

MOBILE MONEY ECOSYSTEM IN SOMALIA - SUMMARY

Altai Consulting for the World Bank | June 2017





Executive Summary

- Mobile money embodies financial opportunity in Somalia. Deemed convenient, affordable and fast, mobile money has been widely adopted. It has reached a penetration rate of 73% (83% in urban areas, 72% in IDP camps and 55% in rural areas), compared to a penetration rate of 15% for formal bank accounts. Given the depreciation of the local currency and lack of other satisfying and accessible alternatives, people and firms rely heavily on mobile money for their daily money transfers, and mobile money services have been acting as a virtual dollarized currency. Thus, mobile money has become the primary financial instrument in Somalia and Somaliland, while cash usage is decreasing. The ecosystem is also already robust, with nearly two-thirds of users choosing to keep funds in their mobile accounts rather than cashing them out. Large shares in the value mix of disbursements and bill and merchant payments suggest an expanding ecosystem of institutions and businesses using the system.
- 2 Most of the success has been due to the home-grown nature of mobile money. Mobile Network Operators have managed to nurture, from scratch, a local context-appropriate, unique and compelling mobile money ecosystem that meets Somalis' needs. This is a substantially different environment than telecommunications in countries across the rest of the African continent, which have traditionally been dominated by incoming multi-nationals such as India's Bharti or France's Orange. Given Somalia's complex political environment and volatile security conditions, investments in telecommunications have been almost exclusively led by Somalis, both from the diaspora and within the country. As a result, the ICT sector has been able to leverage Somali social and business networks, and has created products uniquely suited to the Somali context.
- While mobile money services are broadening the reach of financial services for the unbanked, the most vulnerable are more likely to be excluded from the system. Barriers to direct use by the poorest segments include cellular coverage, cost of phone ownership and use, limited access to electrical power, illiteracy and the predominance of mobile money services being offered in USD (rather than the local Shilling valued in rural areas). Nevertheless, there is strong evidence of a social impact. Mobile money circulates across groups of different vulnerability levels, and in a society of frictionless financial interdependence, mobile money enables more fluidity within the family and clan, and constitutes a lifeline for the poor. Mobile money transfers from NGOs and aid agencies also contribute to flows targeting vulnerable populations.

4

Yet, just as mobile money in Somalia offers significant opportunities, it also comes with staggering risks. The current system used in most of the Somali peninsula lacks formal Know-Your-Customer requirements on customer identity, as well as formal parity between e-Money and cash in banks.

As such, the following policy priorities are crucial for sustainable growth:

- Establishing parity between online and offline credit for mobile payments;
- Developing trusted "Know-Your-Customer" systems;
- Ensuring interconnection of mobile payments between Mobile Network Operators;
- Passing the Communications Act to license Mobile Network Operators;
- Enabling Shilling-based mobile money transactions (alongside US\$-based payments).

For now, the universal acceptance of mobile money will continue to drive mobile money use - but the market could become rapidly saturated. To leverage the full potential of Somalia's mobile money industry, operators need to target rural areas and offer more diverse, value added services to build up their user base and spur more active usage of mobile money by subscribers. Partnerships with Money Transfer Operators and banks have shown the potential to develop a more comprehensive ecosystem and extend the value proposition of mobile money as the market grows. Further developments will require reliable regulatory support from the government, as well as private sector adherence to financial and consumer security requirements. This could then help the industry gain more trust from Somali consumers and the international community.

1. Key findings

1.1 Contextual elements

1.2 How does mobile money work in Somalia and Somaliland?

1.3 How is mobile money circulating across the financial landscape of Somalia and Somaliland?

- 1.4 What does the dollarization of the economy mean for the mobile money sector?
- 1.5 To what extent do people and firms rely on mobile money in Somalia and Somaliland?
- 1.6 What are the advantages and risks of the current system?
- 1.7 What drives the adoption of mobile money? What are the barriers to adoption?

2. Key recommendations

2.1 Objective 1: Further build upon the mobile money ecosystem

2.2 Objective 2: Apply a regulatory framework to the industry to strengthen the ecosystem

2.3 Objective 3: Provide greater financial inclusion for Somalis

2.4 Objective 4: Provide greater economic contribution to Somalia and Somaliland

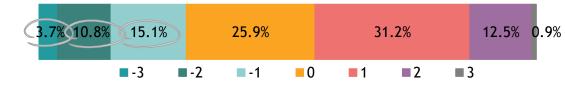
3. Annex

Contextual elements

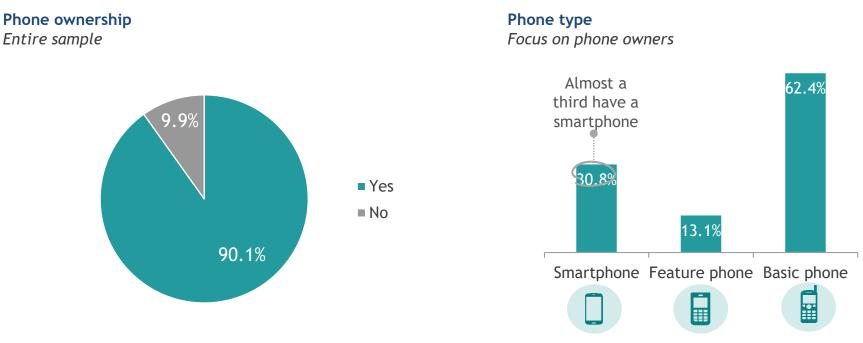
Population:

• 30% of the population can be considered as vulnerable or very vulnerable based on their living and housing conditions. 26% have an average monthly income below US\$100¹.

Vulnerability index Entire sample



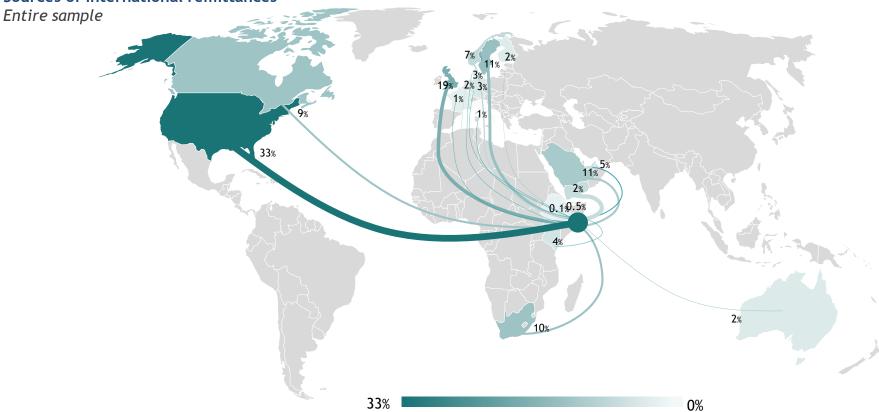
- 25% have not received any education. 31% don't know how to read and 69% cannot speak English.
- 90% own at least one mobile phone. 88% own at least one SIM card.



(1) The statistics refer to Somalis above 16, excluding nomadic populations and those living in inaccessible areas due to security reasons.

Financial services:

- A very large part of the population is still unbanked. The penetration rate of banking services remains very low, at 16%.
- Digital transactions are overall well known, while Somalis have low levels of understanding of loans and insurance services. People with lower levels of education tend to be less financially literate.
- Usage of financial services remains very limited: 47% of Somalis do not send nor receive money domestically; 55% do not save nor borrow money.
- 37% of Somalis have received international remittances over the last year. More than half of international remittances recipients receive more than US\$100 per month.

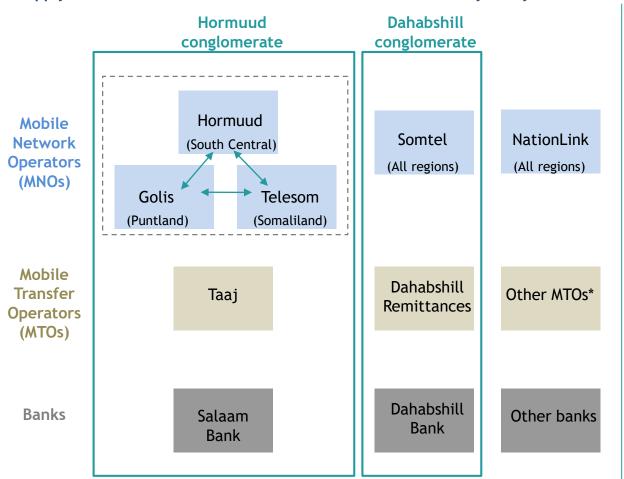


Sources of international remittances

% of international remittances recipients who receive money from that specific country

1.2 KEY FINDINGS > HOW DOES MOBILE MONEY WORK IN SOMALIA AND SOMALILAND?

How does mobile money work in Somalia and Somaliland?



Supply-side elements: Somalia and Somaliland's mobile money ecosystem

Companies in the ICT sector have been operating in an unregulated environment. Although some steps have been taken, adequate regulatory and taxation policies still do not exist. A major and expected regulation is the Communications Act. Somalia boasts a developed ICT sector. Given Somali complex political and security conditions, investment in the ICT sector has been almost exclusively led by Somalis. No interconnectivity exists between concurrent operators, except for an agreement between Hormuud, Golis and Telesom.

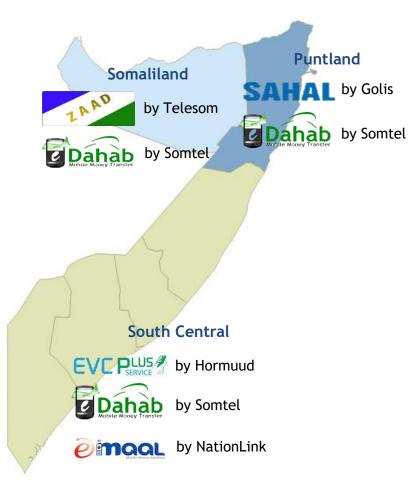
The predominance of mobile money has put the smallest MTOs out of business but left the largest uncontested for international money transfers. 17 MTOs, based on the *hawala* system, operate across Somalia. MTOs specialize in international remittances, but also offer domestic money transfer services.

