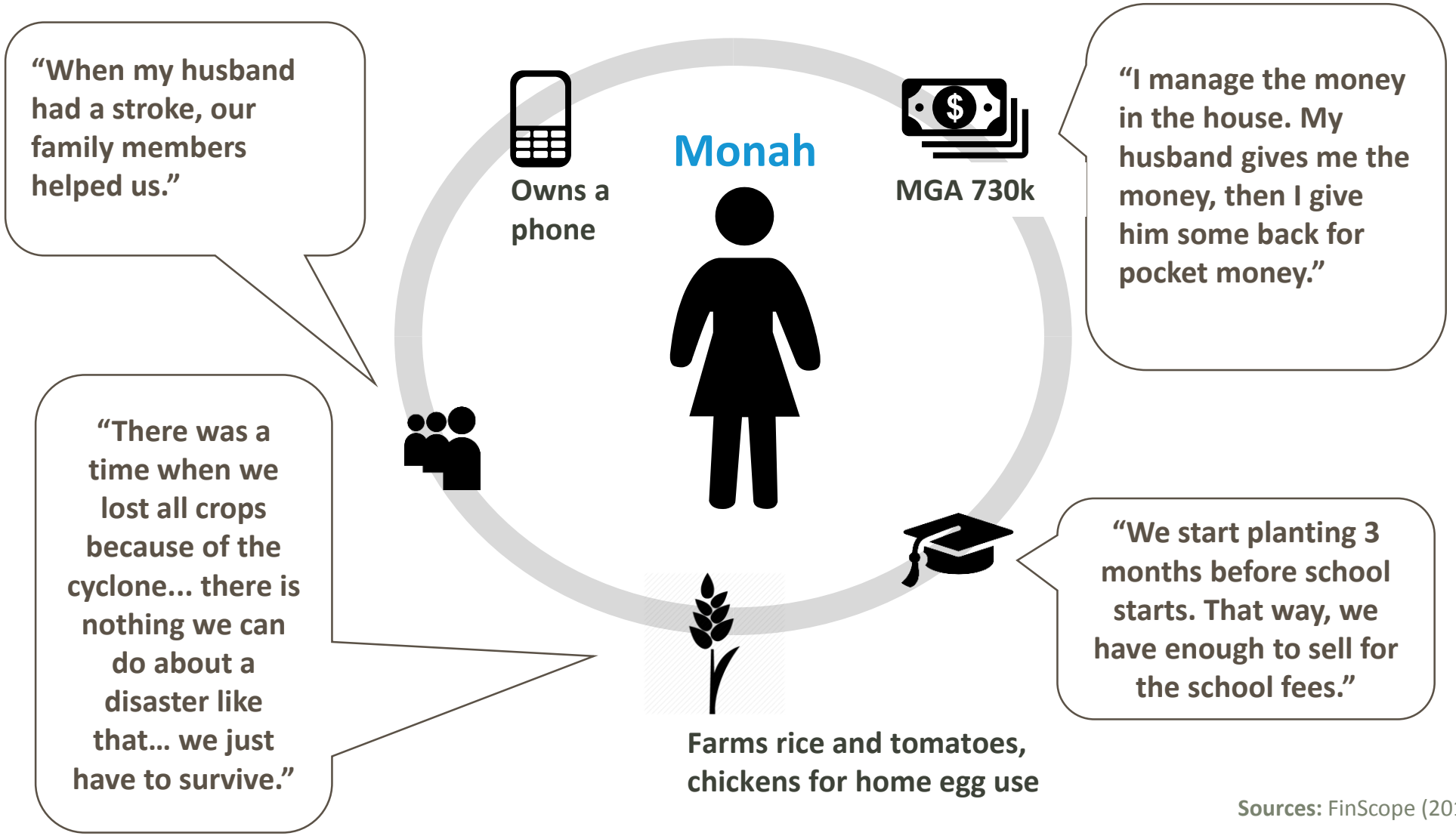
- Interviews with 41 stakeholders
- Data received from 28 stakeholders

MAP approach: Timeline



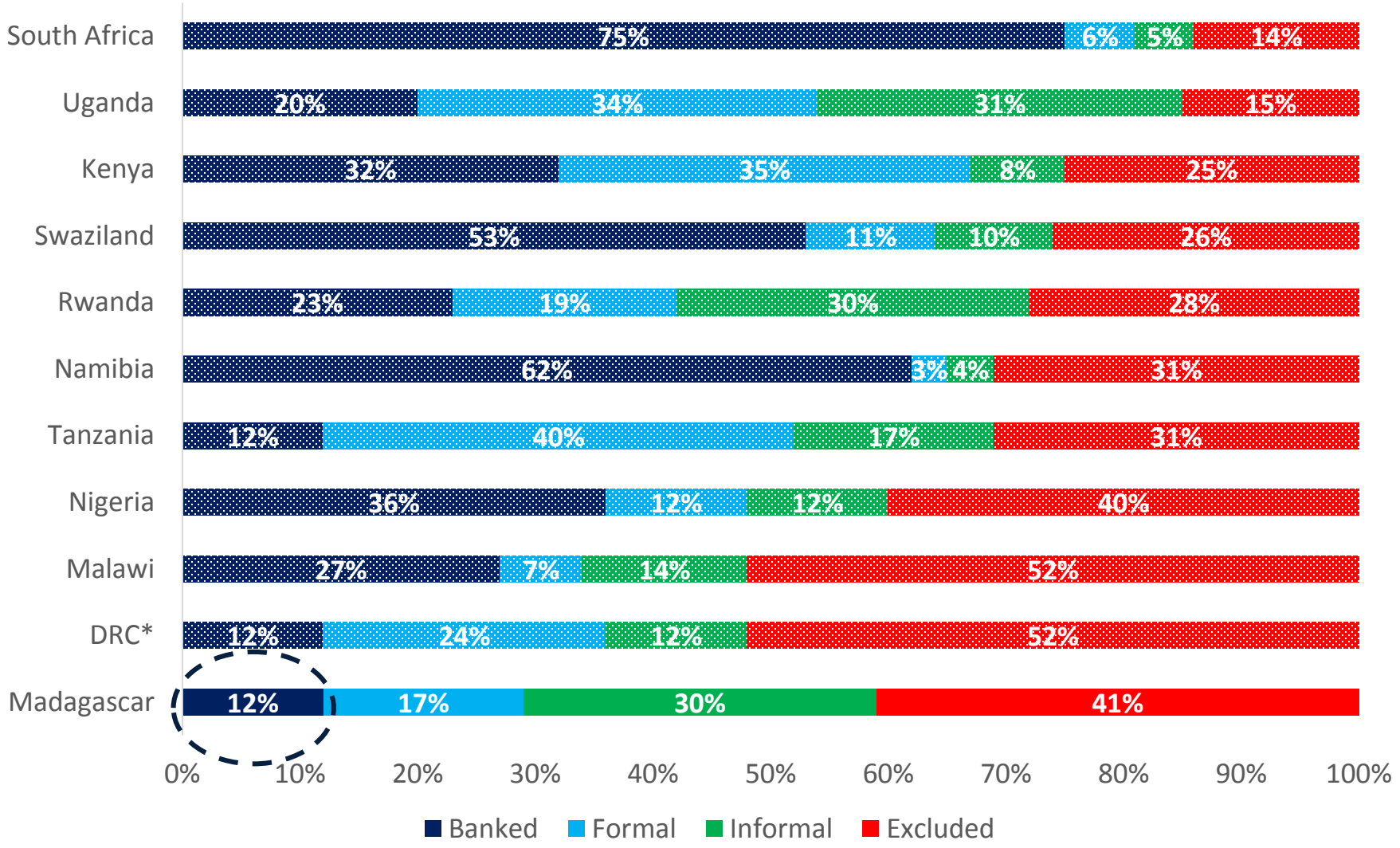
Context and financial needs

Most Malagasy manage their lives without using the financial system



Sources: FinScope (2016), qualitative interviews

Use of financial services to meet needs limited



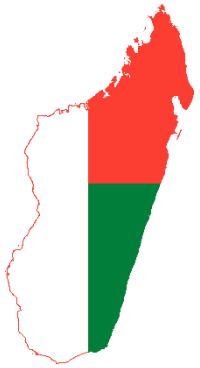
* Only economically active areas

Source: FinScope (various years)

Context and realities very tough for inclusion

Poverty:
- GDP per capita of $402 (current USD)
- GDP of $9.7bn

Ease of doing business constrained:
- Ranks 167/190 countries



47th largest country: 587,041 km²

52nd largest population: ~24 million inhabitants

Significant urbanisation, insignificant migration:
- 4.7% rate of urbanisation
- Only 0.63% live abroad

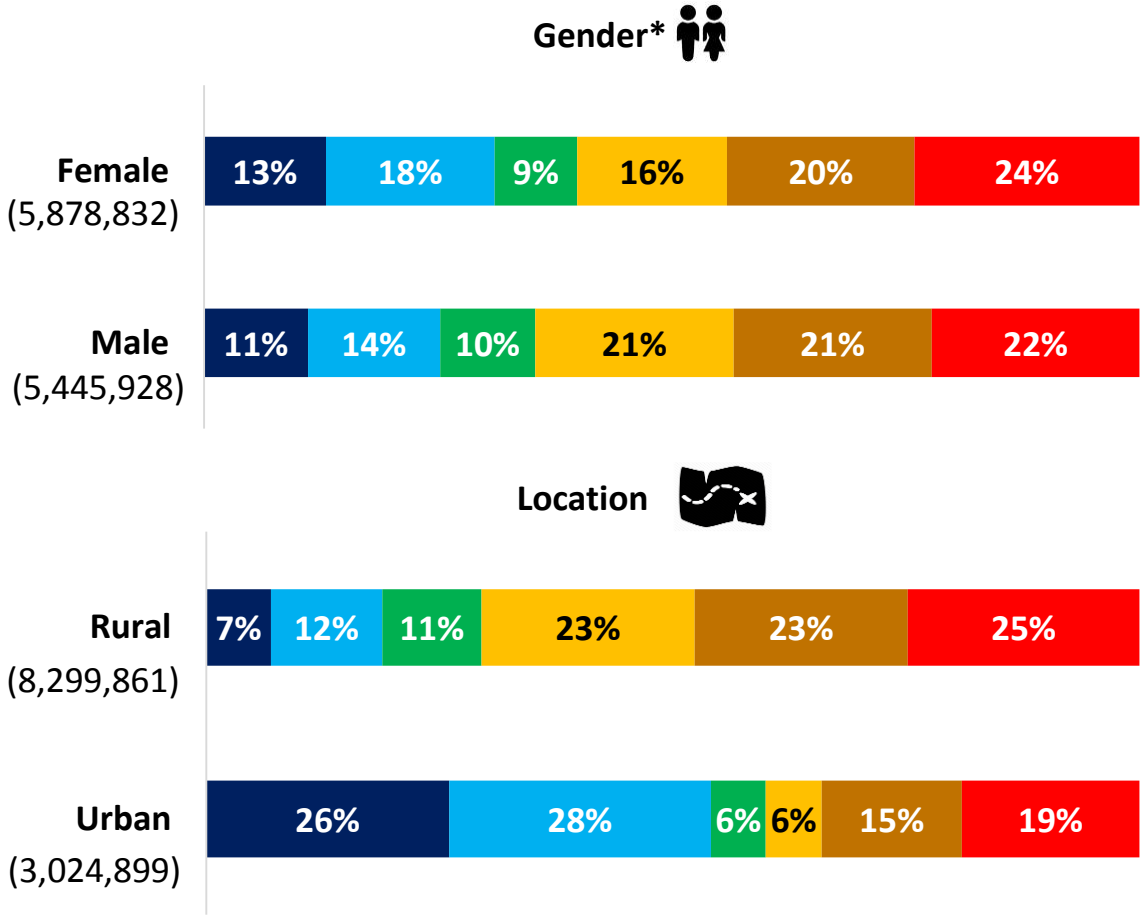
Mobile phone ownership low:
- 44% of adults

Reliance on agriculture:
- >70% of the population involved
- >4.3 million experience annual agricultural shocks

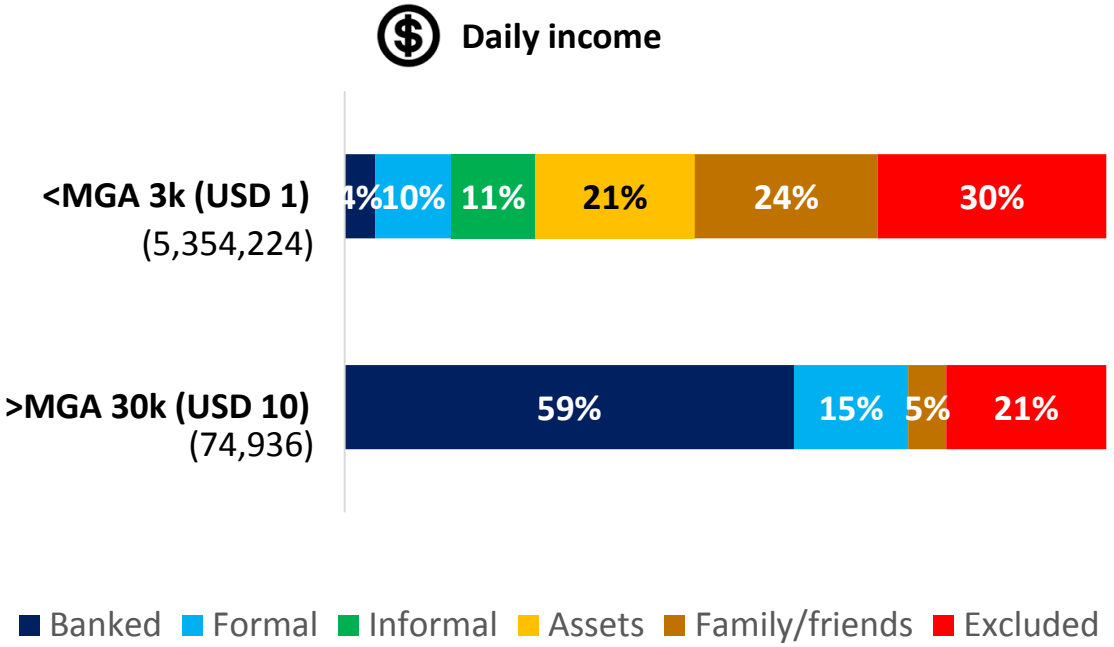
Young population:
- ~61% under 25 years

Sources: CIA World Factbook (2017), CNFI (2017), Ease of Doing Business Report (2017), FinScope (2016), IOM (2017), UNDP Human Development Report Madagascar (2015), World Bank (2016)

