



# Responding to Afghanistan's Humanitarian Crisis: The Role of Digital Payments

*Michael Pisa*

## KEY TAKEAWAYS

- Resolving Afghanistan's humanitarian emergency requires addressing the country's liquidity crisis.
- The primary hurdle to moving money into Afghanistan is the risk of money laundering and terrorism financing (ML/TF) associated with doing business there, which has left most financial service providers unwilling to process transactions into the country.
- Digital payment solutions paired with heightened customer due diligence measures—including traceability of payments and biometric identification—could help lower the ML/TF risks associated with payments into and within Afghanistan.
- The risks presented by using digital payments for aid are significantly lower than paying the Taliban to provide security for in-kind assistance, which is the dominant aid modality in Afghanistan today.
- Several factors that hindered earlier efforts to establish digital payments in Afghanistan have improved, including better connectivity and access to mobile phones, newly available interoperable payments solutions, and innovations (like QR codes) that make it easier to scale merchant acceptance networks.
- Donors that use digital payments in Afghanistan must consider how to meet the needs of Afghan women, who are less likely to have access to a phone or identifying documents, and more likely to be illiterate.
- The balance of risks and rewards suggests that investing in digital payment solutions for Afghanistan is a sensible policy for humanitarian and development organizations to adopt and one that government agencies responsible for addressing ML/TF risks should proactively support.

## INTRODUCTION

Afghanistan's humanitarian crisis continues to worsen, with the World Food Programme (WFP) reporting that 22.8 million people—more than half the country's population—are projected to be acutely food insecure in 2022, including 8.7 million at risk of famine-like conditions.<sup>1</sup> Even before the Taliban took over the country on August 15, 2021, Afghanistan's economy was buckling under the weight of the country's worst drought in decades, a deteriorating security situation, and the COVID-19 pandemic.<sup>2</sup>

Financial flows into Afghanistan collapsed immediately after the Taliban takeover, as foreign aid was cut, private sector activity fell sharply, and foreign banks and money service providers (collectively: "financial service providers" or FSPs) refused to process payments into the country for fear of inadvertently violating sanctions and anti-money laundering and the countering the financing of terrorism (AML/CFT) regulations.

The exceptional nature of the situation hampers efforts to resume normal financial flows to Afghanistan. Never before has an organization designated as a terrorist group by the United States assumed control of an entire jurisdiction.<sup>3</sup> The United States and other countries responded to this novel circumstance by freezing the country's foreign exchange reserves held abroad; keeping in place sanctions that criminalize most transactions with the Taliban; and denying official recognition of the Taliban as the legitimate head of the Afghan state, which has prevented the Afghan central bank (Da Afghanistan Bank or DAB) from maintaining correspondent accounts with foreign banks. Cumulatively, these measures have limited access to US dollars in the Afghan economy, leaving Afghans unable to pay for the food, fuel, and imported intermediate inputs their economy relies on.

Actions taken by the international community have also affected the availability and value of Afghanistan's local currency, the afghani. The freezing of DAB's foreign exchange reserves and its inability to maintain correspondent accounts abroad has left DAB unable to

conduct the dollar auctions it previously used to support the value of the afghani, resulting in sharply rising food and commodity prices.<sup>4</sup> The measures also exacerbated concerns about the solvency of the Afghan banking sector, leading to a run on Afghan banks shortly after the Taliban takeover that DAB responded to by placing strict limits on bank withdrawals. These caps and a string of bank branch closures due to lack of liquidity have impaired economic activity and the humanitarian response. There is also concern about the physical deterioration of afghani notes used in the country because the foreign companies that DAB relies on to print new currency have refused to do business with the Taliban.

In sum, the shortage of domestic and foreign currency in Afghanistan has hobbled the economy and impoverished the middle class. Allowing financial flows into Afghanistan to resume is critical to stabilizing the domestic economy and resolving the humanitarian crisis.

The two biggest challenges to getting money into Afghanistan are the fear FSPs have of violating sanctions or AML rules by unwittingly processing transactions that involve actors affiliated with the Taliban and their unwillingness to pay the high compliance costs required to do business in Afghanistan. These factors, coupled with the limited profitability of doing business in the country, have left FSPs reluctant to process transactions into Afghanistan and pushed those seeking to send money there toward the least visible financial channels.

In a recent survey conducted by the Norwegian Refugee Council of 72 humanitarian NGOs working in Afghanistan, 85 percent reported having some of their international bank transfers blocked between August and December 2021.<sup>5</sup> As a result, less than five percent of the NGOs processed more than five transactions through banks and money service providers (MSPs) during this period, while more than 70 processed transactions through hawala, an informal money transfer network that extends through much of the Middle East and South Asia. At the same time, larger aid organizations, including the UN, have resorted to airlifting shipments

1 World Food Programme. *WFP Afghanistan Situation Report*. 2022.

2 Jonathan Dumont. *Drought, economic collapse and hunger push Afghanistan to brink of famine*. 2021.

3 US Senate Committee on Banking, Housing, and Urban Affairs. *Afghanistan's Future: Assessing the National Security, Humanitarian and Economic Implications of the Taliban Takeover*. 2021.

4 William Byrd. *Afghanistan's Frozen Foreign Exchange Reserves: What Happened, What's Next*. 2022.

5 Erica Moret. *Life and Death: NGO access to financial services in Afghanistan*. 2022.

of \$100 bills into the country, while smaller NGOs have used cryptocurrencies to provide aid.<sup>6</sup>

That payments into Afghanistan have been increasingly pushed into these less visible channels is a perverse outcome for a global AML/CFT regime intended to increase financial transparency. Although DAB strengthened the regulation and supervision of Afghan hawaladars over the last decade, globally hawala remains less regulated than the formal financial system, and it has provided a channel for evading sanctions in the recent past, including those against Iran.<sup>7</sup> The Taliban's (perhaps temporary) shuttering of the Afghan financial intelligence unit, FinTRACA, the agency responsible for agency receiving, analyzing, and transmitting disclosures on suspicious transactions, and the severing of FinTRACA's relations with other financial intelligence units suggests that illicit finance risks are virtually unsupervised in the country's hawala network, as well as its banks.<sup>8</sup>

Relying on physical cash notes raises security concerns for those transporting bulk cash, while the anonymity of cash transactions creates a risk of diversion. The Taliban's apparent ban on foreign currency exchange has also impeded humanitarian agencies' efforts to use imported dollars in the country.<sup>9</sup> Cryptocurrencies, which appear to be used at a small but growing scale in Afghanistan, may raise similar concerns about potential diversion given their pseudonymity, but this risk has lessened as new analytic techniques have made it easier to trace blockchain-based payments.