7 Sharia-compliant banks operate across the Somali peninsula. The Somali financial sector remains underdeveloped. Only a couple of banks offer ATM and credit card services.

The market structure has evolved, with consolidation around conglomerates, resulting from partnerships between MNOs and MTOs and between MNOs and banks - more below.

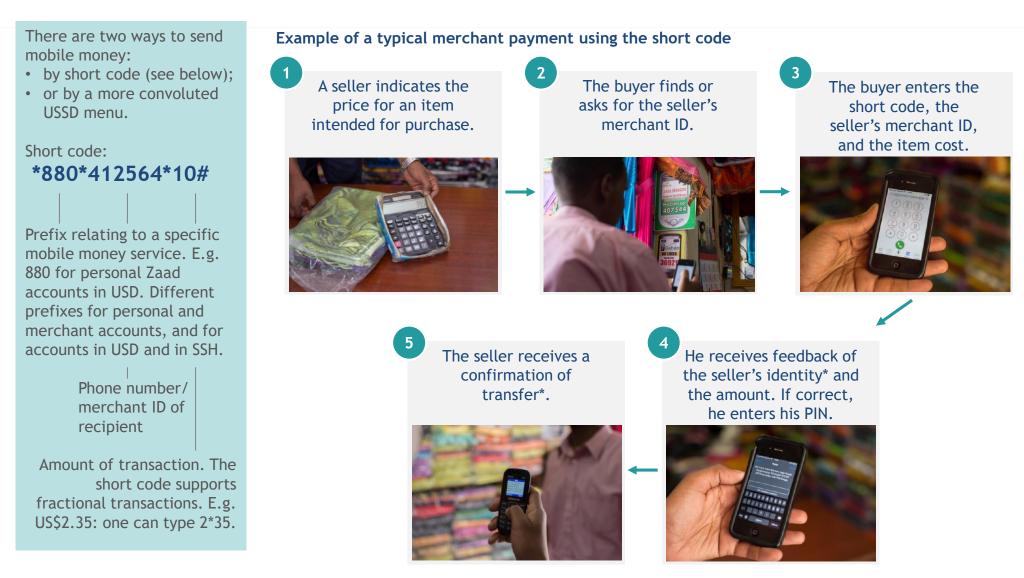
* Even if not formally part of the Hormuud conglomerate, some MTOs, such as Tawakal, World Remit, Transfer Galaxy and Bakal have developed partnerships with Hormuud, Golis and Telesom.

Mobile money services in Somalia and Somaliland



- Mobile money services share many similarities, including:
 - All mobile money services are free of charge. The business model of MNOs was based on mobile money as a retention tool, that only contributes to indirect revenues.
 - All mobile money services are available in USD (Zaad and E-Dahab also offer services in Shillings).
 - MNOs decided to utilize their own distribution networks and not to rely on external agents.
- Registration criteria vary greatly by MNO. While Zaad and Golis have relatively sophisticated KYC and registration criteria, EVC-Plus does not operate under a set of rules compliant with international standards.
- Partnerships are increasingly being developed between MNOs and MTOs and between MNOs and banks to try and create better services for the population and gain competitive advantages:
 - MTOs are increasingly partnering with MNOs to transfer international remittances directly to the mobile money accounts.
 - Partnerships between MNOs and banks enable further integration of mobile money and mobile banking.
 - It is the realization of mobile money as a significant tool that can help to create a financial infrastructure that has not been present, and that can help to develop potentially better financial structures in the country.

• Mobile money can be transferred easily, by just dialing some short codes on the mobile phone.



Credit for the pictures: StudioD

* As detailed above, different KYC processes across mobile money services create discrepancies in the referencing of transactions. In step 4, a EVC-Plus user will only receive the phone number as a feedback, which is more error-prone.

Demand-side elements:

The mobile money market is active and mobile money is widely used across the Somali peninsula. MNOs have developed **mobile money services that fit well Somalia's cultural and socio-economic context**. Mobile money in Somalia has indeed filled a more traditional banking need; Somalis use mobile money as e-wallets, holding money in the system and saving it for other purchases or transfers, in essence acting as a bank account.

'All my friends and relatives use mobile money, it has become part of our lives.' (Dini, South Central)

'If you go to the market, you will not see any one carrying money in their pockets but you will see everyone buying something through EVC+ which is very essential. All people have adapted to it. Mobile money is like a new currency. Somali Shillings have become very rare.' (Asha, South Central)

'People you meet will ask you 'Do you have Mobile Money?'. If you say no, they may ask you 'How can I send you money then?'. So, you see, this situation forces you to use mobile money, and this is the real reason why almost everybody in Somalia uses mobile money.' (Abdulahi, South Central)

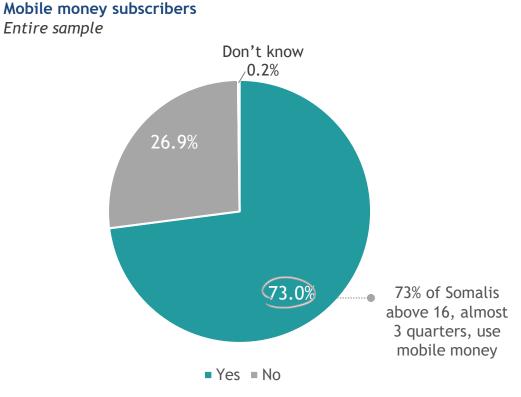
'Somalis have learned how to use mobile money services and use it widely to buy goods and send and receive money. Mobile money has become one of the first Somali life pillars.' (Suhero, South Central)



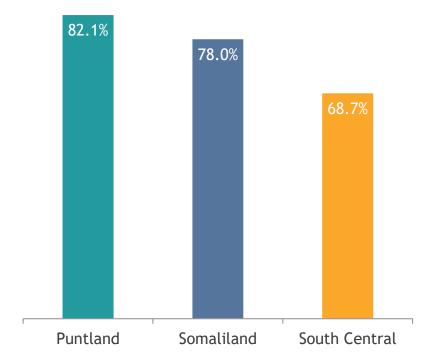
1.2 Key findings > How does mobile money work in Somalia and Somaliland?

• Penetration rates:

- 73% of Somalis over the age of 16 use mobile money services*.
- Puntland has the highest mobile money penetration rate (82%), closely followed by Somaliland (78%). South Central (69%) exhibits high heterogeneity of mobile money penetration among its Federated Member States (FMSs).



Mobile money penetration rates by zone Entire sample

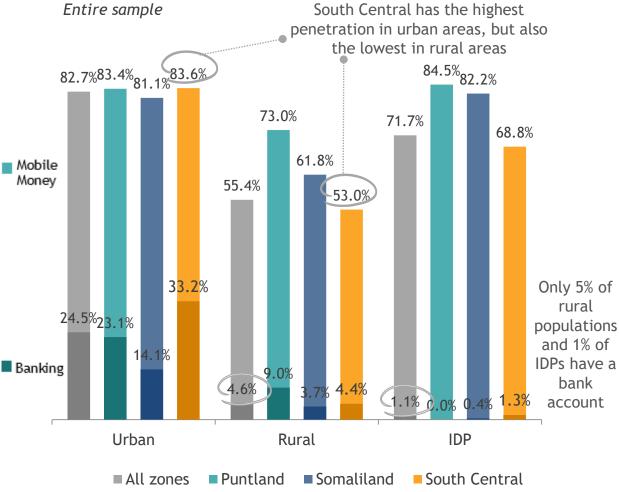


As nomadic populations and populations living in areas assessed as inaccessible are likely to have lower levels of access to mobile money, the penetration is likely to be overestimated, would one like to infer statistics on the entire Somali population. However, FGDs with nomads revealed that usage of mobile money by nomads is also widespread (see Slide 170). Endogenous factors to the MNOs (more sophisticated mobile money services and stronger KYC requirements in Somaliland and Puntland), variations in living standards and the influence of Al Shabaab contribute to explain discrepancies between the usage of mobile money services in South Central and the usage in Somaliland and Puntland.

* Comparison with Kenya: Kenya stays ahead in terms of mobile money penetration, put not by much (different estimates could be found for Kenya, ranging between 72% to 85%). The gap is far greater in terms of bank accounts penetration (55% in 2014 in Kenya compared to 16% in 2017 in Somalia) - cf. Global F-Index 2014.

- The penetration rate of mobile money is 83% in urban areas, 72% in IDP camps and 55% in rural areas. Mobile money is less widespread in rural areas, where the economy is based predominantly on subsistence farming and where the Shilling is more valued (see Slide 38 for more on specific barriers faced by rural populations).

Mobile money penetration rates by urban/rural/IDP split - and comparison with banking penetration rates



Penetration of mobile money is high in IDP camps. Aid agencies distribute phones and send money to beneficiaries through mobile money.