Rural areas excluded, even higher income earners underserved

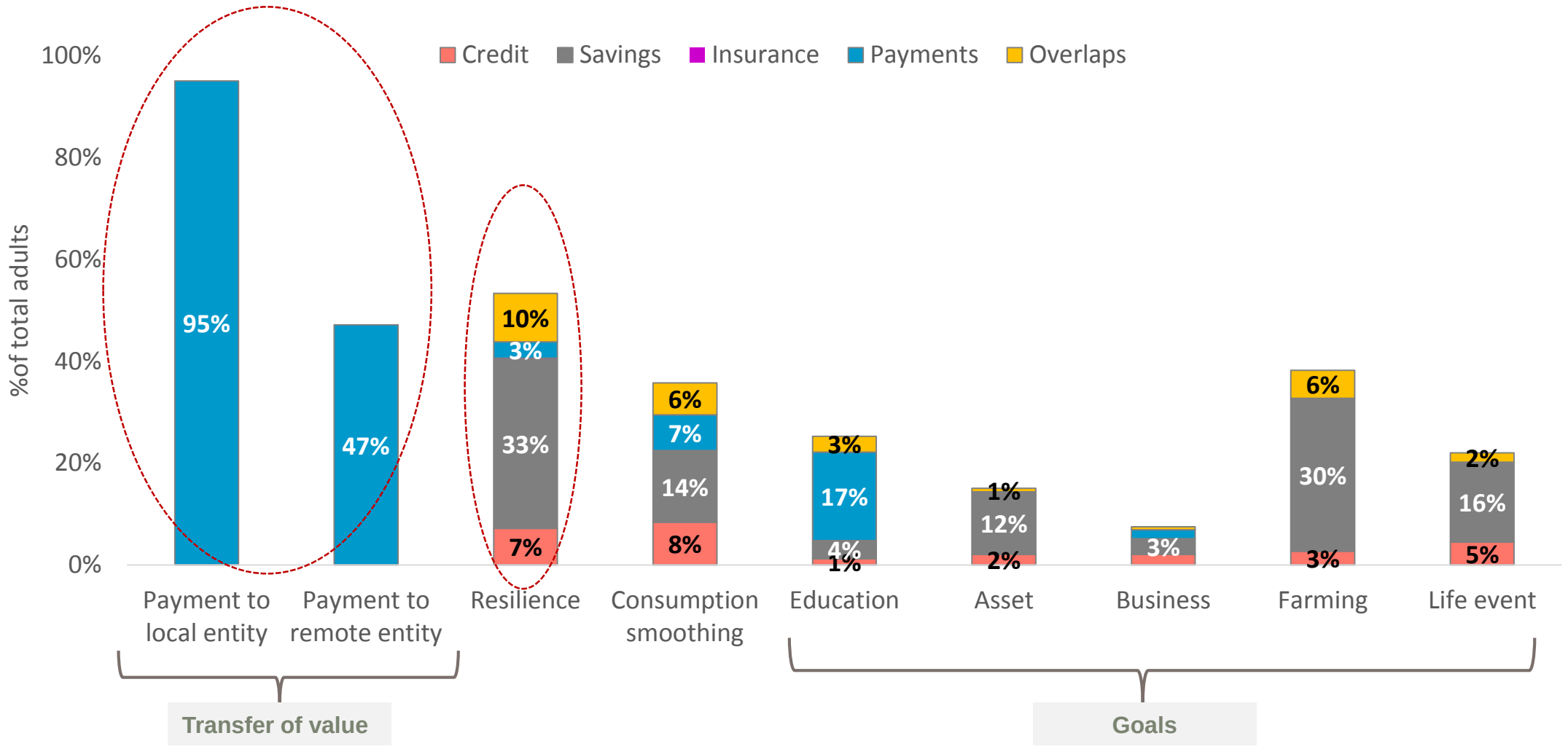


Menabe, Anosy higher male penetration;
Analamanga higher female penetration



Source: FinScope (2016)

Payments and savings most used to meet needs



Source: FinScope (2016)

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

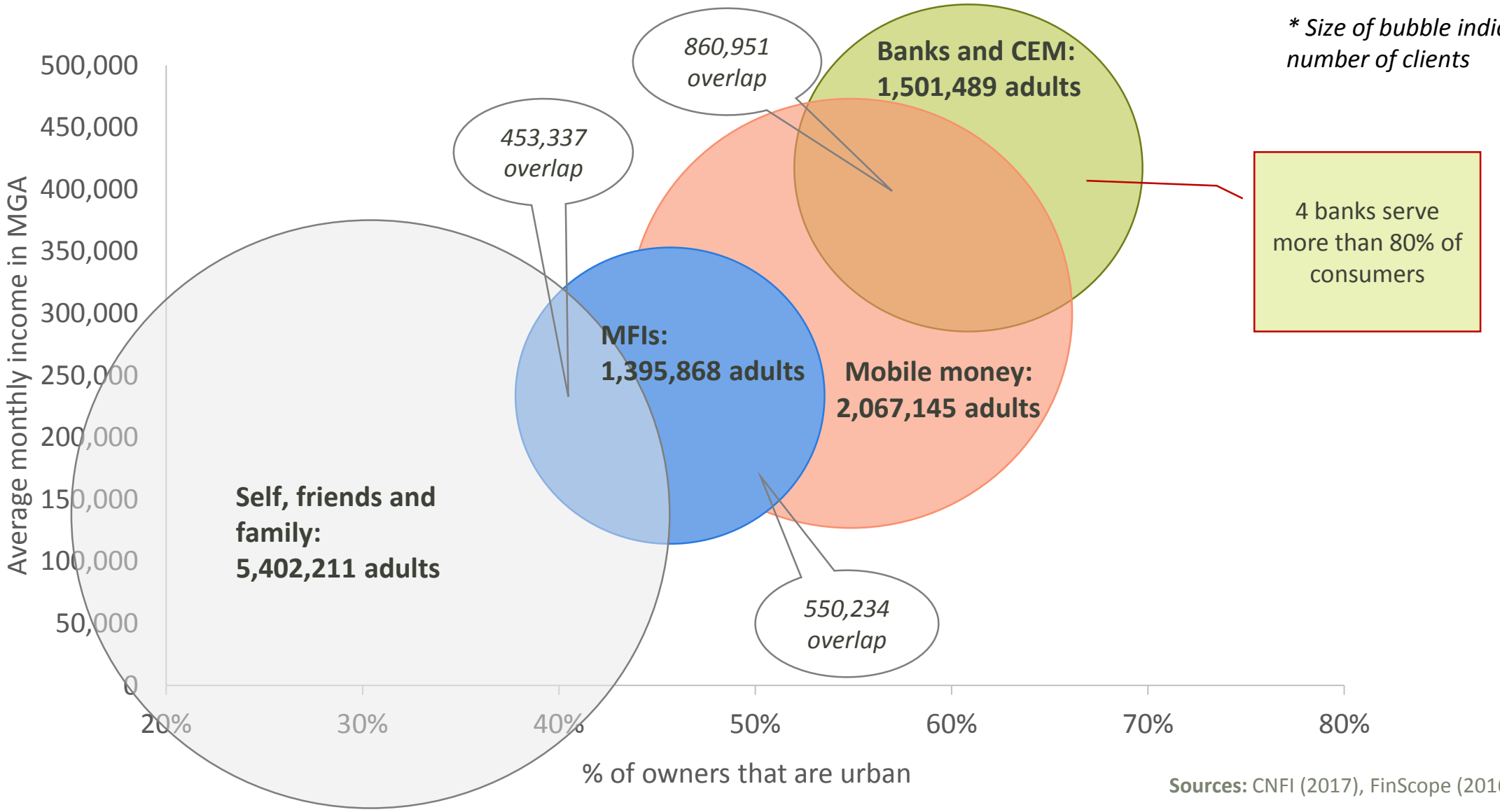
Source: Qualitative interviews (2016)

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, government 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

Source: Qualitative interviews (2016)

Distinct consumer focus for each provider



Sources: CNFI (2017), FinScope (2016)

Financial needs and priorities

Main financial needs

- **Food security and resilience:** 4.3m adults faced agricultural risks in past year, 40% of adults worry they will not have enough food
- **Economic growth and opportunity:** 5.3m adults live in extreme poverty without economic opportunities other than subsistence farming

Financial sector priorities: support resilience and growth

- **Individual:** critical need to build **savings** and secure fast emergency **payments** for resilience and food security. Credit and insurance a niche role only given cost and complexity.
- **MSMEs and farmer entrepreneurs:** **intermediation** and **trade payments** over distance key to build opportunities for growth and exports
- **Government:** broader climate risk management strategies needed beyond financial inclusion approach

Sources: WB survey (2015, 2016)

Current gaps in provision

	Responsible entity	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	Will need a **national intervention**, e.g. disaster risk management strategy and PPP for agricultural and disaster risks which leverages insurance Niche **insurance** role to manage risk	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

Opportunities to extend inclusion

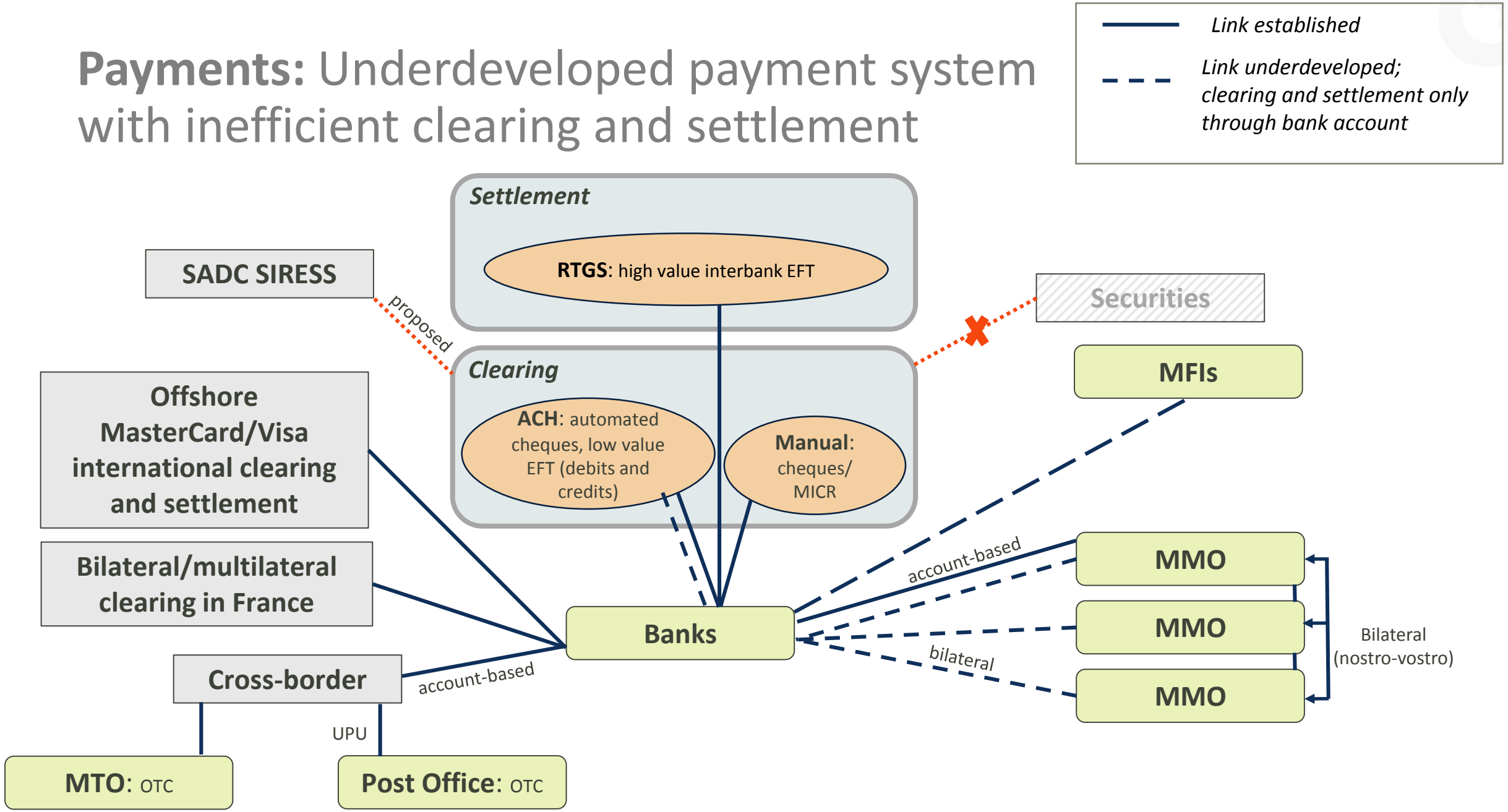
Opportunities to extend inclusion

1. Payments for resilience and trade
2. Savings to manage shocks and build productive capital
3. Targeted credit to grow economic opportunity
4. Strengthen enabling regulation and environment

Niche opportunities for insurance exist, but do not currently constitute one of the principal factors for financial inclusion