The U.S. Treasury's Office of Foreign Assets Control (OFAC) has tried to give FSPs greater comfort in processing transactions into Afghanistan by publishing a series of increasingly accommodative General Licenses aimed at ensuring U.S. sanctions "do not prevent or inhibit transactions and activities needed to provide aid to and support the basic

human needs of the people of Afghanistan."<sup>10</sup> General License No. 20 explicitly expanded authorizations for commercial and financial transactions in Afghanistan, including with its governing institutions.<sup>11</sup>

The license gives FSPs the legal cover needed to re-establish correspondent banking relationships with Afghan financial institutions, including DAB, but it remains unclear whether they will be willing to do so. While international recognition of the Taliban as the legitimate head of the Afghan government would further ease the process of reconnecting Afghanistan to the global financial system, such a decision seems unlikely in the near-term.

Over the last several months, different actors within the development and humanitarian and communities have put forward proposals aimed at enabling urgent financial flows into and within Afghanistan, including privatizing the role of DAB, developing a humanitarian exchange facility, and unfreezing at least some of the country's foreign exchange reserves. While some of these proposals are more likely to gain traction than others, all are partial solutions and by themselves inadequate to solving the problem.

One avenue that warrants further exploration is the role of digital payments in processing transactions into and within Afghanistan. Depending on how they are designed, digital payment systems can lessen ML/TF risks by improving the traceability of fund flows and incorporating the use of biometric data to authenticate the parties involved in a transaction. They can also reduce the cost of providing aid, by reducing reliance on physical cash notes. Finally, they can increase financial access, support livelihoods, and make Afghanistan's financial sector more resilient.

Like the other proposals under discussion, digital payments represent only a partial solution to Afghanistan's liquidity crisis. There are challenges to scaling digital payment solutions in the country. But the depth of Afghanistan's humanitarian crisis and the unwillingness of FSPs to engage with the country demand innovative solutions.

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6 Robin Emmott, John O'Donnell and Jonathan Landay. [Exclusive-Cash airlifts planned to bypass Taliban and help Afghans—sources](#). 2021.

Lee Fang. [Starving Afghans Use Crypto to Sidestep U.S. Sanctions, Failing Banks, and the Taliban](#). 2022.

7 Anna Fifield. [How Iranians are avoiding sanctions](#). 2008.

8 Alex Zerden. [Reassessing Counter Terrorism Financing in a Taliban-Controlled Afghanistan](#). 2021.

Reuters. [Anti-laundering unit goes off-grid, fraying Afghan ties to global finance](#). 2021.

9 Reuters. [U.N. Has Millions in Afghanistan Bank, but Cannot Use It](#). 2022.

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10 U.S. Department of the Treasury. [U.S. Treasury Issues General License to Facilitate Economic Activity in Afghanistan](#). 2022.

11 US Department of the Treasury. [U.S. Treasury Issues General License to Facilitate Economic Activity in Afghanistan](#). 2022.

In this note, we discuss:

- How increased use of digital payments in Afghanistan could help address the immediate financial and humanitarian crises by responding to AML/CFT concerns
- The obstacles to scaling digital payments in Afghanistan
- What the international/development community can do to support greater use of digital payments in the country

## THE POTENTIAL ROLE OF DIGITAL PAYMENTS IN RESPONDING TO THE AFGHAN CRISIS: OVERCOMING THE AML/CFT HURDLE AND BUILDING INCLUSIVE FINANCIAL INFRASTRUCTURE

The cost of complying with AML/CFT rules and the concern FSPs have of unknowingly processing transactions that involve illicit actors have grown in line with an increase in regulatory fines relating to AML compliance over the last two decades.<sup>12</sup> To reduce their exposure to regulatory and reputational risk and avoid high compliance costs, FSPs have increasingly opted to terminate or restrict “business relationships with clients or categories of clients to avoid, rather than manage, risk.”<sup>13</sup>

This pattern of behavior—often referred to as “de-risking”—has made it more difficult for certain groups to access financial services, particularly those that live or operate in environments where sanctioned entities exist. This includes NGOs providing humanitarian aid in fragile settings.

The need for humanitarian agencies to maintain the confidence of FSPs has grown as the sector has sought to increase the amount of aid it provides through cash and voucher assistance (CVA) rather than in-kind assistance. Between 2015–2019, the amount of aid provided through CVA increased by more than 180 percent from \$2.0 to

\$5.6 billion and rose from 8 to 18 percent as a share of total humanitarian assistance.<sup>14</sup>

There is a rich body of research on the benefits of providing cash transfers for domestic social protection programs—which include poverty reduction, greater resilience through consumption and income smoothing, better health outcomes, and higher school enrollment.<sup>15</sup> The evidence on the benefits *for recipients* of providing humanitarian aid in the form of cash rather than in-kind goods is more contextual and depends on the needs of the target community and the benefits being provided.<sup>16</sup> But the benefit for donors is clear: a recent systematic review by the World Bank and WFP concluded that, on balance, “while the effectiveness of cash and food transfers is similar, the efficiency is generally in favor of cash.”<sup>17</sup>

Against this benefit, humanitarian agencies must weigh the challenge that stems from the common perception (some would argue, misperception) that providing cash is riskier than in-kind assistance because it is easier to divert and misuse.<sup>18</sup> These concerns are heightened in environments where sanctioned groups operate.

Donors have sought to allay FSPs’ concerns about diversion and fraud by strengthening their customer due diligence (CDD) protocols and establishing more detailed reporting requirements for their NGO counterparts.<sup>19</sup> NGOs, in turn, have had to strengthen their protocols for identifying the beneficiaries they work with and understanding the risks they pose (a process collectively referred to as “Know Your Customer” or KYC). The International Committee of the Red Cross (ICRC) notes that donors “are increasingly demanding ‘end-to-end auditability,’ and making more-and-more humanitarian

14 The Cash Learning Partnership. [The State of the World’s Cash 2020: Cash and Voucher Assistance in Humanitarian Aid](#). 2020.

