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Exploring barriers to remittances in sub-Saharan Africa series

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from the British people

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Acronyms

ACH	automated clearing house
AML/CFT	anti-money laundering and the combating the financing of terrorism
ATM	automated teller machine
CDD	customer due diligence
CORE	centralised online real-time and electronic
EATS	Ethiopian automated transfer system
EFT	electronic funds transfer
ESAAMLG	Eastern and Southern Africa anti-money laundering group
FATF	financial action task force
IMF	international monetary fund
KYC	know your customer
MCIT	ministry of communications and information technology
MFI	microfinance institution
MMO	mobile money operator
MNO	mobile network operator
MTO	money transfer operator
NBE	national bank of Ethiopia
NFIS	national financial inclusion strategy
NID	national ID
OTC	over-the-counter
POS	point of sale
RSP	remittance service provider
RTGS	real-time gross settlement
SDG	sustainable development goals
SSA	sub-Saharan Africa
SWIFT	society for worldwide interbank financial telecommunication
USD	US Dollar

Key definitions

Mobile money operator (MMO):	A licensed mobile money service provider that develops and deploys financial services through mobile phones and mobile telephone networks.
Mobile network operator (MNO):	A company that has a government-issued licence to provide telecommunications services through mobile devices.
Remittance service provider (RSP):	An entity providing services that enable the transfer of remittance funds.

Source: Authors' own based on AFI (2013)

About the barriers to remittances in SSA series

At the time of writing, the average cost of remittances to sub-Saharan Africa (SSA) was 9% of the value of the transaction, compared to the global average of 6.9% (World Bank, 2018). Informal flows are rife, especially in SSA, and the trend is increasing in many corridors. High amounts of informal remittances, coupled with the high cost of formal remittances are indicative of a formal market that is not functioning optimally to serve people's needs. The G20 and the Sustainable Development Goals (SDGs) made it an explicit target to reduce the price to between three and five percent of the transaction value. However, a fine balance needs to be struck between lowering the cost and keeping remittance business profitable for providers, especially in hard to reach areas, so that access for rural consumers is not compromised. To do so, there needs to be an understanding of the market impediments preventing formal costs from decreasing and hindering access for consumers.

This note is the fourth in a series of seven notes that explores the barriers to remittances in SSA to conclude on what is required to enable the formal market to fulfil its true potential.

The series is organised as follows:

- Volume 1 provides an overview of key remittance corridors in SSA, from the perspective of both the receiving and sending countries. It analyses the correlation between migration and remittances and introduces a categorisation of countries.
- Volume 2 outlines and ranks the market barriers to the efficient flow of remittances in SSA, drawn from existing literature and in-depth stakeholder interviews.
- Volumes 3 to 6 explore how the barriers manifest in the region by presenting four country case studies from SSA: Uganda, Ethiopia, Nigeria and Côte d'Ivoire.
- Volume 7 draws conclusions and recommendations for SSA on how to overcome the barriers to reduce informality and costs without compromising access in the region.

This note explores the state of the remittance sector in Ethiopia and unpacks the key barriers and enablers to the development of the formal remittances market, drawing on in-country stakeholder consultations from October 2017 and desktop research.

1. Introduction

A lifeline for households. Remittances are non-reciprocal transfers of money from an individual or household in one place to another individual or household in another place[1] (Hougaard, 2008). They can take many forms but are typically associated with working migrants that send regular amounts of money to support their families and communities back home. The advantage of these payments is that they usually flow directly into the hands of households, which increases household income and reduces the likelihood of households falling into poverty (International Organisation for Migration, 2005). This monetary support has positive effects on both education and health outcomes, and it has been shown to support human capital development particularly in children (Gupta and Pattillo, 2009; Hassan, et al., 2017).

Loyal diaspora ensures steady, largely informal, remittance inflows. Volume 1 of this series ("Where are the flows?") revealed the array of countries Ethiopia receives remittances from. The diaspora remains closely tied to home even after many years abroad and sends an increasing number of funds to support families and friends. Data estimates of both the formal and informal remittance sector vary immensely yet all state that the majority of remittances enter the country informally. While formal remittance prices are below the average for SSA, they remain above the SDG target (the average cost is 6.7% from the most prominent countries in terms of flows). This report is therefore aimed at understanding the market conditions for remittances: what drives the high rate of informality and what are the cost drivers for providers?

Case study outline. This case study outlines the barriers and enablers of remittances in Ethiopia. It is organised as follows:

- Section 2 introduces the remittance sector in the country, including remittance flows, the actors, the regulatory framework, and the infrastructure underpinning money transfers.
- Section 3 discusses the country-specific remittance barriers and enablers in terms of business case, regulation, infrastructure and consumer-facing elements.
- Section 4 offers recommendations and conclusions for actors already active in the market and for those who wish to enter.

[1] Remittances can be "domestic", meaning the sender and receiver of the remittances are within the same country (but still in disparate locations), or "international", meaning that the sender transfers money from one country to a recipient in another country (Hougaard, 2008).

2. Remittance sector overview

2.1. Remittance market

Ethiopia is a net recipient of remittances; high informality. Remittance estimates for Ethiopia vary substantially*:* net remittance flows in Ethiopia according to World Bank remittance figures for 2016 stood at USD742 million, with USD772 flowing into the country and only USD 30 million flowing out (World Bank, 2017).The National Bank of Ethiopia (NBE), however, estimated private individual transfers into Ethiopia to be over USD4.4 billion in the 2016/2017 financial year, a nearly six-fold difference. Outflows were estimated to be around USD60 million (NBE, 2017a)[2]. Despite the large discrepancy between sources, it is clear that Ethiopia's remittance inflows are a significant contributor to the economy. Outflows are subject to tight capital controls, making Ethiopia a clear net recipient of remittances. Inflows would be substantially higher, should it be possible to count informal flows. Informal inflows into the country are estimated to be as high as 78% in some corridors (Isaacs, 2017). They mainly involve sending cash with family and friends or happen on the back of trade payments that are offset without money ever crossing borders (Stakeholder interviews, 2017).

Dispersed diaspora requires multitude of operational corridors. Ethiopia has a large diaspora abroad[3]. The World Bank estimates that there are Ethiopians living in 85 different countries[4]. Given the widespread diaspora, many corridors need to be operational and need to cater for a diverse set of needs, payment channels and instruments.

