Leaving No One Behind

Inclusive Fintech for Remittances

By Ravenna Sohst
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Executive Summary

Remittances are a lifeline for millions of migrants and their communities worldwide, serving as a vital source of income and contributing to essential needs such as health care, education, and housing. In 2023, migrants sent an estimated USD 860 billion, according to data from the World Bank, and for many low- and middle-income countries, remittances make up sizable shares of their gross domestic product. Not surprisingly, both sending and receiving countries recognize remittances as essential tools to boost economic development. However, despite efforts to leverage these private financial flows for development purposes, sending remittances has long been too costly and the remittance industry too rigid to deliver on their full potential.

By easing access to financial services, mainly via mobile phones, development actors hope that financial technology (or fintech) will change this status quo. Many believe that such technologies—namely mobile money and cryptocurrencies—hold the potential to advance migrants’ inclusion in financial systems and enhance the development benefits of remittances, especially for the most vulnerable segments of a society. Fintech appears to have brought new movement into an industry long dominated by a few players whose services have high transaction costs. Compared with banks or conventional remittance services providers such as Western Union and MoneyGram, fintech solutions can be faster and notably cheaper. In 2023, the cost of sending remittances through mobile operators averaged 4.1 percent versus 12 percent through banks. It also contrasts with the significant risks involved in informal ways of remitting money, such as when an intermediary physically carries cash. As a result, fintech has grown over the past decade and has become widely used in countries such as Nigeria, the largest remittance recipient in sub-Saharan Africa.

Moreover, governments in several low- and middle-income countries are increasingly open to innovation and experimentation with digital tools to encourage remittance inflows, which are an important source of foreign capital, especially in times of crisis. As a result, interest is increasing in government-led digital currencies and other fintech solutions. However, the success of such initiatives varies. For instance, the Nigerian government has promoted its digital currency, the eNaira, for use with inbound remittances, and it is exploring options to use the digital currency for welfare payments, connecting remittances to essential services. But uptake has been slow, mostly due to a lack of trust in the initiative and high levels of mistrust in the government overall. In Sri Lanka, meanwhile, the government-developed LankaRemit app is still mostly unknown to the country’s many migrant workers.

Despite these advances, fintech still makes up only a minor share of all remittance transactions worldwide, and growth during COVID-19 was not necessarily as fast as expected. The journey toward migrants’ financial inclusion is riddled with challenges, such as barriers to access, barriers to use, and risks emerging from the digitalization of remittances.
LEAVING NO ONE BEHIND: INCLUSIVE FINTECH FOR REMITTANCES

► Barriers to access: At its core, the adoption of fintech hinges on access to the necessary physical and digital infrastructure, such as telecommunications services, internet connection, and mobile phones. However, almost 400 million people worldwide still lack mobile broadband, and access is especially limited in remote areas and refugee camps. In addition, high data costs hinder accessibility, as in Nigeria, where fintech users report running out of data during transactions, leading to abandoned operations. Stringent checks when people register to use a service can be prohibitive too, especially for displaced persons and unauthorized migrant workers who lack identification documents or a permanent address. In Jordan, Bangladeshi migrant workers transcribe information from their identity cards, written in a non-Latin alphabet, to sign up for digital financial services that primarily use the Latin alphabet, which poses challenges for identity verification. Additionally, fintech companies face challenges in establishing the necessary physical network of agents for customers to conduct transactions, such as depositing cash into their digital accounts (cash in) or withdrawing funds (cash out). Such dependency on agents—typically small shop owners—is an obstacle to broadening uptake, particularly for smaller fintech start-ups that may not have the resources for tasks such as agent recruitment, training, and ongoing operational support.

► Barriers to use: Disparities in digital and financial literacy, along with deep-rooted social norms, can affect who can fully reap the benefits of digital remittances. The emergence of cryptocurrencies has added additional literacy demands and trust issues, exacerbated by regulatory uncertainty. In addition, many fintech apps have an interface whose design is not especially user friendly. In Nigeria, for example, migrant women who participated in a focus group expressed the view that digital remittance apps should be simpler so that people with lower levels of digital literacy could use them. Previous research in Côte d’Ivoire also showed that one in five digital finance users expressed difficulty in navigating their provider’s app menu. Additionally, fee structure matters. Women tend to make more regular remittance payments but send smaller amounts, so fixed fees per transaction can affect women disproportionately, making their transactions more expensive than men’s.

► Risks: Digital remittances can also create new risks for users. The rapid evolution of digital finance has outpaced consumer protection efforts. Fraudulent transactions via mobile apps grew by 83 percent between 2019 and 2020, outstripping the overall transaction growth of 38 percent. In Sri Lanka, for instance, focus group participants reported facing frequent scam attempts that aimed to gain access to their usernames and passwords. Such scams result in financial losses and users often do not have effective recourse mechanisms, highlighting the need for enhanced digital financial education and adapted regulatory frameworks. In addition, moving into the digital financial ecosystem may expose new users to predatory lending, increasing risks of indebtedness.

Along with these barriers and risks, fintech’s potential to leverage remittances for development should be viewed within the broader economic context of migrants and their communities. Many migrants choose to keep using informal remittance channels, even when fintech is accessible to them, because the exchange rates offered on the black market are simply more attractive. Economic crises and rampant inflation (as in Nigeria and Sri Lanka) may also factor into this choice, as can low levels of trust in a government’s economic policy. Furthermore, fintech can take different forms, and not all are equally well-equipped to work as drivers of financial inclusion. For example, cryptocurrencies are inconvenient for most users, complex, and
more expensive than anticipated by fintech enthusiasts and some development actors, mostly because of severe market volatility and high cash-out costs. By contrast, mobile money has shown real potential to transform financial markets in some countries, such as Kenya, even if that success does not appear straightforward to replicate in other countries.

Given those limitations, fintech's potential to deliver on its promises may need a more nuanced perspective. Although fintech remittances are generally hailed as inexpensive, fast, and accessible, in practice they depend on a broad set of enabling factors. More work is needed to improve accessibility beyond the world's main remittance corridors, where prices are already relatively low, and to enhance cooperation within regions. For example, a migrant sending USD 200 from Tanzania to neighboring Uganda incurred fees of at least 39 percent in 2023—more than six times the global average of 6.2 percent. In such regions, mobile money remittances could be especially transformative. Achieving meaningful advancements in financial inclusion through fintech will thus require a collaborative effort involving a diverse array of stakeholders: government entities, remittance service providers, telecom companies, development actors, and researchers, among others. Finally, fintech should not be seen as an end in itself, but rather as one possible strategy to advance development objectives where it proves to be the most effective tool to do so.

1 Introduction

Remittances are a vital source of revenue for migrants’ families, communities, and origin countries, estimated to reach USD 860 billion in 2023.\(^1\) However, the traditional banking sector that facilitates many of these money transfers has remained difficult to reform, with transfer costs persistently above the 3 percent target set out in the Sustainable Development Goals. Costs globally average 6.2 percent and are much higher in some corridors connecting the poorest countries.\(^2\) By contrast, financial technology (or fintech), which includes mobile money services and cryptocurrencies such as bitcoin, has increasingly attracted attention and hopes of bringing down costs and increasing the speed of transactions. With remittances through mobile operators averaging 4.1 percent versus 12 percent through banks, there are some signs that fintech could pave the way toward greater financial inclusion in low- and middle-income countries and help leverage remittances to support development goals.\(^3\)

Since 2020, the pandemic has played a critical role in accelerating the trend toward digital remittances. According to the latest Global Findex report, the share of adults making or receiving digital transfers in developing economies grew from 35 percent in 2014 to 57 percent in 2021, and growth among women

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\(^2\) For example, costs reach more than 39 percent when sending USD 200 in the most expensive corridors, such as between Tanzania and neighboring Uganda. See Ratha et al., “Leveraging Diaspora Finances.”

\(^3\) Ratha et al., “Leveraging Diaspora Finances.”
During the pandemic, many migrants and their families looked for alternative solutions to keep remittances flowing despite restrictions on freedom of movement and the temporary closure of many transfer offices and banks. Migrants relying on informal remittance transfers were especially affected. As a result, governments around the world and fintech companies sought to incentivize the adoption of digital remittance tools to keep critical remittances flowing. Some national authorities lifted restrictions on the use of fintech, while some firms temporarily reduced transaction fees. Many of these arrangements were unprecedented, and at least some are expected to become permanent. However, the pandemic has also revealed some of fintech’s limitations and the difficulty of reaching the most vulnerable groups.

Despite the potential benefits of mobile money and cryptocurrencies, many obstacles remain to widening their reach. Unstable internet connections, lack of access to technology, the uneven presence of fintech companies’ agents across rural areas, low levels of trust in and awareness of fintech options for remittances, and limited literacy (linguistic, financial, and digital) prevent many people from accessing any sort of digital financial services. Many governments are also skeptical of fintech’s risks and have taken steps to limit its use, such as by refusing to recognize cryptocurrencies as legal tender or placing limitations on fintech services due to money laundering and terrorism concerns. Finally, fintech is creating a range of new challenges, including risks related to data protection and fraud, and exacerbating inequalities.

This report examines opportunities to use digital financial services for international remittances, including a look at gendered aspects of these technologies’ impacts. It draws on interviews conducted in 2022–23 with experts and practitioners at fintech companies, financial institutions, development organizations, and academia, as well as an expansive literature review. The report uses examples from around the world but pays special attention to two countries: Sri Lanka and Nigeria. Both countries have high remittance inflows (making up 5.1 percent and 4.2 percent of gross domestic product in 2022, respectively), but Nigeria has adopted fintech to a much greater degree than Sri Lanka. The Migration Policy Institute organized focus group sessions with users and nonusers of digital remittance services in both countries, along with

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6 EMN and OECD, “The Impact of COVID-19 on Remittances.”