15 GiveDirectly. [Research on cash transfers](#). 2020.

16 Overseas Development Institute. [State of evidence on humanitarian cash](#). 2015.

17 Dahyeon Jeong and Iva Trako. [Cash and In-Kind Transfers in Humanitarian Settings: A Review of Evidence and Knowledge Gaps](#). 2022.

18 Overseas Development Institute. [Risk and humanitarian cash transfer programming](#). 2015.  
USAID and The Cash Learning Partnership. [Cash And Voucher Assistance And Risk In Financial Management And Compliance](#). 2020.

19 USAID and The Cash Learning Partnership. [Cash And Voucher Assistance And Risk In Financial Management And Compliance](#). 2020.

12 Clay Lowery and Vijaya Ramachandran. [Unintended Consequences of Anti-Money Laundering Policies for Poor Countries](#). 2015.

13 Financial Action Task Force. [High-Level Synopsis of the Stocktake of the Unintended Consequences of the FATF Standards](#). 2021.



funding contingent on demonstrable anti-fraud and accountability processes.”<sup>20</sup>

As humanitarian agencies have transitioned towards greater use of CVA, they have also increased their reliance on digital payments—defined as “payments made via digital channels, including mobile and internet, using infrastructure such as mobile phones, computers, cards, and Point of Sale (PoS) devices.”<sup>21</sup> The International Rescue Committee (IRC) has argued that delivering CVA electronically rather than by providing physical cash can improve “the efficiency and speed of cash relief and strengthen the accountability and transparency of aid efforts to both donors and recipients.”<sup>22</sup> The recent World Bank and WFP report also concluded that “studies suggest that mobile money cash transfers are the most efficient transfer method provided that mobile network infrastructure is available.”<sup>23</sup> These efficiency gains are likely to be even greater in Afghanistan given the scarcity of physical cash there.

From the perspective of addressing AML/CFT concerns, digital payments offer two potential benefits: the ability to track and trace payments (“traceability”) and the ease of incorporating biometric identification. The degree to which both features are integrated into a digital payment solution is a design choice involving tradeoffs. The level of traceability a digital payments solution provides is often inversely related to the degree of choice people have over how funds are spent. Likewise, different approaches to using biometric data create differing levels of data protection and privacy risks that must be accounted for.

## Traceability

Digital CVA solutions are often categorized into three groups: mobile money, e-voucher, and card-based systems, including debit, pre-paid, and stored value cards.<sup>24</sup> These approaches span a continuum along which different tradeoffs are made between control and openness.

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20 Ben Hayes and Massimo Marelli. *Facilitating innovation, ensuring protection: the ICRC Biometrics Policy*. 2019.

21 USAID. *Mission Critical: Enabling Digital Payments for Development*. N.d.

22 International Rescue Committee. *Cash Strategy: 2015–2020*. 2015.

23 Dahyeon Jeong and Iva Trako. *Cash and In-Kind Transfers in Humanitarian Settings: A Review of Evidence and Knowledge Gaps*. 2022.

24 GSMA. *Mobilising cash and voucher assistance programmes: The case for mobile money*. 2019.

At one end of the continuum are open systems that allow beneficiaries to pay anyone for (essentially) anything. Mobile money wallets offer beneficiaries the greatest degree of choice in how to spend funds and can be designed to connect to the wider digital ecosystem, offering a potential steppingstone for beneficiaries to integrate into the formal economy. For these reasons, mobile money wallets are generally considered the most attractive option for providing CVA in low- and moderate-risk environments.

In higher risk settings like Afghanistan, FSPs tend to require greater visibility over fund flows, including when beneficiaries receive aid and how it is used. These demands have “largely prevented agencies from adopting mobile money systems, as they by nature reduce the control and visibility over funds” relative to other digital CVA options, even though there is no evidence linking the use of mobile money with increases in money laundering or the financing of terrorism.<sup>25</sup>

Humanitarian agencies operating in risky environments generally use either card-based systems with strict purchase limitations or e-vouchers that can be exchanged for a set quantity or value of goods or services and are restrictive by default.<sup>26</sup> These systems are considered “closed” because they are not interoperable with other digital payment options and limit who can receive payments to a list of pre-vetted merchants. Their closed nature makes it easier to determine where funds are at any given time (track) and where they came from (trace)—a capability often referred to as “end-to-end auditability.”

From the perspective of dignity, choice, financial empowerment, and inclusion, open systems are generally preferable. But closed systems can also be designed to enable beneficiary autonomy and freedom. Consider that payment facilitators like Mastercard, UnionPay, and VISA conduct KYC on merchants before allowing them to use their products to accept payments. These providers give

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25 Valerie Nkamgang Bemo, Dilwonberish Abera, Jamie M.

Zimmerman, Amanda Lanzarone, and David Lubinski. *Enabling Digital Financial Services in Humanitarian Response: Four Priorities for Improving Payments*. 2017.

26 GSMA. *Mobile money enabled cash aid delivery: Essential considerations for humanitarian practitioners*. 2019.

Mercy Corps. *Prepaid Card Products for Humanitarian Programs: Actors, Insights, & Recommendations*. 2019.

CALP Network. *Glossary of Terms*. N.d.

consumers the freedom to buy what they want but only at pre-approved merchants operating in a closed network.

To prevent a desire for greater visibility of fund flows from creating a risk to individual autonomy (and veering into a form of colonial control), limits should be placed on the level of detail the system collects about transactions. For example, recording information that ties individuals to specific items purchased could breach a critical threshold of personal autonomy and privacy.

With these considerations in mind, donors interested in supporting digital CVA solutions in Afghanistan should consider (1) whether using closed digital payment options are better than other CVA options and the status quo (which in Afghanistan is mostly in-kind assistance); (2) whether it is possible to design closed digital payment solutions that can become more open and interoperable over time as conditions improve; and (3) how to design systems that preserve individual autonomy and privacy.