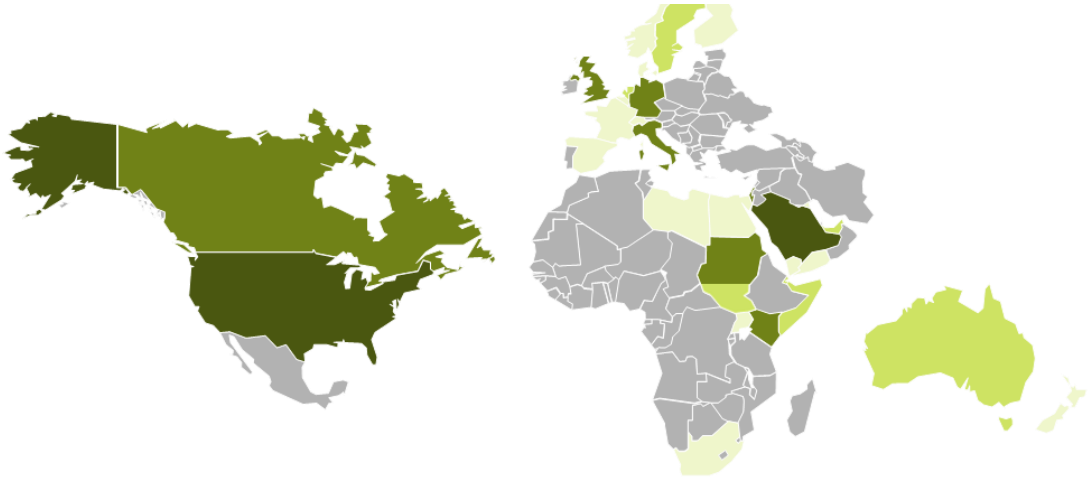
Figure 1 shows the distribution of Ethiopian migrants[5] as well the top ten countries that sent remittance to Ethiopia in 2017:

[2] Part of the irregularity in reported data may stem from the vast informal market, which NBE includes in their estimates. In addition, however, the NBE measures the inflows differently to the World Bank, which highlights the difficulty of finding one reliable data source (Isaacs, 2017).

[3] Ethiopians in the diaspora have strong ties to their home country, which has suffered a range of political and economic crises. The first wave of migrants was exiled in the US while studying after the Ethiopian Revolution in 1974; they refused to give up citizenship in the hope that this status would be temporary. The second wave of migration occurred between 1980 and 1991 where many left due to the tumultuous political regime. A large proportion of skilled Ethiopians is estimated to have migrated to the US and other economically attractive destinations during that time; many refugees crossed the border into Sudan. The third wave of migration occurred post 1991 until today, due to the ongoing conflict with Eritrea and the continuously difficult economic and political situation. Many relatively unskilled Ethiopians settled in the Middle East (a large percentage of which are women who are taking up domestic work) but migration continues to the Western developed world as well (Lencho, 2017).

[4] Such diverse migration from the continent is currently only topped by the diaspora of Nigeria, South Africa and Ghana.

[5] The graph only captures countries with at least 1,000 documented Ethiopian migrants.



Remittances (in million USD) received from....			
USA	255	Canada	26
Saudi Arabia	191	UK	22
Israel	86	South Africa	19
Italy	33	Sweden	19
Sudan	32	UAE	18

Figure 1. Ethiopian documented migrant stocks abroad and top 10 countries sending formal remittances to Ethiopia

Source: World Bank, 2017

Most formal remittances come from outside Africa. The USA, Saudi Arabia, Israel and neighbouring Sudan account for most Ethiopians abroad. With the exception of Sudan, these countries also account for the majority of formal inflows into Ethiopia. Around 82% of Ethiopian migrants lived outside of Africa in 2017 and only 9% of formal inflows were received from Africa. Yet, there is anecdotal evidence of large informal flows from African and Middle Eastern countries that are not reflected here. Estimates suggest that there are currently around 750,000 undocumented Ethiopians in Saudi Arabia and around 250,000 undocumented Ethiopians living in South Africa. Given the money transfer laws that only allow documented migrants access to formal money transfer services in those countries, informality remains the only available channel for many (Stakeholder interviews, 2017).

Major host of refugees. Ethiopia hosted close to 900,000 refugees at the start of 2018 - the second largest host in Africa after Uganda. Most refugees come from South Sudan, Eritrea and Somalia and the trend is increasing given Ethiopia's continued open door policy for refugees and the ongoing conflict in the region (UNHCR, 2018). Many refugees rely on remittances from their home countries and tend to have to travel far distances to access the remittances within Ethiopia (Vargas-Silva, 2016). The rising number of refugees requires suitable remittance solutions to serve this vulnerable yet economically active customer segment.

Virtually all formal remittances are handled OTC by banks, MTOs and MFIs. Banks and money transfer operators (MTOs) facilitate the bulk of formal remittance inflows into Ethiopia. MTOs are legally required to handle foreign exchange transactions through commercial banks, which are required to pay out cash to the recipients in local currency. In 2016, 40 MTOs operated in the country, yet the market is dominated by just five of them. The MTOs operate in partnership with two state-owned and 16 private banks via over-the counter (OTC) services (Gaukler, 2016). In terms of domestic remittances, Findex (2017) states that 24% of adults sent or

received domestic remittances during the past year. The majority of these remittances were sent/received via a bank or microfinance institution (MFI) (59% of remitters), followed by in-person or cash (40% of remitters). Less than 1% of remitters stated that they had sent or received remittances via a mobile phone[6]. This means that essentially all remittances services, both cross-border and domestic, are conducted via OTC services or in person.

Varying remittance prices depending on corridor and channel. The average cost to send USD200 from either the USA, UK, Saudi Arabia or Italy to Ethiopia is 6.7% of the transfer amount[7] (World Bank, 2018). All four corridors are serviced by an array of providers who charge varying fees. The cheapest provider in Italy charges 1.8%, while the most expensive costs 19.2%. A similar picture emerges for the UK. Average costs from the USA and Saudi Arabia are 3.7% and 4.3%, respectively. Especially in the USA corridor, competition is high. The average cost of sending remittances into Ethiopia is lower than that of other SSA countries. Yet the low penetration of financial access points forces especially rural recipients in Ethiopia to travel far to pick up the cash (Stakeholder interview, 2017). This is discussed in more detail in Section 2.3.

2.2. Regulation

This section focuses on the regulatory background to conduct remittance services in Ethiopia. It highlights the regulation around licensing, government policies, currency, know-your-customer (KYC) requirements and anti-money laundering.

Tightly controlled financial sector. Financial liberalisation only occurred in 1992 after 17 years of Socialist central planning and the nationalisation of financial institutions. While private banking institutions are gradually gaining market share from the dominant public bank (Commercial Bank of Ethiopia), progress is slow: the central bank (the NBE) remains in tight control of many aspects of the financial system. The financial sector remains shallow and is reserved for local investors, who are protected from global competition (Geda, et al., 2017). A policy emphasis on gradual liberalization translates into close scrutiny by the NBE of any innovative market solutions (Geda, 2006).

