



Suggested Finance Framework for the “Day After” in Gaza: Using Fintech to Forge a Terrorism-Free Future

Citation

Wagman, Shlomit. "Suggested Finance Framework for the “Day After” in Gaza: Using Fintech to Forge a Terrorism-Free Future." M-RCBG Associate Working Paper Series 2024.227, Harvard University, Cambridge, MA, March 2024.

Published Version

<https://www.hks.harvard.edu/centers/mrcbg/publications/awp/awp227>

Permanent link

<https://nrs.harvard.edu/URN-3:HUL.INSTREPOS:37378295>

Terms of Use

This article was downloaded from Harvard University’s DASH repository, WARNING: No applicable access license found.

Share Your Story

The Harvard community has made this article openly available.
Please share how this access benefits you. [Submit a story](#).

[Accessibility](#)



HARVARD Kennedy School

MOSSAVAR-RAHMANI CENTER
for Business and Government

Suggested Finance Framework for the “Day After” in Gaza: Using Fintech to Forge a Terrorism-Free Future

Dr. Shlomit Wagman
Harvard Kennedy School

March 2024

M-RCBG Associate Working Paper Series | No. 227

The views expressed in the M-RCBG Associate Working Paper Series are those of the author(s) and do not necessarily reflect those of the Mossavar-Rahmani Center for Business & Government or of Harvard University. The papers in this series have not undergone formal review and approval; they are presented to elicit feedback and to encourage debate on important public policy challenges. Copyright belongs to the author(s). Papers may be downloaded for personal use only.

Suggested Financial Framework for the "Day After" in Gaza:
Using Fintech to Forge a Terrorism-Free Future

By Dr. Shlomit Wagman¹

*Fellow, Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School;
Former Chair, Risk & Trends Working Group, the Financial Action Task Force;
Former Chair, Israel Money Laundering and Terrorism Financing Prohibition Authority.*

Executive Summary:

After the war against Hamas in Gaza ends, billions in funds for Gaza's reconstruction and humanitarian aid will be allocated by the international community, as has been the case following past conflicts. Historically, a significant portion of this international aid has been diverted to finance terrorism, undermining its intended purpose. In total, the financial aid provided to Gaza in past years is four times the Marshall Plan's assistance to Europe post-World War II. If those funds had been invested in civil prosperity, Gaza could have looked like Singapore.

This proposal advocates for the creation of a comprehensive financial framework that leverages Financial Technology (Fintech) innovations to ensure aid is transparently and effectively used for rebuilding Gaza's civil infrastructure. By integrating digital wallets, blockchain technology, oversight mechanisms, and reputable global financial institutions into the reconstruction efforts, and by eliminating the use of cash, money exchangers, and unsupervised domestic banks, the aim is to minimize fund misuse, increase transparency and traceability, while protecting the privacy of individual, and foster an environment of prosperity and peace. This could even transform Gaza into a Fintech hub.

It is recommended that this framework be incorporated into any international agreements aimed at concluding the war, irrespective of the identity of the governing stakeholder in Gaza. This framework could also establish the foundation for a resilient and thriving economy, serving as the cornerstone for what could become a prosperous future. Moreover, this approach could serve as a blueprint for addressing similar challenges in other disaster-stricken areas, demonstrating the power of innovative financial solutions in building resilience against future crises.

¹ Research Fellow, Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School and Fellow at the Getting Plurality research network, the Ash Center, Harvard Kennedy School. Former Director-General of the Israel Money Laundering and Terror Financing Prohibition Authority, head of the Israeli delegation to the Financial Action Task Force (FATF) from 2016 to 2022, Co-Chair of the FATF's Research, Typologies, and Methods Group from 2019 to 2022, and former Acting Director-General of the Israel Privacy Protection Authority. The author earned an L.L.M. and J.S.D. from Yale Law School and a B.A. from Hebrew University.

Introduction:

Upon the conclusion of the conflict in Gaza, it is anticipated that the international community will allocate billions in funds for the region's reconstruction and humanitarian aid. This pattern follows [historical precedents](#) where, after similar conflicts in Gaza, [substantial financial support](#) was marshaled by the global community for rebuilding efforts. Remarkably, the cumulative financial aid dispatched to Gaza in recent years [surpasses by fourfold](#) the assistance provided to European countries under the [Marshall Plan](#) following World War II.