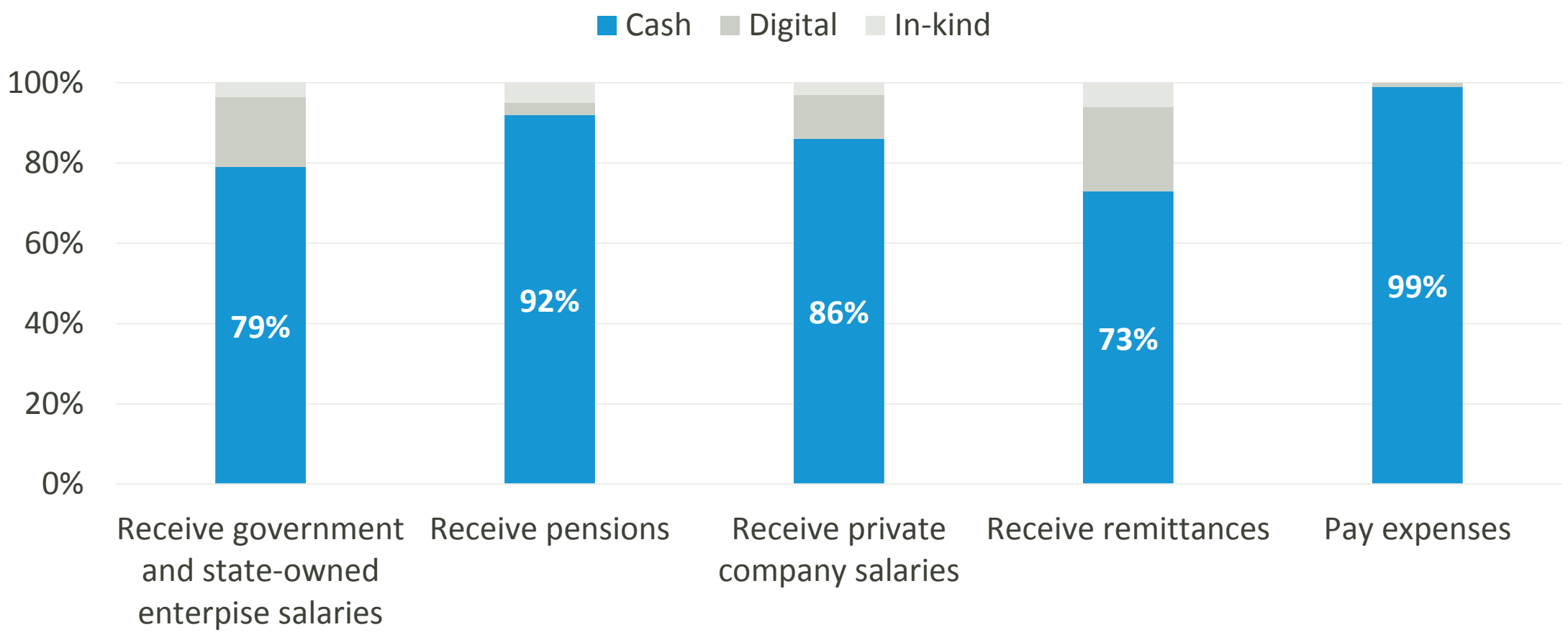
1. Payments for resilience and trade

Payments: Underdeveloped payment system with inefficient clearing and settlement



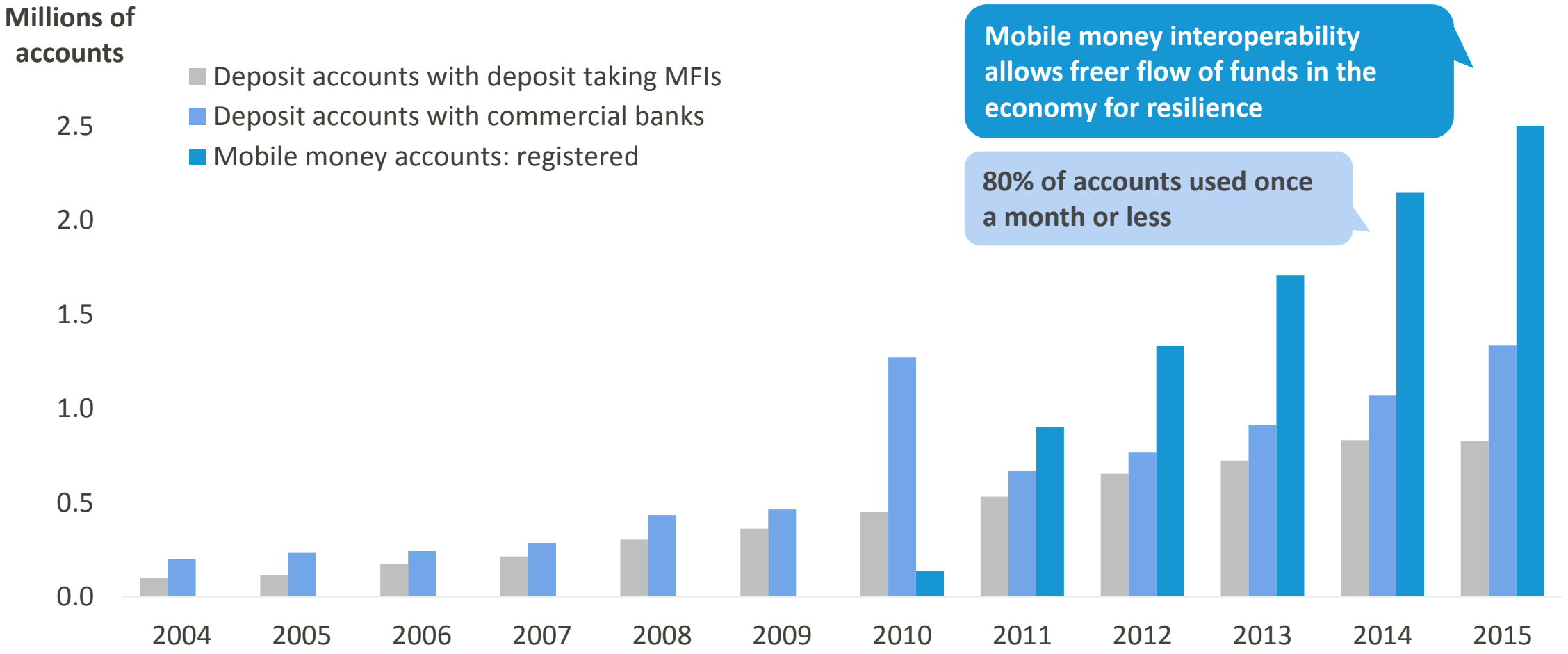
Source: Authors' own per interviews

Payments: Cash dominates across expenses and receipts



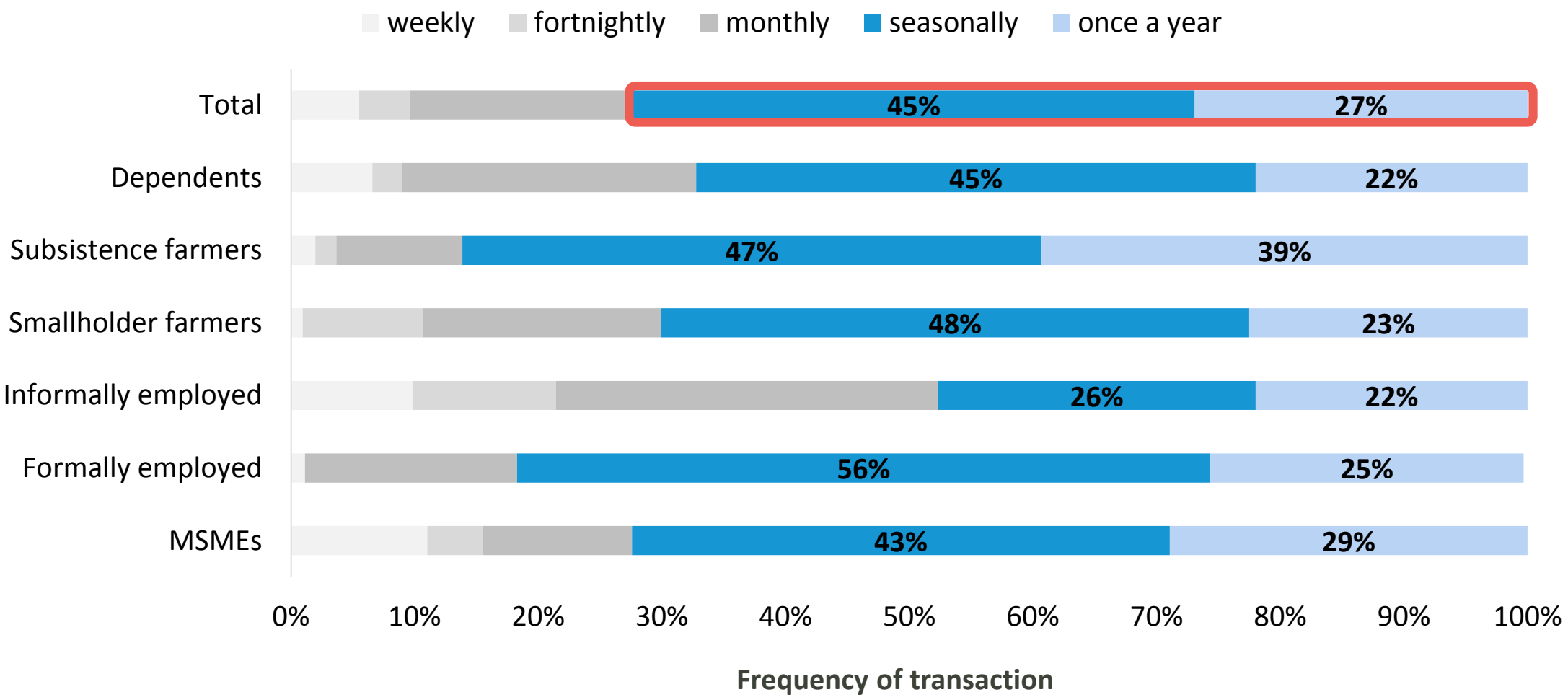
Source: FinScope (2016)

Payments: Swift growth in accounts, especially MFIs and mobile money accounts, but higher dormancy



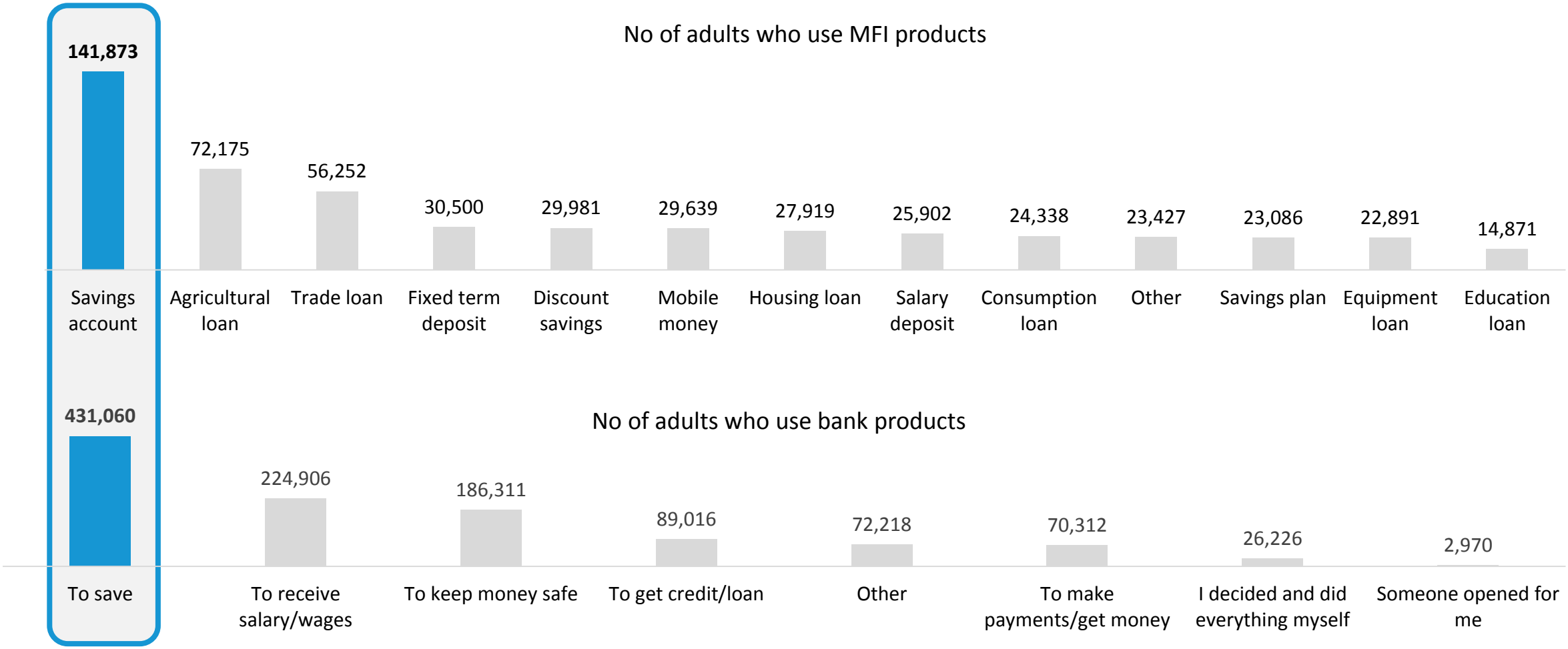
Source: Findex (2014), IMF (2016)

Payments: More than 70% of remittances received seasonally or less; used to strengthen resilience instead of income



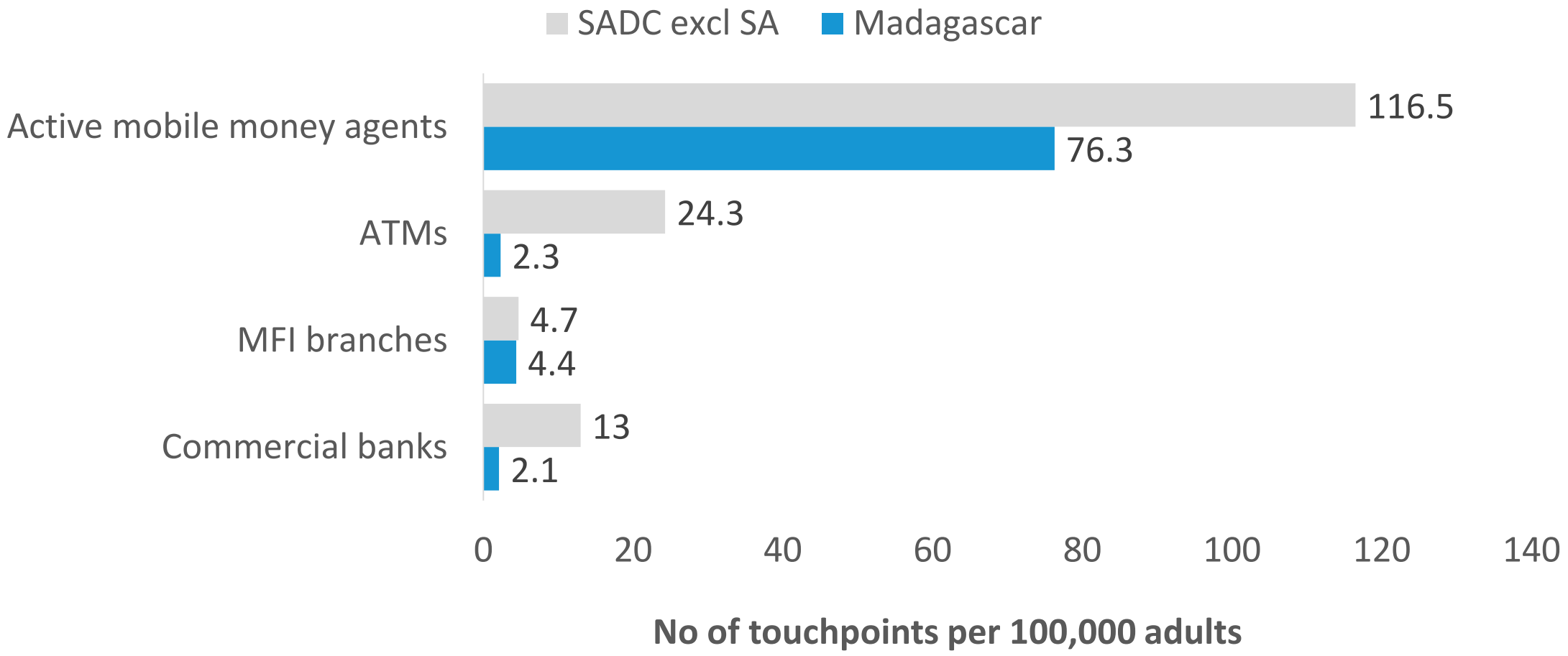
Source: FinScope (2016)