Bank-led regulatory framework. The NBE licenses, regulates and oversees banks and MFIs. Comparatively few regulations[8] govern the remittance sector compared to other SSA countries, such as Nigeria. Further details are discussed below:

- **Cross-border remittances.** Only local banks are eligible to conduct cross-border remittances services. All non-bank RSPs, such as international and local MTOs, need to enter into partnerships with banks and exclusive partnership agreements are prohibited since 2009. The only other organisations allowed to conduct cross-border transfers are Ethiopian Airlines and Ethiopian Shipping Lines.
- **Domestic remittances.** Banks, MFIs, the post office and mobile money operators (MMOs) in partnership with banks or MFIs are allowed to conduct domestic remittances.

[6] Two mobile money providers (MMOs) licensed by the Ministry of Communications and Information Technology (MCIT) provide cash-in/cash-out services and domestic person-to-person (P2P) transfers backed by bank accounts in partnerships with MFIs. Their uptake is increasing with a combined number of around 800,000 accounts (IFC, 2016). While the remittances flowing through this system are much smaller than in most other African countries, they are expected to increase. Ethio Telecom's M-BIRR already handles government social payments for over 750,000 households, increasing financial inclusion through the mobile phone and P2P transfer volumes are expected to grow (Rees, 2018, Stakeholder interviews, 2017).

[7] Average for second quarter of 2018.

[8] Namely, the 2006 Provisions for International Remittance Services Directive and the 2012 Mobile and Agent Banking Service Directive.

- **Mobile money.** Only licensed banks and MFIs are permitted to provide mobile banking services and require approval by the NBE before starting operations. All other players must partner with a licensed provider, i.e. a bank or MFI. The services are only permitted within Ethiopia. Mobile transactions are limited to ETB6,000 (around USD212) daily, which seriously impacts the uptake by traders according to stakeholders. No e-money license exists, and cross-border mobile money is prohibited. The Ministry of Communications and Information Technology (MCIT) is responsible for regulating and supervising payment service providers, as they are classified as value-added services rather than financial service providers. These include the two licensed MMOs that are not seen as financials service providers but rather as technical service providers.
- **Agent banking.** Banks and MFIs may use agents, which need to be a registered commercial business and need to be approved by the regulator. In order to become agents, a merchant, for example, must have a business license and audited financial statements. The vast majority of merchants especially in rural areas do not operate as registered businesses (Stakeholder interviews, 2018). Agents may open mobile money and savings accounts, perform KYC, and conduct cash in/out services. If the mobile network operator (MNO) wants to become a mobile money agent or partner with a bank/MFI, it needs the approval of the MCIT (IFC, 2016). The financial institutions are responsible for oversight of their agents, to ensure that they conduct transfers in real time, and must report on the activities of their agents.
- **KYC regulation.** Under the customer due diligence (CDD) directive[9], the NBE is responsible for ensuring that financial institutions fulfill know-your-customer (KYC) requirements. These include proof of identity and proof of address. While proof of identity is required for all OTC remittance transactions, proof of address is only required to open a bank account or obtain a sim card.

Remittances benefit from policy drive for inclusion and stability. The Ethiopian government has committed to financial inclusion and economic stability through a number of plans, including the Growth and Transformation (GTP) plan 2015-2019, the National Financial Inclusion strategy (2016), the Maya declaration (2011) and the Diaspora policy (2006 and 2013). A number of the strategies pursued under these plans support the development of the remittances market. Notably, government has committed to the expansion of financial access points and has mandated banks to roll-out new brick-and-mortar branches annually. Furthermore, government strives to attract foreign capital by classifying Ethiopians abroad as domestic investors, able to open local bank accounts from overseas.

Protectionist foreign exchange policy and overvalued currency lead to higher informality in remittances. The NBE follows a closed capital account policy to maintain the stability of the economy in view of the serious foreign exchange shortage in the country. It is illegal to send money out of Ethiopia unless for specified reasons that are tracked by the NBE; these do typically not include remittances. USD is the most common currency of denomination for cross-border remittances transferred to Ethiopia. However, remittances must always be paid out in Birr when received as cash, although they can be held locally in foreign currency accounts subject to limitations on maximum- or minimum-balance amounts (Geda & Irving, 2012). The NBE issues a daily fixed exchange rate and buys all foreign currency. The general consensus is that the Birr is severely overvalued, leading to an extensive shadow market for foreign exchange and hence a higher uptake of informal remittance mechanisms (Geda, et al., 2017, FSDA, 2017).

[9] Customer Due Diligence of Banks, Directives No. SBB/46/2010

AML/CFT not yet aligned to risk. Ethiopia joined the Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG) in August 2013 and has a relatively robust anti-money laundering and the combatting of terrorist financing (AML/CFT) legal framework, effective since 2009. However, as of 2015, there appeared to be no clear and comprehensive understanding of national AML/CFT risk that informs government action. The risk-based approach (RBA) has hence not been adopted as there is no coherent policy informing a risk-based AML/CFT policy (ESAAMLG, 2015). The absence of a risk-based approach adoption means that there is no proportional application of KYC requirements, disproportionally burdening low-risk consumers.

2.3. Infrastructure

This section focuses on the Ethiopian payment system conditions as the basis for efficient remittance provision. Financial access points are described. It furthermore describes the status of the mobile, internet, electricity and road infrastructure.

Young NPS infrastructure built with digitisation in mind. The National Financial Inclusion Strategy (NFIS)[10] from 2017 has a strong focus on payment digitisation. Strategies include the extension of financial access points into rural areas, strengthening inter-bank clearing and settlement infrastructure and achieving interoperability (NBE, 2017b). NBE's 2009 National Payment Strategy[11] requires all banks to have centralised online real-time and electronic (CORE) banking solutions. These have to be connected to the central bank.

The payment system consists of three parts, namely a real-time gross settlement system (RTGS), an automated clearing house (ACH) and a national switch. The RTGS and ACH were launched in 2011 by the NBE under the name Ethiopian Automated Transfer System (EATS). The national e-payment switch, EthSwitch, was launched in 2016. These three components are described in turn below (based on IFC, 2016):

- The **RTGS** is set up for low-volume, high-value transactions. Transactions of more than ETB200,000 (around USD7,000) go through the RTGS (Stakeholder interviews, 2017). Settlement occurs t+1.
- The **ACH** is set up for high-volume, low-value transactions. Interbank settlement of transactions lower than ETB 200,000 are handled via cheques or letters. No electronic funds transfer (EFT) system exists, which is necessary to ensure efficient digital transactions.
- **EthSwitch** integrates automated teller machines (ATMs) and point of sale (POS) devices. All banks hold equal shares in the EthSwitch, regardless of whether they have an ATM network. This creates the possibility for each bank to issue cards without investing in a proprietary ATM network: a pre-requisite for interoperability. MFIs can technically connect to the switch, but none currently do[12]. Income is generated through an interchange fee which is split between acquirers, EthSwitch and the NBE[13]. While ATM, card and internet switching is live, mobile payments have not yet been integrated with the banks. Settlement occurs via NBE the next day.