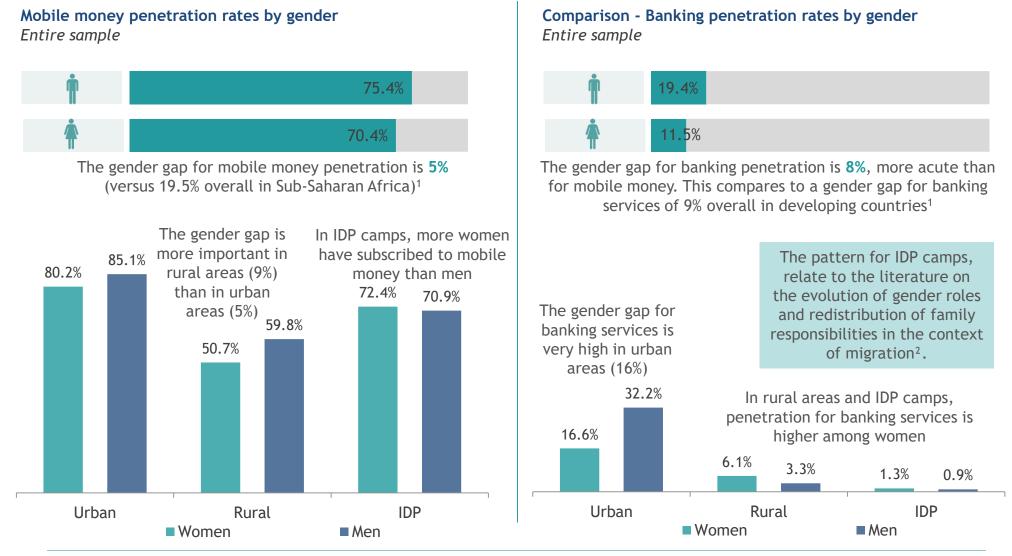
'Humanitarians in Somalia use the system of mobile money transfer and it has promoted and enhanced the work of the agencies because they deliver help more quickly and more effectively. It's better than cash that brings conflict when distributing.' (Farhia, South Central)

By comparison, penetration of mobile money in rural areas is much lower. This can be partly explained by the lack of operators' branches in rural areas.

'The operators do not have an agency here for mobile money transactions and sometimes it's hard to load money to your phone. We would like telecommunications companies to open an agent here at Libaaxe, so that we can get good access for using mobile money and other necessary services, like the ones who live in big towns.' (Safiyo, Puntland)

1.2 Key findings > How does mobile money work in Somalia and Somaliland?

- The gender gap in terms of mobile money subscription is 5% (penetration of 75.4% for men versus 70.4% for women). This can be compared to 8% for banking services, which would tend to prove that mobile money is progressively closing finance gender gaps in Somalia.

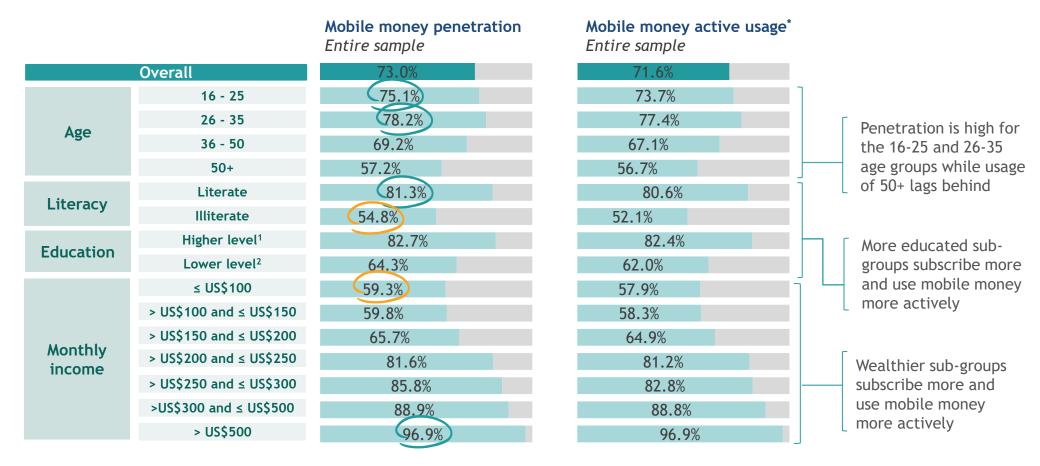


(1) Global F-Index 2014; What Financial Diaries Tell Us About Building Financial Services That Matter to Low-Income Women, Omidyar Network, 2016

(2) Shift in Social Order - Shift in Gender Roles? Migration Experience and Gender Roles, Tetiana Havlin, 2015

1.2 Key findings > How does mobile money work in Somalia and Somaliland?

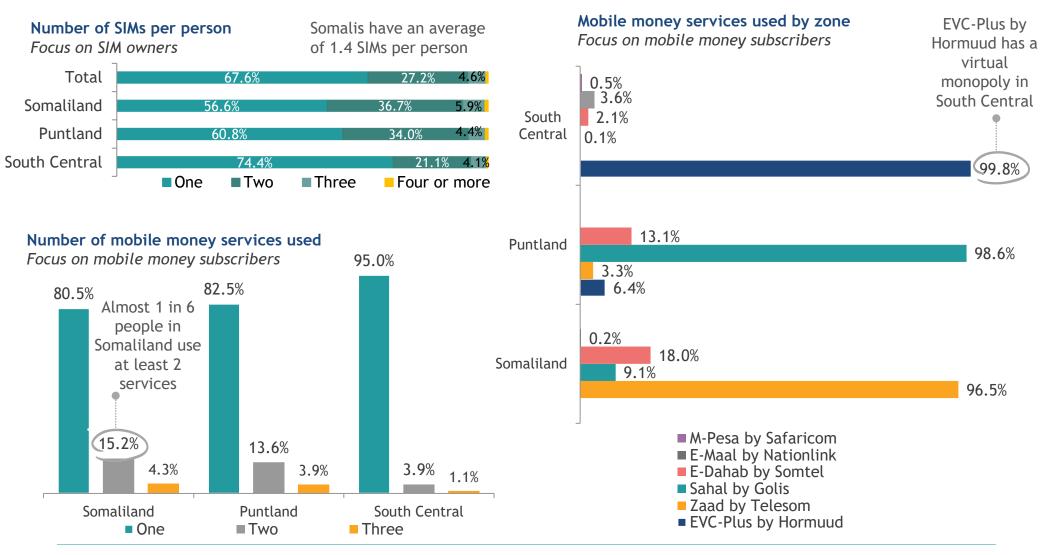
- Younger, literate, more educated and wealthier people tend to subscribe more to mobile money and use it more actively than other sub-groups.
- Among socio-demographic variables, being elderly and relatively wealthy are the two strongest predictors of mobile money subscription: while being elderly (above 55) significantly reduces the odds of using mobile money, having a monthly income higher than US\$200 per month significantly increases the odds.
- The head of the household and his/her partner are more likely to use mobile money. On the contrary, the household members who have a less important role in the household are less likely to use mobile money.



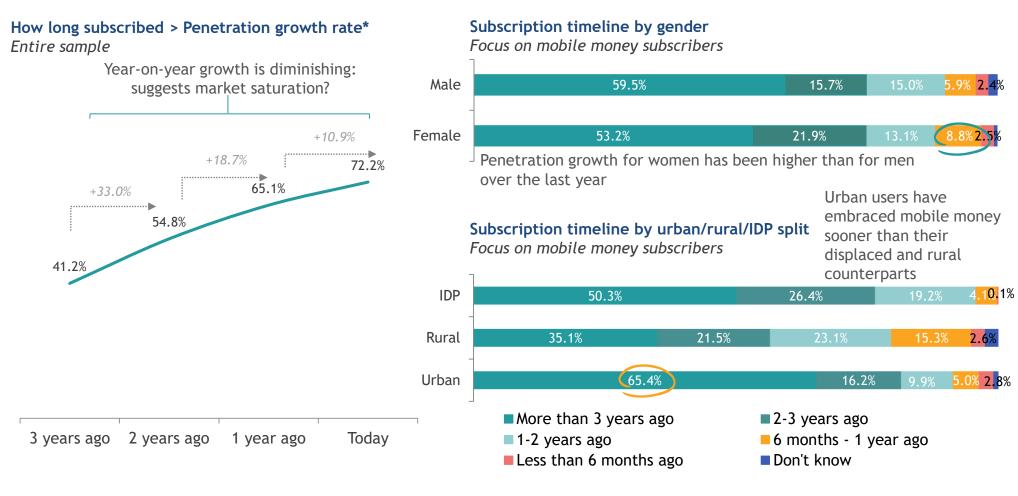
*Active users are mobile money subscribers who have used mobile money services within the last 3 months.

1.2 Key Findings > How does mobile money work in Somalia and Somaliland?

- While it is supposedly competitive, some operators have virtual monopolies. Each zone is indeed largely dominated by one mobile money service: Somaliland by Telesom's Zaad, Puntland by Golis' Sahal and South Central by Hormuud' EVC-Plus.
- Yet, the lack of interconnectivity across services sometimes requires users to use multiple mobile money services to stay connected.



- Trends:
 - Mobile money services are booming as the industry has faced significant year-on-year growth over the past few years.
 - Men and urban populations were initially quicker to adopt mobile money. But women and rural populations are progressively catching up, with higher year-on-year penetration growth over the last year.
 - However overall annual growth has started to decline: towards a saturation of the market?



* 1.1% responded 'Don't know'. The difference between the penetration rate of the previous slides and the 72,2% is due to the non-response (respondents who don't know when they first subscribed).

Usage patterns - general public:

• Mobile money is used for various types of transactions. Somalis commonly embrace mobile money for transferring money, purchasing goods, paying bills, transferring airtime, receiving money from families and relatives, receiving salaries, saving money, etc.

'I use mobile money for everything: to buy goods, to receive money, to buy airtime, for all bill payments like electricity, water and food bills. I also reimburse with mobile money the money that my household owns. We rely on mobile money.' (Nicmo, South Central)

'This service helps my household in our daily life. For example, when I want to receive money from my family and other relatives, send school fees, pay bills, buy food and to pay doctors, I use mobile money.' (Ali, Somaliland)

'I pay merchants with mobile money because most of my money is in my mobile, most of the businesses use dollars and have merchants numbers. It is very easily accessible.' (Nora, Somaliland)

From the FGDs, sending and receiving money, as well as transferring/purchasing airtime and paying utility bills, are the most valued services. However, in rural areas, only the most basic services are commonly used.