7 “Legal tender” refers to a payment method that must be accepted when offered in payment of debt. Since the rise of cryptocurrencies, several governments around the world have placed limitations on their use and in some cases enacted bans on buying, selling, or holding cryptocurrencies. Concerns are mostly related to its (still) unregulated nature, use for criminal purposes, and circumvention of capital controls. For example, Algeria passed a law in 2018 that prohibits any use of cryptocurrencies, and Bolivia has upheld a ban since 2014. See Freeman Law, “Algeria and Cryptocurrency,” accessed November 28, 2023; Freeman Law, “Bolivia and Cryptocurrency,” accessed November 28, 2023.

8 World Bank, “Personal Remittances, Received (% of GDP),” accessed November 28, 2023.
interviews with officials and experts, to better understand local circumstances and policy innovations.\textsuperscript{9} The differences between these country case studies allows for analysis of a broader range of barriers and challenges and identification of recommendations applicable in different contexts.

2 The Fintech Sector, Remittances, and the COVID-19 Crisis: What Has Changed?

Sending or receiving international remittances is frequently a complex, lengthy, and expensive undertaking. When banks are not accessible, migrants often send money to their families through intermediaries traveling with cash, a system sometimes called \textit{hawala} or \textit{undiyal}.\textsuperscript{10} But sending remittances using these informal methods has major risks. Besides being outlawed in several countries, focus group participants in both Sri Lanka and Nigeria reported that people entrusted with carrying remittances occasionally keep some of the cash for themselves, sometimes as much as half of the total amount.\textsuperscript{11} Yet, even when migrants choose to send remittances through formal channels, via banks (if they have access to banks accounts) or money transfer operators such as MoneyGram or Western Union, this can come with notable inconveniences. High transfer rates, disadvantageous exchange rates, caps on sending limits, slow transfer speed, and lack of oversight of whether the money arrives at its destination all complicate the sending and receiving of remittances.\textsuperscript{12}

But this appears to be changing. Accelerated by the COVID-19 pandemic, the fintech sector has transformed consumer behavior, market landscapes, and government policy and is proposing solutions for international remittances that could address these inconveniences and risks.

\textsuperscript{9} In Nigeria, the Migration Policy Institute (MPI) partnered with Mojo Africa, a strategic research agency that organized and conducted the focus group discussions in close cooperation with MPI. The agency conducted three focus group discussions, each with about ten persons, both Nigerians and immigrants in Nigeria. One group involved only female participants, one group involved only digital remittance users, and one group involved users of conventional remittance-sending methods. In Sri Lanka, MPI partnered with the Center for Poverty Analysis (CEPA), a research institute. The center conducted stakeholder interviews and also organized and conducted four focus group discussions: two involving Tamil speakers (one female only, one mixed) and two with Sinhala speakers (one female only, one mixed).

\textsuperscript{10} \textit{Hawala} and \textit{undiyal} are informal money transfer systems used in several regions around the world. An intermediary (hawaladar) collects funds from a sender in their currency and informs a counterpart in the recipient's area, who then disburses the equivalent amount to the recipient, minus a fee. Hawala and undiyal operate outside of official channels, relying on personal networks and trust, and are therefore vulnerable to misuse. However, many migrants still use such systems because they are often less costly than official channels and are easily accessible without any paperwork or identification, and thus are convenient. See Uditha Jayasinghe, “Explainer: Why Does Sri Lanka Want Migrant Workers to Remit Funds Via Banking Channels?” Reuters, December 6, 2021; Nikos Passas, “Formalizing the Informal? Problems in the National and International Regulation of Hawala,” in Regulatory Frameworks for Hawala and Other Remittance Systems (Washington, DC: International Monetary Fund [IMF], 2005).

\textsuperscript{11} Focus group discussion with female digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.

\textsuperscript{12} Focus group discussion with digital remittance service nonusers in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
**BOX 1 What Is Fintech?**

Fintech, short for financial technology, refers to any innovation that leverages technology to improve the processing or delivery of financial services. Contemporary fintech often links information technology and financial services, such as mobile money and cryptocurrencies.

**Mobile money** refers to a service that allows users to store, send, and receive money using an electronic wallet on their mobile phones, sometimes without the need to have a bank account. It can be used to buy items online and in participating shops and make payments for rent or utilities. Cash withdrawals can be made at authorized agents for a fee. Compared with other remittance-sending methods, mobile money is often cheaper and faster. Using mobile money, sending remittances cost an average of 4.4 percent in the second quarter of 2023, compared with 5.18 percent using a credit or debit card, 6.67 percent using cash, and 7.46 percent using a bank. Using a mobile phone to access the traditional banking system (such as by logging into a bank’s app and making bank transfers) is not mobile money but mobile banking.

**Cryptocurrencies** (or crypto) are decentralized digital currencies that use cryptography for transactions and operate independent of central banks. Bitcoin is the most well-known cryptocurrency among a multitude of such currencies. Users rely on a dedicated crypto wallet to make transactions. To cash out their crypto for another currency (such as U.S. dollars), users rely on bitcoin ATMs or third-party mediators called crypto exchanges and must pay a fee.

Both methods rely on “real money” being fed into their respective systems (either by buying crypto, paying into a mobile wallet, or receiving payments on a mobile wallet). Users also generally need to cash out in order to use their money in shops, for investments, and other purposes. Ignoring these steps—especially cashing out—can lead to a significant underestimation of the real costs associated with fintech transfers.


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**A. How the Fintech Sector Has Changed**

Digital tools helped to keep remittances flowing during the pandemic, amid bank closures in countries such as Rwanda and widespread travel restrictions that made the hawala system difficult to operate. In Nigeria, migrants from Rwanda reported exploring digital remittance services during the pandemic because banks in their home countries were shut down. Focus group discussion with mixed-gender digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 24, 2022.
environments, according to a global survey of fintech firms by the Cambridge Centre for Alternative Finance.\textsuperscript{14}

The pandemic also made the market more competitive. New technologies and numerous domestic or regional start-ups entered the scene or gained market share, driving overall costs down.\textsuperscript{15} For instance, the digital-only bank Kuda in Nigeria, launched in 2019, reports that it tripled its daily adoption of customers during the pandemic.\textsuperscript{16} With more competition, companies that had demanded high fees have had to gradually bring down their costs. In Kenya, a country with an overall high affinity for digital finance, average international remittance costs decreased from 13 percent in 2011 to 8 percent in 2021.\textsuperscript{17}

In addition, the COVID-19 crisis led more governments and other public entities to adopt measures and policies facilitating the shift to digital money transfer options.\textsuperscript{18} In Fiji, for instance, Vodafone and the United Nations Pacific Financial Inclusion Program offered free remittances to Fiji on the M-PAiSA platform for two months to support Fijians experiencing financial hardship caused by the pandemic and Tropical Cyclone Harold. In addition, regulators in several countries relaxed their Know-Your-Customer (KYC) requirements (requirements for financial institutions to cross-check customers’ personal information to prevent fraud and financial crimes). In Guinea, mobile network operators were authorized to open special entry-level accounts using a simplified KYC procedure, and in Ghana, existing mobile phone registration details could be used for low-value accounts as a simplified KYC procedure. Although most of these changes were originally designed to be temporary, several have been made permanent, including Ghana’s flexible KYC policy.

Governments have favored mobile money over crypto, even during the pandemic. El Salvador emerged as an exception by making bitcoin a legally recognized payment option in 2021, with the aim of reducing remittance costs.\textsuperscript{19} However, most nations have continued to approach cryptocurrencies with skepticism, maintaining or even tightening restrictions on their use. Nigeria, for instance, banned commercial banks from dealing in cryptocurrencies in 2021. Paradoxically, despite these prohibitions, Nigeria’s crypto market has continued to flourish. Driven by a quickly depreciating naira, inflation, and persistent barriers to accessing formal finance, the country boasts one of the highest rates of cryptocurrency use globally.\textsuperscript{20}

More recently, Nigeria’s Securities and Exchange Commission has shown signs of readiness to explore regulatory frameworks for cryptocurrencies, potentially indicating a shift in the government’s stance, and it is promoting its digital currency, the eNaira, to play a bigger role in Nigeria’s remittances (see Box 2).\textsuperscript{21} In Sri Lanka, the central bank has repeatedly warned the public against using crypto and underlined that it is an unregulated investment instrument without any safeguards for users. Crypto exchanges and mining


\textsuperscript{17} World Bank, “Average Transaction Cost of Sending Remittances to a Specific Country (%)—Kenya, Nigeria,” accessed July 31, 2023.


operations are banned in the country, and it is illegal to use credit or debit cards for transactions with crypto companies or exchanges.22

** BOX 2
Nigeria’s Fintech Sector and Remittances**

Nigeria is by far the largest remittance recipient in sub-Saharan Africa, typically accounting for more than one-third of all remittance inflows to the region. The country was expected to receive USD 20 billion in remittance inflows in 2023, contributing substantially to the overall government budget and dwarfing official development aid. Yet, sending remittances to Nigeria is costly. The average cost of sending USD 200 from various countries to Nigeria was 10.4 percent in the second quarter of 2020. When the pandemic hit, remittances decreased by 28 percent and prompted the government to declare mobile money an essential service, allowing it to continue operations even while other sectors were locked down.