However, substantial amounts of these funds were thwarted by Hamas and used to fuel violence and terrorism. Instead of building civic infrastructure like hospitals and schools and bankrolling salaries for public officials, many resources were funneled to support terrorism—such as Hamas's enormous military [underground tunnels](#). Nicknamed “Gaza’s Metro”, Hamas invested billions in building tunnels that allow its operatives hidden transport between combat and missile launch areas. The cumulative length of these tunnels is estimated at [300 miles](#), longer than the [250 miles](#) of London’s metro, with Gaza at only 25% the size of London. In these exact same tunnels, dozens of Israeli civilians kidnapped in the October 7th attack are being [held hostage](#), and where Hamas’s leaders, including Yahya Sinwar, [hide](#) from accountability.

This misuse underscores the immediate need for a revised strategy for the Gaza economy. One that ensures transparent delivery of resources to the right and rightful recipients with stringent oversight, in a manner that provides the needed transparency and traceability.

In preparation for post-conflict global agreements to be set in the region, and regardless of the identity of the stakeholder that will govern Gaza, it is essential to design a financial framework that strives to eliminate terrorism and serves as a catalyst for change and prosperity in Gaza.²

In order to support global policymakers in setting such a policy, this paper outlines a proposed model, that leverages cutting-edge Fintech solutions and is informed by [extensive experience](#) in counter-terrorism financing and Fintech innovative products.

This approach can also be implemented into the recent US Spending Bill adopted this week, which allocates funds to the West Bank and Gaza, under the strict condition that these funds will not be used to fuel or support terrorism.³

² As the [US intelligence community assessed](#), the combat against Hamas will linger for years to come. See: National Threat Assessment of the US Intelligence Community, Office of the Director of National Intelligence, February 5, 2024. Available at: <https://www.dni.gov/files/ODNI/documents/assessments/ATA-2024-Unclassified-Report.pdf>

³ See the US Spending Bill, adopted on March 22, 2024, at section 7037, page 851 - 861. Available at: <https://docs.house.gov/billsthisweek/20240318/WDI39597.PDF>

A Blueprint for Change: Fintech at the Forefront - Proposed Financial Framework:

1. Eliminate the use of cash and transit to a digital economy

Gaza's economy relies heavily on cash. Cash is the most notorious avenue for terrorism financing, extremely challenging to trace or monitor. The difficulty in tracing cash transactions is a primary concern of the [Financial Action Task Force](#) (FATF), the global money laundering and terrorist financing watchdog, and the international community. This also correlates with the efforts of many countries to limit the use of cash (including in France, Italy, and soon [all over the EU](#)).

Instead, innovative Fintech solutions, allowing transparency and traceability, should play a vital role in replacing the current cash economy in Gaza. For example, digital wallets, similar to "ApplePay" or "GooglePay", can be used easily, as smartphones and Wi-Fi are widely available across Gaza.⁴ No additional significant equipment or infrastructure is needed in order to operate digital wallets, other than the development of a dedicated application and scanned barcodes to replace the traditional physical "point of sale" terminals.⁵

Digital payment can facilitate the use of aid funds and salaries swiftly and securely to pay for services or local stores, such as food in local stores, medical treatment, utility bills, and more. The nature of digital payments allows micropayments, making it extremely convenient and accessible. All of the payments should be settled by a reputable international party.

Robust identification and monitoring measures should be implemented, ensuring the integrity of this framework and providing transparency on the destination of the funds. The identity of each user shall be verified with a full Customer Due Diligence (CDD) process, as required by the international Anti-Money Laundering and Counter-Terrorism Financing (AML/CFT) standards of the Financial Action Task Force (FATF). Each user will go through a Know Your Customer (KYC) process upon establishing the digital wallet, which includes the collection and verification of relevant personal information. Users' identities shall be verified against governmental documentation, supported by biometric validation (fingerprint or selfie), and screened against relevant "blacklists" of terror-designated activists. In cases where the user characteristics indicate a higher risk for terrorism financing, additional measures will be implemented, as per the risk-based approach (Enhanced Due Diligence - EDD). After successful onboarding, every transaction shall be subject to strict ongoing monitoring and will require biometric validation. (The request for biometric validation prior to each use provides an additional layer of protection to prevent the funds from being stolen, which is a useful practice in less stable environments, including displacement and temporary housing scenarios).