[10] Online document access: https://www.nbe.gov.et/pdf/service/Ethiopian%20National%20Financial%20Inclusion%20Strategy.pdf
[11] Online document access: http://www.nbebank.com/pdf/Vision%20&%20Strategic%20plan%20new.pdf
[12] Payment technical service providers such as Belcash, M-BIRR and Kifiya can also link to the switch upon approval by the NEB.
[13] EthSwitch is specifically mandated to be affordable and strives to lower fees over the coming years in order to break even. Currently, the fees stand at ETB0.25 per ETB100 withdrawal (roughly USD0.01 per USD3.50).

In addition to these payment system elements, SWIFT[14] is used for most cross-border remittances.

Financial access points limited yet growing. Given the bank-led remittance sector and the absence of e-money providers, consumers need to be able to access remittances via physical financial access points. Financial access points in the form of banks, ATMs, agents, MFIs, point of service (POS) devices and cards are still scarce, particularly in rural areas. Findex (2017) states that around four million adults (7%) do not have a financial institution account because the access point is too far away. Most MFIs do not have CORE banking systems and many bank branches are not connected to the CORE banking systems, preventing them from accessing the EATS. Financial access points are increasing at rapid rates as a result of the government strategy (NBE, 2017b), but much further progress is possible:

- **Banks.** In 2017, there were 19.3 million bank accounts (33% of total adult population) – 11% more than in 2014 (Findex, 2017). 18 banks operated 4,257 bank branches in Ethiopia, over 950 more than the year before. 33% of bank branches, however, are located in Addis Ababa while only about 3% of the population resides in the capital city (UN Habitat, 2017). The publicly-owned Commercial Bank of Ethiopia operates about 1,200 bank branches, by far the largest share (Stakeholder interviews, 2017)[15].
- **ATMs.** In 2016, there were 1,639 ATMs but more than 50% were located in the capital (NBE, 2017b)[16]. Given the predominantly rural population, access to ATMs outside Addis Ababa is low for most. ATMs are the only channel in Ethiopia that is interoperable, but banks charge fees for cash-out at rival ATMs (Stakeholder interviews, 2017).
- **MFIs.** There are currently 35 licensed MFIs in Ethiopia with around 3.9 million active clients (7% of the adult population) (Hasan & Batra, 2018). The largest five MFIs are state-owned. In 2015, there were a total of 317 MFI branches and 568 sub-branches (IFC, 2016). Some MFIs offer closed-loop domestic remittance transfers within their branch network, operating outside the national payment system infrastructure (Stakeholder interviews, 2017). Given that MFIS do not access CORE banking systems and generally still have paper-based processes, the operational risk is immense (Stakeholder interviews, 2017).
- **Agents.** According to stakeholder interviews (2017) only around 10,000 agents currently operate in Ethiopia and do not significantly expand the access to remittances.
- **POS devices and cards.** The NFIS states that there were only roughly 7,300 merchant POS terminals in the country in 2017. By comparison, in Kenya almost 40,000 POS terminals are in operation (Central Bank of Kenya, 2018). Only around six million debit cards are in circulation, which translates to roughly 10% of the adult population owning a card (APANews, 2017, Stakeholder interviews, 2017)[17]. No credit cards exist.

Road, electricity and internet infrastructure underdeveloped. Only 43% of the total population has access to electricity. Coverage is unequal with only 27% of the rural population having access (World Bank, 2018). The road network in Ethiopia remains a challenge given the size of the country, but the government has dedicated sizeable investments to double the size of its

[14] The Society for Worldwide Interbank Financial Telecommunication (SWIFT) provides a network that enables financial institutions worldwide to send and receive information about financial transactions in a secure, standardised and reliable environment (SWIFT, 2010).
[15] This branch network is the biggest in Africa within a single boundary (Stakeholder interviews, 2017).
[16] Kenya has around 2,800 ATMs by comparison (Central Bank of Kenya, 2018).
[17] Kenyans has around 15.4 million debit cards (serving around 54% of adult population) (Central Bank of Kenya, 2018).

road network (CivilsOnline, 2018). Only 4% of the population has access to the internet (Internet Live Stats, 2018)[18].

Wide mobile network coverage; slow 3G expansion. Ethio Telecom is Ethiopia's state-owned telecommunications company and has a monopoly. In November 2017 it overtook MTN Nigeria to become Africa's largest MNO in terms of subscriptions (AfricaNews, 2017). There are over 62 million SIM cards in circulation yet only 34.7 million unique subscribers (33% of the total population) (GSMA, 2017). The average for SSA stands at 73% (IFC, 2016). While 2G network coverage is generally quite high (around 85% of the country), 3G expansion is lagging behind (less than 20% coverage) compared to other East African countries. Stakeholders revealed that there is a high number of failed mobile connections as well as network outages depending on time of day and region.

No accessible ID database for providers. While the development of a national ID database has been ongoing for a number of years, it has yet to go live (Stakeholder interviews, 2017).

2.4. Consumer realities

This section describes some attributes of the Ethiopia population, including literacy rate and access to identification documents, which impact remittance service provision.

Large, mostly rural, population; high poverty and illiteracy despite sustained economic growth. In 2016, Ethiopia had a population of over 102 million – the second largest population in Africa after Nigeria. Although it is the fastest growing economy in East Africa[19], it remains one of the poorest (World Bank, 2018). Over 22 million people are living below the poverty line despite an incredible headcount poverty rate decline of 93% in 15 years (UNDP, 2018). Especially rural areas, where 80% of the population live, suffer from higher rates of poverty. Findex (2017) revealed that 85% of adults without an account with a financial institution cited insufficient funds as the reason. With only 49% of adults in Ethiopia being able to read and write, it also lags behind in terms of literacy compared to other countries (CIA, 2017).

Good ID penetration, yet of questionable quality. Contrary to other SSA countries most of the adult population have access to a form of identification that allows them to identify and authenticate themselves. Though there are no official estimates on the penetration of identification documentation (ID4D, 2016), Findex (2017) found that only 7% of adults do not have the required documentation to open a financial institution account. However, both literature and stakeholder interviews (2017) revealed that the local ID, which is issued by the 16,000 local authorities or 'kebeles' around the country, is of questionable quality. This often results in the ownership of multiple IDs with no biometric function to counter fraudulent activities. The process around the rollout of national IDs (NIDs), which include ten fingerprints, is painfully slow (ID4D, 2016).

[18] Worryingly, the Ethiopian government regularly imposes nationwide, politically motivated internet filtering (IFC, 2016). This is likely to cause trust issues among consumers.
[19] With an average growth rate of over 10% between 2005 and 2015 (World Bank, 2018).

3. Market barriers and enablers

The barriers described in the following sections reflect the findings from interviews conducted with regulators and remittances and payments service providers in the remittance value chain in Ethiopia in October 2017. These barriers were considered by industry stakeholders to be either cost drivers, impediments to accessing services or as hindering market development.