Payments: MFI and bank accounts largely used for saving not payments



Source: FinScope (2016)

Payments: Distribution very limited compared to SADC



Source: FinScope (2016)

Payments: Key considerations for national switch in Madagascar— “Fit for purpose” imperative

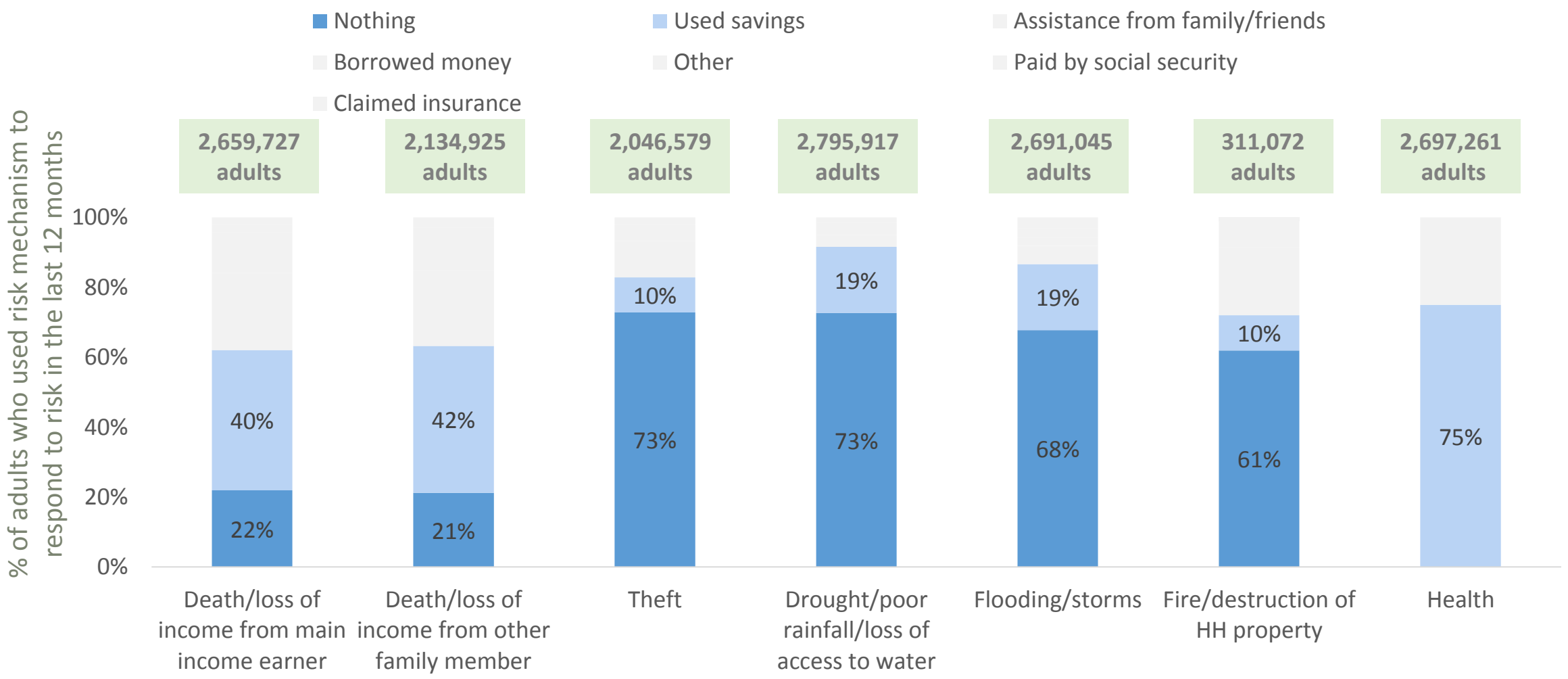
Criteria for national switch	Virtual (off-site) hosted system	Physical (stand-alone) in-country hosting
Fits needs	✓✓	✓
Flexibility and interoperability	✓✓	✓✓
Affordability – capacity and software	✓✓✓	✓
Manages risk	✓✓✓	✓
Swift implementation	✓✓✓	✓
Trust	✓✓	✓
Global integration and compliance	✓✓	✓✓

Payments: Opportunities to extend payments

- Critical to find **appropriate model for sustainable digital scale** for interoperability, security and efficiency – a stand-alone national switch model is increasingly becoming redundant
- Improve **efficiency** of cash management and reticulation
- Significant **mobile money** potential, but follows existing cash footprints
- Payments **use cases** to be extended – value chain digitisation role, remittances key for domestic transfers (especially MSME transactions), government payment digitisation potential (but sequencing critical to shifting cost to consumer)
- **MFI and Post Office footprint,** key rural institutions to be leveraged for payments
- Limited opportunity for cross border remittances given relatively few diaspora

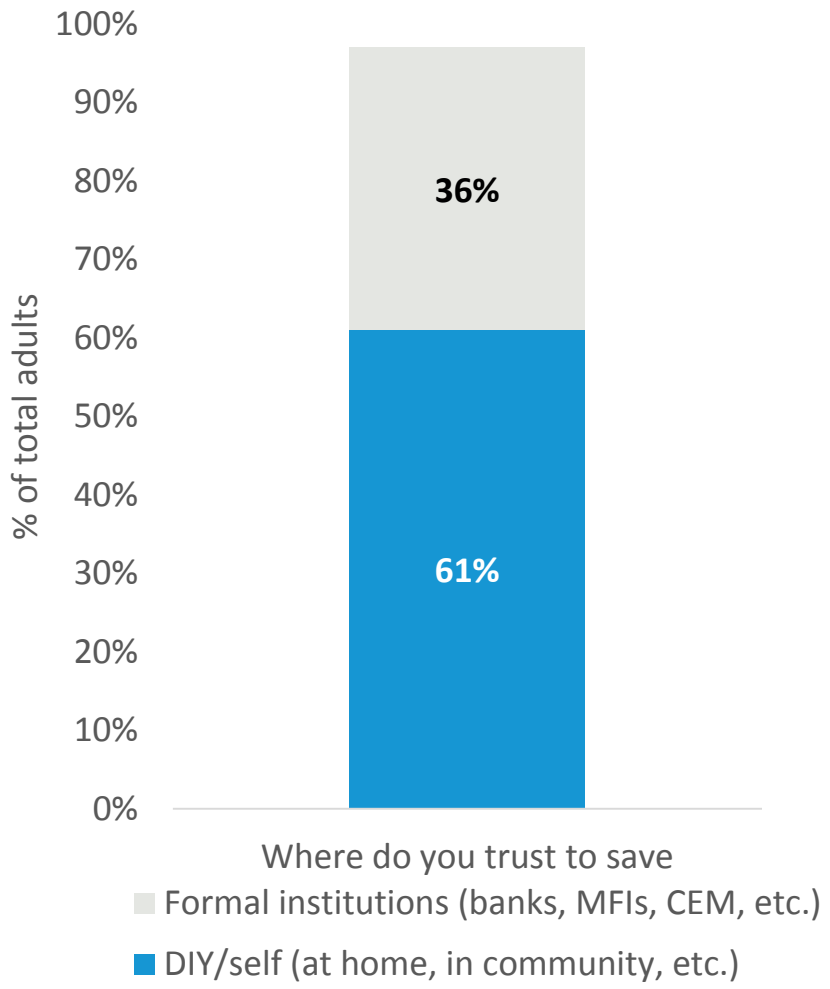
2. Savings to improve resilience and build productive capital

Savings: Significant risks experienced; no tools to cope; most use savings or do nothing



Source: FinScope (2016)

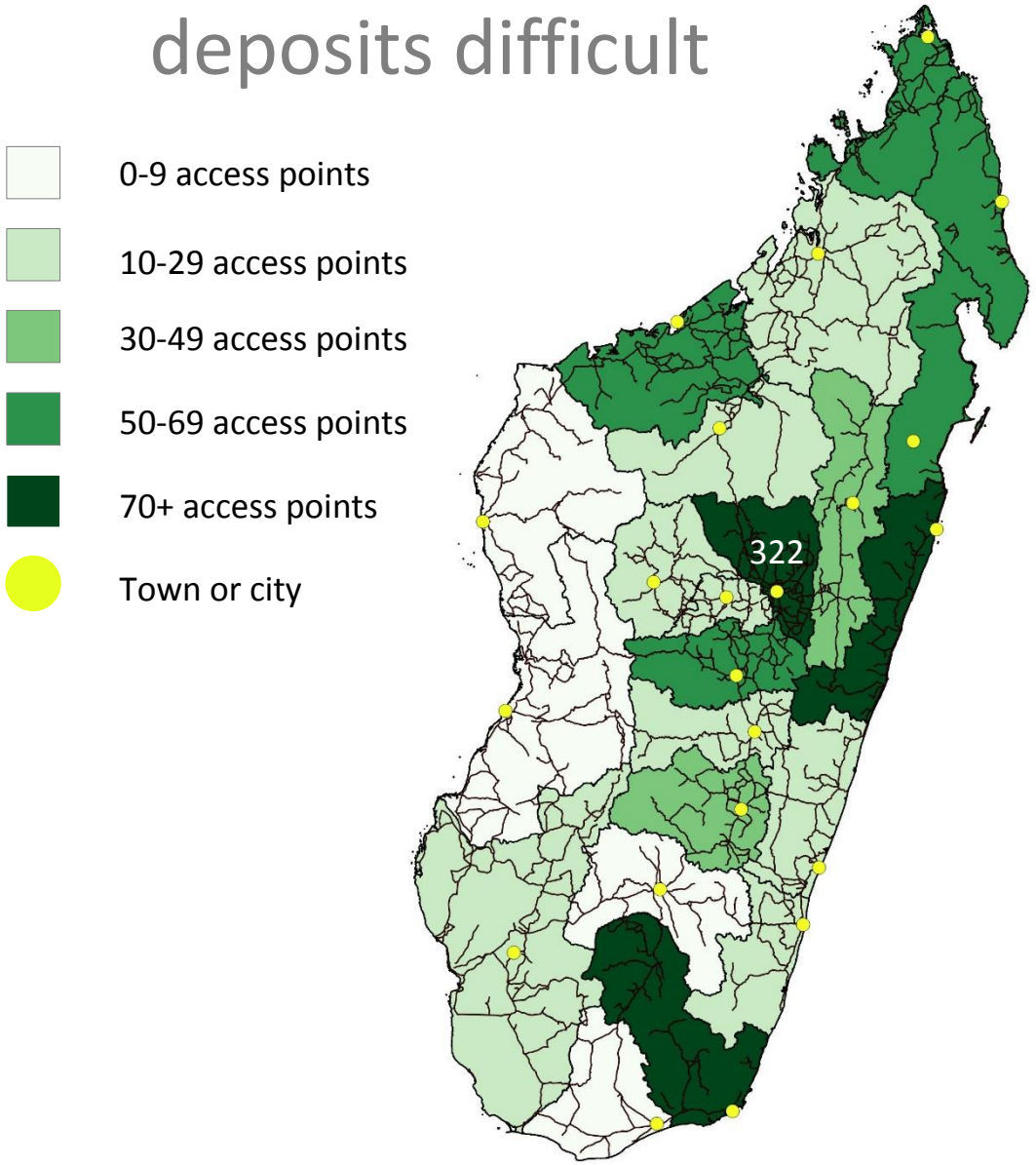
Savings: Trust and return constrains saving



- Most formal products deliver negative real returns
- % who save in assets: 30%
- % who save informally: 80%

Sources: FinScope (2016), interviews qualitatifs (2016), Transparency International (2015)

Savings: Distribution footprint makes low value frequent deposits difficult



- **Distribution varies significantly**
  - 950+ access points total
  - Range from 4-322 per province
  - Over one third in Tana
- **Payments interoperability limited**
  - Between branches
  - Between institutions
  - Limited MFI-Mobile money partnership
- **Challenging cash reticulation**
  - Cash management expensive

Sources: CIA World Factbook (2017), CNFI (2017), Ease of Doing Business Report (2017), FinScope (2016), UNDP Human Development Report Madagascar (2015), World Bank (2016)