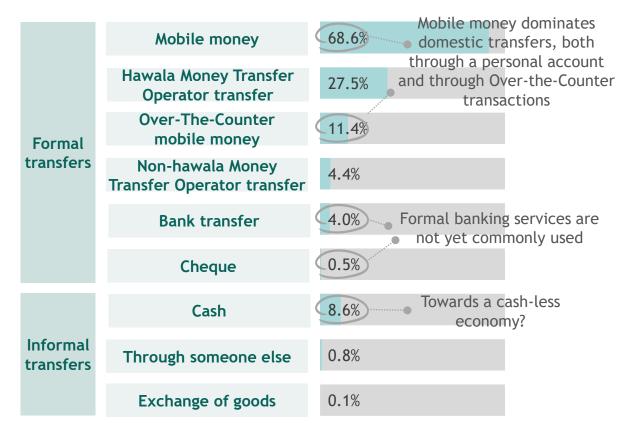


1.2 Key findings > How does mobile money work in Somalia and Somaliland?

- Mobile money largely dominates domestic transfers (with 69% of those sending or receiving money domestically using the method) (compared to 28% for hawalas and only 9% for cash).
- To receive money internationally, Hawala is used the most. Remittances companies are also increasingly partnering with MNOs (see above), explaining why 25% receive international remittances directly on their mobile money accounts.
- Over-The-Counter (OTC) transactions are also widespread, even for mobile money non-subscribers (11% of Somalis use OTC transactions for domestic transfers).

Methods of domestic transfer

Focus on those who send and/or receive money domestically



Methods of international transfer

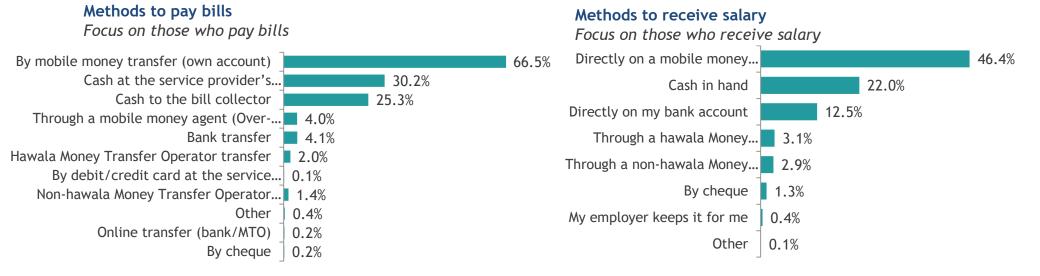
Focus on those who *receive* money internationally

76.0% receive money from abroad through a hawala Money Transfer Operator transfer.24.9% receive money from abroad directly on their mobile money account.

'Mobile money is easy to send and receive money from anywhere in the world; here Hormuud included TAAJ service, TAAJ service is really under EVC-Plus and you can receive money from abroad directly on your phone; some of my friends are receiving money from Saudi Arabia through their phones by Taaj Hawala.' (Tahlil, South Central)

The possibility to receive international remittances directly on mobile money accounts is convenient as it does not require users to cash-out from the hawalas and deposit the funds into the mobile money accounts. - Among those who pay utility bills, 67% use mobile money to pay their bills (versus 30% who pay in cash at the service provider's branch and 25% who pay in cash to the bill collector).

- Of those who receive salaries/allowances, 46% receive it directly on their mobile money account (versus 22% in cash)*.



• The usage of mobile money is quite uneven across users. The research distinguished groups of subscribers:

- Subscribers who use mobile money the least: they only use the most basic services and have the smallest monthly amounts transferred by service. This group corresponds to more vulnerable segments of the population.

- Subscribers with intermediate mobile money usage: their usage of mobile money is quite frequent and diversified, but they are somehow constrained by their income in terms of the numbers/values of transactions.

- Subscribers with very active usage of mobile money: they are long-time users and use many different mobile money services. They correspond to wealthier and more educated groups.

- Groups can be disaggregated by the amounts of salaries/allowances received through mobile money.

^{*}There is potential for mobile money salary payments to be further expanded as 26.4% of those who receive their salary in cash would prefer to receive it on a mobile money account if they had the choice.

1.2 Key findings > How does mobile money work in Somalia and Somaliland?

- Sending and receiving money domestically, transferring airtime and paying merchants are the mobile money services with the highest frequencies of use.

- P2P transfers represent both demanded services and vehicles for cash volumes.

- Salary disbursements and international remittances are relatively less prevalent and less frequently used but generate important volumes of transactions.

Comparison of different mobile money services - Prevalence, frequency of use and transfer volumes *Focus on mobile money subscribers*

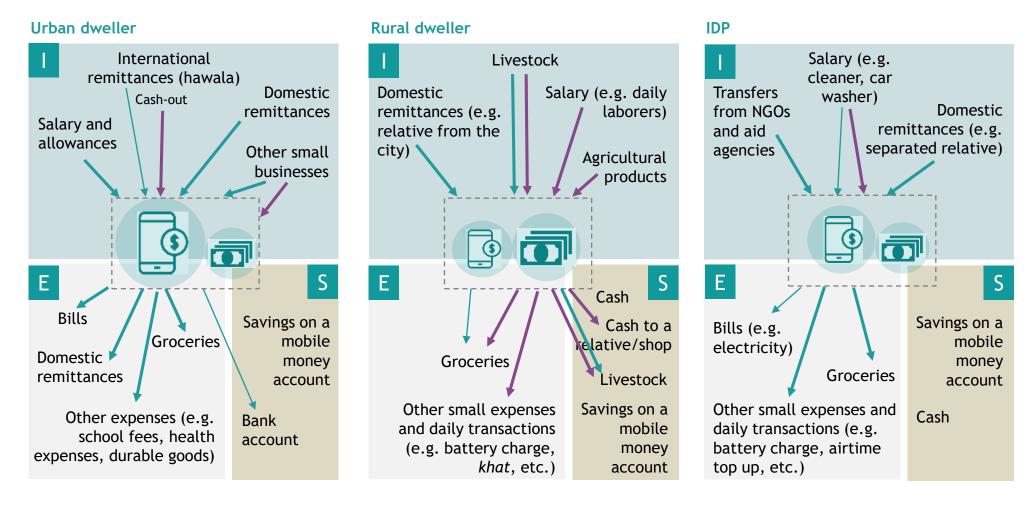
Mobile money services	Percentage of subscribers using the service	Average number of transactions per month ¹	Average amount spent/sent/ received per month (USD) ²
Take out	100.0%	4.0 Somalis cash-out more	81.6
Deposit	100.0% Transfer airtime: a	2.6 • often than they cash-in	75.7 but for small amounts, hence significance as a
Transfer airtime	82.8% large percentage of	4.4 with a high frequency of use	demanded service but
Bill payment	subscribers using the service	1.8	61.2 lesser significance as a vehicle for cash volume
Receive domestically	55.9%	3.7	P2P transfers: both a
Send domestically	52.7%	4.9	124.0 demanded service and a
Purchase airtime	48.4%	2.0	27.0 vehicle for cash volume
Merchant payment	48.1%	3.9	87.6
Salary/allowances	45.0%	0.7	186.5 Lower prevalence and
Reimburse loans	32.5%	0.5	51.4 frequency for these transactions but
Save money	15.5%	0.3	132.0 important amounts transferred
Receive internationally	8.9%	0.1	210.1

(1) Mean average of number of times the specific service was used over last month and (2) mean average of the amount spent/sent/received over last month for mobile money users who have used the specific service at least once over the last month ²⁰

1.2 Key findings > How does mobile money work in Somalia and Somaliland?

• Urban users tend to use more mobile money services than their rural and IDP counterparts. The percentage of subscribers using mobile money to pay bills, purchase airtime, pay merchants and receive salaries is particularly higher in urban areas. Mobile money is progressively becoming more commonly used by rural populations, who still however receive cash and rely on cash.

Typical usage of mobile money by an urban dweller, a rural dweller and an IDP



Savings

Usage patterns - SMEs and merchants:

- SMEs and merchants receive most of the payments from their customers through mobile money.
- SMEs and merchants also largely rely on mobile money to pay their utility bills, remunerate their vendors and suppliers, store money and reimburse money borrowed.

Receiving payments from clients

'We use mobile money because it is driven by our clients who use it and want to be able to pay through mobile money. This is common to every business.' (Fardowso, Puntland)

Many SMEs and merchants have a specific mobile money account for their business (with a merchant ID customers can send mobile money to). However, due to the application process required to acquire a merchant ID, small or informal vendors generally use their own personal mobile money account to receive payments from their clients.

Paying vendors/suppliers and utility bills

'Most of the suppliers like the mobile money system; it has a reference. They can print all transactions for tracking their expenses'. (Mustafe, Somaliland).

Bank accounts linked to mobile money accounts

MNOs partnering with banks in large conglomerates, SMEs' bank accounts can be easily associated with the mobile money merchant accounts. This improves SMEs' ability to access their funds when they need to, which reduces liquidity issues.