The market barriers and enablers are presented through four different lenses: **business case or commercial** factors are those that impact on a provider's ability to offer services at different costs or expand their access points. **Regulatory** implications relate to specific clauses impacting on the cost of remittances or access to remittances. Remittances need to be set in an adequate environment to be able to be accessed by all – hence the **infrastructure** factors describe the supporting conditions in Ethiopia. **Consumer-related** issues highlight the realities for the consumer on the ground that can act as drivers or barriers for using formal remittances.

3.1. Business case/commercial

As Ethiopia is a net recipient of cross-border remittances, convenient and accessible cash-out options is a major determinant of market shares in the remittance market. The underdeveloped financial access infrastructure means that informal mechanisms, which are more accessible and convenient, dominate and outcompete formal RSPs. But even within the formal sector competitive barriers arise. Partnership issues due to lack of trust, reliable data or limited capacity around integration increase provider costs and impact remittance prices for consumers. Below, each of these business case or commercial factors are discussed in turn:

Informal market impacts formal RSPs' profitability. All interviewees raised the degree of informality in the remittances market as a major barrier. They estimated between 65% and 80% of remittance value to flow through the informal system. Formal RSPs often struggle to compete with informal providers given that informal remittances are conducted on the back of trading relationships and offer a better exchange rate than on the formal market. The high level of informality means that formal providers compete for a much smaller pool of funds, which reduces the profitability of formal RSPs. It also means that less funds are available for intermediation in the formal sector (Stakeholder interviews, 2017).

Unlevel playing field keeps costs artificially high. The government-owned and subsidised Commercial Bank of Ethiopia has the largest branch network in the country and hence is able to capture a large share of consumers. Other banks cannot compete and tend to focus on urban centres to offer their services. The absence of competition in rural areas inflates costs for rural consumers. Given that only two mobile money providers have obtained licenses so far and no e-money license exists, an expanded agent strategy is not attractive or profitable at this stage. Moreover, the state-owned Ethio Telecom is the only licensed MNO operating in Ethiopia. Thus, RSPs are bound to one telecoms player without being able to influence prices. They are further limited by the telecom network's coverage, which limits the expansion of services to more remote areas (Stakeholder interviews, 2017).

Partnership issues increase business risk and cost. As noted in Section 2.2, regulation only allows local banks to engage in remittance business. All non-bank RSPs need to enter into

partnerships with banks to offer their services, which is costly for both sides and results in the following business model constraints:

- **Difficult to establish correspondent banking relationships.** Correspondent banking relationships are necessary as foreign banks are not allowed to operate directly in Ethiopia. Especially relationships with US banks are tricky given the high regulatory requirements from these banks (Stakeholder interviews, 2017). Ethiopia has been especially hard-hit by derisking given its high-risk status by the Financial Action Task Force (FATF)(FATF, 2018) (. This is indicative of the fact that that the onerous and disproportionate AML approach is not seen as effective by correspondent financial institutions.
- **Smaller banks struggle with MTO integration and competition.** In order to be able to compete and attract maximum foreign currency values, banks need to integrate their systems with all available MTOs. Stakeholder interviews revealed that integration costs are often too high to make this viable, especially for smaller banks. This means that larger banks can attract a larger share of customers given the integration with all MTOs instead of just a select few. In addition, given that all banks offer the same service, smaller banks with limited outreach need to invest in more attractive remittance solutions for consumers and increase access points if they want to compete with larger banks. This further increases their operational costs (Stakeholder interviews, 2017).
- **Finding a partner bank for domestic remittances.** Interviewees state that banks are driven by the prospect of receiving foreign currency – one stakeholder stated that banks can get a margin of 40% on the USD. Banks are not allowed to earn commission on cash-out of remittances and are hence allegedly not prioritising partnerships where they cannot attract foreign currency. This makes it hard for non-bank RSPs to attract partner banks to offer domestic transfer services. If they succeed, waiting times for integration tend to be long and the compliance process onerous. Hence MFIs are the dominant partner for domestic remittances. Yet they lag behind banks in terms of systems and reporting (Stakeholder interviews, 2017).

Constrained capacity stifles integration. The interviews suggested that it is difficult to find employees with suitable technical know-how, especially around the issues of integrating CORE banking systems with those of partners. There seems to be a distinct lack of skills around technological solutions (Stakeholder interviews, 2017).

Lack of reliable data constrains business case development. Limited and inconsistent data on formal and informal flows means that use case development is costly for providers. Moreover, no comprehensive demand-side survey, such as FinScope[20], exists in the country. The MMOs and other technical service providers, in particular, struggle to finance data collection initiatives that estimate the true market size for their products. This leads to a lower rate of innovation compared to other countries in the region (Stakeholder interviews, 2017).

Limited trust within the industry. Financial institutions as well as technical service providers in Ethiopia report a lack of mutual trust among each other leading to a lack of cooperation. Interviewees suggested that there is a certain level of uncertainty and unease around government action and product approval. This impacts the appetite for innovation by providers (Stakeholder interviews, 2017).

[20] FinScope is a comprehensive demand-side survey around financial inclusion, which has been conducted in over 30 countries (FinMark Trust, 2018).

3.2. Regulation

While the abolishment of agent exclusivity had a positive impact on remittance inflows, the stakeholder interviews suggest that business constraints stemming from regulatory requirements and control remain high. In fact, regulation is cited as the main barrier for many providers. The main regulatory barriers noted are foreign exchange controls, the high level of central bank involvement in the market, the absence of e-money regulation and compliance uncertainties. They are explained in detail below.

Foreign exchange controls inhibit expansion of formal market. When a country's exchange rate is viewed as overvalued, there is an increased incentive for migrants to transfer funds using informal channels, as the net value received from remittances would be materially diminished under the official exchange rate. The International Monetary Fund (IMF) urged actions aimed at allowing more flexibility in Ethiopia, indicating that there is a potential loss of remittance inflows due to this overvaluation (Gaukler, 2016). Stakeholders mentioned the tight controls on foreign currency as the single most important driver of informal flows (Stakeholder interviews, 2017).

CBE capacity constraints and slow rate of regulatory approval weakens innovation progress. Nearly all stakeholders raised the issue of central bank control as a major barrier to their remittance business. NBE insists on overseeing and signing off on every aspect of the remittance business. This slows down the expansion of the industry. Interviewees suggested that the NBE does not have enough human and financial resources to adequately and efficiently supervise the sector. Those abilities are in demand by the private sector as well, especially by the banks. Hence skilled employees need to be incentivised to join the NBE, leading to further deprecation of financial resources (Geda, et al., 2017). The effect is visible in the prolonged waiting times for licensing experienced by all RSPs interviewed. Several years of approval time are not uncommon, especially when it comes to innovative technological remittance solutions. It was also alleged that a lack of understanding of technology within NBE leads to a high non-approval rate (Stakeholder interviews, 2017).