In parallel, Nigeria’s fintech sector has emerged as one of the largest in Africa, propelled by a young, tech-savvy population, a government open to digital financial solutions, and a vast unbanked population that presents an opportunity for companies seeking new clientele. In a focus group for this study, native- and foreign-born young people in Nigeria indicated that they rely on a variety of fintech services to send or receive remittances, including major platforms such as Binance (the leading cryptocurrency exchange) and popular apps such as Payoneer, Geegpay, and PayPal to secure the best exchange rates and expedite transactions.

To enhance official remittance inflows and encourage the uptake of digital solutions, the Central Bank of Nigeria announced in June 2023 that its digital currency, the eNaira, would become a payment option for inbound remittances. In addition, the government is exploring options to use the eNaira to make welfare payments to citizens, connecting remittances to essential services. However, the currency faces challenges regarding its potential to advance digital financial inclusion. Only people who already have bank accounts can open an eNaira wallet, excluding unbanked individuals (mostly rural and poorer populations) from its benefits. The central bank is also yet to improve the currency’s interoperability with other mobile money providers. Finally, uptake has been slow after initial interest, and most wallets now appear inactive, driven by a significant lack of trust in the initiative and generally very high levels of mistrust of the government. The 2021 Gallup World Poll showed that Nigerians’ confidence in their government fell to the lowest levels across Africa (only 25 percent said they trust their national government). These issues raise questions about the potential of the eNaira to truly accelerate mobile money adoption in Nigeria and to advance financial inclusion.


B. Limitations of the Fintech Sector

Despite these changes propelled by the pandemic and promising developments in some areas, the fintech remittance industry has not proved to be as transformative as it was once hoped to be. Most of the bigger fintech companies in this area (that is, Instarem, Remitly, TransferGo, Wise, WorldRemit, and Xoom) started their operations in the most competitive remittance corridors such as United States–Mexico or United States–India, where their potential to bring down costs was limited from the start. Even several years after they started operating, only a few have a notable market share in sub-Saharan Africa, where remittance costs are the highest in the world. For instance, nine years after it launched, TransferGo has almost no presence in sub-Saharan Africa (its market share is less than 1 percent in all sub-Saharan African countries in which it operates). Another leading company, Wise, surpasses the 1 percent market share in only five countries in the region. The leading digital remittance companies are therefore not meaningfully covering some of the most underserved remittance corridors, raising doubts about their potential to reach populations that are the least included financially.

In addition, the widespread adoption of mobile money in sub-Saharan Africa does not mean that it is easily used for international remittances, especially from richer countries in Europe and North America. In fact, its use has remained largely limited to inter-African transfers: 84 percent of all international remittances sent via mobile money took place within sub-Saharan Africa in 2017. This is because mobile money operators face challenges in managing differing regulatory requirements and overcoming restrictive licensing. For instance, mobile money start-ups often need to apply for a dedicated license allowing them to facilitate international remittances, but the process and timelines can be opaque. In addition, they face difficulties related to differences in KYC requirements and transaction and balance limits in sending and receiving countries, both of which need to be fulfilled for international money transfers. Finally, mobile money operators rely on partnerships to cover a wide range of remittance corridors without being legally registered in each country. These partners are often traditional remittance service providers (such as Western Union and Tigo Money in Latin America), other mobile money providers, or remittance hubs such as Onafriq that fulfill the necessary regulatory requirements and conduct client and transfer checks. However, managing these partnerships can present significant difficulties, especially for smaller mobile money operators.

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24 See Ratha et al., “Leveraging Diaspora Finances.”
26 Teixeira da Silva Filho, “Curb Your Enthusiasm.”
28 Challenges include partner due diligence, joint customer identity management, and reconciliation mechanisms. For more details, see GSMA, “Guidelines on International Remittances through Mobile Money” (working paper, GSMA, London, UK, September 2017).
3 Risks and Barriers to Financial Inclusion for Migrants and Their Communities

In many ways, fintech presents potential solutions to issues associated with financial inclusion and remittance transfers. Sending remittances using fintech could be more widely accessible through mobile phones, which would drive down costs by cutting out intermediaries, while increasing the speed of transactions and introducing competition into a sector that only a few players have long dominated. The pandemic provided valuable impetus for both industry actors and policymakers to renew discussions on digitalization across various sectors, accelerate the adoption of fintech in some cases, and highlight the potential of such tech tools, especially during periods of crisis. Yet, increasing uptake has also improved understanding of fintech tools’ limitations and led to a renewed assessment of their risks and challenges, mainly barriers to access, barriers to use, and risks inherent to the digitalization of financial services.

A. Barriers to Access

The ability to benefit from digital financial services and remittance solutions is tied closely to the presence of infrastructure, such as broadband internet and reliable electricity. Additionally, regulatory frameworks governing financial transactions and the extent of agent networks’ reach affect digital financial inclusion significantly. Users who experience these limitations are not able to fully enjoy the opportunities fintech offers.

Telecommunications Infrastructure

An individual or community’s adoption of fintech hinges on access to the necessary physical and digital infrastructure, especially telecommunications services, internet connection, and electricity. However, almost 400 million people worldwide lack mobile broadband and are therefore excluded from the social and economic benefits that digital remittances can offer.29

The issue poses significant challenges for refugees, particularly in camps where connectivity is often unreliable. In rural areas, 20 percent of refugees have no connectivity at all, and even in urban areas, many refugees who have connectivity cannot afford it.30 This lack of reliable and affordable internet access hampers the potential of digital financial services to address refugees’ needs. Access to fintech solutions would be especially useful because it can help refugees bypass common obstacles to financial inclusion (such as the absence of local bank branches), connect to remittance services that represent important lifelines in refugee camps, and keep the costs of money transfers lower. Several recent initiatives by actors such as the United Nations High Commissioner for Refugees31 and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)32 promote digital transfers to refugees based on mobile wallets and similar

technologies. Although such options can be valuable in areas that have solid internet coverage (such as most of Jordan), areas without network connectivity are excluded from such developments.

Even where basic telecommunications infrastructure is in place, it is not always reliable, and complaints about network outages and poor network strength are frequent. This unreliability constrains the development of fintech. In focus groups held in Nigeria, for example, nonusers of digital services reported worrying that the lack of connectivity may lead to their wire transfers getting lost or double payments being made if the network is unstable. As a result, traditional cash-out points and personal networks (and other informal methods) appear safer to them. In Sri Lanka, the state-run utility provider introduced extended power cuts in December 2021, from 4 hours to 13 hours per day at the height of this measure. The cuts were driven by Sri Lanka’s economic crisis, which made importing fuel for power generation increasingly unaffordable. Even though users are adapting to frequent power outages, it risks undermining their trust in the ability of mobile apps to function properly and transfer their funds safely. Additionally, regions experiencing conflict or political upheaval can experience disturbances in access to digital infrastructure and become financially excluded. In Afghanistan, for example, the Taliban previously targeted cell phone towers and other internet infrastructure to limit communication, making internet access highly unreliable, especially in the most embattled regions.

The challenges related to a lack of telecommunications, internet, and electricity are especially pressing because they tend to affect the most vulnerable populations—those living far from urban centers, in refugee camps, or in areas affected by violent conflict. Some bilateral development cooperation initiatives are, however, attempting to improve the situation through large-scale investment and infrastructure packages. For example, the 2021–24 EU-Nigeria Digital Economy Package plans to provide 160 million euros in grants and 660 million euros in loans to support Nigeria’s digitalization strategy. One major component of this project is improving digital infrastructure and establishing 4G connectivity in several states. The project will also focus on providing opportunities for youth and women to develop the digital skills necessary to engage in the digital economy, including fintech.

Mobile Phones

In principle, the technology underlying mobile money does not require users to have internet-enabled phones. When the mobile phone-based transfer service M-PESA was launched in Kenya in 2007, and smartphones were much less widely available than today, its users would process payments over PIN-

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33 Focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
35 Focus group discussion with female digital remittance service nonusers in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
secured text messages. Users could shop in local stores and pay at the checkout using text messages, pay bills, or send money domestically from phone to phone. Today, however, most fintech options (and especially those designed for remittance transfers) rely on internet-enabled phones. Mobile money now typically needs to be stored and accessed through a mobile wallet, which is a smartphone app. Internet access is equally necessary for fintech services involving crypto. Also, many apps now have more advanced security features, such as biometric recognition, that rely on smartphones. Consequently, the availability of smartphones has become increasingly essential to advancing financial inclusion and digital remittances.