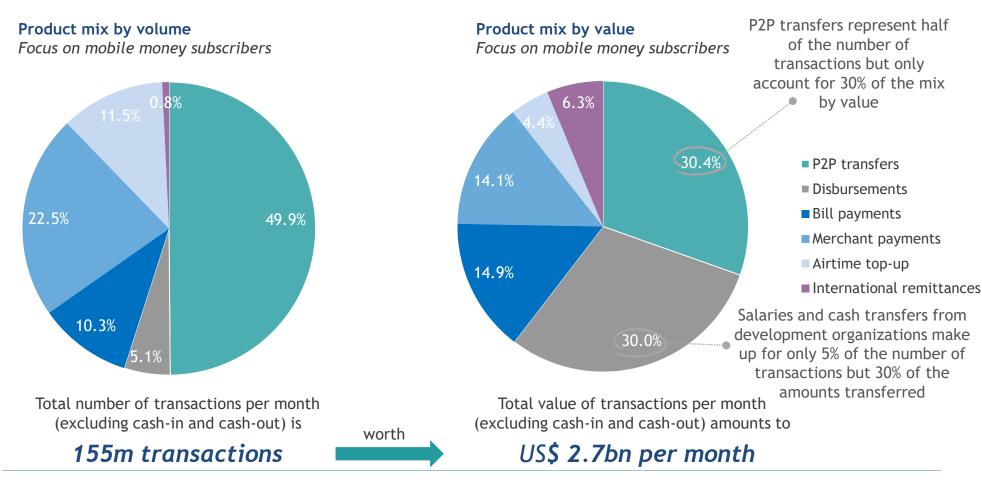


Merchant number for a petrol station

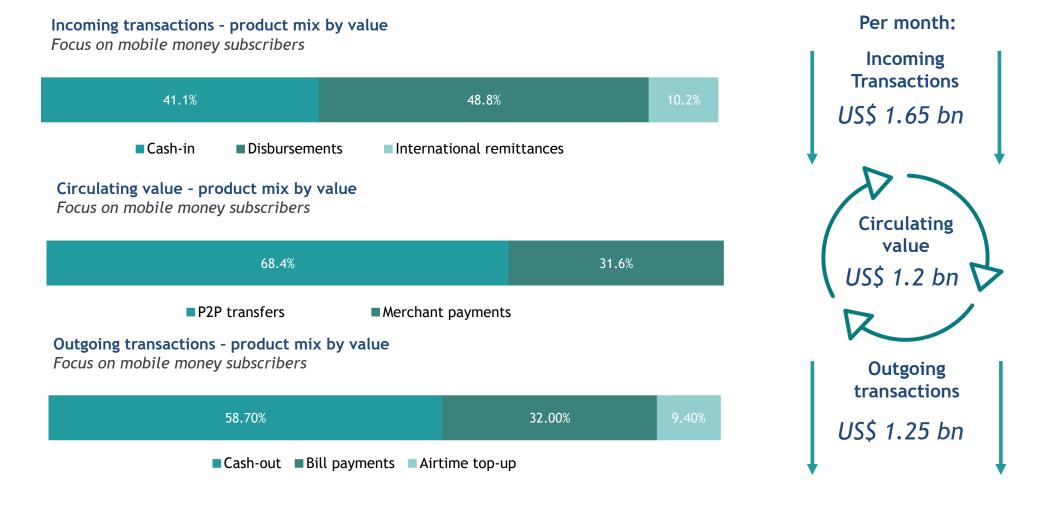
How is mobile money circulating across the financial landscape of Somalia and Somaliland?

Volumes and values:

- Person-to-Person (P2P) transfers dominate the mix by volume and the mix by value.
- However, the large shares of the disbursements and bill and merchant payments reflect an expanding ecosystem of institutions and businesses using the system.



Incoming transactions (including cash-in, disbursements and international remittances) amount to US\$1.65 bn per month. US\$1.2 bn is circulating in Somalia's mobile money ecosystem every month (P2P transfers and merchant payments). Lastly, outgoing transactions (cash-out, bill payments and airtime top-up) account to US\$1.25 bn per month.



Development of an ecosystem:

- More than 63% of mobile money users do not withdraw nor transfer all the money out of the account straight away once a transfer is received into the mobile money account, but rather transfer the money over time as and when needed. Mobile money then further circulates into the economy.*
- Customer-to-business (C2B) payment services have managed to create an entire ecosystem, in which higher penetration rates
 among the general public drives adoption of mobile money by SMEs and in which, reciprocally, merchant payments increase
 mobile money transaction volumes by an order of magnitude.
- Receiving salaries on a mobile money account prompts more active and varied usage of other mobile money services, including bill payments, merchant payments and saving money.

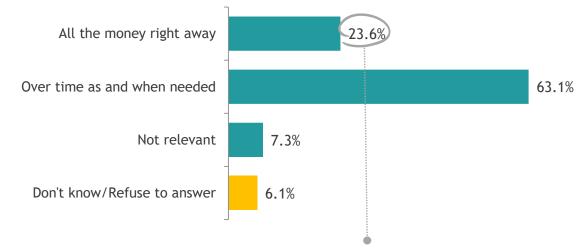
MNOs have managed to develop a system whereby customers are encouraged to keep money in the system rather than cashing it out. Indeed a large share of users store mobile money into their account when they receive an important transfer and then pay their daily expenses with it.

'It is great to receive my salary on my account. I can have my salary without going anywhere. Then I can directly pay my rent, electricity bills and other expenses with mobile money. No need to cash out.' (Mahdi, Somaliland)

This is especially true for IDPs as storing money in the IDP camp would be unsafe. 'My money is safer on the phone; I don't have a safe as our house is made of plastics and cardboard and does not have a proper door. Better to have it on the phone and then I can spend when needed.' (Mohamed, South Central).

Withdrawing once an important amount is transferred into the account

Focus on mobile money users



Only a quarter of the money received through mobile money is cashed out immediately. This creates a large float of cash for the MNOs, which given the lack of regulation, can be used for various uses (e.g. for other investments) with minimum repercussion. Directions/vectors of transfer:

- Mobile money originates from urban areas. For respectively 89% and 80% of the IDPs and rural populations, the majority of incoming mobile money transfers is sent from urban areas.
- Most mobile money transactions take place within Federated Member States (FMSs). Banadir is the exception, with most mobile money originating from Banadir being sent to the other FMSs in South Central. Mobile money is regularly transferred across FMSs in South Central. On the contrary, very few mobile money transfers are sent from Somaliland to the other zones.

Mobile money circulation across Federated Member States

Focus on those who send mobile money domestically

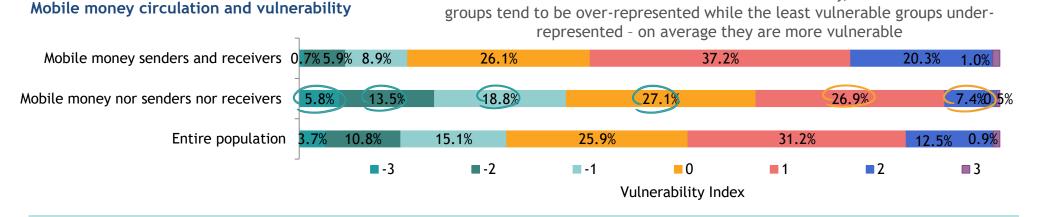
People from Banadir do not send much mobile money within Banadir. Instead they send money to South-West,

📍 Jubaland and HirShabelle 🔍

				***************	••••••••••••••••••••••••••••••••••••••			
Respondent from		Banadir	Galmudug	HirShabelle	Jubaland	Puntland	Somaliland	South-West
	Banadir	1.3%	6.9%	20.6%	31.4%	5.2%	2.8%	34.9%
	Galmudug	39.5%	88.0%	9.6%	1.1%	0.7%	0.0%	1.5%
	HirShabelle	30.8%	12.0%	83.9%	0.0%	5.9%	0.0%	2.8%
	Jubaland	21.6%	0.0%	0.0%	71.9%	0.0%	0.0%	34.4%
	Puntland	14.8%	1.2%	3.2%	8.5%	83.3%	8.0%	1.2%
	Somaliland	0.0%	0.0%	0.0%	0.3%	3.7%	99.1%	
	South-West	2.8%	0.0%	0.0%	1.1%	0.0%	1.9%	88.5%
)	
	Galmudug, HirShabelle and Jubaland send mobile money to Banadir				Except for 3. to Puntland a send to Ju Somaliland exclusively s within So		nd 0.3% who Ibaland, ers almost end money	

Mobile money sent to

• Even if the most vulnerable are more likely to be excluded from the mobile money system, mobile money circulates across groups of different vulnerability levels. In a society of frictionless financial interdependence, mobile money enables more fluidity within the family and clan, and constitutes a lifeline for the poor.



Within those who do not receive nor send mobile money, the most vulnerable

Within Somalia and Somaliland, mobile money circulates across groups of different vulnerability levels. From the FGDs, mobile money is used as a tool when successful family members support other relatives/clansmen in times of need - cf. predominant practice of *zakat* from the wealthier to the poor (see slide 119), for transfers from employed household members to the rest of their family, often in rural areas, and transfers to displaced relatives. Mobile money aid agencies and development organizations-to-beneficiaries transfers also contribute to mobile money flows targeting the most vulnerable ones (see Section 6.5).

Intra-clan/family transfers:

Most likely to give:

- Diaspora people
- Urban dwellers
- Successful business persons
- Working persons

Main reasons to give:

- · Person is out of work and needs money to cover basic needs
- Person is displaced
- A hard season/drought
- Help with engagement and wedding costs
- Help with heath and funeral costs
- Help with sickness

What does the dollarization of the economy mean for the mobile money sector?

Practicalities with currencies:

- People mostly use dollars when they pay for durable goods, send/receive money from friends and family, pay for groceries, school fees, their rent and utility bills, etc. On the contrary, they use Somali/Somaliland Shillings for small daily expenses.
- The dollarization of the economy has exacerbated the depreciation of the local currency.
- Urban populations are more favorable towards dollars. The Shilling remains popular among the rural and IDPs for paying everyday expenses.

Currency used (USD vs. Shillings) - comparison by urban/rural/IDP split

	Overall	Urban	Rural	IDP
Withdraw money (bank/mobile money)	18.6%	14.6%	24.1%	29.2 %
	77.8%	84.7%	63.7%	69. 1%
Send/receive money from friends/family	21.3%	19.0 %	23.2%	34.1%
	78.5%	81.0%	76.2%	65.9%
Receive payments/ salary/allowances	24.1 %	16.8%	55.5%	<mark>28.6</mark> %
	75.2%	82.5%	44.0%	70.8%
Pay utility bills	31.5%	21. 7%	47.7%	51.0%
	64.8%	76.5%	41.8%	48.8%
Pay for durable goods	21.2%	<mark>16</mark> .2%	37.3%	31.0%
	78.6%	83.8%	61.7%	69.0%
Pay everyday	45.5%	33.4%	60.2%	64.7%
expenses	53.6%	65.8%	38.2%	35.3%
		US Dollars	s 🛛 = Somali Shillings	

The USD is well distributed in urban areas, its main sources being remittances companies, international trade, as well as international organizations and NGOs.