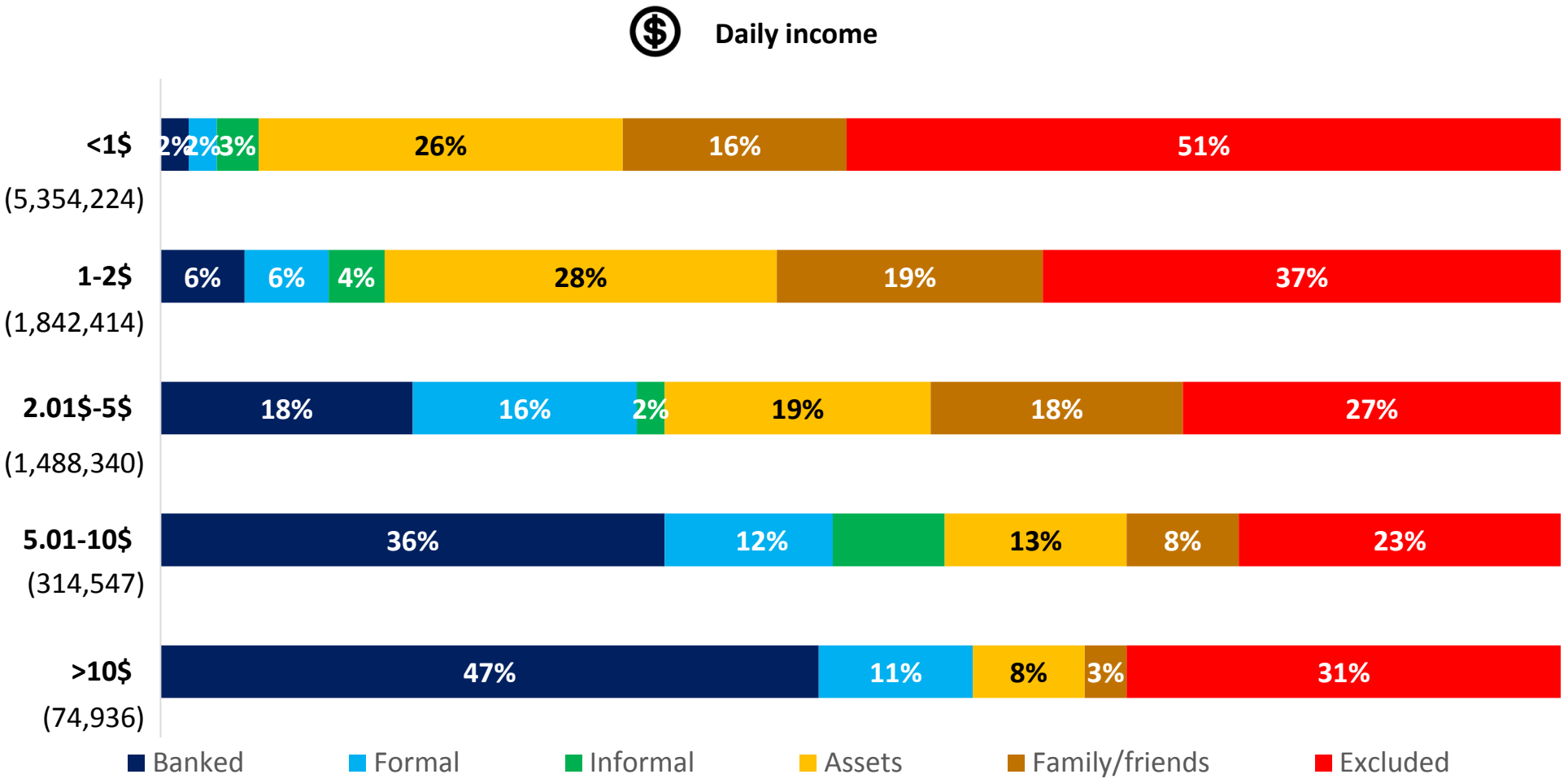
Savings: CEM and CNAPS largest individual savings institutions; banks main holders of capital

Provider	No of savings customers	Interest rate (per year)	Total assets (in 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

Sources: CNFI (2017), FinScope (2016), IMF (2016), FTHM (2016), provider interviews (2017)

Savings: Wealthier consumers driving formal capital pool



Source: FinScope (2016)

Savings: Opportunities to extend savings

- **Secure** systemic savings for intermediation and growth
  - Strengthen legal oversight of systemic institutions
  - Protect savings in formal institutions via deposit insurance
- Strengthen bank and mobile **agency** to receive deposits to increase efficiency of existing distribution infrastructure
  - Encourage partnership with mobile providers
  - Support cash reticulation development
- Align **product design** to meet customer needs
  - Easy access key in emergencies
  - Land and housing a key driver of need for longer term savings
- **Strengthen informal groups** to enable local services
  - Build trust to collaborate with **community structures** for trust and education
  - Strengthen role of local structures in financial inclusion
- Leverage **community structures and church groups** for trust and education

Savings: Opportunities to extend savings

- Align **product design** to meet customer needs
  - Easy access key in emergencies
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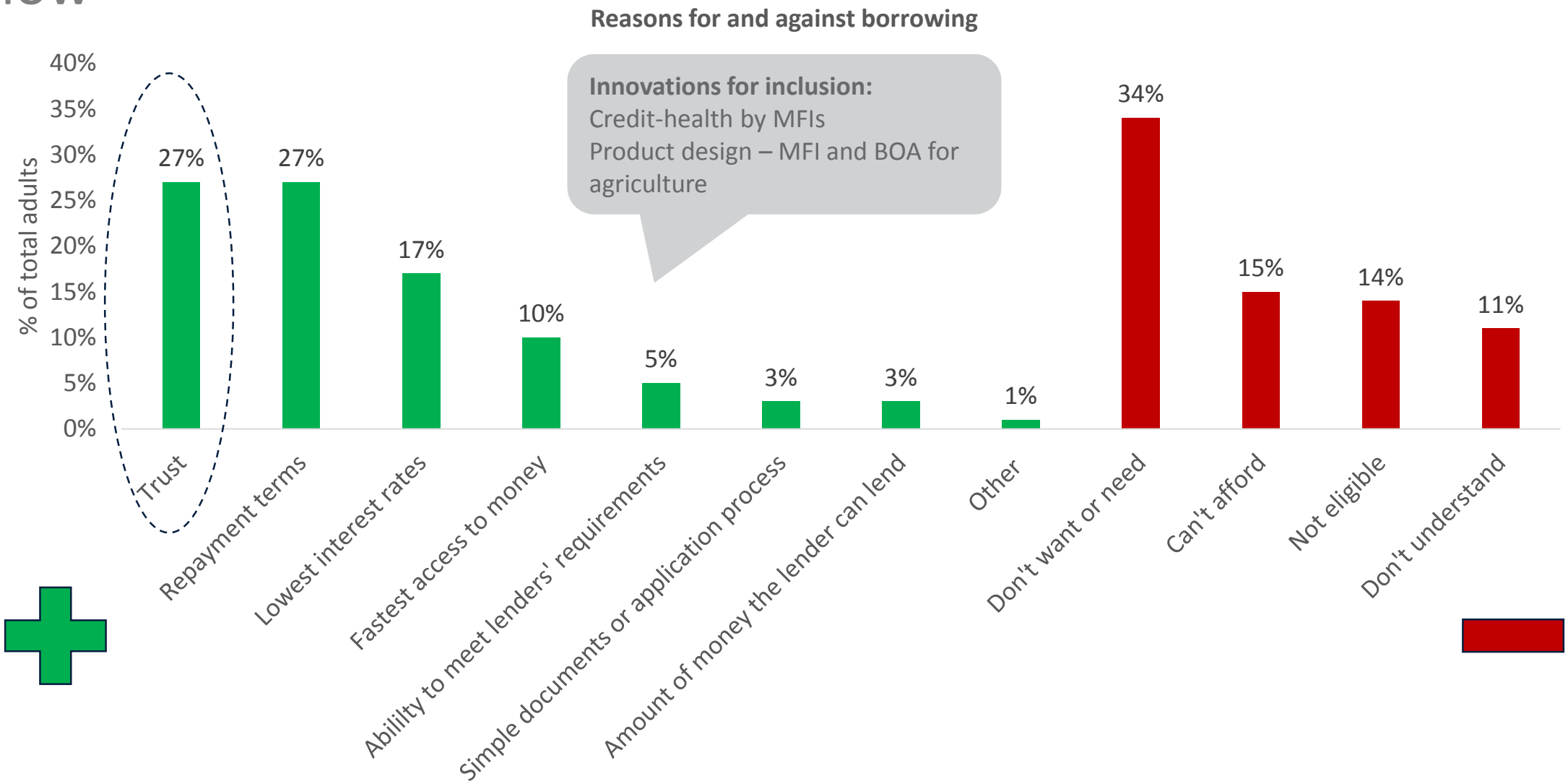
3. Targeted credit for economic opportunities

Credit: Big gap in potential productive need for credit, but use low



Source: FinScope (2016)

Credit: Banks and MFIs main credit providers

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% - 24%	~320
MFI 3	383	-7% - 19%	6%	530,000 (63%)	18% - 48%	~850
MFI 2	548	-10% - 23%	21%			
MFI 1	9	1% - 6%	15%			

*Excludes various fees and other charges. Effective rate much higher.

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

Credit: Barriers – high cost to operate

High cost to lend

- Limited effective credit information (credit bureau) and use of title deeds or collateral registry
- Legal process and contract enforcement difficult
  - Most supply-side interviews: very difficult to realise collateral or recover debt; bank and MFI personnel targeted by police
  - Guarantee fund interviews: multiples of collateral required for debts, due to difficulty to recover (up to 600%)
  - Limited recovery rate of debt and significant delays (11% and 3 years)
- Cost of cash burdensome, especially in remote locations
- Client shocks affect sustainability; need to strengthen resilience
- Particular problem for MFIs (typical Opex: 80%; profits low: 4%)

Source: FTHM (2016), provider interviews (2017), World Bank (2015)

Credit: Barriers – scarce capital not optimally allocated

Capital scarcity and allocation

- Banks are the biggest lenders (MGA 4.5tn loans), but focus on high income & corporates; some excess liquidity
- MFIs lend most to MSMEs, but report a capital gap of MGA 386bn
- MFI capital funded largely by deposits (MGA 220bn/MGA 250bn), with some funding by CNAPS and CEM
- Limited use of donor funding (MGA 10bn), limited loans from a small number of banks, and a refinancing fund (MGA 5bn)
- MFI lending from banks constrained due to:
  - Lack of reliable information on MFI activities
  - Profitability and perceived risk of MFIs; struggle to rival banks' other options

Source: FTHM (2016), provider interviews (2017), World Bank (2015)

Credit: Barriers – cost of capital challenging

Cost of capital

- Limited funds available from CNAPS & CEM at 6%-12%
- Bank funds available at 10%-14%
- 0%-7% margin above inflation (6%-7%)
- Limited profitability results in constrained ability to afford such rates

Source: FTHM (2016), provider interviews (2017), World Bank (2015)

Credit: Opportunities to extend credit

- Build **consumer education and trust**
  - Implement market conduct requirements (disclosure and recourse)
  - Strengthen governance and supervision of MFIs
- Reduce **operating and lending costs** and improve **affordability** of credit
  - Implement an effective credit bureau for **credit information** to reduce risk to lend
  - Facilitate **contract enforcement**
  - Update and enforce **usury law**
  - Improve implementation of **title deed registry** and access
  - Digital payments for **economies of scale**

Credit: Opportunities to extend credit

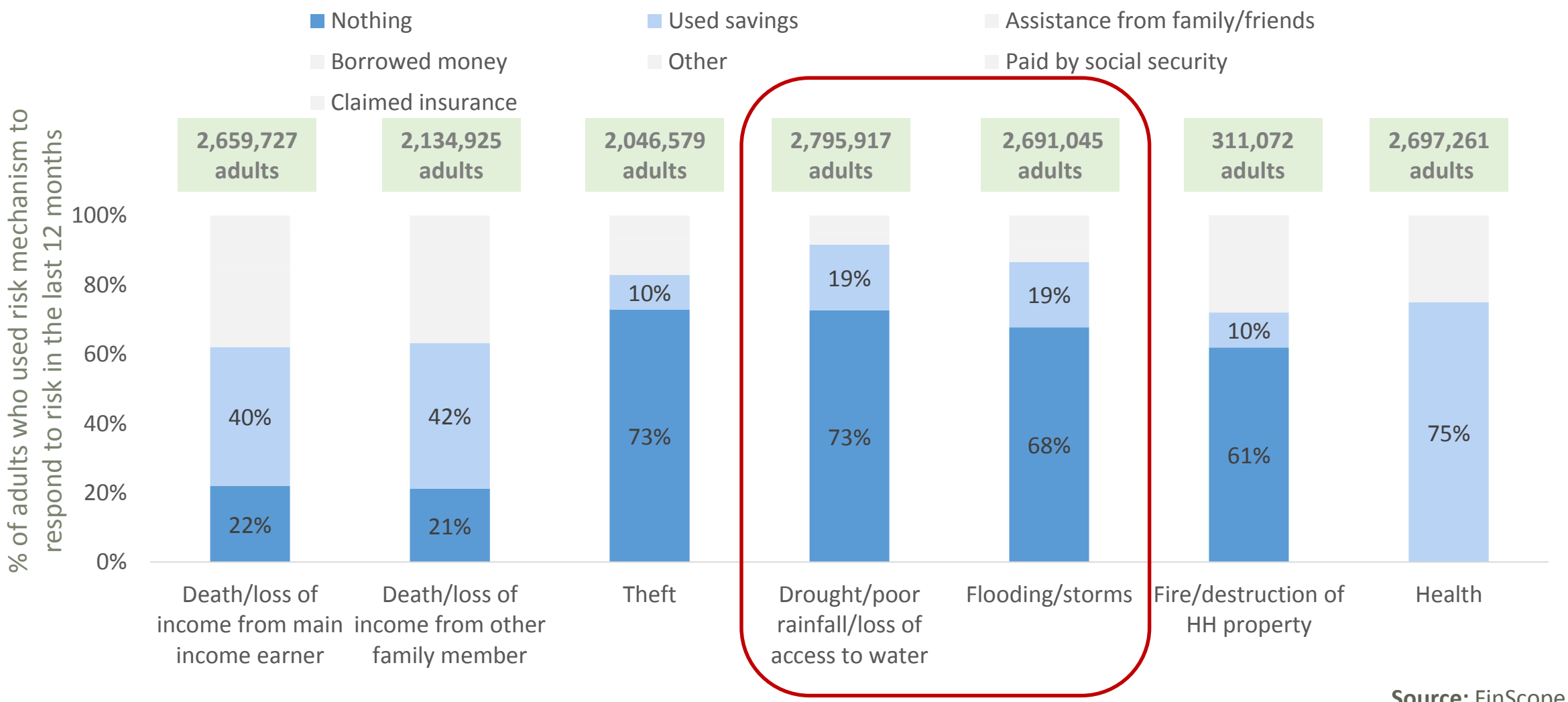
- Facilitate **access to affordable capital** for growth MFIs
  - Improve **quality of MFI information** to access bank and financial provider finance
  - Extend MFI **refinancing fund**
  - Support bank-MFI **partnerships**
- Improve **information on MSMEs** and farmer entrepreneurs to identify market opportunity
- Improve MFI resilience through **wholesale MFI insurance** against losses from climate shocks
- Support CNFI to collect and report on appropriate market **data**

Credit: Opportunities differ across types of MFIs

	Niche MFIs	Retail MFIs	Donor-funded MFIs	Fragile MFIs
Description	• Targets agriculture & MSMEs	• Focuses on large-scale deposit collection and lending	• 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