FIGURE 1
Mobile Cellular Subscriptions (per 100 people) in Nigeria and Sri Lanka, 2000–22


Despite these trends, access to smartphones is still low for certain population groups. Worldwide, 3.4 billion people are not using mobile internet, despite living in areas with mobile broadband coverage. Referees find it especially difficult to finance an internet-capable mobile phone and are 50 percent less likely to own one than the general population. Growth in mobile phone use has been steep in most countries, including Nigeria and Sri Lanka (see Figure 1). But although mobile phone use in Sri Lanka is very high, adoption of digital finance options is relatively low, which appears to be driven partly by the perceived risks and prejudices toward these tools. In both countries, data from the World Bank show that the number of mobile cellular subscriptions has continuously increased over the past decades.40

39 UNHCR, “Connectivity for Everyone.”
40 World Bank, “Mobile Cellular Subscriptions (Per 100 People),” accessed August 4, 2023. Prior to 2000 (the earliest year in Figure 1), the rate of cell phone subscriptions was minimal in both countries. Interestingly, there have been more than 100 cellular subscriptions per 100 individuals in Sri Lanka since 2014, meaning that the mean average individual possesses more than one mobile device.
In focus groups, several Sri Lankans noted that the high cost of mobile data is one factor that limits greater internet use.\(^4\) As a result, the internet is frequently not available, especially toward the end of the month when data packages run out. In Nigeria, fintech users reported their entire data volume being used up during transactions, causing the transaction to be abandoned and requiring them to top up their data and then restart the process.\(^2\)

Many people without mobile phones simply cannot afford one, and the cost of devices and data continue to be a concern, but cultural norms and political divisions also play a role in shaping who has access to mobile phones and, consequently, who can send or receive remittances with them.\(^3\) For example, Sri Lankan focus group participants reported being afraid to use digital services such as mobile money because of their perceived connection to illegal activities such as drug dealing or use (see Box 3).\(^4\) Even for tech-savvy migrants, using their mobile phones might not always be possible during their time in foreign countries; for example, their employers may restrict access to such devices. This is especially common in low-skilled domestic or manual labor jobs, for which many Sri Lankan migrant workers are recruited. In other contexts, using mobile devices can be interpreted as a political statement. In Afghanistan, smartphone ownership has been equated with espionage or susceptibility to foreign influence or intrusion. This issue became more prominent following the resurgence of the Taliban, which has led to complaints of beatings, harassment, and smartphone inspection.\(^5\)

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\(^4\) Focus group discussion with digital remittance service nonusers in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
\(^2\) Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
\(^3\) Alliance for Affordable Internet, “The Economic Costs of Digital Exclusion in West Africa—9 Takeaways,” Alliance for Affordable Internet, December 10, 2021.
\(^4\) Focus group discussion with digital remittance service nonusers in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
Remittances play a significant role in Sri Lanka’s economy, with more than 1 million migrant workers sending remittances worth 4–5 percent of the country’s gross domestic product annually. But official remittance inflows have recently been severely diminished. This comes at a time when the country is struggling with the effects of a domestic economic crisis coupled with the impacts of the COVID-19 pandemic, resulting in an 80 percent depreciation of the rupee against the dollar and a fall of remittance inflows by 35 percent between 2021 and 2022. The use of informal money transfer channels, known as undiyal, resurged as formal remittance flows dwindled. Considering these challenges, there is a pressing need to explore ways to revitalize remittance inflows, and to harness the potential of digital solutions to contribute to this endeavor.

One opportunity involves addressing Sri Lanka’s migrant workers, most of whom undergo predeparture training when they first leave the country. The training typically does not include information on remittances, and even though banks are often present during these sessions to promote their services, they rarely give guidance on digital remittance channels and have limited incentive to offer independent advice about lower-cost options. In addition, predeparture training has been less consistent since the pandemic, and civil-society groups see this as a missed opportunity to expand financial literacy information. A Swiss nongovernmental organization, Helvetas, is developing a training manual for use during the government’s predeparture training sessions. The manual will include a module on financial literacy.

Financial literacy is a major challenge for many Sri Lankan migrant workers. About 25 percent are domestic workers or housemaids with typically low levels of financial or digital literacy, and in some cases, employers send remittances on their behalf. The government introduced an initiative, a mobile app called LankaRemit, designed specifically for migrant workers to facilitate remittance transfers. The app is already linked with several of Sri Lanka’s largest banks (including Bank of Ceylon and People’s Bank) and allows for adjacent services such as direct bill payments. However, the app is not yet connected to foreign banks where migrant workers may have accounts and is still waiting for fintech companies to join its network. In addition, its outreach remains limited, failing to reach most Sri Lankan migrant workers. In a 2023 focus group, none of the Sri Lankan participants had ever heard of LankaRemit.

By contrast, mobile money options such as eZ Cash and mCash are relatively better known, even if mostly for in-country payments and less for remittances. Like most mobile money providers, eZ Cash and mCash can be used to store money in an e-wallet, make online payments, or receive inward remittances on a phone, which can then be cashed out at service points. But users reported that they found too few cash-out points and regretted that most shops allow only cash in, such as to top up their e-wallets. Most important, even though Sri Lankans agreed that it is easy to sign up for eZ Cash, several pointed out the negative stereotypes associated with using this and similar apps, specifically their perceived connection to drug abuse and other illegal activities. As a result, some users are afraid of being tracked by the police or viewed poorly by other community members.

Gender also plays a role. Despite the perception that mobile ownership has become near universal, gender gaps in both phone ownership and mobile internet use persist. For example, in Nigeria, men are 36 percent more likely than women to use mobile internet. Worldwide, 372 million women do not own a mobile phone, which often excludes them from their benefits in terms of connectivity and financial inclusion. Even if some women may have access to financial services through their husbands’ or other family members’ phones, the lack of phone ownership is still a reason some do not use mobile money options. One Sri Lankan woman noted in a focus group that her only access to a mobile phone is through her son-in-law. Such situations can have important consequences for women’s ability to become more financially connected and literate, and it affects their decision-making power and creates dependency.

In addition, crises such as the COVID-19 pandemic can prompt mobile phone ownership to decrease when people lose their jobs or earn less money, making such devices less affordable. Women tend to be especially affected. Research by GSMA (a group representing mobile operators worldwide) suggests that women in Kenya were expected to sell their phones during the pandemic to support their families with the extra earnings. In other cases, families might decide to reduce the number of expensive phones and share usage. During the pandemic, phones also became more important for work and education. In Sri Lanka, several focus group participants reported family members sharing their phones so they could continue their online education.

Besides phone and internet access, SIM cards can be challenging to obtain, especially for migrants. In Nigeria, for instance, focus group participants reported that they need to show electricity bills and provide a home address to obtain a SIM card. Yet, doing so can be difficult for migrants who are newly arrived in the country and may not yet have their own home, instead living with friends or relatives. In addition, the Nigerian National Identification Number is now often required, and not all foreigners sign up to receive one or can receive one (e.g., if they lack legal residence status).

Action along different lines could be useful to reduce these hurdles and enable more migrants and their families to access internet-enabled phones. One option is for international and civil-society organizations to help users access phones (e.g., through phone-sharing networks or intermediary access at agents). Another option is for public authorities and civil-society organizations to focus on bringing down the cost of

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48 Focus group discussion with digital remittance service nonusers in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
50 Focus group discussion with female digital remittance service nonusers in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
51 Focus group discussion with digital remittance service nonusers in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
52 GSMA, *Making Internet-Enabled Phones More Affordable*.
devices to facilitate ownership. Several countries run universal service and access funds, which are typically financed through mandatory contributions from mobile network operators and other telecommunications providers.\textsuperscript{54} In Pakistan, the government announced it would use its fund to provide smartphones to 30,000 low-income women. The smartphones are preloaded with about USD 1.90 credit, and an accompanying program offers financial and digital literacy training for recipients.\textsuperscript{55} In Nigeria, the national universal service and access fund is running an access program that provides end-user devices to community spaces such as schools.\textsuperscript{56} And in India, Vodafone and a local nonprofit organization, Hand In Hand India, launched the Smart Snehidi program, which aims to scale up low- and middle-income female entrepreneurs’ use of internet-enabled smartphones by offering tailored microfinance loans.\textsuperscript{57}

**Know-Your-Customer Regulations**

Despite progress in recent years to ease access to digital financial services, legal and regulatory requirements remain a major hurdle to improving digital financial services and expanding access to underserved populations. KYC regulations require fintech companies to conduct robust user verification by collecting numerous personal documents, typically to prove their identity and address.\textsuperscript{58} The rationale of KYC requirements is to prevent identity theft, protect against money laundering and financial fraud, and intercept financing for terrorism or other financial crimes. This is especially important in emerging markets that are opening to fintech. Nigeria, for example, has some of the highest rates of identification document forgery in the world.\textsuperscript{59}

However, KYC processes can be cumbersome, if not prohibitive, for both migrant customers and fintech start-ups. Some migrants lack identification documents, either because they were displaced and are unable to retrieve them or because they were born in communities that do not register births and therefore never owned official identity documents. In focus group discussions, some Tamil Sri Lankans reported that most people in their communities lack birth certificates or other identity documents and are therefore unable to access any form of banking.\textsuperscript{60} Nigeria has long struggled with a fragmented documentation system, which similarly creates challenges for people who wish to subscribe to digital platforms but lack adequate identification documents.\textsuperscript{61} The documentation gap in Nigeria disproportionately affects women and marginalized groups such as migrants.\textsuperscript{62} In other cases, migrants possess identity documents but are not eligible to open accounts with financial institutions; this can be the case for refugees or migrants who do not have legal status in their host country. For example, Jordanian law prohibits refugees from opening


\textsuperscript{57} GSMA, *Accelerating Affordable Smartphone Ownership*.


\textsuperscript{60} Focus group discussion with Tamil-speaking digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, November 25, 2022.

\textsuperscript{61} Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.