In rural areas, people trust the SSH more; they know its value while the USD can be confusing. Most of them continue using SSH to pay for daily expenses and other small transactions.

The inflation of the SSH has created a significant rift between those whose income is based in a SSH ecosystem (incl. pastoralists and those in rural areas), versus those living in a USD ecosystem (international traders, receivers of overseas remittances, individuals receiving salaries in USD, etc.). Impact of the dollarization of mobile money services on the economy:

• The perception that mobile money is responsible for the devaluation of the local currency and inflation is widespread.

A fact: mobile money has made the Somali economy even more dollarized.

'My salary is paid in dollars, and dollars dominate the national currency. Mobile money solved most of the needs by allowing people to buy goods easily and to meet their needs, so now the country seems even more dependent on Dollars.' (Mohamed, South Central)



Is mobile money responsible for the devaluation of the Shilling and inflation?

Yes

'The main disadvantage of mobile money is that mobile money substituted and devalued the Somali Shilling. Everybody uses mobile money widely and this has weakened the Somali Shilling for the last decade.' (Fartun, South Central)

'Government should fix the exchange rate because it's going up and down, and the exchange rate is now made by operators who do what they want.' (Maryan, Puntland)

No

'Since the Somali Shilling remains in trouble, and often many businessmen and politicians make false Somali Shillings, mobile money in dollars makes it possible for the fluctuation exchange to remain in a middle mode.' (Dini, South Central) Implications of the dollarization of the economy for mobile money services:

- Almost 90% of Somalis would be interested in mobile money being available in Shillings. Many believe this would reinforce the local currency.
- However they would want first the image and strength of the local currency to be restored and only then mobile money services offered in local currency.

Is there demand for mobile money services being offered in Shillings? Yes

'Having mobile money services only in Somali Shillings would be good because it's easier to have only one currency and it's better for the economy. Using mobile money in Shillings would reduce the fluctuation of the exchange rate and fluctuation of the price of the items.' (Ifraah, Puntland)

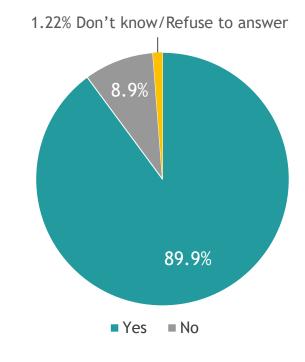
'I'm not satisfied to use the mobile money in USD, I would prefer that the Telecommunication Companies start to use the Somali Shilling currency for mobile money. And that time the Shilling will be valued in the Somali market. The Somali Shilling needs to receive assistance.' (Dini, South Central)

In addition, it was reported during the FGDs that some people who receive their salary in Shillings do not try to convert it to dollars, as the exchange rate costs are prohibitively expensive, and hence cannot use mobile money. Services in Shillings would thus be very useful for such categories of workers.

No

'Until we get a reform from the government on the local currency, I believe we still need to use the Dollar for mobile money and cash.' (Hassan, South Central)

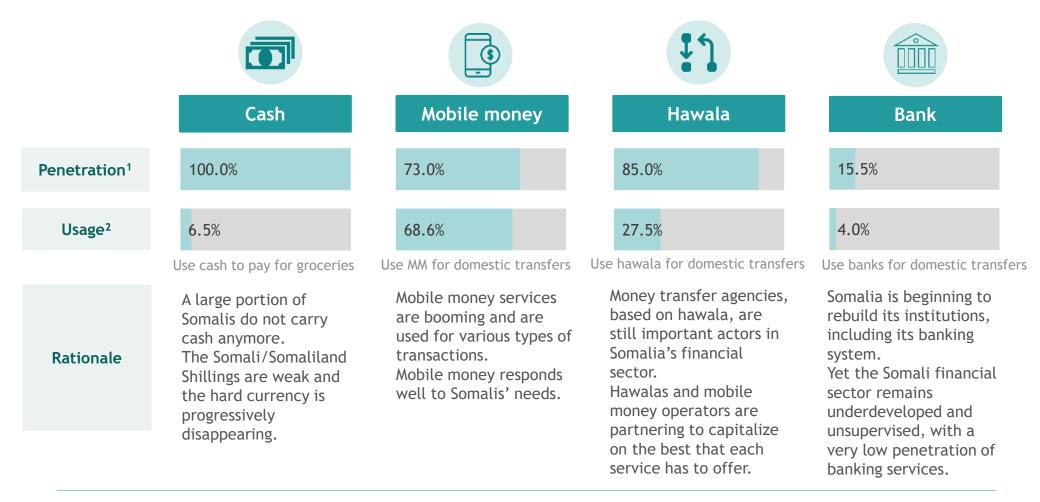
Interest in mobile money being available in Shillings Entire sample



To what extent do people and firms rely on mobile money in Somalia and Somaliland?

Service development compared to other mechanisms:

• Given the depreciation of the local currency and lack of other satisfying and accessible alternatives, people and firms rely heavily on mobile money for their daily money transfers. Mobile money has a crucial role and has become the primary financial instrument in Somalia, while cash usage is decreasing.



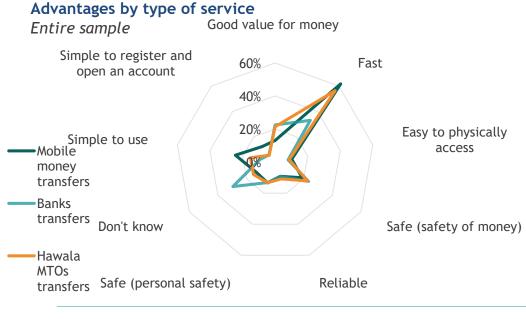
What are the advantages and risks of the current system?

Overall perceptions on MNOs and mobile money:

- Overall, Somalis praise MNOs for providing much needed services in the entire country. Somalis notably believe that MNOs are more trustworthy and meet their needs to a larger extent than MTOs and banks.
- 93% of mobile money subscribers are very satisfied or quite satisfied with mobile money services.
- Mobile money is perceived as a system filling a gap, as other alternatives are not widely used, and as an innovation which broadens the range of available choices (hawala money transfers, banking services) rather than replacing them.

Advantages of mobile money (perceived and actual):

- Mobile money is **deemed fast, convenient, affordable and safe (personal safety)** by Somalis. Compared to bank and hawala transfers, Somalis think that mobile money transfers are simpler to use, simpler to register, faster and easier to physically access.
- Mobile money services help people in their daily lives, and support the development of firms.



'Mobile money has improved the life of Somalis and taken a great role in the development of Somalia. The technology is very fast, free and very safe.' (Ugaaso, South Central)

'[...] Now it takes only a click for sending or receiving, and the recipient will receive on the spot.' (Fartun, South Central)

'Mobile money is cheap compared to other remittances companies such as Dahabshill, Amal, or Kaah. When you want to cash at an operator branch, it is free of charge.' (Sahan, South Central)

'You can carry money with you without fear. Even if your phone is stolen, no one can use your account thanks to the PIN.' (Farhia, South Central)

32

1.6 Key findings > What are the advantages and risks of the current system?

- Mobile money facilitates financial inclusion. Mobile money is an accessible and efficient means of extending financial services (payments, sending and storing money) to those who are outside of the formal banking system.
- For vulnerable groups, mobile money has additional advantages and positive consequences:



Displaced populations believe mobile money has mitigated the unsafety they were facing. The system also facilitates the flows of remittances and cashassistance programs by aid agencies and contributes to their recovery and resilience, as it enables them to smooth their income and help them prepare and adjust to shocks and stresses. In addition, they feel more economically integrated and empowered thanks to the system.



Nomads believe mobile money is convenient and facilitates trade, notably for selling livestock. They also feel the system helps strengthen relationships between nomadic communities and the rest of society. Lastly, they perceive mobile money as a system that fits well nomadic patterns and that has improved the way they deal with shocks, for instance during droughts.



Women feel less financially dependent and more empowered thanks to the system.

• This more bottom-up approach to innovation, whereby technology has succeeded in starting to address challenges of everyday governance and service delivery is also an important lesson for the importance of taking a context-based approach to understanding innovation and the potential of new technologies to engage marginalized communities and vulnerable groups.

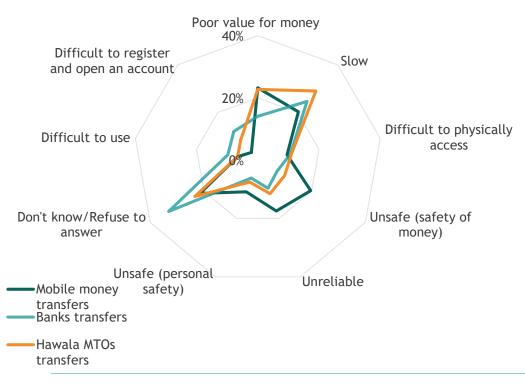
1.6 Key findings > What are the advantages and risks of the current system?

Disadvantages of mobile money (perceived and actual):

- For many Somalis, mobile money is unreliable and carries significant risks for their money as the system does not provide any guarantees for customers. In particular, Somalis think that mobile money services are more unsafe for their money and more unreliable than banks or hawalas/MTOs.
- Mobile money is also prone to technical issues and mistakes.
- Users also deplore the lack of interconnectivity between the different mobile money services.
- Issues with cash/e-float management were also reported: for 22%, agents struggle to maintain enough cash to be able to conduct successfully all cash-out transactions.