Lack of non-bank e-money providers and restrictive agent banking regulation restrict expansion of access points. The tight regulatory restrictions around e-money and agent banking have delayed the uptake of mobile money in the country, leading to lost opportunities for financial inclusion and the digitisation of remittances. According to the interviews, the lack of e-money licenses for non-bank or non-MFI institutions delays product release considerably due to the partnership approval process with the financial institution. Digital signatures are not allowed in the absence of e-money regulation. This increases operational costs for providers and means that consumers have to wait longer to be onboarded (Stakeholder interviews, 2017). In terms of the agent banking regulation, interviewees lamented the stringent rules for agent licensing. As registered businesses are scarce in Ethiopia and often cannot produce the necessary documentation, the pool of potential agents is small. Furthermore, the daily mobile transaction limit of ETB6,000 (around USD212) hinders the uptake especially by traders who could benefit greatly from this technology for e-float management if they are used as cash-in/cash-out agents for RSPs (Stakeholder interviews, 2017).

High compliance costs barriers to business. Stakeholders revealed that the regulatory burden and the cost of compliance is disproportional to their remittance business risk. Onerous reporting, the absence of a risk-based approach to AML/CFT regulation and an insistence on proof of address were noted as particular concerns:

- **Onerous reporting and supervision.** Stakeholders report high compliance costs for their remittance businesses. The central bank asks for an array of documentation for international transfers, which can be onerous for both consumers and providers to obtain. Furthermore, banks are required to supervise their agents in terms of CDD. Banks report to being understaffed to conduct adequate compliance supervision. Continuous training of partners is costly (Stakeholder interviews, 2017). Lack of capacity can lead to disproportionate risk mitigation requirements between the bank and agents.
- **Lack of RBA adoption adds to provider costs.** In the absence of a clear framework around the risk-based approach (RBA), providers are cautious to adopt risk-based measures. This increases the compliance burden for both providers and consumers alike, leading to an inefficient use of resources meant for AML/CFT risk management with limited real-world efficacy. This in turn increases operational costs and leads to exclusion of consumers from the formal system. The absence of a robust national risk assessment causes disproportionately high compliance requirements, leading to an increased level of informality in the remittance sector (Stakeholder interviews, 2017).
- **Insistence on proof of address leads to exclusion.** The value of addresses in proving identity in terms of AML/CFT is heavily contested as it adds no meaningful identification value. In less developed countries such as Ethiopia, official records of residential properties or residential settlements often do not exist. Requiring proof of address to open financial accounts hence leads to exclusion of consumers who do not have access to such documents (Cooper, et al., 2018).

3.3. Infrastructure

The poor infrastructure development in Ethiopia creates a number of challenges in the remittance market. Infrastructure constraints relate to both payment system infrastructure and physical infrastructure. The setup of the national payment system is still basic with limited live functionalities. While the government-mandated roll-out of bank brick-and-mortar structures increased the financial access footprint substantially, especially rural areas remain severely underserved. Other infrastructure challenges relate to the underdeveloped road, electricity, mobile network and internet infrastructure, which increases operational costs for providers. The lack of access to a national ID database increases the burden for both consumers and providers alike. Below, each main infrastructural challenge is considered in turn:

Current NPS not optimal for remittances. The setup of the national payment system, while built with efficiency gains in mind, is still underdeveloped and causes high costs for providers. Interviewees raise the lack of resources as a barrier to improvements of the NPS. The limitations of the ACH, RTGS and the switch are outlined in more detail below and are based on stakeholder interviews:

- **ACH limitations cause inefficiencies.** The ACH is set up for cheques or bank letter clearing. The lack of a retail EFT system to process low-value, high-volume remittance flows increases the cost for providers and consumers and carries increased payment risk. In the absence of a real-time EFT system, flows are partially handled by the RTGS or in batches through the highly manual cheque channel. Stakeholders mentioned that many CORE banking systems do not support ISO 20022[21], which would be more cost-effective as it supports interoperability for remittance payments.

[21] ISO 20022 is a messaging standard framework for financial services based on contemporary technologies. The ISO 20022 repository holds many payment message standards that can replace legacy standards for interested organisations. ISO 20022

- **Reliance on RTGS expensive.** The current setup of the national payment system requires all real-time payments to go through the expensive RTGS system. This is suboptimal, as the RTGS system is meant to be only for systemically important payments. SWIFT fees are expensive and in the absence of an adequate payment system for real-time low-value, high-volume payments, fees are disproportionate to the individual remittance value.
- **Limited functionality of switch constrains its sustainability.** While ATMs are already interoperable through EthSwitch, this has not yet been achieved for POS devices, cards or mobile payments. Especially mobile payments should be prioritised given the emphasis of government to drive digitisation in the country. MFIs have a large consumer base but do not participate in the switch due to the lack of CORE systems; their management information systems remain manual. This reduces the cost sustainability of the switch and creates financial risk for consumers and the whole system.
- **T+1 settlement decreases trust.** The lack of trust between RSPs and the industry as a whole increases the need for real-time clearing and settlement. The current next-day settlement by the NEB reinforces trust issues.

Lack of NID database access increases business costs. While most consumers have the required documentation to conduct remittance transfers, providers report that the lack of access to a national ID database increases their cost of business. According to the interviewees, local IDs are often handwritten, making it hard to verify their legitimacy. Stakeholders revealed that access to the database would assist greatly with CDD measures.

Electricity outages hamper quality of service. The low electrification rate as well as the frequent electricity outages severely impact providers' ability to guarantee good quality of service to consumers. The need for back-up generators or solar solutions increases the cost of doing business. It also increases the cost of agent network expansion and uptake of digital financial services. Interviewees report that merchants, for example, do not adopt POS devices on a large scale due to the frequent electricity outages (Stakeholder interviews, 2017).

Mobile network penetration patchy. The unreliability of mobile network connections impacts the uptake of POS devices by merchants as well as mobile money, which has consumer and agent trust implications for formal financial services. As with electricity, agent network expansion is hampered by the lack of reliable mobile network cover (Stakeholder interviews, 2017).

Rural RSP outreach limited. The relatively low penetration of mobile phones, coupled with the lack of ATMs and agents, means that remittance access points are limited in rural areas and that most rural consumers have no choice but to rely on informal remittance channels. While government policies emphasise digitisation of the economy, this underdeveloped infrastructure does not create the needed ecosystem to drive digital financial services. MFIs penetrate rural areas better, but not fully, and due to the lack of adequate information management systems are not well positioned to offer cost-effective remittance services (Stakeholder interviews, 2017).

Liquidity management increases operational costs. Given the underdeveloped road infrastructure, limited number of access points and the need for cash in the absence of a digital ecosystem, RSPs report liquidity management of branches and agents to be a major cost driver.

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messages can carry remittance information, including the sender and recipient account information, which can lead to increased straight-through processing and visibility into balances, increased mobility of cash across financial service providers, lower information technology support costs and easier maintenance and troubleshooting (ISO 20022 Education and Promotion Work Group, 2016).