\textsuperscript{62} World Bank, “*Nigeria Digital Identification For Development (Id4d)*” (project sheet, World Bank, Washington, DC, 2020); focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
bank accounts but allows mobile wallets, making this an essential tool for refugees in the country.\textsuperscript{63} As a result, humanitarian and development actors such as the United Nations High Commissioner for Refugees and GIZ have launched initiatives in Jordan to improve refugees’ access to digital remittances and other financial services through mobile money, involving partnerships with the country’s central bank and the private sector.\textsuperscript{64} In addition, the KYC process tends to be specific to national contexts. In Jordan, Bangladeshi migrant workers must transcribe information from their identification documents, written in a non-Latin alphabet, to sign up for digital financial services that primarily use the Latin alphabet.\textsuperscript{65} This language barrier can lead to misunderstandings, errors, and delays in the KYC verification process, creating additional hurdles for migrant workers seeking financial inclusion through digital platforms. Finally, the KYC process may simply appear too cumbersome for some users. In Nigeria, for example, female users of digital remittance services complained that the process of signing up for these apps felt too long and that the systems were not always functional.\textsuperscript{66}

KYC regulations also pose challenges for fintech start-ups that struggle to implement costly and complex identification processes, hindering their ability to offer affordable and accessible services to marginalized populations. As the fintech landscape evolves quickly, smaller start-ups can also find it challenging to keep up with changing KYC regulations, risking hefty fines if they are caught conducting insufficient checks on their customers. Yet in a context such as Nigeria, where there is no centralized identity management system, start-ups have difficulty verifying their customers’ identities in the various national databases. In addition, address verification—a crucial step in KYC—is challenging, given Nigeria’s poor address system for some locations.\textsuperscript{67} For start-ups with limited resources, investing in adequate technology, staffing, or both can be a financial burden. Additionally, the time-consuming nature of the KYC process may lead to delays in registering and enabling customers to use a service, reducing the ability of fintech tools to respond in crisis situations or on short notice.

Efforts are underway to overcome the challenges posed by KYC regulations. One potential solution is to implement a tier-based approach to due diligence and KYC obligations, which can ease the strain on smaller transfers and increase the speed of transactions. According to Onafriq, a pan-African payments company, most transfers in sub-Saharan Africa are less than 23 euros and often serve as emergency funds.\textsuperscript{68} Such transfers pose few risks of terrorism financing or money laundering and could therefore be processed with fewer safeguards. In Nigeria, the central bank implemented a three-tiered KYC regime, offering flexible account-opening requirements. Low-value account holders need to submit only basic identity information, while medium- and high-value accounts are required to provide more substantial proof and

\begin{itemize}
  \item \textsuperscript{63} GIZ, “Financial Inclusion of Refugees in Jordan.”
  \item \textsuperscript{65} Author interview with Kathrin Damian, head of the Digi#ances Project, GIZ Jordan, October 3, 2022.
  \item \textsuperscript{66} Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
  \item \textsuperscript{67} Olawuyi and Odeku, 2021 Know Your Customer (KYC) Survey.
  \item \textsuperscript{68} Author interview with Nika Naghavi, executive director for mobile network operators, Onafriq (formerly MFS Africa), September 8, 2022.
\end{itemize}
documentation. Such tiered approaches can strike a balance between compliance and accessibility, facilitating smoother financial services for migrants and other underserved communities.

Another approach is to build a national identification system that registered fintech companies can query to verify their users’ identities (known as e-KYC). Unlike traditional KYC, which relies on a third party to review paper documents that users submit or to query a database on the company’s behalf, e-KYC can be faster because the fintech company can perform all checks itself digitally. The World Bank is working with Nigeria’s National Identity Management Commission to fill the identity documentation gap in the country. In 2020, the Commission set out to register 150 million people in the country who they estimated did not have National Identification Numbers. By July 2023, more than 100 million new numbers had been registered. Better coverage and integrated identity databases are a prerequisite for a country to implement an e-KYC system later. Although this is a potentially efficient solution to KYC barriers, it must be accompanied by the necessary technical capabilities (such as offline accessibility when connectivity is not stable) and regulatory safeguards to ensure the safety, security, and privacy of citizens in those databases.

A third approach to simplifying KYC processes for low-value transactions (such as most remittances) is to use the KYC process for SIM registration and apply it automatically for fintech subscriptions via mobile phone. In countries where these requirements overlap, doing this can reduce redundancies and make registration significantly easier. Sri Lanka already allows this: identification information collected when a person registers a SIM card can be used to open relatively low-value mobile money accounts, which allow users to hold a balance of up to 10,000 rupees and make transfers of up to 5,000 rupees.

Finally, harmonizing KYC regulations across countries would improve regulatory certainty and reduce the cost of compliance. Development actors can provide added value in this area by bringing the right stakeholders together and guiding discussions toward these goals. For instance, the United Nations Capital Development Fund (UNCDF), in collaboration with the secretariat of the Intragovernmental Authority on Development, is reviewing regulatory arrangements in individual Member States in the Horn of Africa and aims to harmonize these regulations. Replicating such efforts would be especially useful in remittance corridors that, to date, remain underserved and costly (far above the 3 percent goal for transaction costs set out by the Sustainable Development Goals), many of which are within Africa.

Agent Networks

Agents play a critical role in expanding access to digital remittance tools because they are typically the main contact point for users, help them register and learn to use the service, and assist as they make transactions. This support is especially relevant for women, older adults, and less-educated users who often have less

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70 GSMA, Overcoming the Know Your Customer Hurdle: Innovative Solutions for the Mobile Money Sector (London: GSMA, 2019).
73 GSMA, Overcoming the Know Your Customer Hurdle.
experience with digital and financial management. In addition, agent networks serve as links for users to deposit or withdraw cash from their digital accounts, and their accessibility plays an important role in attracting and serving new users, given that many economies are largely cash-based. For example, mobile money users in Sri Lanka reported that it is difficult to withdraw cash through their eZ Cash mobile money accounts. Local shops serve only as cash-in points, but to get paid out, users need to go to a specific service point or a commercial bank with an eZ Cash option at its ATM. Migrant workers also frequently receive their salaries in cash, increasing their reliance on nearby agents that can act as cash-in points before they can send their remittances via apps. As a result, and despite hopes that fintech would enable a complete move away from physical infrastructure including agents, such systems continue to be dependent on them.

In fact, a lack of agent networks presents a significant hurdle to expanding access to digital remittances. One reason is that agents often struggle to become economically and operationally viable, especially in rural areas. Low transaction volumes and few customers result in low profit margins. In addition, operational barriers such as liquidity management pose significant hurdles to agents, who are sometimes unable to process transactions because of limited liquidity. For example, some agents must find a bank or other agent to rebalance their accounts and convert e-money into cash, or vice versa, without support from the fintech companies they work with. So-called “runners” can provide these services, but relatively few are present in rural areas. Moreover, rural agents often have more demands to cash out than to cash in, leaving them with large imbalances of e-money.

Recruiting agents and expanding networks into rural areas is another challenge, given the difficulties of making a living as an agent. However, innovative partnerships may point to solutions, notably when they allow agents to combine different sources of income and build on existing networks. In Indonesia, for example, fintech companies have expanded their reach significantly by merging with ride-hailing apps. One such company, Gojek, started in the business of motorcycle taxis and expanded into financial services through its payment service GoPay. Its riders double as cash-in points, reaching even isolated places that are...

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75 Focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
76 Across the African continent, for instance, only 5–7 percent of all payments were made through electronic or digital channels in 2020. Some countries, such as Kenya, are leading the way toward a cashless economy. The success of the phone-based money transfer service M-PESA in Kenya is largely due to its large physical network across the country. Yet overall, cash economies still prevail. See Emilio Hernandez, Sasidhar Thumuluri, Archana Pandey, and Sandhya Rani, “Digital Finance’s Little Secret… (Agent Networks)” (podcast, Inclusive Finance Frontiers, produced by Consultative Group to Assist the Poor [CGAP], January 10, 2023), 35:56.
77 Focus group discussion with Sinhala-speaking digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
poorly connected to banks or other financial services. About 50 percent of Gojek users also use its e-wallet, making it Indonesia’s fourth largest e-wallet.\textsuperscript{82}

Fintech companies also increasingly rely on third-party management of agent networks, which takes care of recruitment, training, and operational support.\textsuperscript{83} The Indian company Dvara (originally a fintech start-up itself) is one such company. It operates a digital platform that connects agents with various banking and payment partners so that agents can offer access to a wide range of products and services. As of 2022, it oversaw 1,700 agents in six Indian states, facilitating more than 6 million transactions per month.\textsuperscript{84} In Kenya, a company called Top Image Africa is helping manage more than 18,000 agents working for the mobile money company M-PESA. Its staff visit agents at least once every two weeks and assess whether each one has enough cash for their operations and whether their logbooks are in order.\textsuperscript{85} Taking on external services to manage agents can be a valuable investment for fintech companies, given the substantial time and resources required to maintain functioning networks. However, this can also represent an important cost for new fintech companies and shows the advantage held by large players that can subcontract such services.