## Biometric identification

Humanitarian agencies have also sought to give FSPs greater confidence that funds will not be diverted to illicit activity by incorporating biometric identification into their digital CVA systems to help identify aid recipients. Today, biometric data—including fingerprints, iris scans, and facial scans—play “a central role in the scaling up of cash-transfer programming across the sector, with many FSPs viewing them as a correspondingly simple way to meet to meet their KYC and other legal ‘due diligence’ requirements.”<sup>27</sup>

Biometric data provide a strong basis for verifying identity because they are “singularly unique to the individual involved and cannot be changed,” making them difficult to counterfeit.<sup>28</sup> But these characteristics also raise concerns about abuse and mishandling. The best-known example of misuse in a humanitarian context occurred in 2018 when the UNHCR provided the Bangladeshi government with biometric data linked to Rohingya refugees, which was then shared with the Myanmar regime, who reportedly used it to identify people for possible repatriation.<sup>29</sup>

Many legal systems consider biometric data “sensitive,” including the EU General Data Protection Regulation, which treats it as a special category of “sensitive personal data” and prohibits its use to “uniquely identify natural persons” except in limited cases and only after a data protection impact assessment has been conducted.<sup>30</sup> The imperative for heightened due diligence is even greater for humanitarian organizations because obtaining informed and voluntary consent as the basis for data processing is essentially impossible in situations where people must give their “consent” to receive life-saving services.<sup>31</sup> The problem is compounded by the fact that aid beneficiaries “often lack understanding and control over the systems and processes in which personal data is collected and managed.”<sup>32</sup>

Despite these challenges, the world’s largest humanitarian aid agencies have increased their use of biometrics over the last decade. In 2020, the UNHCR reported that 8 out of 10 UNHCR-registered refugees had a globally unique biometric identity and that its biometric identity management system helped the organization “strengthen the integrity of existing processes and significantly improve efficiency for operations.”<sup>33</sup>

The level of data protection and privacy a biometric ID approach offers depends on its design. The most consequential design choice is between using biometrics to support beneficiary *identification* versus beneficiary *verification*.

- “One-to-many” approaches allow for biometric *identification* to answer the question “who are you?” by comparing a person’s captured biometric template (i.e., the stored set of their distinct biometric features) against all stored biometric templates in a database.
- “One-to-one” approaches allow for biometric *verification* or *authentication* that confirms or denies a

27 ICRC. *The ICRC biometrics policy*. 2019.

28 The Engine Room and Oxfam. *Biometrics in the Humanitarian Sector*. 2018.

29 Human Rights Watch. *UN Shared Rohingya Data Without Informed Consent*. 2021.

30 European Parliament. *General Data Protection Regulation*. 2016.

31 ICRC. *Handbook on Data Protection in Humanitarian Action*. 2017. Kerrie Holloway, Reem Al Masri and Afnan Abu Yahia. *Digital identity, biometrics and inclusion in humanitarian responses to refugee crises*. 2021.

32 Emrys Schoemaker, Paul Curriion, Bryan Pon. *Identity at the margins: Identification systems for refugees*. 2017.

33 UNHCR. *Biometric Identity Management System*. 2015. UNHCR and World Food Programme. *Update on Use of Biometrics*. 2020.

person's claimed identity by comparing their biometric features to a biometric template that was recorded in a prior enrollment and is either located using information stored in a personal credential that they provide or is stored on a smart card or another device they keep in their possession.<sup>34</sup>

By making it possible to “uniquely distinguish an individual from a larger set of centrally stored biometric data,” biometric *identification* approaches offer a broader array of capabilities than those limited to *verification*, including de-duplication of records. But they also pose greater data protection and privacy risks because they require biometric data to be stored in a centralized database.

Contrarily, one-to-one *verification* approaches can be designed in a privacy-preserving manner that preserves the anonymity of beneficiaries by eliminating the need to store their personal information in centralized databases. Indeed, the ICRC's *Biometrics Policy*, published in 2019, states that “beneficiaries may be issued with, for example, a card on which their biometric data is securely stored, but that the ICRC will not collect, retain or further process their biometric data (and will not therefore establish a biometric database).”<sup>35</sup> The ICRC concluded that such a practice would “allow the institution to leverage the advantages that biometric authentication offers in respect to efficiency and effectiveness and ensuring end-to-end accountability in its aid distributions, while minimizing the risks to which its beneficiaries would be exposed.”

While the use of biometrics for verification poses less risks than using it for identification, it leaves NGOs with the challenge of ensuring the uniqueness of aid recipients, without which a person could register multiple accounts. To ensure uniqueness, NGOs need to put in place due diligence processes to identify recipients. This task can be particularly challenging in Afghanistan

because 52 percent of Afghan women lack a national ID (compared to 6 percent of men). In cases where individuals lack a national ID, NGOs tend to rely on other forms of identification (including IDs previously provided by large humanitarian organizations like ICRC, UNHCR, and WFP) and “face-to-face interviews...to strengthen an individual's registration by allowing authorities to cross-check and verify their information.”<sup>36</sup>

### Digital CVA and the risk-based approach to AML/CFT

In a 2016 small-sample survey of digital CVA providers conducted by the Bill and Melinda Gates Foundation, two of the four most critical barriers (KYC requirements; funds traceability requirements; agent/merchant networks; connectivity infrastructure) related directly to AML/CFT compliance challenges (Figure 1).<sup>37</sup>

The foundation of the global AML/CFT framework overseen by the standard-setting Financial Action Task Force (FATF) is the risk-based (RBA) approach, under which “countries, competent authorities and financial institutions, are expected to identify, assess and understand the ML/TF risks to which they are exposed and take AML/CFT measures commensurate to those risks in order to mitigate them effectively.”<sup>38</sup>

The RBA allows actors to flexibly apply preventive measures commensurate to the nature of risks they face, to best target their resources.<sup>39</sup> But the approach's effectiveness rests on “an assumption that institutions will assess risks correctly and adopt simplified CDD [measures] when risks are low” that has not always held in practice.<sup>40</sup> As noted above in the context of de-risking, FSPs have often been either unable or unwilling to accurately assess and manage the risks that certain “categories of clients” present.

36 GSMA. *Refugees and Identity: Considerations for mobile-enabled registration and aid delivery*. 2017.

37 Valerie Nkamgang Bemo, Dilwonberish Aberra, Jamie M. Zimmerman, Amanda Lanzarone, and David Lubinski. *Enabling Digital Financial Services in Humanitarian Response: Four Priorities for Improving Payments*. 2017.