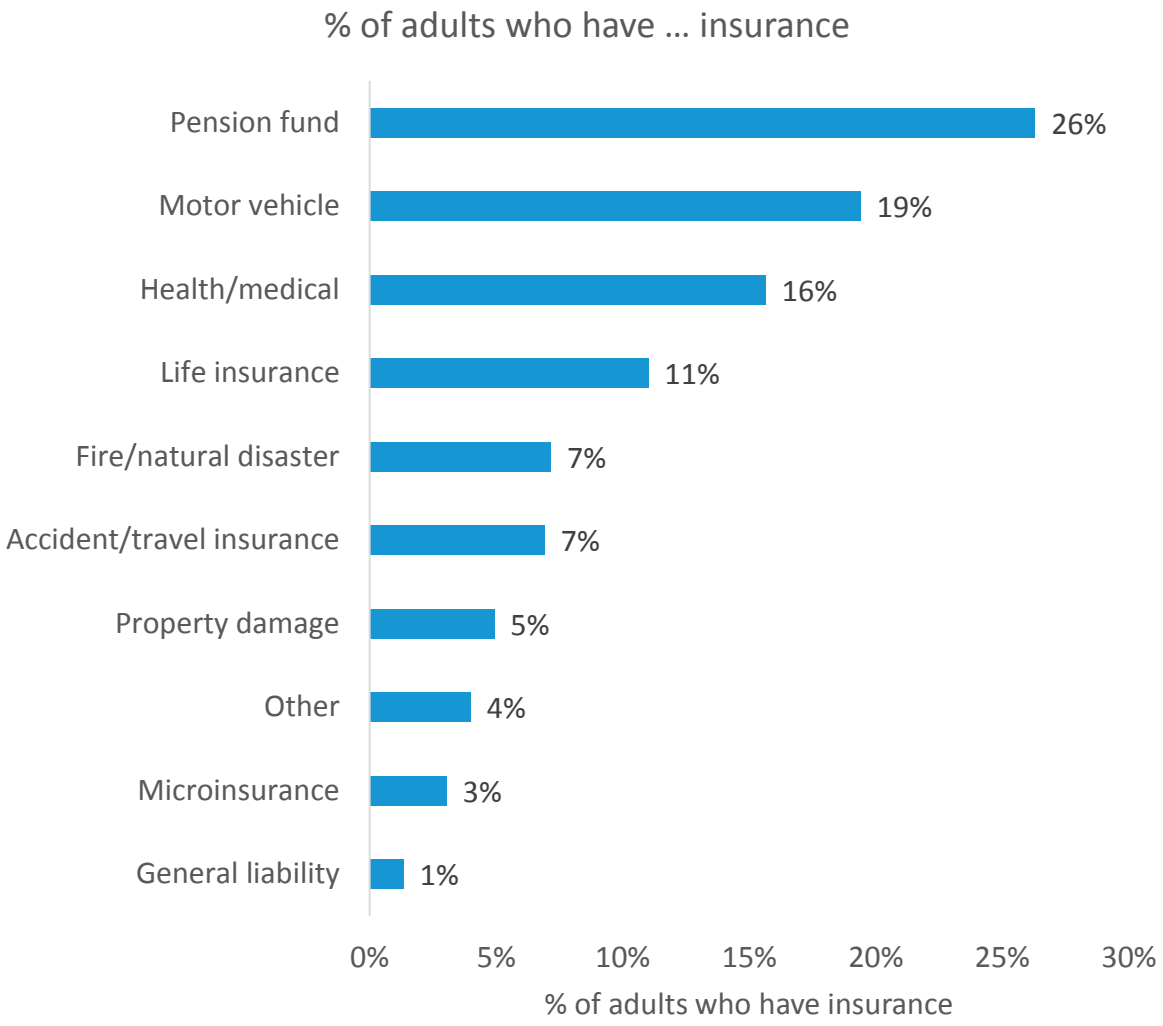
4. Insurance not a financial inclusion priority, but opportunities to extend cover remain

Insurance: Exposure to significant risks; no tools to cope



Source: FinScope (2016)

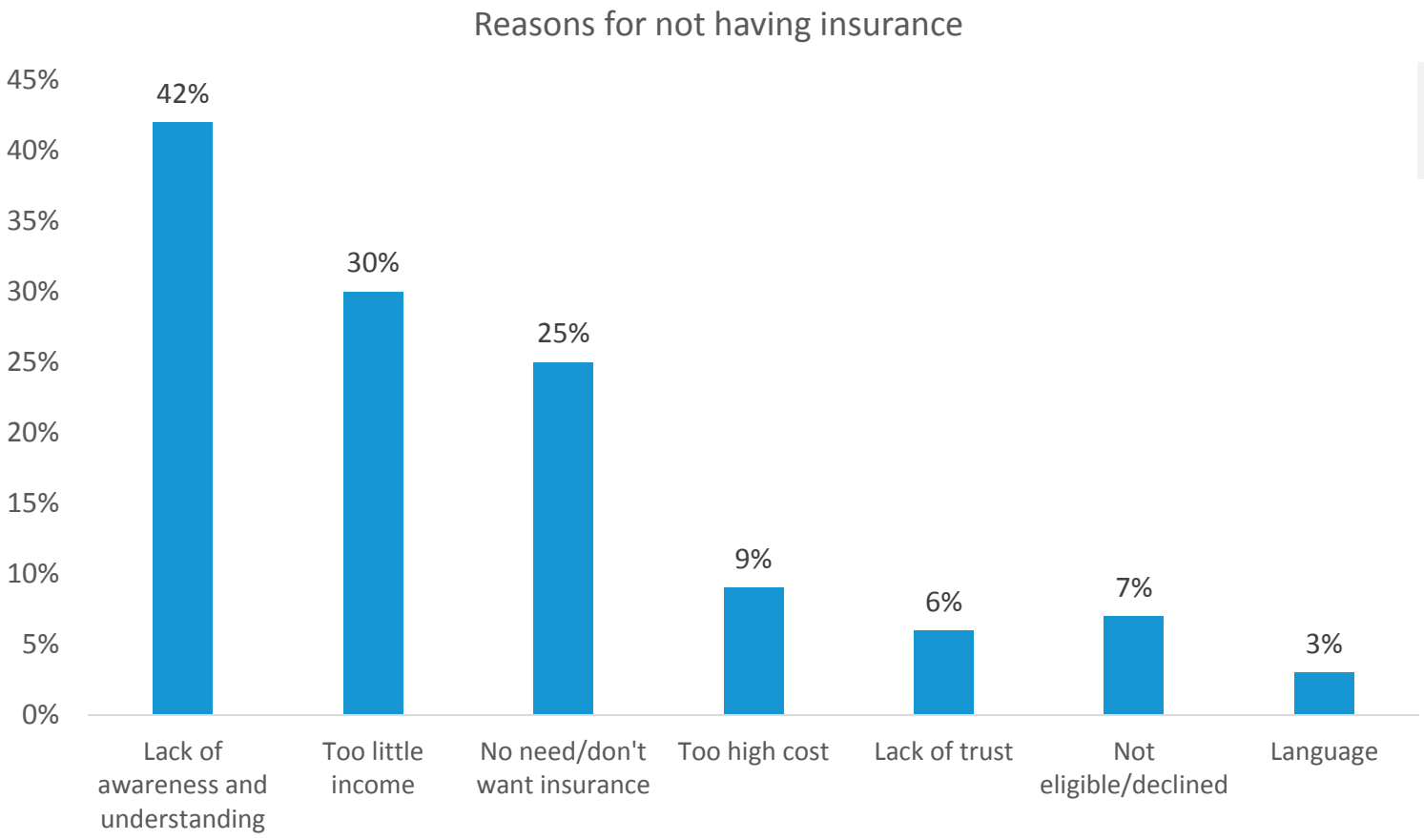
Insurance: Only 200k adults have insurance, 130k have pensions; motor vehicle and health most owned products



- 5 Insurers, largest state owned
- No commercial agricultural insurance offered
- Health cover provided through employer schemes, CNAPS, insurance companies and health mutuals
- National pension scheme offers compulsory pensions to all employed

Source: FinScope (2016)

Insurance: Limited awareness, income, trust key constraints to consumers



62% of people have never heard of insurance
Only **28%** of people think insurers can be trusted

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

*"I was the victim of an accident once, but the insurance company found pretexts and arguments **not to refund me** - I got absolutely nothing."*
Male, urban, small business owner

Source: FinScope (2016), qualitative interviews (2016)

Insurance: Provider constraints to address for development

- No **framework to enable insurance** through MFIs, MNOs (m-insurance)
- **Agent models** limited to employees of insurers
- Limited actuarial **skills** and **MIS**
- Benefits of **digital contracting** not realised
- **Tax burden** on life products make them unaffordable
- **Product innovation** need beyond retail; innovations to enable insurance to value and supply chain actors to survive shocks faced by their clients to enable future service (e.g. insuring MFIs to allow payment holidays during climate shocks)

5. Strengthen financial inclusion policies, regulation and institutions

Regulation: Context and challenges for financial inclusion

- Constrained legal system with insufficient resources – 659 advocates, 460 in Antananarivo
- Trust in formal justice challenging
- Document access for inclusion is challenging – Identity and title deeds
- Most rely on community legal system (Dina)
- Challenging relationship between judiciary and FSPs
- Well drafted legislation – flexible and principles-based but;
- Practice does not reflect legislation and regulation in some cases

Regulation: Opportunities to enable for inclusion

Extend access

- Implement **electronic money regulation**
- Improve **access to identity documents** and deeds
- Implement **FATF guidelines (2012)** in inclusive manner
- Embed, operationalize and validate **credit information sharing**
- Develop a **framework for bank agency**
- **Strengthen Financial Inclusion mandate**
    - Financial inclusion policy required
    - CNFI mandate strengthened to coordinate and monitor
    - Appropriate financial inclusion data to be collected
    - CSBF mandate to include support for financial inclusion

Regulation: Opportunities to enable for inclusion

Build trust & ensure stability

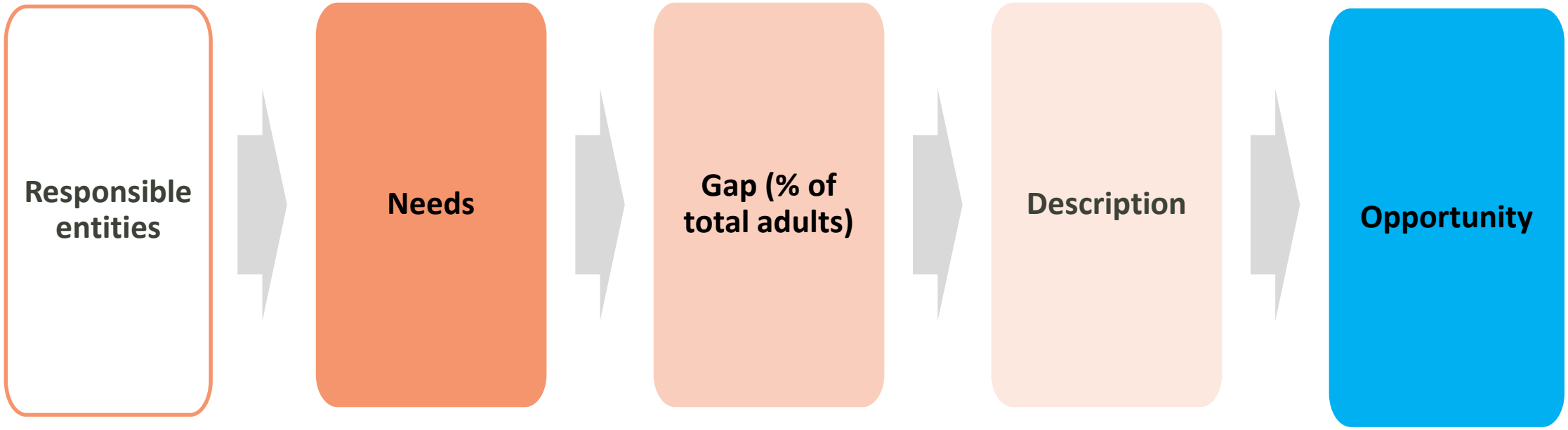
- Implement **market conduct** requirements for recourse and transparency
- Improve **judicial system quality** for contract enforcement
- Create **specialized financial services ombud** following international standards for broader financial services matters
- Strengthen **prudential requirements for systemic savings institutions**
- Comprehensively **protect trust account** of mobile money institutions – priority creditor
- Strengthen **MFI reporting and auditing requirements**
- Investigate **deposit insurance** to build trust

Enable informality

- Normalize informal legal mechanisms in appropriate jurisdiction for **informal savings groups**
- Create appropriate legal space for small scale savings groups from credit establishment requirements

Priorities and actions

Opportunities to address gaps: Resilience and growth



Opportunities to address gaps: Resilience

Individuals	Payments to receive family and community and donor support when shock hits	8.7m adults (79%)	Do not use formal payment mechanisms	Payment eco-systems and trust, partnership and agency for footprint
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	Trust, informal savings groups
Government	Will need 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	Outside scope of Financial Inclusion policy

Opportunities to address gaps: Growth

Wealthier individuals	Savings to be mobilised for investment capital	501,000 adults (5%)	Are not formally saving despite being formally employed or earning more than 5 USD/day	Trust, secure formal long-term savings, payment system, education
MSMEs and farmers who sell	Savings to be mobilised for business	1.8 million adults (16%)	Who sell and earn at least 1 USD/day do not save	Above, targeted products
MSMEs and farmers who sell	Formal credit to be allocated to productive opportunities	1.1 million adults (10%)	Who sell and earn at least 2 USD/day have never had formal credit	Credit eco-system and trust
MSMEs and farmers who sell	Payments to facilitate trade and value chains	795,000 adults (7%)	Who sell and earn at least 1 USD/day do not use formal payment mechanisms	Payment eco-systems and trust, partnership and agency for footprint

Opportunities to address gaps: Payments

- **Payment eco-system development to improve efficiency (infrastructure, cash management)**
- **Digitise key value chains and government payments to extend use cases**
- **Extend distribution – Bank agency; leverage Post Office and MFI footprint**
- **Mobile money liquidity management to extend distribution**

Opportunities to address gaps: Savings

- **Secure systemic savings – regulation and supervision**
- **Appropriate product design aligned with market needs**
- **Enable informal savings groups – regulation and capacity building**
- **Improve collection of deposits through payment system development above**
- **Build trust and education through community and church groups**

Opportunities to address gaps: Credit

- Improve contract enforcement and credit information in financial sector to increase trust
- Address constraints to reduce operating and lending costs and improve affordability of credit
- Facilitate access to affordable capital for growth MFIs
- Enable MFIs to lend to growth businesses – MIS, quality of financial information, capacity building
- Strengthen information on MSMEs and farmers to identify market opportunity
- Improve MFI resilience through wholesale insurance

Opportunities to address gaps: financial inclusion policy, regulation

- **Address regulatory barriers**
- **Implement targeted market conduct regulation**
- **Strengthen financial sector relevant judicial environment**
- **Develop and implement financial inclusion policy**
- **Design and monitor financial inclusion data to improve implementation**
- **Strengthen CNFI to coordinate, enable and monitor financial inclusion interventions**
- **Consumer education strategy needed**

MAP is a comprehensive market assessment of retail financial services. The purpose of MAP is to assist the Government to identify key priorities and opportunities to extend access to financial services.