RSPs engage regional cash distribution hubs, yet large parts of the country remain underserved (Stakeholder interviews, 2017).

3.4. Consumer-related challenges

The main consumer challenges raised by stakeholders relate to the lack of affordability, literacy, lack of trust and forgeries of IDs and cash:

Consumer poverty and illiteracy impacts business model innovation. Ethiopia's persistent high rate of poverty and illiteracy, especially in rural areas, causes severe constraints in the formal remittance sector. It reinforces the use of informal mechanisms as those are generally perceived to be more affordable and do not require filling out of forms. The illiteracy limits the expansion potential of mobile money services in the absence of in-depth consumer education initiatives (Stakeholder interviews, 2017).

Lack of trust in formal systems reinforces uptake of informal mechanisms. Consumers show high rates of mistrust in formal financial services. According to interviewees, this stems from the high government involvement in commercial financial matters and the difficult political history. Many people were expelled from Ethiopia due to political activism in the past and reports of government surveillance still persist (WSJ, 2014). According to interviewees, consumers prefer informal systems not only because of better foreign exchange rates and higher convenience - no need to fill out forms or wait for onerous ID identification - but also because of the increased privacy these services offer. Even where formal services are used, cash is perceived to offer better privacy than electronic means of sending and receiving remittances (Stakeholder interviews, 2017).

Forgery of IDs and cash costly. Providers report that cases of ID and cash forgery are not uncommon. Especially in border regions, counterfeit currency is allegedly an issue that increases the operational costs for RSPs.

Undocumented migrants forced to use informal mechanisms. In the case of Saudi Arabia and South Africa with estimated one million undocumented Ethiopian migrants combined, remittance senders are excluded from the formal system due to their lack of formal migration status. This reinforces the reliance on informal mechanisms to send money to Ethiopia.

4. Conclusion and recommendations

Cross-border remittances are important to Ethiopia's economy and population. Given the persistently high rates of poverty in the country, remittances play a vital role in the alleviation thereof as they directly flow into the hands of consumers. The diaspora maintains close ties to the country and sends large amounts of remittances every year, much of it informally. A net receiving country requires a particularly strong system at the last mile to support consumers in accessing the funds sent. It is therefore essential to expand adequate systems that support the efficient flow of remittances both domestically and cross-border.

The government has made efforts towards the liberalisation of its economy and financial sector. It still lags behind other countries in East Africa, however. While formal flows are increasing, the high persistence of informal flows points towards several impeding factors for consumers and businesses. If these challenges are not addressed, the informal system is likely to persist and expand, having a knock-on effect on economic stability and consumer welfare by increasing inflationary and currency overvaluation pressures in the longer run. This in turn increases poverty if not managed carefully.

This case study reviewed the challenges for providers in the remittances sector, which span across regulation, infrastructure, the setup of the sector and consumer-related issues. To incentivise the use of formal mechanisms and develop the remittance sector further, the following steps could be considered:

Measures to increase access to formal remittances

- **Convert NID to interoperable biometric systems and grant access to database to mitigate KYC risks.** In the absence of full national ID penetration in the country, other identification measures should be employed to ensure a sufficient identification confidence level between one or more identification elements. This is needed to enable universal consumer access. It could be considered to give providers access to the database and interlink existing commercial and donor databases to create an ecosystem of use cases. This ecosystem has the potential to financially sustain the development of the NID to in turn enable a faster rate of digitisation as envisioned by the government. If consumers can onboard quicker through pre-loaded KYC information on the many possible providers' systems, informal mechanisms could become less attractive.
- **Review compliance process and implement RBA.** The risk-based approach to AML/CFT should be adequately implemented at regulator, FSP and RSP levels to ensure proportional KYC requirements for consumers. It has the potential to lower compliance costs for providers, whilst maintaining financial integrity in line with global standards. This requires the adequate assessment of AML/CFT risks within the country. The completion of a risk-assessment of ML/FT risks will enable better correspondent banking relationships and adoption of RBA. Sending and receiving low-value funds by lower risk consumers, should not require the same level of identification attributes or verification as higher-value transfers by higher risk consumers. Regulators need to hold FSPs and RSPs to account where they have applied an unnecessary high KYC standard to lower risk consumers. Key to the adoption of proportional KYC requirements is the implementation of a principles-based concept of identification. In addition, the requirement of a proof of address when opening

financial institution accounts should be eliminated given its ineffectiveness in risk mitigation.

- **Build out agent and digital ecosystem.** The mandate to roll-out brick-and-mortar bank branches increases the level of financial access points in the country, but it should be considered whether this could not be achieved more cost effectively by agent network expansion. Electricity and mobile network expansion is vital to support agents and brick-and-mortar structures alike. The use of mobile phones is critical for digital expansion and could be encouraged by specific incentivisation programmes. MFIs could play a greater role as a catalyst for digital payments given their reach but should prioritise the adoption of adequate management information systems to be able to participate better in the payments system.

Measures to improve efficiency of remittances sector

- **NBE to regulate all financial services; capacity building for supervision and regulation at NBE and MCIT.** To effectively increase the speed of financial inclusion, the NBE should be regulator and supervisor for all financial services, including mobile money. Positive examples from Africa highlight the success of such a model. In order to speed up the process of granting licenses and reviewing innovation proposals, capacity-building initiatives for supervisors and regulators could be considered. By learning from other countries and/or sectors, leapfrogging is possible and provider trust in the sector could be strengthened.
- **Open up the financial sector to create a level playing field for remittance providers.** The fact that only domestic actors can independently participate in the remittance sector limits the amount of capital invested in the sector. This impacts the reach and viability of services and the pace of development, which is a particular need in Ethiopia when compared to peer countries. Additional participants in partnership with local incumbents could drive the much-needed competition that can accelerate the delivery of services with prospects of reducing remittance costs. Competition from other countries has the potential to increase the rates of innovation in Ethiopia to meet consumers' needs better than the informal system can. Lightening the strict controls of capital outflows could minimise informal providers competitive advantage of using remittances on the back of wholesale trade flows.
- **Revise agent and mobile banking regulation; establish e-money law.** In order to foster the expansion of digital financial services, it could be considered to revise and strengthen the existing agent and mobile banking regulation. It would be ideal to evaluate the existing agent licensing requirements to understand the barriers to agent network expansion. E-signatures and digital storage of documents at provider level could be considered to decrease the compliance burden and ease the onboarding of consumers. The government in conjunction with the regulator could consider developing legislation and a regulatory framework for e-money to clarify the current position. As an interim measure guidance and e-money regulation could be put in place to the extent that it is consistent with mandates and the realm of enabling legislation. In the longer term, e-money legislation would create more certainty, especially as systemic reliance on e-money increases.
- **Implement real-time EFT system.** A real-time EFT system has the potential to be much more efficient as it can replace the costly cheque system and can be run at low cost for all channels if set up ubiquitously. This is because it minimises the payment, clearing and settlement risk given its real-time functionality. Real time EFT can also impact the ability of agents and retailers to rebalance their float and ease the way towards retail digital acceptance.