Disadvantages by type of service

Entire sample



'Mobile money are overall good services. But there are some technical issues that would need to be fixed for us to really enjoy the service.' (Mahad, Somaliland)

'Sometimes it happens that the network is out of service for several days, and people who are depending on the mobile money services are not able to use them. For instance the antenna of Hormuud in our area might be out of service during a number of days because Al-Shabaabs are in Jilib district where the antenna tower is located. So they switch off and all areas in Jilib district remain out of network.' (Abdirashid, South Central)

'Sometimes you may send to a wrong person and the process of recalling money can take two days and you need this money for emergency supplies. The wrong receiver may even withdraw the money and switch off the phone.' (Hamze, South Central)

'The system is risky. [...] This is a fear we keep in our hearts.' (Sahan, South Central) 'We just trust without condition for the sake of Allah and if the money that we have in our mobiles disappears or the network doesn't work anymore, we don't have any document and guarantee to prove that we put money in our account or mobiles.' (Ali, Somaliland) Risks of the current system:

- 1. Risk for the customers lack of customer protection: Customers have no guarantees that their e-money can always be redeemed for cash. Personal data is not systemically registered for each mobile money account (especially in South Central), and in case of dispute, arbitrary seizing of their assets, technical problem, cyber-attack or system collapse, they are not protected by a formal service provider-user agreement.
- 2. Risk of terrorism financing through mobile money: Al-Shabaab can finance its terrorist activities due to the lack of regulation on mobile money transfers.
- 3. Risk of money laundering through mobile money: Money launderers can use mobile money, as they can multiply mobile money accounts without giving their identity. Oversight authorities cannot monitor financial transactions.
- 4. Risk of fraud by MNOs: The lack of monitoring of mobile money services gives a chance for fraud activities, such as the issuance of electronic money by MNOs without having its equivalent in real cash.
- 5. Tax evasion: The government does not collect direct revenues on mobile money transactions and currently does not have the information required to do so given oversight authorities cannot monitor financial transactions.
- 6. Risk of further depreciation of the local currency: The current mobile money system and its dollarization can further contribute to the depreciation of the local currency.
- 7. Risk of inflation: Uncontrolled use of e-money could lead to an increase in its supply and potentially result in inflation.
- 8. Risk that the international remittances market be eventually closed to Somali mobile money companies due to the absence of appropriate Know-Your-Customers (KYC) processes if the international regulations for MTOs become more stringent.

What drives the adoption of mobile money? What are the barriers to adoption?

Triggers for adoption - Why is mobile money so widely adopted?

- A mass effect contributes to further adoption of mobile money. Many mobile money subscribers decide to use mobile money to follow recommendations of their relatives, and the more service providers and users register, the more others subscribe.
- Other users have subscribed to send money to or receive money from family and relatives. Indeed, as detailed above, a strong culture of sharing between family members, clans and sub-clans promotes the fluidity of capital across kin and creates a significant demand for movement of money.
- Other triggers to adoption relate to the added-value mobile money services provide

 the ease with which one can pay for goods and services as well as the possibility to
 store money on mobile money accounts.
- The devaluation and progressive disappearance of the Somali/Somaliland Shilling is another push factor explaining the uptake of mobile money.
- The lack of other satisfying and accessible to all alternatives (cf. a limited banking sector) push people and firms to rely heavily on mobile money for their daily money transfers.
- Receiving a salary is also a trigger for opening a mobile money account, although for a small share of the population. 5.4% of mobile money subscribers who receive a salary through mobile money registered and opened an account to receive a salary and 9.4% have subscribed before but opened another account specifically to receive their salary.
- Appetite for new technologies is shared by many Somalis. 79.4% of Somalis like new technologies and 71.1% could use their phone to vote. High degree of interest in new technologies can explain the initial popularity of mobile money. Trust in mobile technologies can sustain this popularity.
- Mobile money services are free of charge and provide a solid experience user that push people to have a more active usage.



'All the community was using mobile money, so I decided to do the same.' (Sahan, South Central)

'I used to work in another region in Somaliland so I wanted to send regularly money to my family through a simple way.' (Abdikarim, Somaliland)

'I was forced to use mobile money because of what happened to the Somali Shilling. When mobile money is in dollars, the inflation does not affect the money stored in the account.' (Saleban, South Central)

Barriers to adoption:

- A main barrier is the lack of livelihood opportunities that does not allow to have enough money to put on a mobile money account.
- Another major barrier relates to low education and illiteracy, as well as financial illiteracy, which prevent people from accessing mobile money services*.
- The distribution of mobile money in rural/remote areas is also constrained by other factors:
 - Lack of mobile money agents in rural areas virtual currency is not useful if it cannot be easily converted to physical cash when needed. Having to do a trip specifically to do so which takes time and can cost money for the journey, constitutes an impediment to further use of mobile money.
 - Limited access to electrical power people in more isolated communities are unable to recharge their handsets regularly, and recharging a mobile phone involves an additional cost that users have to consider carefully.
 - Issues with network coverage and reliability though coverage is quite good along major corridors, veering into the bush, one loses signal relatively quickly and the lack of network or network outages can discourage people in rural areas from using mobile money.
 - Need to convert to USD the local currency is still used in rural areas and the exchange rate to USD is rarely favorable; a need for conversion into USD can be a strong barrier.
- The previous barriers are even more acute for vulnerable groups:
 - For IDPs: lack of access to electricity; financial constraints that severely limit their usage of financial services; higher illiteracy and lack of education.
 - For nomads: lack of access to electricity; no network coverage; lack of mobile money agents in remote areas; higher illiteracy.
 - For women: traditional family roles; higher illiteracy; lack of IDs; lack of opportunities for them on the labor market.
 - For elders: higher illiteracy.

*Although literacy is a major barrier, semi-literate individuals can rote learn numerical commands to send money or rely on others to assist them with completion of transactions.

'I'm very poor and I cannot afford to pay a SIM card and airtime top up; it is bad because I would need mobile money; for instance aid agencies are giving money to those who have a mobile.' (Farhan, South Central)

'I don't read and write, I wouldn't be able to write figures and amounts and then the process of making transactions is complicated. I can't manage it.' (Maryan, Puntland)



1.7 Key findings > What drives the adoption of mobile money? What are the barriers to adoption?

• Even though only less than half of the population own ID documents, the lack of ID documents does not constitute a strong barrier to adoption. The scarcity of ID documents means official KYC policies are often sidestepped. A relative can vouch for someone else and most of the time an ID is not required to open a mobile money account. This is less the case in Somaliland.

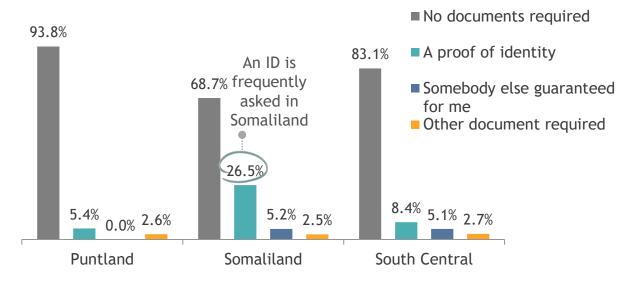
0.1% Don't know/Refuse to answer Less than half of the 43.8% population 56.2% own identity documents The proportion is even ■Yes ■No smaller in rural areas and in IDP camps Urban 59.5% 40.5% 0.0% 23.9% 0.3% Rural 75.8% IDPs 20.0% 80.0% 0.0% ■ Yes ■ No ■ Don't know/Refuse to answer

Identity documents ownership

Entire sample

Identity documents needed to open a mobile money account

Mobile money subscribers



'Here nobody asks for any ID when you want to open an account, because you can open your mobile money account in your telephone without going to the mobile money company. So not having an ID does not prevent you from opening an account.' (Dini, South Central)

Mystery visits confirmed that the lack of ID documents prevents people from gaining access to banking services^{*}, but not to mobile money services. Mobile money agents in Puntland and South-Central confirmed that an ID is not needed to open an account. In Somaliland however, agents explained that they started asking systematically for an ID.

* To open a bank account, one needs to submit an official identification document (a passport, a national identification card, a job identification card or a driver's license), documents that the poorer parts of the population, especially in rural areas, and displaced populations, rarely possess.

1. Key findings

1.1 Contextual elements

1.2 How does mobile money work in Somalia and Somaliland?

1.3 How is mobile money circulating across the financial landscape of Somalia and Somaliland?

- 1.4 What does the dollarization of the economy mean for the mobile money sector?
- 1.5 To what extent do people and firms rely on mobile money in Somalia and Somaliland?
- 1.6 What are the advantages and risks of the current system?
- 1.7 What drives the adoption of mobile money? What are the barriers to adoption?