38 Financial Action Task Force. *Guidance for a Risk-based Approach: The Banking Sector*. 2014.

39 Financial Action Task Force. *Guidance for a Risk-based Approach: The Banking Sector*. 2014.

40 Louis de Koker. *The 2012 Revised FATF Recommendations: Assessing and Mitigating Mobile Money Integrity Risks Within the New Standards Framework*. 2013.

34 John Trader. *The Difference Between 1:N, 1:1, and 1:Few and Why it Matters in Patient ID*. 2015.

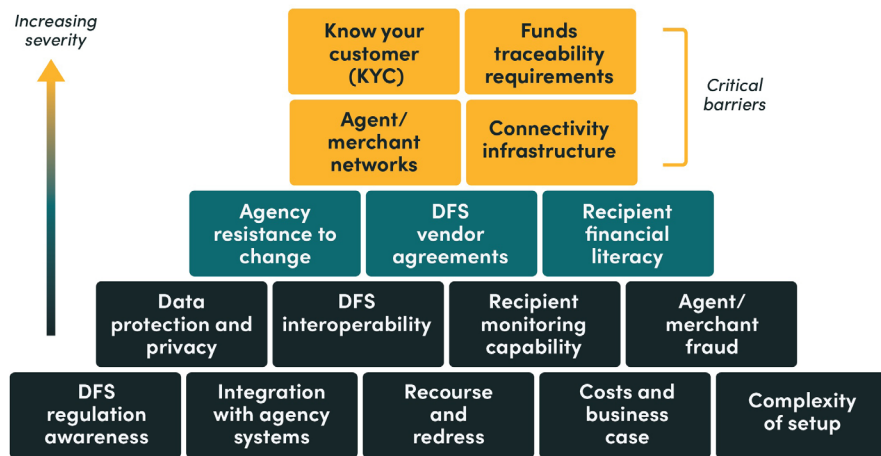
Office of the Victorian Information Commissioner. *Biometrics and Privacy—Issues and Challenges*. 2019.

John Trader. *Defining Patient Verification & Identification in Healthcare*. 2013.

Information and Privacy Commissioner of Ontario. *Privacy by Design Solutions for Biometric One-to-Many Identification Systems*. 2014.

35 Ben Hayes and Massimo Marelli. *Facilitating innovation, ensuring protection: the ICRC Biometrics Policy*. 2019.

**FIGURE 1. Challenges to the use of digital payments in humanitarian response**



*Reproduction of a figure from “Enabling Digital Financial Services in Humanitarian Response” by the Bill & Melinda Gates Foundation*

In the case of assessing the ML/TF risks associated with humanitarian CVA, there often appears to be a disconnect between the level of risk that small payments to aid beneficiaries present and the CDD measures required, particularly when compared to other risks higher up in the aid supply chain.<sup>41</sup> For example, the UN is paying the Taliban millions of dollars to protect its operations in Afghanistan, including security for convoys providing in-kind assistance and the movement of bulk cash.<sup>42</sup> Compared to this, the ML/TF risk of sending \$50–100 monthly payments to poor Afghans is miniscule.

## OBSTACLES TO SCALING DIGITAL PAYMENTS IN AFGHANISTAN— AND THE CASE FOR OPTIMISM

Interest in using digital payment systems in Afghanistan is not new. Promoting mobile money solutions was an important element of the development community’s efforts to strengthen Afghanistan’s financial sector since the late 2000s, led by USAID’s \$100 million Financial

Access for Investing in the Development of Afghanistan (FAIDA) initiative, which began in 2011.<sup>43</sup>

The early stages of developing Afghanistan’s mobile money ecosystem yielded some encouraging results. In 2008, Roshan, the largest Afghan telecommunications operator, launched a mobile money platform M-Paisa in collaboration with the British company Vodafone. One year later, the company piloted a project in which the Afghan central government directly paid the salaries of Afghan National Police officers using M-Paisa. The results suggested that it “dramatically reduced leakage by reducing the incidence of “ghost” workers on the payroll, and by increasing the effective payment to participating officers by removing opportunities for diversion of funds.”<sup>44</sup> By 2012, Roshan reported having more than 1.2 million M-Paisa subscribers, though the number of active users was likely much smaller.<sup>45</sup>

Despite these initial gains, however, the growth of mobile money in Afghanistan plateaued before reaching meaningful scale. As of 2018, less than one percent of Afghans had a mobile money account, compared to an average of four percent in South Asian countries and 18 percent in other low-income countries.<sup>46</sup>

41 Kerrie Holloway, Reem Al Masri and Afnan Abu Yahia. *Digital identity, biometrics and inclusion in humanitarian responses to refugee crises*. 2021.

The Engine Room and Oxfam. *Biometrics in the Humanitarian Sector*. 2018.

Emrys Schoemaker, Paul Currion, Bryan Pon. *Identity at the margins: Identification systems for refugees*. 2018.

42 Jonathan Landay. *Exclusive: U.N. proposing paying nearly \$6 million to Taliban for security*. 2021.

43 USAID. *Afghans now pay bills, share funds using “mobile money”*. 2014.

44 Joshua Blumenstock, Michael Callen, Tarek Ghani, and Lucas Koepke. *Promises and pitfalls of mobile money in Afghanistan*. 2015. International Finance Corporation. *M-Money Channel Distribution Case—Afghanistan*. N.d.

45 Joshua Blumenstock, Michael Callen, Tarek Ghani, and Lucas Koepke. *Promises and pitfalls of mobile money in Afghanistan*. 2015.

46 World Bank Group. *The Little Data Book on Financial Inclusion*. 2018.



## BOX 1. The special case of cryptocurrency

Cryptocurrency is used at a small but growing level in Afghanistan and is cited by some as providing a lifeline for NGOs and businesses that need to send money into Afghanistan but have been turned away by formal FSPs.<sup>a</sup> Several money exchange dealers in Herat now offer crypto exchange services, reportedly conducting \$40,000-\$100,000 worth of transactions daily.<sup>b</sup> There are also reports that a growing number of hawaladars are using cryptocurrency to settle cross-border transactions.