The MAP framework has been developed in partnership between Cenfri, FinMark Trust and the UNCDF and is intended to become a public good that can advance the global financial inclusion agenda.

Thank You!

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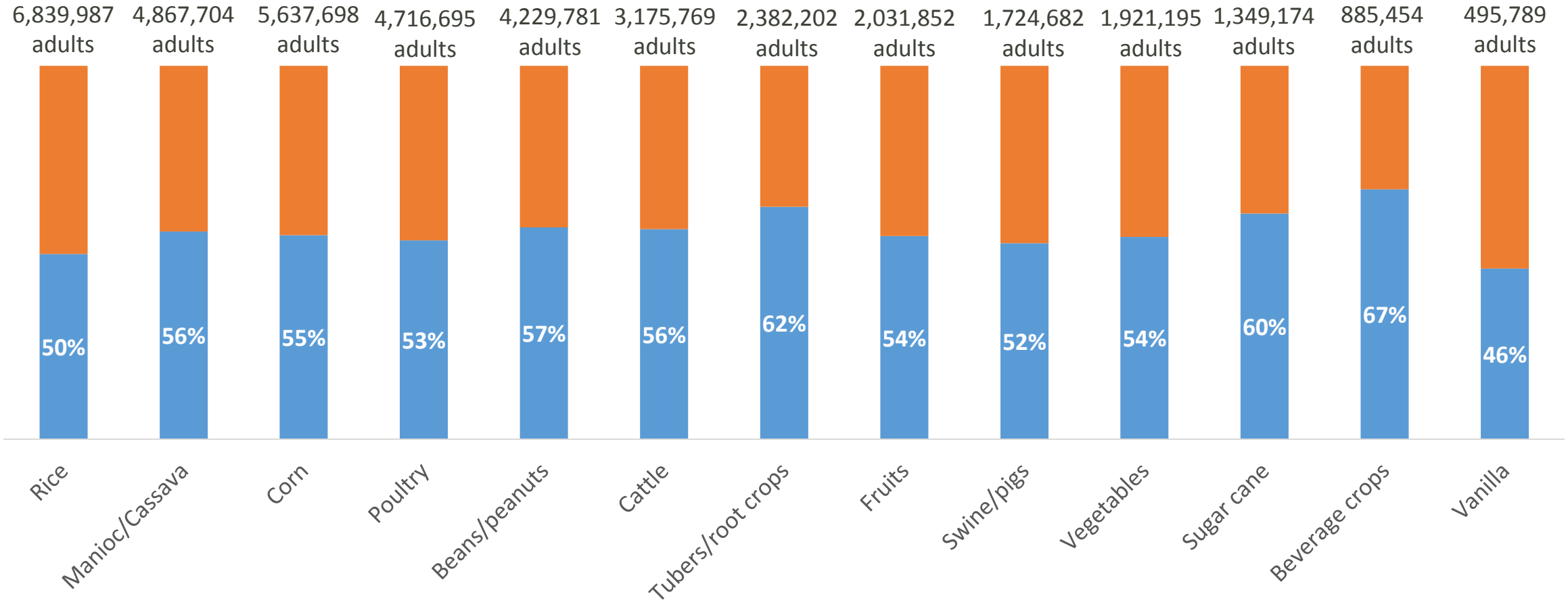
Annexure: Additional supporting data

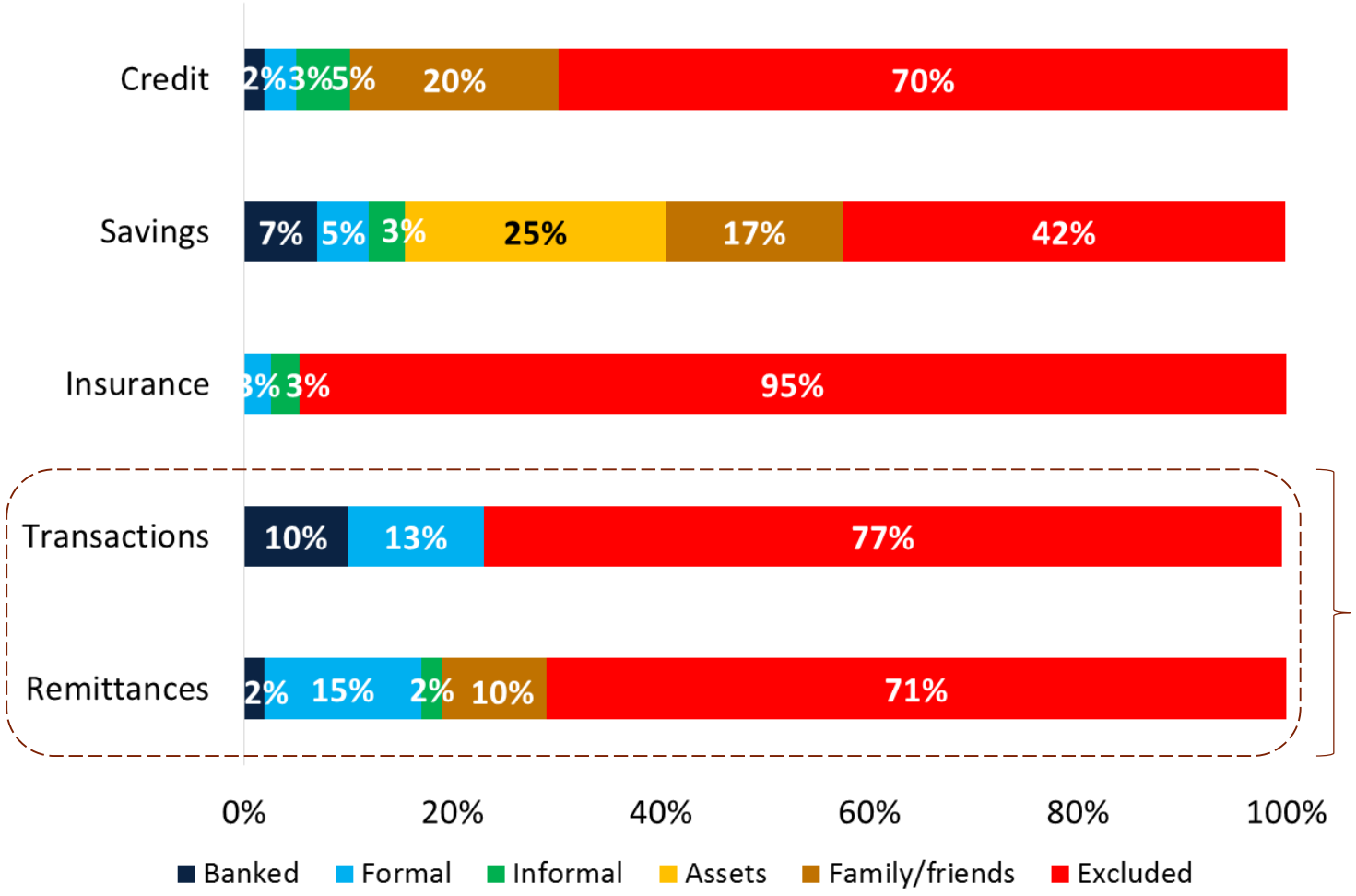
Very vulnerable society with over 4.3 million experiencing annual agricultural shocks

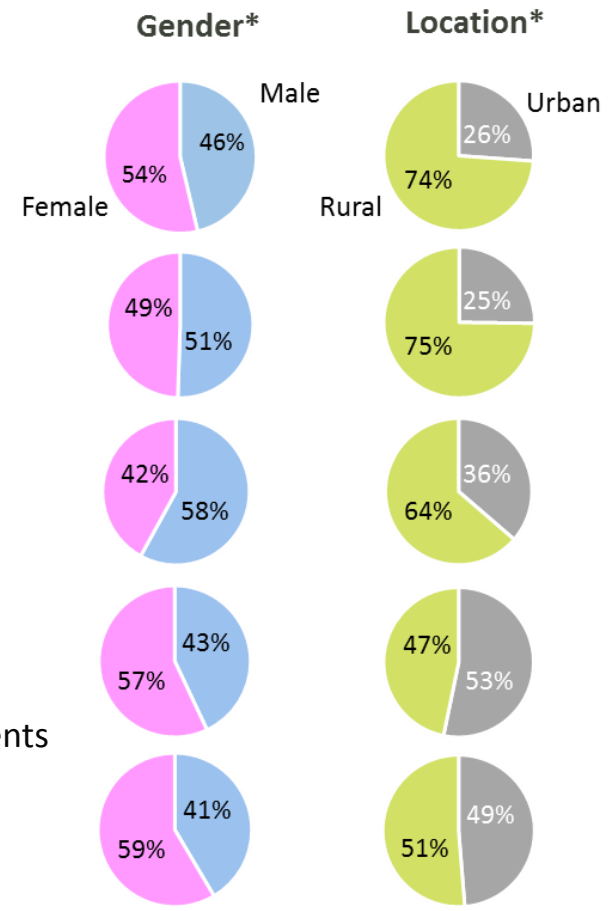
Of those adults involved in farming, the % who experienced a shock in the past 12 months



Source: FinScope (2016)

Product access strand – savings most used, very limited formal access

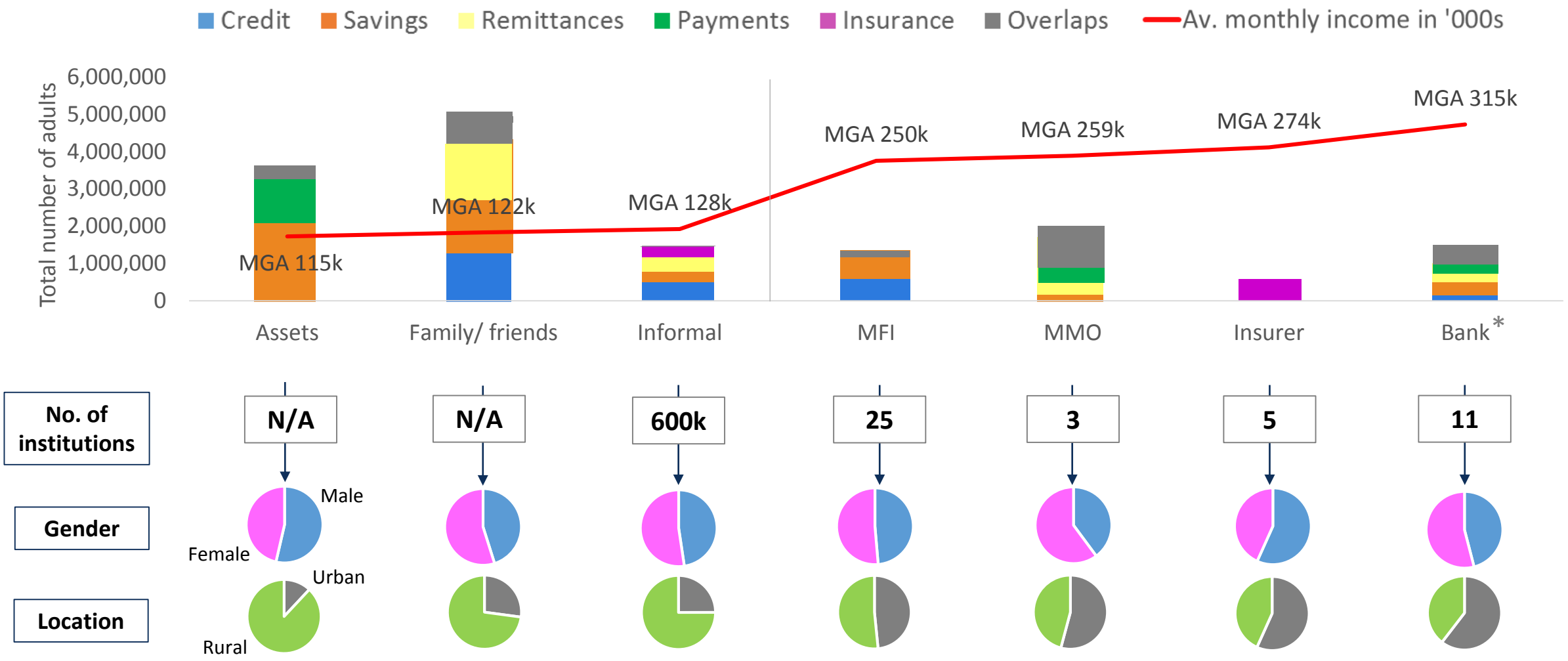




** Split for individuals who have any type of product within the specified category*

Source: FinScope (2016)

Who provides what to whom



* Includes CEM and MTOs (work through the banks)

Sources: BCM (2016), CNFI (2017), FinScope (2016)