2. Key recommendations

2.1 Objective 1: Further build upon the mobile money ecosystem

2.2 Objective 2: Apply a regulatory framework to the industry to strengthen the ecosystem

2.3 Objective 3: Provide greater financial inclusion for Somalis

2.4 Objective 4: Provide greater economic contribution to Somalia and Somaliland

3. Annex

2 Key recommendations

Objective 1: Further build upon the mobile money ecosystem		
For the government	For the mobile money providers	
 Benefits for the government: Needed services available to the population Salaries sent to civil servants in a more secure and transparent way 	 Benefits for the providers: Increased uptake of mobile money services More active and diversified usage of mobile money by subscribers Increased profits 	
 Recommendations for the government: Shift the payments of civil servants to mobile money Develop regulations to enable mobile money providers to meet international market standards and international money transfers to be further included within service scope (see Slide 20) Improve the government's 	 Recommendations for the providers: Building user mass, especially in rural areas Increase awareness and educate about mobile money in rural areas (e.g. through radio awareness campaigns and agents giving trainings in villages) Develop a larger network of branches/mobile money agents in rural areas (e.g. through 'mobile' mobile money agents) Provide incentives to non-subscribers in rural areas (e.g. airtime when subscribing) Incentivize employers to send salaries through mobile money Building customer usage and expanding product line Provide more training in the operator's branches on less used services (e.g. receiving salaries and saving money) Expand associated services offer by taking advantage of/developing partnerships with banks/micro-finance institutions/insurance companies and offer saving/borrowing/insurance 	
obligations in the fields of security and defense to protect providers' investments (see Slide 22)	 schemes directly through the mobile money interface (e.g. separate wallet for savings) Integrate more systematically international transfers with mobile money services and further advertise the possibility to send international remittances directly to mobile money accounts Improving service quality Increase network capacity, especially in rural areas Increase staff to reduce queuing time Increase cash/e-float balances to be transferred to each store to avoid liquidity issues 	

• Improve customer care, for instance by further developing customer service hotlines

Objective 2: Apply a regulatory framework to the industry to strengthen the ecosystem			
For the government	For the mobile money providers	For the World Bank	
 <u>Benefits for the government:</u> Development of an enabling business environment that will encourage competition and diversification across the mobile money supply chain Increased customer security Reduced risks of terrorism financing and money laundering 	 Benefits for the providers: Increased trust from potential users leading to domestic market expansion Support in meeting international standards, thus increased international opportunities Development of an enabling environment that will lead to sector growth 		
 Recommendations for the government: Provide licensing procedures for the ICT sector actors and mobile money providers (cf. Communications Act) Set up regulations that protect customers, notably regulations establishing parity between online and offline credit for mobile payments and ensuring that there is an actual bank guarantee underlying the credit for all mobile money services; and develop corresponding oversight mechanisms Develop interconnectivity between operators and interoperability between mobile money services, through technical and business frameworks to link the MNOs Set up clear regulations on Know-Your-Customer procedures (to buy a SIM card and register for a mobile money service), that are sufficiently conducive to allow undocumented Somalis to open a mobile money account while ensuring international standards are followed (e.g. through tiered documentation requirements) 	 Recommendations for the providers: Consistently apply the regulations on Know-Your-Customer procedures Provide subscribers with a written documentation about their mobile money account (similarly as bank account details) 	 Recommendations for the World Bank: Support the government in developing conducive regulatory frameworks geared towards industry growth and increased consumer security, and in operationalizing these frameworks Help build the capacity of the CBS and MPTT to be able to monitor mobile money providers 	

2 Key recommendations

Objective 3: Provide greater financial inclusion for Somalis			
For the government	For the mobile money providers	For the aid and development agencies	
 Benefits for the government: More vulnerable Somalis with access to needed services 	 <u>Benefits for the providers:</u> Increased mobile money uptake 	 Benefits for the aid and development agencies: Increased efficiency and effectiveness of aid- delivery mechanisms through mobile money Increased inclusiveness of aid-delivery mechanisms (inclusion of vulnerable groups) Greater accountability (cf. traceability of mobile money) 	
 <u>Recommendations for the government:</u> Ensure Know-Your-Customer requirements do not affect some groups disproportionately (e.g. women, rural or poorer households) and take measures to provide those groups with an identity document Streamline government drought response through a mobile money platform to allow for bulk payments where the sender can monitor the payments and ensure traceability to the recipient 	 Recommendations for the providers: Target awareness campaigns towards the less educated, IDPs, nomadic and rural populations, and women Further develop voice services for illiterate and blind people, and advertise these services (In coordination with aid and development agencies) Develop microfinance loans, micro-savings tools and schemes for insurance against emergency situations, like droughts - through mobile money 	 Recommendations for the aid agencies: Provide solar panels chargers in IDP camps and rural areas so that vulnerable populations get connected to cash safety nets provided through aid agencies Further develop mechanisms for the disbursement of cash-assistance programs through mobile money Build government capacity to enable government to independently manage humanitarian response-focused bulk payment systems 	

2 Key recommendations

Objective 4: Provide greater economic contribution to Somalia and Somaliland			
For the government	For the mobile money providers	For the World Bank and partners	
Objective 4.1: Increase revenue generation from the mobile money ecosystem			
Benefits for the government:Larger taxation revenues	 Benefits for the providers: A stronger government able to protect the provider's investments 		
 Recommendations for the government: Develop taxation plans and regulations Engage with the private sector to take this forward In turn, enhance public service delivery and fulfill government's obligations in the fields of i) public financial management, and ii) security and defense 	 <u>Recommendations for the providers:</u> Abide by the taxation regulations once passed 	 Recommendations for the World Bank and partners: Help develop a regulatory framework for an effective tax system, which will facilitate the application of regulation in the areas that can most absorb it Help further develop government structures and institutions through the Somalia Development and Reconstruction Facility, and the Multi-Partner Fund projects strengthening financial structures 	
Objective 4.2: Reinforce the value of the local currency			
<u>Benefits for the government:</u>Stronger local currency	 Benefits for the providers: Increased services in the local currency, in line with expanding to rural areas 		
 <u>Recommendations for the government:</u> Print new Shillings notes and fight against counterfeiting Include in the regulation clear specifications about the use of the dollar vs. the local currency for mobile money services 	 Recommendations for the providers: Further invest in mobile money services in Shillings and enable Somali/Somaliland Shilling-based mobile money transactions, alongside US\$-based payments 	 <u>Recommendations for the World Bank and partners:</u> Support efforts by the CBS and the IMF on currency reform and monetary policies 	

...

1. Key findings

1.1 Contextual elements

1.2 How does mobile money work in Somalia and Somaliland?

1.3 How is mobile money circulating across the financial landscape of Somalia and Somaliland?

- 1.4 What does the dollarization of the economy mean for the mobile money sector?
- 1.5 To what extent do people and firms rely on mobile money in Somalia and Somaliland?
- 1.6 What are the advantages and risks of the current system?
- 1.7 What drives the adoption of mobile money? What are the barriers to adoption?

2. Key recommendations

2.1 Objective 1: Further build upon the mobile money ecosystem

2.2 Objective 2: Apply a regulatory framework to the industry to strengthen the ecosystem

2.3 Objective 3: Provide greater financial inclusion for Somalis

2.4 Objective 4: Provide greater economic contribution to Somalia and Somaliland

3. Annex

The research was organized around six modules.

	Modules	Objectives	Approach and methodology
1	Desk review and preliminary ckground research	Refine objectives, scope and methodology Develop research tools	 In-depth review of global mobile money trends, regulatory environment and best practices, current mobile money ecosystem's actors and existing services in Somalia and Somaliland Design of fieldwork sampling plan and research tools
2 res	Quantitative demand-side search: household survey	Assess mobile money usage patterns (including demand, usage volume and preferences <i>vis a vis</i> formal and informal domestic payments and international remittance services, potential, etc.)	 Demand-side questionnaire designed and pilot- tested Enumerators trained and sampling design finalised Survey rolled out to sample 1,500+ households
3	alitative demand- side research: Focus roup Discussions	Understand the reasons behind usage of mobile money (or lack of) and the drivers and barriers to adoption of mobile money across user categories	 12 Focus Group Discussions (FGDs) with various categories (across zones) to dive deeper into the target populations' needs and current behaviours At-risk populations and SMEs included for rounded insight

The research was organized around six modules.

Modules	Objectives	Approach & Methodology
4 Qualitative supply- side research: In- Depth Interviews and visits to agents	Understand the mobile money ecosystem in Somalia and Somaliland, analyse current remittance channels and understand the role played by agents	 15 In-Depth Interviews (IDIs) of sector experts, incl. government authorities and academics, Mobile Network Operators, remittance services providers, banks, etc. 9 face-to-face interviews with mobile money agents 18 mystery visits to agents
5 Analysis and recommendations	Generate findings and formulate recommendations to the World Bank and stakeholders	 Analytic findings presented on data collected Interactions with WB team, project partners and stakeholders Recommendations presented to frame the design of the pilot payment services application
6 Communication of the findings	Design innovative material to communicate findings of the research to a broader audience	 Dissemination workshop with stakeholders and partners Impact-driven PPT

1,796 respondents have been successfully interviewed during the quantitative data collection, completed in December 2016.

Stratification

The sampling frame was divided between economic zones (South Central, Puntland, and Somaliland), then further broken down between urban areas, rural areas and IDP camps.

Sampling

The survey sampling frame was constructed based on the UNFPA PES Survey and the last round of the SHFS.

With a sample size of 1,540 interviews, the survey achieves a margin of error of 3% with a confidence level of 95%.

The design was a stratified four-stage cluster sample, with Probability Proportional to Size (PPS) of selection for the districts and EAs. Households within the EA were selected using a random walk method. Respondent within the household were selected through a randomization formula within the encoded questionnaire, among the adults above 16 present at the time of the interview. Oversampling was used to minimize the need to redo-interviews.

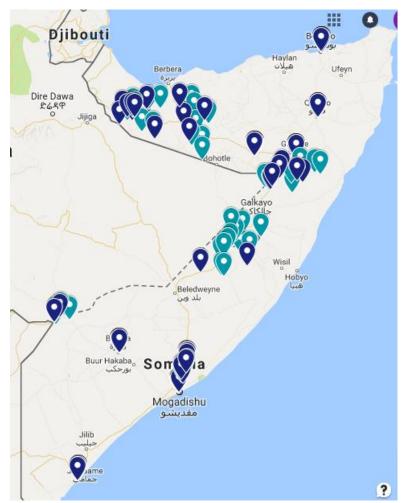
Questionnaire

A questionnaire translated in Somali, with 110+ questions, was used.

Calculations & tools

The databased is composed of 1,796 valid and successful interviews. The database has been cleaned and post-weighted according to demographic data. The calculations were conducted on Stata.

1800+ respondents have been interviewed all over the country



Quantitative data collection in action



Survey in Hargeisa (left) and Mogadishu (right)





Matthieu Dillais - <u>mdillais@altaiconsulting.com</u> Anne-Elisabeth Costafrolaz - <u>aecostafrolaz@altaiconsulting.com</u>