In general, parties that use cryptocurrency to transfer value into Afghanistan rely on stablecoins to serve as a bridge between fiat currency in the sending country and afghani in Afghanistan. In most cases, the person abroad sending money exchanges fiat currency (or another cryptocurrency) for stablecoin of the same value using a crypto wallet app and then sends stablecoin to the wallet of a recipient in Afghanistan. That recipient can then use a crypto exchange dealer to exchange the stablecoin for physical afghani notes, or have the dealer send afghani to another recipient in the country on their behalf.

In theory, AML/CFT laws should apply to cryptocurrency transactions in Afghanistan. Although DAB's 2016 Electronic Money Institution (EMI) Regulation does not explicitly mention cryptocurrency, crypto exchanges seem to fall under the regulation as entities that provide electronic money services.<sup>c</sup> This means that crypto exchanges, like other EMIs, are required by DAB to strictly enforce KYC procedures based on a risk-based approach.

a Lauren Shin. [Crypto Actually Fixes This: How Code to Inspire Uses Crypto in Afghanistan](#). 2021.

b Interview

c Da Afghanistan Bank. [Electronic Money Institution's Regulation](#). 2016.

By allowing cross-border payments to flow outside of the existing correspondent banking system, cryptocurrencies offer a promising avenue for overcoming the de-risking challenges that Afghanistan faces.<sup>d</sup> Stablecoins are especially appealing because they are not subject to the same volatility as other cryptocurrencies and could provide a much-needed store of value in inflationary environments. Using stablecoins for cross-border transactions involves fees incurred by both the sender of value when they exchange local fiat currency for a stablecoin and by the receiver when they exchange stablecoin into their own local currency. For the moment, however, crypto exchange dealers in Herat are reportedly willing to exchange stablecoin for afghani for free.

The bigger challenge in the near term is that financial regulators, including those in the US and Europe, have yet to decide how they will regulate cryptocurrency. Until greater regulatory clarity is achieved, most large donors are likely to remain unwilling to rely on cryptocurrencies and stablecoins for payments.

Over time, cryptocurrency use in Afghanistan seems likely to evolve into three categories: (1) individuals and small organizations that rely on crypto exchanges to process transactions for legitimate economic activity; (2) larger organizations, including private companies and humanitarian/development agencies, that use stablecoins to transfer payments within the formal financial system; and (3) illicit actors who use cryptocurrency to evade sanctions and AML/CFT controls. How this evolution plays out depends on how countries, including Afghanistan, choose to regulate the use of cryptocurrency.

d Michael Pisa. [Facebook's Big Bet on Digital Currency: What Libra Could Mean for Global Payments and Remittances](#). 2019.

Earlier efforts to establish digital payments in Afghanistan failed to gain traction for many reasons. The most important may be the lack of trust most Afghans have in formal financial institutions and their preference for using hawala, a centuries old informal money transfer network that extends through much of

the Middle East and South Asia and continues to play a prominent role in the country.

Afghanistan is a cash-intensive economy where only 15 percent of adults have a banking account. There is a high level of distrust in the banking system due to past

financial scandals, including the Kabul Bank crisis of 2010, and wariness of formal institutions more broadly.<sup>47</sup> The current liquidity crisis triggered by the Taliban takeover and the resulting limits on bank withdrawals will further erode trust in the banking system.

By contrast, most Afghans are familiar with and trust local hawaladars and, compared to banks, the hawala network is perceived as providing cheaper, safer, and faster payment services.<sup>48,49</sup> The country's network of hawaladars also extends more deeply into rural areas than bank branches. Together, these factors undercut the potential demand for digital payments.

Until recently, connectivity and access to phones were also major barriers to expanding digital payments in Afghanistan but the situation has dramatically improved over the last decade. According to the International Telecommunication Union (ITU), the number of mobile cellular subscriptions in the country more than doubled from 10 million in 2010 to 22 million (58 percent of the population) in 2020.<sup>50</sup> Mobile phone access has also improved: 91 percent of respondents to a 2019 survey conducted by the Asia Foundation said that at least one member of their household owned a mobile phone.<sup>51</sup>

Underlying these improvements, however, is a difference in access by gender that could pose a barrier to developing inclusive digital payments solutions—but may also be overstated by phone ownership metrics. In a 2017 Asia Foundation survey (the last with gender-disaggregated phone ownership data), only 46 percent of women said they owned a mobile phone, compared to 78 percent of men.<sup>52</sup> World Bank data from 2018 similarly indicates that only 7 percent of mobile money accounts were held

by women.<sup>53</sup> A 2013 USAID survey found, however, that women and girls' access to mobile phones is far higher than SIM card registration data suggests because their phones are often registered in the name of a male relative: 80 percent of women surveyed had regular or occasional access to mobile phones (48 percent owned, and 32 percent borrowed one when needed).<sup>54</sup>

Afghanistan's low literacy rate—which also poses a hurdle to adopting digital payment solutions—also varies by gender: the literacy rate for Afghan men is 55 compared to 29 percent for women.<sup>55</sup> Establishing inclusive digital payment systems will be most difficult in the eastern and southern rural areas of Afghanistan where gender inequality and illiteracy are worst.

Another reason mobile payments have not taken hold in Afghanistan is a lack of interoperability between mobile wallets, which has prevented Afghans from transacting across different mobile wallets and forced merchants to install and maintain separate point-of-sale machines for each mobile offering they wanted to accept payments from.<sup>56</sup> Lack of investment by Afghan mobile money providers to create a network of merchants willing to accept mobile money payments for goods also hindered the development of a healthy digital payments ecosystem.

The weakened state of Afghanistan's banking system is a more recent challenge for Afghan mobile money providers because the country's Electronic Money Institution (EMI) regulation requires mobile money or e-money service providers to deposit their assets into the banking system.<sup>57</sup> This means that mobile money providers are subject to the same bank withdrawal limits as other customers and that bank failures would likely destabilize the mobile money sector as well.<sup>58</sup>

47 World Bank Group. *The Little Data Book on Financial Inclusion*. 2018.  
Margarete Biallas, Scott Stefanski, and Cherine El Sayed. *IFC Mobile Money Scoping Country Report: Afghanistan*. 2013.  
Brian George. *The Kabul to Dubai Pipeline: Lessons Learned From the Kabul Bank Scandal*. 2020.