In addition to these operational hurdles, fees and tariffs also affect the profitability and scalability of agent networks. The exact amount an agent can expect to earn depends on the country and specific mobile money service, and it also reflects the business model along the entire life cycle of a mobile payment. For instance, M-PESA in Kenya weights transfer fees at 60 percent and cash-out fees at 40 percent, whereas providers in Tanzania weight the cost more heavily toward cash-outs, with 15 percent for transfer and 85 percent for payout.\textsuperscript{86} While these examples are illustrative of this variation, there is little comprehensive information on how much agents charge. Even in countries that regulate fees and tariffs, the rules are not always followed, and rates are expected to vary widely among agents.\textsuperscript{87}

Several options exist to help new fintech companies establish or grow their agent networks. At the most basic level, there is a need for regulatory frameworks that are conducive to building broad agent networks, allow agents to have diverse income streams, and offer personal support for new users and due diligence. For instance, most countries permit mobile money agents that are unaffiliated with banks, though Mauritania, Vietnam, and Zimbabwe continue to allow only bank agents.\textsuperscript{88}

In addition, innovative partnerships can help increase agent availability.\textsuperscript{89} As the example of Gojek in Indonesia shows, partnerships with actors that already have a robust local presence are especially useful, such as ride-hailing services but also public places such as postal offices. In Zimbabwe, the central bank,

\textsuperscript{83} Emilio Hernandez and Christopher Blackburn, “Agent Networks at the Last Mile: Implications for Financial Service Providers” (PowerPoint reading deck, CGAP/World Bank, Washington, DC, September 2022).
\textsuperscript{84} Hernandez and Blackburn, “Agent Networks at the Last Mile: Implications.”
\textsuperscript{87} With funding from the Bill and Melinda Gates Foundation, Innovations for Poverty Action’s Financial Inclusion program plans to develop a transaction cost index to track the real costs of using mobile money for deposits, transfers, and withdrawals, including by using mystery shoppers who collect real cost data in Bangladesh, Tanzania, and Uganda. See William Blackmon and Rachel Pizatella-Haswell, “Tracking the Real Cost of Mobile Transactions: IPA’s New Two-Year Pilot;” Innovations for Poverty Action, January 19, 2022.
\textsuperscript{88} GSMA, \textit{Four Years of the Mobile Money Regulatory Index: Insights, Opportunities, and Challenges} (London: GSMA, 2022).
\textsuperscript{89} Emilio Hernandez, \textit{Agent Networks at the Last Mile: A Guide for Digital Finance to Reach Rural Customers} (Washington, DC: CGAP and World Bank, 2019).
Econet Wireless (the country’s main mobile operator), and Mastercard partnered in 2018 to enable merchants to accept EcoCash mobile money in stores that were already equipped with card readers. This allowed more than 3,800 merchants to be paid with mobile money. In India, the government partnered with the agent networks of private-sector providers (such as the fintech company PayNearby) to pay out government-to-person transfers. Such partnerships benefit both sides: governments can rely on existing networks to reach rural populations, and private agents increase their income and can diversify their services, making them more useful to customers.

Finally, development actors can support knowledge sharing, research, and innovation concerning agent networks, including innovation in business models that help overcome common challenges, such as liquidity constraints, small customer bases, and low transaction volumes. An example is UNCDF’s work in Ethiopia with Tegera, one of the country’s main agent network managers, to develop and scale distribution models that can reach underserved groups.

B. Barriers to Use

Financial inclusion is not hindered solely by access barriers. Factors that impede the effective adoption and use of digital financial services are equally critical barriers. These factors can include limited financial and digital literacy, as a result of which individuals lack the necessary knowledge and skills to navigate digital platforms and understand financial concepts. Additionally, trust in digital payment and transaction systems can play a significant role because concerns about data security and fraudulent activities can deter people from using these services. Product design may also not always cater to the specific needs and preferences of migrants and their communities. Finally, deep-rooted social norms can influence usage patterns, with certain cultural expectations and gender norms limiting women’s involvement in financial decision-making in some contexts. Addressing these barriers is essential to fostering genuine financial inclusion, ensuring that digital financial services are accessible, user-friendly, and tailored to the needs of all individuals, including migrants and their families.

Digital Financial Literacy and Trust

Digital financial literacy is defined as the skills, knowledge, confidence, and competencies to “safely use digitally delivered financial products and services, to make informed financial decisions and act in one’s best financial interest per individual’s economic and social circumstance.” It plays a crucial role in determining migrants’ likelihood to adopt and effectively use digital financial services for remittances. As a result, low levels of digital and financial literacy present significant barriers. In a focus group, some Sri Lankan participants reported needing help from fellow migrant workers to sign up for digital services and use

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them. In Uganda, a large majority (75 percent) of refugees requires help with making digital transactions. Such low levels of digital financial literacy are driven partly by social and economic norms (e.g., access to education and employment), but also by the economy (e.g., the state of formal financial markets) and the quickly evolving landscape of digital financial services (e.g., use of cryptocurrencies and emerging technologies).

In many countries, women face more challenges than men due to lower literacy levels, resulting in a higher reliance on informal means of sending remittances and limited awareness of how to open accounts and operate online transactions. In Sri Lanka, for instance, men are 18 percentage points more likely than women to use digital payments, and in Nigeria, the gender gap is 16 percentage points. Women in Sri Lanka also reported that they would feel comfortable using these digital services in principle but need someone trustworthy to explain them first. In addition, because remittances are sent only occasionally, some women said they had not had an opportunity to become more familiar with the apps. This, together with the overall disadvantaged position of women when it comes to using digital financial services (i.e., they are less likely than men to own a phone or access the internet through a phone and are more likely to lack identification documents), underscores the importance of putting women at the center of financial inclusion efforts.

The emergence of technologies such as cryptocurrency and blockchain further complicates both trust and requirements for digital financial literacy. Some Nigerian women reported having tried to use crypto to send remittances, but they lost money in scams and are now reluctant to trust the technology again. While there has been hope among some observers that cryptocurrencies could transform the financial landscape by bringing down the cost of remittances and cutting out intermediaries, crypto has also introduced new literacy demands, as reported by fintech users in Nigeria and Sri Lanka who described these currencies as sometimes hard to navigate. This is the case even if crypto is used mostly as a middle currency to bypass the standard international wire transfer system, which means that consumers are typically not directly in contact with crypto. Moreover, cryptocurrencies have experienced severe price volatility, making them a risky set of tools for remittances and for users with little knowledge of how to use them effectively.

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95 Focus group discussion with Sinhala-speaking digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
98 Focus group discussion with female digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
100 Focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
101 Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022; focus group discussion with Sinhala-speaking digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
Additionally, the regulatory landscape surrounding cryptocurrencies is still relatively underdeveloped, contributing to uncertainties and trust issues among potential users. Although some countries have banned or severely restricted crypto use, others, such as Nigeria, are trying to find a middle ground between restriction and regulation (see Box 4). Given the importance of remittances for some economies, regulators are keen on monitoring the flow of money in and out of economies, which is complicated by cryptocurrencies because they exist largely outside of the baking system. For consumers, liquidity is a major concern, especially because remittances often serve as emergency funds that require immediate cash-out, an option that is not consistently feasible with crypto.

BOX 4

Crypto Remittances in Nigeria

Nigeria has emerged as one of the largest cryptocurrency markets globally, with trading volumes reaching significant levels. Between July 2022 and July 2023, Nigerians traded more than USD 56.7 billion worth of bitcoin, a 9 percent increase compared with the previous year. Cryptocurrencies have also become increasingly popular for Nigerian diaspora members seeking to send remittances to friends and family back home. As a result, several blockchain-based remittance apps now operate in the country, such as Afriex or Swy Chr.

Cryptocurrencies’ popularity in Nigeria can be attributed mostly to the volatility of the Nigerian naira, which plummeted dramatically in 2023. With a promise to safeguard against that fluctuation, currency trading has become a common practice among many Nigerians seeking stability in their financial transactions, even if most cryptocurrencies have significant volatility on their own.

Despite the popularity, Nigeria’s regulators have only recently become receptive to the idea of cryptocurrencies. In 2021, Nigeria’s central bank prohibited financial institutions from dealing in or facilitating transactions in digital currencies, and it ordered them to identify individuals and entities operating cryptocurrency exchanges and to close their accounts. But in May 2023, Nigeria’s market regulators published new guidelines on digital assets that indicate a move toward greater openness and the development of regulations for cryptocurrencies.

Crypto remittances in Nigeria showcase the promise of digital currencies in transforming financial transactions and remittances, especially by offering a hedge against currency fluctuations. However, this trend also brings inherent risks, including market volatility, potential misuse, and regulatory challenges. In addition, processes for converting money from crypto into cash are complex and costly, which poses a problem for many of the most vulnerable remittance receivers, many of whom are unbanked. Striking a balance between fostering innovation and implementing robust regulatory frameworks will be crucial to harnessing the benefits of cryptocurrencies while safeguarding consumer interests and ensuring the stability of Nigeria’s financial ecosystem.


Building trust in financial systems is an important part of improving digital financial literacy and financial inclusion. This can involve transparent communication about data-handling practices, robust security measures, and effective consumer protection frameworks. In addition, targeted interventions are often necessary to enhance the skills of individuals with various levels of literacy. For those with existing digital skills who aspire to start or develop businesses, tailored support and training programs can provide the necessary tools and knowledge. At the same time, special attention should be paid to women, displaced populations, and other marginalized groups who have more limited exposure to digital technologies and higher levels of mistrust.

Various stakeholders—including civil-society organizations, public institutions, and private companies—have implemented activities with those goals in mind. The Central Bank of Nigeria has a Financial Literacy Working Group that develops and implements financial literacy activities. It has launched an e-learning platform, SabiMONI, that offers free training and an opportunity to become a Certified Financial Literacy Trainer through a self-paced course. Yet, this opportunity is likely to target better-educated segments of the population. In addition, the e-learning platform is available only in English, not in any of Nigeria’s many local languages. In Bangladesh, BRAC Bank, supported through technical assistance by UNCDF, conducted a customer survey and found that a lack of financial literacy was a major hurdle for new customers. As a result, it now offers a short training course to interested individuals to improve financial and digital literacy, covering topics such as opening a bank or mobile wallet account. Between September 2021 and September 2022, BRAC provided training to 32 percent of its customers and reached 328,000 migrants and their family members. In Sri Lanka, a college teacher reported taking online training organized by the U.S. Agency for International Development on business education and online payment systems. Finally, the Alliance for Financial Inclusion, GSMA, UNCDF, and others have developed toolkits with guidelines on how different actors can contribute to improving digital financial literacy levels.