Providers innovating to meet customer needs

Mobile money interoperability

Allowing freer flow of funds in the economy for resilience

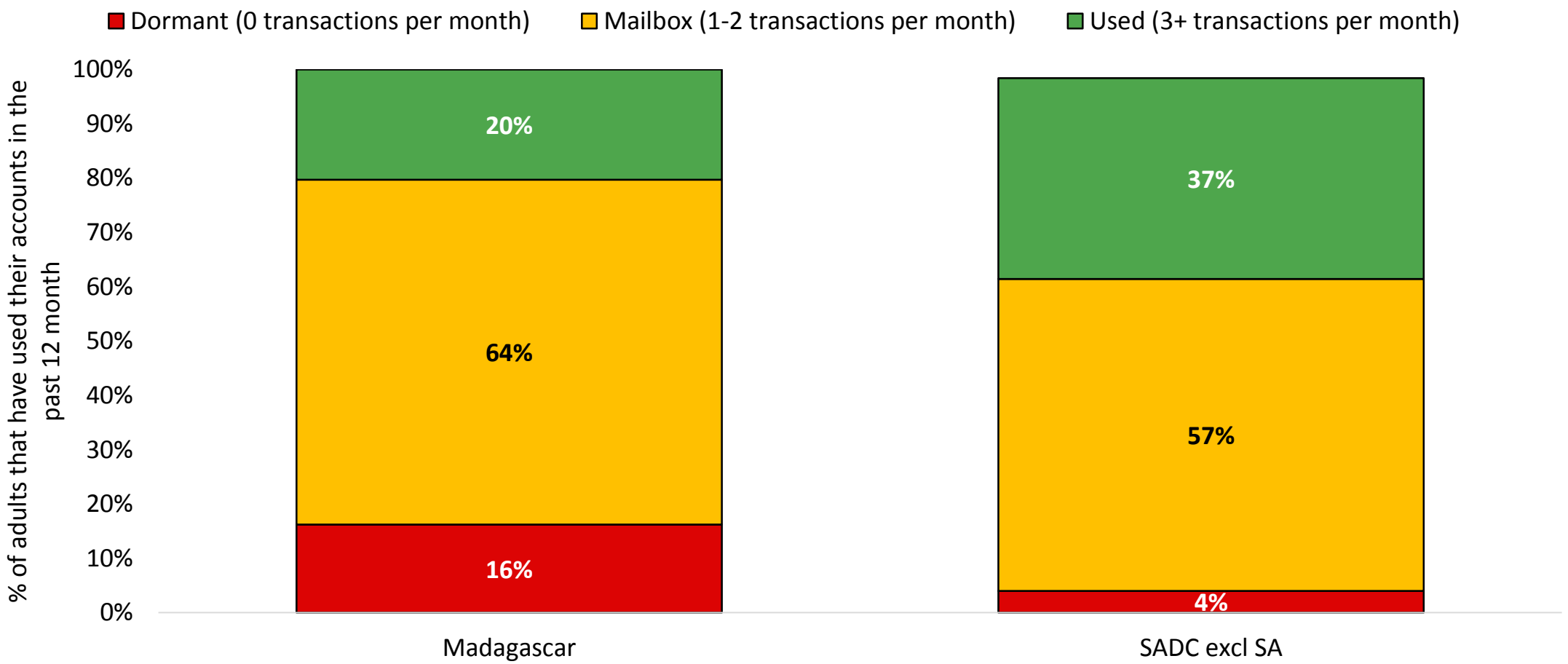
Credit-Health by MFIs

Tying health and repayment together

Product design - MFI & BOA for agriculture

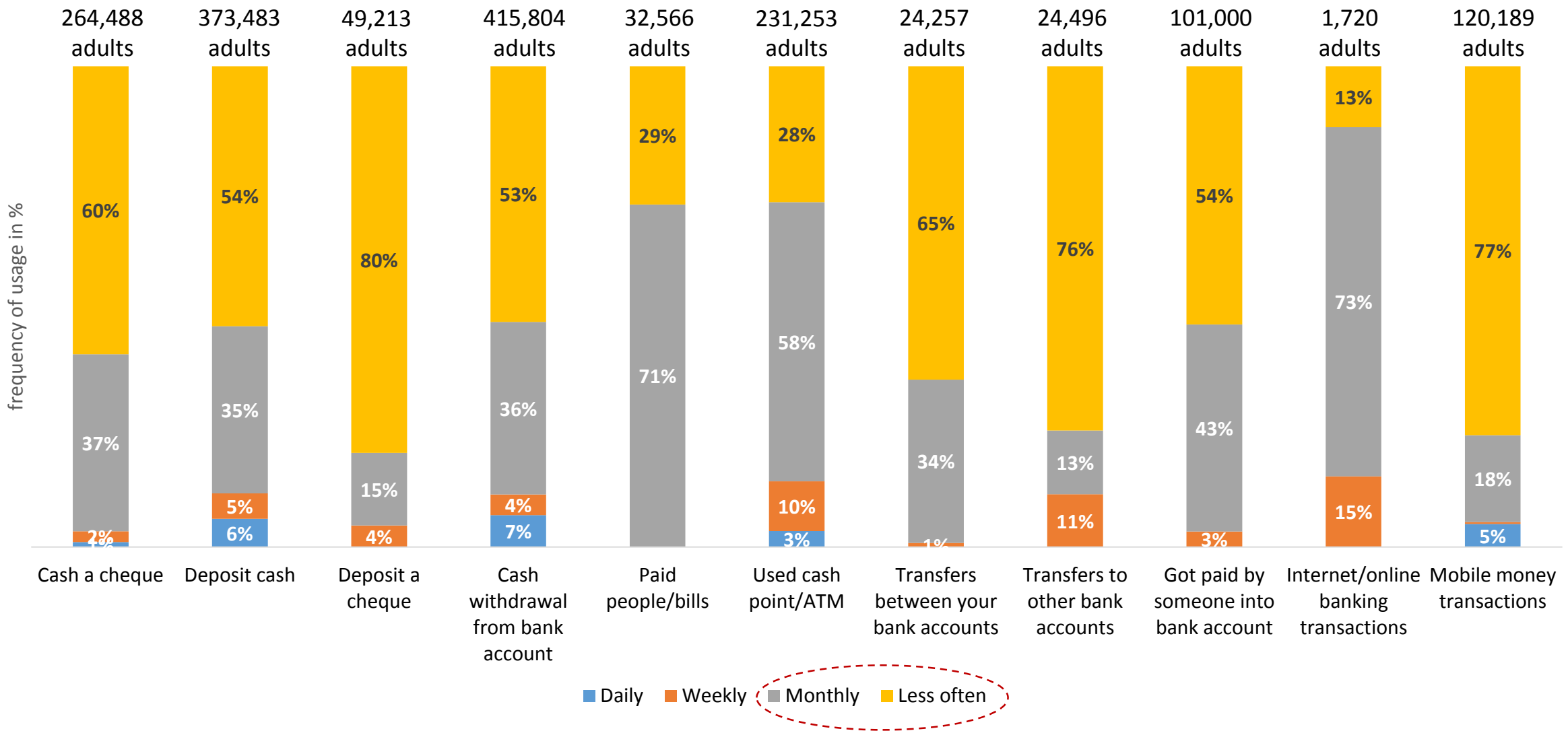
Crop maturity determines repayment (not the reverse)

Payments: High dormancy in accounts; 80% only use once a month or less



Source: Findex (2014)

Payments: Limited use, most transaction types used monthly or less



Source: FinScope (2016)

Criteria for National switch (based on analysis of constraints and opportunities in payments) + WB Aide Memoire	Virtual (Off-site) hosting linked via Bankserve or Siress	Physical (standalone) in-country hosting
Able to raise and stimulate currently limited use case, infrastructure-light, less connectivity reliant, reduces costs of card and associated product use, and can be gradually enhanced	YES. Relatively low costs and speed of running system will positively impact on consumer trust and uptake	NO. Could worsen current adverse Financial inclusion environment because of high cots (upfront and running costs) that will be passed on to consumers, likely debt financing, inadequate local capacity
Functionality; Facilitates payment convergence and interoperability—both multiple instrument and multiple channel; e.g. can process different types of payments; POS, ATM, mobile, cards vs non-card including vouchers, low value EFT (debit and credit)	YES. Can be efficient even at current low volume	YES. But needs high volumes to be efficient and this may only be possible in the long term. Overall will offer low value to consumers and payment system users.
Cost effectiveness (procure, deploy, use and maintain) hereby fostering consumer trust and confidence. This is a key financial inclusion imperative because consumer affordability and use of affordable payment products critical	YES. Approx. US$1000/month to deploy, and use plus US$0.17 cents per transaction. (Zimbabwe, DRC have similar low cost system)	NO. Approx US$10 million to US$25 million. Anticipated economies of scale and cost reduction may not be realized due to high front-end and back-end costs as well as adverse initial conditions that are likely to persist (limited use case, high costs)
Easy disaster recovery due to ability to switch mirror	YES. Mirroring affordable for disaster recovery	NO. Switch mirroring too expensive given initial cost outlay and high running expenses
Fosters consumer trust and results in affordable financial products, channels and instruments	YES. The above costs are quite low and affordable and provide best chance to stimulate payment system	NO. High cost outlays (as in above) will be passed on to consumers. Alternatively banks will cross subsidize with other products and hence limit inclusive products range

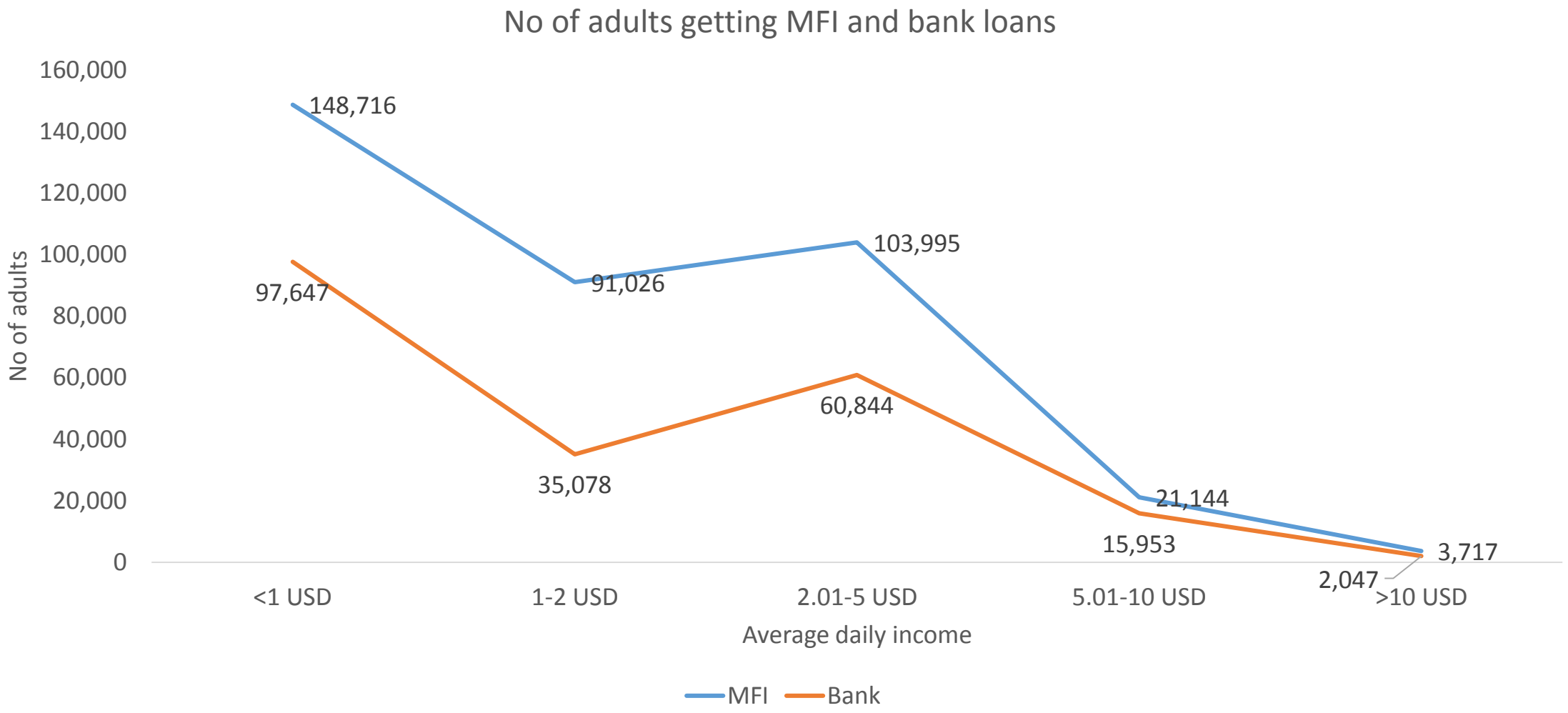
Criteria for National switch (based on analysis of constraints and opportunities in payments)	Virtual (Off-site hosting)	Physical in-country hosting
Very brief testing and implementation phase to ensure costs don't end up being borne by consumer	YES. Very short testing period	NO. Requires elaborate testing and retesting to configure with Madagascar conditions. This increases costs in a capacity constrained environment
Technologically interoperable—with future technologies including biometrics (since ID and KYC is a key issue limiting inclusion)	YES. Its ISO 20022 compliant and interoperable with other technologies. Can be modularized (at minimum costs) and take on additional modules and respond to technological developments	YES. Can be modularized but at high costs. High configuration requirements may make it redundant or difficult to integrate and adapt new technologies in future.
Can seamlessly integrate with mobile (given Madagascar mobile potential) to enhance reach and financial inclusion.	YES. Can do that at low cost	YES. Can do that but at high cost
Switch and Clearing house (PCH) rules and standards to be ISO20022 compliant—covering ID slot, interoperability, etc.	YES. It is ISO 20022 compliant. But Clearing house rules need to in place irrespective of which national switch eventually gets adopted	YES. It could be ISO 20022 compliant. But Clearing house rules need to in place irrespective of which national switch eventually gets adopted
Balance affordability and developmental needs\	Yes. Because its fit for purpose and can grow with the changing consumer and FSPs needs	NO. May result in high costs and exclusion as well as high debt if debt financed

Savings: Real return on bank, MFI and mobile accounts low or negative

	Banks and CEM		MFI banks		MFIs		Mobile money	
	MGA 15k pm	MGA 30k pm	MGA 15k pm	MGA 30k pm	MGA 15k pm	MGA 30k pm	MGA 15k pm	MGA 30k pm
Base deposit over a year	**181k**	**363k**	**181k**	**363k**	**181k**	**363k**	**181k**	**363k**
Annual interest	7.5k	15k	15k	30k	12k	24k	-	-
Nominal value of savings	181k	363k	181k	363k	181k	363k	181k	363k
Real value of savings	**175k**	**353k**	**184k**	**366k**	**181k**	**359k**	**169k**	**338k**
% change between nominal and real savings value	**-5%**	**-2.5%**	**2%**	**0.5%**	**0%**	**-1%**	**-6%**	**-6%**

Sources: FTHM (2016), provider interviews (2017)

Credit: MFIs serve higher number of poor MSMEs and farmer entrepreneurs



Source: FinScope (2016)