48 Financial Action Task Force. *The Role of Hawala and Other Similar Service Providers in Money Laundering and Terrorist Financing*. 2013.

49 Patrick M. Jost and Harjit Singh Sandhu. *The Hawala Alternative Remittance System and its Role in Money Laundering*. 1999.

50 International Telecommunication Union. *Individuals using the Internet*. 2021.

51 The Asia Foundation. *A Survey of the Afghan People*. 2019.

52 The Asia Foundation. *A Survey of the Afghan People*. 2017.

53 World Bank Group. *The Little Data Book on Financial Inclusion*. 2018.

54 USAID. *Connecting to Opportunity: A Survey of Afghan Women's Access to Mobile Technology*. 2013.

55 UNESCO. *Interview: "Literacy rate in Afghanistan increased to 43 per cent"*. 2020.

56 Katrin Fakiri. *Building a Gateway to Digital Payments in Afghanistan: The World Food Programme's E-Voucher Initiative*. 2016.

57 Robin Arnfield. *Mobile money takes off slowly in Afghanistan*. 2016.

58 Erica Moret. *Life and Death: NGO access to financial services in Afghanistan*. 2022.

## BOX 2. Digital payment options in Afghanistan

Since the late 2000s, each of Afghanistan's four major telecommunications companies (telcos) have tried to establish a mobile money platform but only Roshan's *M-Paisa* has achieved meaningful scale. Even so, the company has not published data on active users since 2013 when it reported that only 15 percent of 1.3 million registered M-Paisa customers actively used their account.<sup>a</sup>

A more recent entrant, *HesabPay*, appears to have achieved greater scale than all of Afghanistan's mobile money platforms combined since its introduction in November 2021. The application was created by the company Moore Afghanistan, which has provided financial services businesses in Afghanistan for over a decade. The company reports that it added over 371,000 active users and 3,000 vetted merchants and processed over two million transactions between November 2021 and mid-March 2022. One reason for this rapid expansion is that, unlike earlier digital payments offerings in Afghanistan, the app is designed to be interoperable across all payment platforms in the country. *HesabPay* also appears to have invested significantly more in building out a network of vetted merchants willing to accept digital afghanis (i.e., an "acceptance network") than earlier digital payment providers.

Currently, *HesabPay* is mainly used by NGOs and several UN projects to pay salaries to staff and contractors and make vendor payments, but the company has also partnered with humanitarian organizations such as World Vision to make cash payments to over 4,000 individuals in western Afghanistan. *HesabPay* aims to expand and refine its platform for humanitarian CVA and broader economic activity, including remittances, in the future. In May, *HesabPay* will launch a three-month pilot project with the nonprofit *Uplift Afghanistan* to provide direct aid payments to 7,500 Afghan women in three of the country's largest cities.

*HesabPay* provides customers with a digital wallet they can use to make payments to a pre-vetted group of

merchants. They can access this wallet through either a smartphone or by having a merchant scan a QR code that is printed on a card they carry and linked to their wallet address. In the latter case, a merchant will scan the QR code to confirm that the wallet has sufficient funds for a given purchase before asking the customer for a 4-digit One Time Password provided via SMS to their feature phone, along with information about the merchant and the amount being charged.

The public wallet address itself resides on the Stellar blockchain and stores digital afghanis that are fully backed by fiat currency in *HesabPay* bank accounts. Transactions by users and merchants are free, while humanitarian organizations are charged seven percent of the total amount of money they pay into the system. The company also hopes to soon allow users to move value across wallets using stablecoins (i.e., cryptocurrencies that are pegged to a relatively stable reserve asset like the U.S. dollar or gold).

The app includes several features aimed at reducing ML/TF risks, including traceability and use of biometric data (with all personal identifiable information required by law kept outside Afghanistan in servers operated by Amazon Web Services). The app's payment platform functions as a closed loop in which all merchants are vetted against relevant screening databases. The app also incorporates ID.me facial recognition services to verify identities by comparing a person's official ID with a selfie and comparing the verified name with World Check ID Database to scan for ML/TF concerns.

Following a successful pilot in Kenya, the social enterprise Fintech for International Development (F4ID), a collaboration between Save the Children, Barclays, and Standard Chartered, plans to roll-out a pilot in Afghanistan soon that will provide beneficiary families e-vouchers to purchase goods and services from a network of vetted merchants.<sup>b</sup>

F4ID's digital payments platform, *Lotus20*, is narrowly tailored to providing CVA assistance that aims to ensure that aid goes to who it is intended,

a Emergency Response Mechanism. *M-Paisa: Mobile Money Transfer for Cash Based Interventions in Afghanistan*. 2013.

while also enabling beneficiaries to purchase goods anonymously.

After conducting a needs assessment in a community, an aid organization can use *Lotus20* to provide each beneficiary with a certificate of entitlement (“e-voucher”) that includes a QR code (“QR key”) and enrolls them using facial recognition. When a beneficiary wishes to make a purchase, a merchant will use a smartphone with the *Lotus20* app to scan their QR key to obtain information about what goods they are entitled to and scan their face to ensure that their features match the template attached to the QR

key. Once a payment is confirmed, *Lotus20* sends an invoice directly to the donor, which then settles with the merchant. The platform allows donors to view anonymized purchase data in real-time to improve project design.

Like *HesabPay*, the approach creates a closed payment ecosystem that only vetted merchants participate in. Unlike *HesabPay*, however, *Lotus20* only uses biometric data to check that the biometric features of the registered key holder match the features of the individual who presents the QR key.