**Product and Service Design**

Product design—including language, interface, fee structures, transaction limits, and customer service—plays a fundamental role in shaping financial inclusion outcomes by influencing how individuals engage with and access financial services. Many financial products are designed and marketed to “standard” customers, overlooking the unique needs and constraints of specific user populations, such as migrants and their families. In Sri Lanka, for example, digital services such as LankaPay are seen as targeting users who have elevated levels of education and language proficiency and who already have bank accounts, leading to a rather select group of people using remittance apps. Similarly, native- and foreign-born women in Nigeria described wishing that digital remittance apps had a simplified design to make them easier to use.

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106 Focus group discussion with Sinhala-speaking digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
107 Alliance for Financial Inclusion, Digital Financial Literacy Toolkit.
110 Author interview with Professor Chandana Aluthge, senior lecturer at the Department of Economics of the University of Colombo, February 20, 2023.
for people with lower levels of education. Previous research in Côte d’Ivoire also found that one in five digital finance users had difficulty navigating their provider’s app menu.

Fee structure design also matters. In the United Arab Emirates, UNCDF worked with a remittance service provider to help make their products more migrant- and gender-responsive. The project found that women make more regular remittance payments but send smaller amounts, and that because the company charged fixed fees per transaction, this disproportionately affected women, making their transactions more expensive than men’s. Fintech companies aware of such behavioral differences could consider adapting their fee structures, for example by making fees more proportionate to the amount of money sent.

In the complex and rapidly changing fintech environment, access to customer service is particularly important yet often inadequate. In Nigeria, digital service users noted that their apps did not have sufficient customer services to address their complaints. In focus groups, Nigerian and migrant women called it “an extremely bad part of the experience.” Some also complained that apps associated with companies located in other parts of the world do not have 24-hour customer service, and they had to wait to contact them during business hours in their time zones. Nigerian and migrant women also complained about maintenance breaks and the inconveniences they caused.

Some digital companies have also changed their services and conditions. In Nigeria, fintech users reported that some platforms initially facilitated Automated Clearing House transactions (an electronic transfer of funds between banks), which allowed users to wire money to their naira accounts, but they later changed the rules without warning. This instability creates a poor user experience, especially for groups who are not aware of or do not understand the changes, and it can lead to frustration and mistrust.

Building products and services that are better suited to migrants’ needs starts with analyzing their circumstances and transaction behavior. For instance, BRAC Bank in Bangladesh conducted a customer

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111 Focus group discussion with digital remittance service nonusers in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
114 Author interview with Uloma Ogba, lead gender specialist, Migration and Remittances, UNCDF, September 9, 2022.
115 Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022. Some also commented that a benefit of physical remittances was the possibility of interacting with a service provider.
116 Focus group discussion with digital remittance service nonusers in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
117 Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
118 Focus group discussion with digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
119 See also the UNCDF’s five principles for a better product design for migrants: Uloma Ogba, Julie Kamau, and Saskia Vossenberg, “Migrant-Centric and Gender-Smart Digital Remittances: The Principles to Designing Digital Remittances That Migrants Want and Need” (working paper, UNCDF, New York, December 2021).
survey and analyzed their customers’ literacy levels and remittance behavior. As a result, it modified its mobile wallet interface to shorten transaction times and took steps to facilitate small transactions. BRAC’s wallet accounts for half of the bank’s inbound remittance transactions, and women make up a growing share of its customers (up from 37 percent to 45 percent). An analysis of customer needs can also provide the basis for linking remittances with other essential services, such as insurance or microcredit (see Box 5).

**BOX 5**

**Linking Remittances with Insurance and Credit**

The digitalization of remittances offers a unique opportunity to expand their potential uses beyond money transfers. By establishing digital channels for remittance transactions, new avenues emerge for linking these monetary flows to additional financial services, such as insurance for migrants and their families, and facilitating access to credit.

The International Fund for Agricultural Development provided funding to Appui au développement autonome (ADA; an inclusive finance nongovernmental organization in Luxembourg) and Democrance (a software company specializing in microinsurance) to democratize insurance for foreign workers in the United Arab Emirates, one of the largest remittance-sending countries in the world. The partnership focused on providing insurance to migrants in the country and their families back home through remittance channels by partnering with the fintech firms Hello Paisa and Rise and the French insurance company AXA. Once an insurance product is activated, both the sender (migrant) and the receiver (family back home) receive a text message confirming the details of the policy and the process to make a claim. The beneficiary can make a claim via their mobile phone, and once approved, the payment is made through the remittance channel. By 2020 (three years after the project was launched), more than 13,000 migrants (one-third of whom were women) had accessed one of the insurance products.

Remittances can also be leveraged to improve access to credit for migrants and their families, whose remittance streams are usually not recognized in the conventional banking system. For example, UNCDF partnered with Laxmi Bank in Nepal to develop remittance-linked savings and credit products that cater to Nepali migrants and their families. They also work with New Street Technologies, a blockchain company, to further the goals of overcoming information asymmetries and streamlining financial processes.

Yet, linking remittances to other financial products can be challenging. For example, regulations in the United Arab Emirates restrict marketing for insurance products that are not licensed in the country of sale. Additionally, experience from ADA shows that distribution channels for these products can be lacking, given the low level of financial inclusion among many migrant populations.


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Development institutions such as UNCDF and the Swiss- and Austrian-backed Impact-Linked Fund for Gender Inclusive Fintech provide funding and technical assistance to companies aiming to tailor remittance products and services for migrants and women. Their Financial Innovations for Women Affected by Migration program (run by the fund’s partner Seedstars) is one such example. It offers tailored support to selected start-ups to scale their businesses and amplify their product market fit and impact on women affected by migration. But it is also clear that to succeed, remittance service providers need to demonstrate a strong business case, which requires them to collaborate with a broad network of stakeholders (including regulators and governmental and nongovernmental organizations) and understand how to leverage these relationships to inform the design, implementation, and marketing of their remittance products.

Social Norms

Social norms (encompassing cultural beliefs, traditional practices, and gender roles), economic context, and an individual’s gender and age also exert significant influence on the accessibility and usability of fintech products. Remittance service providers must be sensitive to these factors if they are to design products and services that resonate with their target audiences, but they also have the potential to bring about incremental change. By acknowledging and understanding the impact of social norms on the uptake and use of digital remittances, service providers can design services that both respect cultural sensitivities and leverage these norms to foster greater financial inclusion. For example, by aligning product offerings with societal values (such as promoting savings for education or supporting family well-being), digital remittances can become a powerful tool for financial empowerment and inclusion. In addition, migrants frequently choose to send money through multiple channels, adapting to the preferences and needs of both the sender and receiver. They might send money to their parents who are more comfortable with traditional remittance outlets while also using digital channels to send funds to younger family members.

In Nigeria, women (including some migrants) indicated in focus groups that they often rely on informal chat groups to share information and discuss the best options for making or receiving international transfers through formal and informal channels. They reported using these groups to discuss questions or problems, exchange information about the trustworthiness of different places and companies, and pool transfers. This example highlights the significant impact of an individual’s community on financial behavior, with informal support systems enabling women to navigate the complexities of digital remittances and make informed decisions. Recognizing the role of such social networks and incorporating them into product design and service delivery could potentially enhance the uptake and use of digital financial services among migrants, women, and other underserved populations, fostering greater financial inclusion and empowerment. A mobile banking app in Singapore called Lucy developed an outreach strategy and is advertising in places where female domestic workers tend to go on their days off, capitalizing on the existing networks between these workers. This is especially useful because UNCDF’s research shows that

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122 Post by Luiana Temba, an impact investment professional in Kenya, on LinkedIn, July 2023.
123 Focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
124 Focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
once women gain access to formal remittances, they tend to share their experiences with other women and encourage them to do the same.\textsuperscript{125}

Government behavior and perceptions of government programs (and national currency) also play a large role in shaping the uptake of digital remittance options, and remittance decisions more broadly. In Sri Lanka, how the government is handling the economic crisis and ensuing inflation has shaped various aspects of the remittance process. Many Sri Lankan focus group participants said they did not understand the changing regulatory landscape, undermining their trust in the banks and the government’s ability to store their funds safely.\textsuperscript{126} Rumors also circulated about the government imposing taxes on incoming remittances, leading the government to publish a statement refuting those claims.\textsuperscript{127} In Nigeria, people also reported skepticism toward quickly changing government regulations that could render specific services or products unavailable from one day to the next. In addition, the currency fluctuations and instability of the naira further fueled mistrust in government-led initiatives.\textsuperscript{128} The instability lured many into the black market for currency exchanges. When they could withdraw U.S. dollars from the bank, Nigerians reported that they could exchange those dollars with attractive rates on the black market, making these physical exchanges more economically favorable than traditional banking or fintech.\textsuperscript{129}

C. Risks of Digital Remittance Channels

Digital remittance channels present new opportunities for facilitating cross-border transactions, making them potentially faster and less costly, and ultimately promising to enhance their development potential. However, they also have inherent risks, some of which are increasingly significant (such as scams and data breaches) and others less tangible, given the early stages of fintech adoption in many countries. Some preliminary theoretical and empirical evidence suggests that digital finance may have an exacerbating effect on income inequality, depending on the degree of a country’s enabling environment, market structure, and regulatory frameworks.\textsuperscript{130} Specifically, digital finance is thought to favor those who are already better-off and able to benefit from its advantages in the early stages of adoption, while the less and least well-off are more likely to encounter delays in accessing these benefits. Thus, digital finance may initially widen income inequality before it benefits a wider range of individuals and can contribute to reducing it.