- **Develop regulation for innovation framework.** The regulator could consider developing an explicit framework to test innovative solutions in the payments sector that outline the parameters for providers. This has the potential to increase provider trust and foster innovation.
- **Strengthen formal data collection on remittances.** The collection of reliable data on providers and consumers, in form of consumer surveys like FinScope and remittance price transparency initiatives, has the potential to reduce costs and inform providers about the financial needs of consumers. Overall, it can stimulate trust in the formal sector.

Measures to incentivise usage of formal remittance mechanisms

- **Legalise and license the buying and selling of foreign currency at the adequate exchange rate.** The overvalued Birr causes a shadow foreign currency exchange market that negatively impacts on the formal providers' business case and reinforces the reliance on informal mechanisms. An appropriate exchange rate policy has the potential to incorporate substantial informal flows into the formal system. An 'Authorised Dealer with Limited Authority' license framework adopted by the South African Reserve Bank or the Reserve Bank of Zimbabwe have proven successful from both a risk and compliance perspective.

This case study has shown that there is major potential for remittance development and consequent poverty alleviation in Ethiopia. It suggested a number of actions that, if implemented, have the potential to expand the formal remittance sector and lead to sustainable growth in the country.

Bibliography

AFI (2013). *Mobile financial services, basic terminology*. s.l.: s.n.

AfricaNews, 2017. *Ethiopia telecoms monopoly now Africa's largest mobile operator,* s.l.: s.n.

APANews, 2017. *Ethiopia: All banks to switch to e-payment,* s.l.: s.n.

CapitalBusiness, 2018. *Kenya has 250,000 credit cards compared to 10m debit cards,* s.l.: s.n.

Central Bank of Kenya, 2018. *Number of ATMs, ATM Cards, & POS Machines,* s.l.: s.n.

CIA, 2017. *The World Factbook,* s.l.: s.n.

CivilsOnline, 2018. *Ethiopia invests millions into road infrastructure,* s.l.: s.n.

Cooper, B., Rusare, M., van der Linden, A. & Ferreira, M., 2018. *Biometrics and financial inclusion,* s.l.: Cenfri, FSDA.

ESAAMLG, 2015. *Mutual Evaluation Report,* s.l.: s.n.

FATF, 2018. *Improving Global AML/CFT Compliance,* s.l.: s.n.

Findex, 2017. *The Global Findex Database 2017.* [Online]
Available at: https://globalfindex.worldbank.org/
[Accessed 3 September 2018].

FinMark Trust, 2018. *FinScope*, s.l.: s.n.

FSDA, 2016. *Reducing costs and scaling up service provision for remittance flows from the UK to Africa,* s.l.: s.n.

Gaukler, C., 2016. *Baseline Assessment Report,* s.l.: ACP EU Migration Action.

Geda, A., 2006. *The Structure and Performance of Ethiopia's Financial Sector in the Pre- and Post-Reform Period with a Special Focus on Banking,* s.l.: UNU-WIDER.

Geda, A., Addison, T. & Alemu, G., 2017. *The Current State of Ethiopian Financial Sector and Its Regulation,* s.l.: Department of Economics, Addis Ababa University.

Geda, A. & Irving, J., 2012. *Remittance Markets in Africa: Ethiopia,* s.l.: The World Bank.

Geda, A., Tafere, K. & Amedu, M., 2011. *Remittance and Remittance Service Providers in Ethiopia,* s.l.: Institute of African Economic Studies.

GSMA, 2017. *The Mobile Eoconomy: Sub-Saharan Africa,* s.l.: s.n.

Hasan, A. A. & Batra, G., 2018. *Performance Analysis of Microfinance Institutions in Ethiopia,* s.l.: International Journal of Business and Management Invention (IJBMI).

Hougaard, C., 2008. *The landscape of remittances in Zambia.* [Online]
Available at:
http://cenfri.org/documents/Remittances/2008/Zambia_remittances_doc_Sep%202008.pdf

ID4D, 2016. *Country Diagnostic: Ethiopia,* s.l.: International Bank for Reconstitution and Development/The World Bank.

IFC, 2016. *Mobile money scoping: country report Ethiopia,* s.l.: s.n.

International Organisation for Migration, 2005. *XIX. The Millenium Development Goals (MDGs) and Migration.* [Online]
Available at: http://www.un.org/esa/population/publications/PopAspectsMDG/18_IOM.pdf

Internet Live Stats, 2018. *Ethiopia Internet Users,* s.l.: s.n.

Isaacs, L., 2017. *Scaling up formal remittances to Ethiopia,* s.l.: IOM.

ISO 20022 Education and Promotion Work Group, 2016. *Understanding ISO 20022: A Resource Guide for Financial Institutions, Corporations, and the Public,* s.l.: ISO 20022 Education and Promotion Work Group of the Remittance Coalition's Vendor Forum.

Lencho, T. R., 2017. *The Potential Contribution of Ethiopian Diaspora in Development: The Presenting Absent Partners,* s.l.: Humanities and Social Sciences.

NBE, 2017a. *2016/2017 Annual report,* s.l.: s.n.

NBE, 2017b. *National Financial Inclusion Strategy,* s.l.: s.n.

Rees, M., 2018. *Mobile money: Where Ethiopia leads Europe,* s.l.: Medium.

SWIFT, 2010. *Company profile,* s.l.: s.n.

UN Habitat, 2017. *The Statae of Addis Ababa,* s.l.: s.n.

UNDP, 2018. *Ethiopia's Progress Towards Eradicating Poverty,* s.l.: s.n.

UNHCR, 2018. *Ethiopia Country Refugee Response Plan,* s.l.: s.n.

Vargas-Silva, C., 2016. *Remittances Sent to and from Refugees and Internally Displaced Persons,* s.l.: KNOMAD.

World Bank Remittance Prices Worldwide, 2018. *Price comparison.* [Online]
Available at: https://remittanceprices.worldbank.org/en
[Accessed 29 August 2018].

World Bank, 2017. *Migration and Remittances Data.* [Online]
Available at:
http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
[Accessed 28 August 2018].

World Bank, 2018. *Ethiopia Overview,* s.l.: s.n.

WSJ, 2014. *How Ethiopia Spies on Its Diaspora Abroad*, s.l.: Wall Street Journal.

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The Centre for Financial Regulation & Inclusion (Cenfri) is a global think-tank and non-profit enterprise that bridges the gap between insights and impact in the financial sector. Cenfri's people are driven by a vision of a world where all people live their financial lives optimally to enhance welfare and grow the economy. Its core focus is on generating insights that can inform policymakers, market players and donors who seek to unlock development outcomes through inclusive financial services and the financial sector more broadly.

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