## The case for optimism

Despite the limited scale achieved by mobile money solutions in Afghanistan to date, there are some reasons to believe that digital payments could fare better in the country today. These include:

- *Hawala has become more expensive.* The closure of formal payment channels into Afghanistan following the Taliban takeover pushed payments into hawala, just as hawaladars were finding it increasingly difficult to access physical cash notes, leading to a sharp rise in the fees charged. Reports suggest that hawala transaction fees have climbed from roughly 2 to 4 percent before August 2021 to 6 to 10 percent today.
- *Lessons learned on interoperability:* In 2021, DAB unveiled the Afghanistan Payments System (APS), a national e-payments switch created with funding and technical support from the World Bank to address the lack of interoperability across Afghan financial institutions, including mobile money providers.<sup>59</sup> The existence of the APS should make it easier for new entrants to create interoperable payment solutions.
- *Quick Response (QR) codes lower costs, promote ease of use, and help expand the size of the acceptance market.* Providers of digital payment solutions, including new entrants in the Afghan market, are increasingly incorporating QR codes into their offerings

to make payments cheaper and more efficient.<sup>60</sup> Merchants benefit because they can use a personal smartphone as a QR code acceptance terminal (or display a printed QR code that customers can scan with their own smartphone) instead of paying to install and maintain POS machines. This should make it easier to grow a network of merchants willing to accept digital payments. Customers similarly have the option of using a smartphone to scan a merchant’s QR code or offer a paper card on which a QR code linked to their digital wallet is printed to a merchant who can scan it to initiate a transaction. Hurdles to using QR codes include the need for an active data connection and for at least one party in a transaction to have a smartphone.

- *Digital literacy on the rise.* Although data on social media use and instant messaging apps in Afghanistan is unavailable, WhatsApp clearly plays an important role in the country’s information ecosystem and many Afghans have become accustomed to using mobile phones to communicate and conduct business. This growing familiarity with digital tools should make it easier for digital payments to spread in the country.
- *Growing demand and a supply-push opportunity:* The impairment of Afghanistan’s formal financial sector has created a need for new payment options

<sup>59</sup> Afghanistan Payments System. [About Us](#). N.d.

<sup>60</sup> Consultative Group to Assist the Poor. [Inside QR Codes: How Black & White Dots Simplify Digital Payments](#). 2017.  
Consultative Group to Assist the Poor. [QR Codes and Financial Inclusion: Reasons for Optimism](#). 2018.



in the country. At the same time, if humanitarian agencies decide to push more aid through digital channels, it could set in motion the type of virtuous loop needed for digital payments to reach critical mass by increasing the number of active users and merchants willing to accept digital payments.

## WHAT SHOULD THE DEVELOPMENT AND HUMANITARIAN COMMUNITIES DO TO SUPPORT DIGITAL PAYMENTS IN AFGHANISTAN?

1. *Recognize that digital payments can reduce ML/TF risks and support greater use.* Digital payment systems can reduce ML/TF risks by improving the traceability of payments and making it easier to verify the identity of parties to a transaction. And the risks associated with digital CVA are small compared to paying the Taliban to provide security for in-kind assistance and bulk cash movement. Development and humanitarian agencies should seek out opportunities to test and assess new approaches for supporting digital payments in the country.
2. *Accept that scaling digital payments in Afghanistan will be difficult and the outcome is uncertain.* While some of the factors that hindered earlier efforts to establish mobile money in Afghanistan are changing, the country remains a difficult environment for digital payments to scale. Difficult does not mean impossible, however, and there are examples, like Somaliland, where use of digital payments by humanitarian agencies have helped those solutions take hold in the country despite significant ML/TF risks and operational challenges.<sup>61</sup>
3. *Foster digital payment approaches that can bridge from supporting humanitarian aims to broader development outcomes.* The increasing volume, cost, and length of humanitarian assistance efforts over the past 10 years has given new urgency to strengthening the connection between humanitarian and development efforts.<sup>62</sup> The ability of digital payment platforms used for humanitarian CVA to support

broader economic activity largely depends on whether those systems are interoperable with other payment solutions. Given the importance of supporting livelihoods in Afghanistan, humanitarian CVA approaches should, whenever possible, be designed to be interoperable at the outset or with a plan in place to shift to interoperability over time.

4. *Consider the needs of Afghan women.* Donors that wish to use digital payments to provide aid in Afghanistan must pay special attention to meeting the needs of Afghan women, who are less likely to have access to a phone or identifying documents and more likely to be illiterate than men. Even if phone ownership metrics understate the access Afghan women have to phones, the reality is that, without ownership, they have less control over their use. Digital payment solutions that do not require aid recipients to have access to a phone—and instead allow them to rely on QR codes printed on a card—can help address this concern. Donors and NGOs also need to put in place processes to conduct customer due diligence with women who may lack identifying documents and are unwilling or unable to show their face for cultural reasons.
5. *Support privacy-preserving solutions.* While the use of biometric data can make it easier to verify the identity of parties involved in transactions and thereby reduce ML/TF risks, it also raises significant privacy and data protection concerns. Donor agencies that rely on biometric data in Afghanistan must establish strict safeguards around its use and preference should be given to approaches that do not require centralized storage of personal data.
6. *Strengthen AML/CFT supervision in Afghanistan.* The Taliban's shuttering of the Afghan financial intelligence unit, FinTRACA, has left illicit finance risks in Afghanistan virtually unsupervised, exacerbating the concern that FSPs have with doing business in the country. Lack of credible ML/TF oversight poses a hurdle to developing trusted digital payment solutions in Afghanistan. If it becomes politically feasible to work with the Taliban-led government, the development community should work with DAB to strengthen ML/TF oversight and reconstitute FinTRACA. If cooperation with the government remains infeasible, the development

61 Maha Khan. *Somaliland Pushing the Mobile Money CVA Frontier*. 2019.

62 World Humanitarian Summit. *Changing People's Lives: From Delivering Aid to Ending Need*. 2016

community should explore ways to create a body capable of carry ML/TF monitoring in the country.

## CONCLUSION

Resolving Afghanistan's humanitarian emergency requires addressing the country's ongoing liquidity crisis. Increased use of digital payments in Afghanistan would make it easier to move money into and within the country by lowering the costs associated with complying with AML/CFT rules and provide a path towards greater financial access and inclusion. Although earlier efforts to scale digital payments in the country failed, several factors that hindered those efforts have improved, including better connectivity and access to mobile

phones, the availability of new interoperable payments solutions, and innovations (like QR codes) that make it easier to scale merchant acceptance networks. While digital payments represent only a partial solution to Afghanistan's financial challenges, they offer a potentially vital tool for addressing the country's economic crisis. Government agencies and multilateral institutions responsible for promoting economic development, humanitarian relief, and addressing ML/TF risks should proactively support their use.

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**MICHAEL PISA** is a policy fellow at the Center for Global Development.

[WWW.CGDEV.ORG](http://WWW.CGDEV.ORG)

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