\textsuperscript{125} UNCDF, “Innovations to Improve Financial Inclusion.”
\textsuperscript{126} Focus group discussion with Tamil-speaking female digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
\textsuperscript{128} Focus group discussion with mixed-gender digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022; focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022; focus group discussion with digital remittance service nonusers in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
\textsuperscript{129} Focus group discussion with mixed-gender digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
Even if the evidence on this hypothesis is still being collected, it points toward the potential trade-offs that development actors, governments, and international organizations will face in promoting digital remittance tools. It also highlights the need for strategies to protect the most vulnerable.

**Fraud and Data Misuse**

Fraud and data misuse pose significant risks in the realm of digital financial services. In recent years, consumer protection efforts have sometimes struggled to keep up with the quickly evolving digital finance landscape. According to the Consultative Group to Assist the Poor (CGAP), illicit practices grow faster than the user base in digital finance. Between 2019 and 2020, the share of fraudulent mobile app transactions grew by 83 percent, while the overall share of transactions via mobile apps grew by 38 percent. In Sri Lanka, Sinhala-speaking focus group participants reported that frequent scam attempts aimed to get users to share their usernames and passwords. In Côte d’Ivoire, as many as 16 percent of women and 12 percent of men have reported losing money to scams associated with their transactions. Such scams and data breaches can be very costly for customers, many of whom have no meaningful recourse mechanism. In a focus group in Nigeria, some local and migrant women shared that they had been victims of scams but could not rely on the fintech company to help solve the issue.

One approach to mitigate these risks is to provide better digital financial education and promote digital literacy among users. By empowering individuals with the knowledge and skills to recognize potential scams and protect their data, they can make more informed and secure financial decisions. However, the public sector, operators, and fintech companies also have responsibilities to safeguard customers against these risks. Enhancing transparency is critical in this regard, including clearly and systematically informing users about how their data are being handled, providing receipts for transactions to ensure greater accountability, and allowing users to monitor and verify their transactions. In addition, fintech companies should actively establish recourse mechanisms that allow customers to bring claims and seek resolution in case of fraud or data breaches—mechanisms that are not widely and reliably available.

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133 Focus group discussion with Sinhala-speaking digital remittance service users in Sri Lanka, conducted by CEPA in cooperation with MPI, January 25, 2023.
135 Focus group discussion with mixed-gender digital remittance service nonusers in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
136 In Côte d’Ivoire, 31 percent have made a transaction or payment without receiving a receipt. See Riquet, Duflos, and Izaguirre, “Growth of Digital Finance in Côte d’Ivoire.”
137 Focus group discussion with female digital remittance service users in Nigeria, conducted by Mojo Africa in cooperation with MPI, November 25, 2022.
Some efforts are underway to improve consumer protection and raise awareness of the risks posed by insufficient safeguards. CGAP, for example, is working with local authorities in Burkina Faso, Côte d’Ivoire, and Senegal to develop a more responsible digital finance ecosystem. Among other things, CGAP launched a digital financial service—the Consumer Protection Lab—in the West African Economic and Monetary Union to engage a range of stakeholders in the region’s digital finance ecosystem, including regulators, supervisors, users, consumer associations, financial service providers, and support and research organizations. In 2021, Sri Lanka launched its first National Financial Inclusion Strategy with one of its four pillars dedicated to consumer protection. But although it is important for regulators and remittance service providers to be willing to engage with these issues, competing priorities, lack of funding, and limited capacity can keep them from doing so.

Impacts on Indebtedness

Digital remittances may have the potential to foster greater financial inclusion by providing previously underserved populations with improved access to financial services. This is especially true for remittance services that connect to other areas of financial management such as insurance and credit. However, digital remittances may also have negative consequences and expose users to commercial or even predatory lending. Especially for users who make the transition to digital remittances from informal channels, the risks and opportunities attached to credit are not always clear, and the sometimes-aggressive marketing of these companies without adequate education and capacity building thus creates risks of indebtedness. In Ghana, for example, a study found that digital remittance apps have used their credit-scoring algorithm to encourage users to take out more loans. They can be quite assertive and follow up with text message nudges. Similarly, in Kenya and South Africa, fintech initiatives appear to have exposed informal savings groups to commercial lending and investment models. This supports broader evidence on the links between digital finance and indebtedness in low- and middle-income countries.

Having digital information stored and potentially accessed by institutions that offer abusive or unfair loan terms can thus lead to irresponsible debt-taking. Especially for people with lower levels of financial literacy, the ease of accessing credit markets may tempt some to take on more debt than they can manage prudently. This underscores the need for development actors and public authorities to accompany increasing openness to fintech with adequate public outreach and education campaigns to improve digital financial literacy and empower users to make informed decisions and borrow responsibly. In addition, it will be crucial for regulators to enforce consumer protection standards, market transparency, and fair pricing mechanisms to reduce the risks of predatory lending.

138 FinDev Gateway, “Why We Need a Responsible Digital Finance Ecosystem.”
4 Conclusions

Remittances are a vital lifeline for millions of migrants and their communities around the world. Given their magnitude, exploring the full range of ways to facilitate remittance flows and to leverage them to promote inclusive development could have considerable benefits for both individuals and societies more broadly. Fintech is one particularly promising opportunity, given its potential to shake up what has long been a rigid remittances market dominated by a few established players and high transaction costs. Combined with the rapidly increasing tech-savviness and digital device use of populations in many low- and middle-income countries, fintech could help expand access to financial services, particularly for traditionally underserved populations.

However, the journey toward a more inclusive fintech-driven remittance sector is not without challenges. Barriers related to access and use persist. Widespread access to reliable and affordable mobile internet is still lacking in some places, and stringent KYC requirements—while important tools for preventing fraud and other financial crimes—can make it hard for migrants to register and use certain fintech services. Additionally, moving into a digital financial ecosystem may introduce new risks for users, such as data theft and increased exposure to predatory lending. These challenges highlight the need for complementary measures and targeted interventions to empower and educate users.

Remittances also carry significant implications for countries grappling with economic downturns and are often seen as a vital source of foreign capital inflow, especially in times of crisis. This has led many governments to explore policies to boost formal remittance inflows from nationals working abroad, and some are increasingly receptive to experimenting with digital currencies and other fintech solutions. However, the success of these initiatives varies. Insights from the Migration Policy Institute’s research in Sri Lanka and Nigeria reveal a gap in public awareness of some government initiatives (such as Sri Lanka’s LankaRemit app) and distrust toward certain government-backed endeavors (such as the Nigerian central bank’s eNaira digital currency). Moreover, many migrants continue to use informal channels even if digital options are available to them because they are drawn by more favorable exchange rates on the black market and trust these established channels more than their governments and fintech.

Despite these challenges and the somewhat sobering assessment of the state of fintech for remittances, advocating for its development and use for a more inclusive remittance sector has significant value. The following considerations should be at the heart of efforts to chart a path forward:

- **Strengthening the physical and regulatory infrastructure needed for digital remittances to fulfill their promise to boost development.** Even though fintech companies typically focus their public messaging on their digital offerings, they require a physical footprint to integrate these digital tools into the lives of migrants and their communities and to facilitate cash-in and withdrawals.
from digital accounts. Innovative approaches, such as involving taxi drivers or postal offices in these processes, have played a crucial role in expanding these physical networks and reaching isolated areas. Development actors are well placed to support experimentation with these types of business models and to contribute research and mentoring to fintech start-ups that aim to reach underserved groups. They can also promote a comprehensive understanding of remittances in international forums. Examples include advocating for an assessment of the true costs of remittances (including withdrawal fees) and a cost assessment based on different remittance-sending behaviors (such as looking at the remittance patterns of female migrant workers).

► **Maintaining a big-picture view and carefully weighing the risks and opportunities that come with the growing adoption of fintech in the remittance space.** For instance, Nigerians are increasingly turning to crypto remittances to guard themselves against severe currency depreciation and rampant inflation, but most cryptocurrencies are themselves highly risky and volatile. Instead of implementing outright bans, governments should seek to engage with relevant stakeholders and develop sensible, up-to-date regulations that can help mitigate the risks such currencies pose for users. Development actors can play a role by convening dialogues and providing expertise and technical assistance. Supporting peer exchanges—especially regionally or along closely connected remittance corridors—could add substantial value, given the significant variations in regulatory approaches across countries.

► **Exploring ways to extend fintech's benefits beyond major remittance corridors and to less digitally savvy individuals.** The benefits of fintech so far have been mostly concentrated in major remittance corridors, where the potential to drastically bring down prices is limited because of existing competition between remittance service providers. In addition, while people familiar with digital finance may already be reaping the benefits of digital remittances, those less familiar with digital financial services overall are less likely to be using digital remittance tools. Therefore, more attention should be paid to expanding fintech’s benefits to smaller corridors, where remittance prices are still frequently in the double-digits (many of them in sub-Saharan Africa), and to groups that are less familiar with digital finance.

As the digital financial landscape continues to evolve, collaboration among stakeholders, informed regulatory frameworks, and a commitment to improving digital literacy will be essential to harnessing fintech’s full potential for the benefit of migrants, their communities, and societies more broadly. Although digital tools offer promising opportunities to make the remittances market more transparent, bring down costs, and advance financial inclusion, these tools are not yet available for everyone. Technology can create barriers that leave the most vulnerable segments of a society without access, particularly where support to help people develop the skills and trust to use digital financial services is absent. Thus, the expansion of fintech should not be seen an end in itself, but instead as one among a broader set of strategies that can be used to advance development objectives where it is the most suitable tool to do so.
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