⁴ "97% of Palestinian households have at least one cellular mobile line, with a wide use of smartphones", based on the Palestine Bureau of Statistics, as published by WAFA - Palestinian News and Info Agency, on May 17, 2020 ("4.2 million cellular mobile subscriptions in Palestine, says Bureau of Statistics"), available at: <https://english.wafa.ps/page.aspx?id=4HiWJGa117117013662a4HiWJG>).

⁵ Payments can be also made based on SIM card, with additional verifications vis-à-vis the user, and biometric identification via voice recognition.

Users will be able to spend the funds only in pre-approved businesses and services, in a “closed garden” model. Namely, every stakeholder in the supply chain should be cleared through a strict KYC and EDD examination, ensuring the settlements of these transactions are paid to trustworthy stakeholders and usages. The transactions should be settled by trusted international financial players, rather than domestic ones.

While the digital flow of funds is highly monitored, the **privacy** of each user is kept, as monitoring is mostly done on the algorithmic level, based on patterns and “blacklists”, extracting personal data only for concrete investigations. In order to protect privacy of users, the utilization of Privacy Enhancing Technologies (PET) can and should be adopted, ensuring an additional layer of privacy.

The model developed can rely on prior experience in providing aid to underdeveloped or conflict areas. For example, the financial aid provided by the UN to refugees in Europe and Africa,⁶ including in areas where WiFi is limited, or which rely on older transmitting cellular systems (such as G2 cellular systems). Currently, UN aid for refugees in these locations is mostly focused on ensuring funds reach families and people in need, with limited attention to ensuring it does not go to fund terrorism, a challenge that requires additional focus and tailored solutions.

Recognizing the significant gap between the current state and the ambitious vision outlined, it's crucial to acknowledge the complexity of transitioning to a comprehensive financial framework. The journey towards achieving a digital economy and robust financial infrastructure in Gaza will require patience, incremental steps, and learning from global best practices. For instance, the challenge of implementing Western society's KYC levels for beneficiaries can begin with scalable solutions, as were introduced in Afghanistan to overcome the lack of sufficient governmental documentation.⁷ This example illustrates a realistic pathway toward improving identification processes by building on solutions from similar post-disaster contexts.

Combating Corruption: In addition to the goal of minimizing terrorism, eliminating cash could also help reduce the misallocation of funds due to corruption, following the concerns expressed by the European Parliament in its January 18th, 2024 [resolution](#), at how " Hamas's leaders have amassed immense wealth at the expense of Palestinian civilians, who largely live in poverty," while highlighting that the EU is the most significant humanitarian and

⁶ Past experience in other jurisdictions: It is important to note that digital payment mechanisms have been utilized in distributing aid to refugees across various conflict zones globally, including in Europe and Africa. These models were designed to address challenges such as financial exclusion and limited access to banking services. However, their primary focus was not on mitigating the risks of terrorist financing, as is the intention here. Nonetheless, it is crucial to recognize that the adoption of Fintech solutions as an alternative to cash payments has proven successful. Customized solutions are available that can cater to poor infrastructure with limited WiFi access and a dependence on older technology and equipment. In the case of Gaza, there will be a need for an enhanced focus on robust verification and monitoring of users and their activities to ensure traceability and effectively mitigate the unique risks associated with terrorism financing. The author has a personal experience with providing such digital services to refugees, as part of commercial services provided to humanitarian organizations by a payment company.

⁷ See the OMID ID project introduced in Afghanistan by [Aseel](#), to distribute aid to population without sufficient governmental documentation. See more information on this project at: <https://aseelapp.com/do-good/omid-card>

development donor to the Palestinian territories.⁸ The use of cash may explain at least some of those circumstances, and reducing the use of cash will also minimize ways to misuse it.

Tax Collection: digital payments reduced unreported cash transactions, shadow economy, and assist in increasing tax collection, which in turn contributes to the local economy.

Reduce the Use of Cash: efforts should be made to reduce the existing amounts of cash in Gaza. Such efforts should rely on governmental mechanisms of interested governments and can be implemented, for example, via commerce (import/export payments).⁹

Recommendation #1 - Eliminate the use of cash and transition to a digital economy:

Recognizing cash as a primary vehicle for terrorism financing, we propose transitioning to eliminate the use of cash and transit to a digital economy. Digital wallets, accessible via smartphones, should replace cash transactions, ensuring that funds are used transparently and for their intended purposes.

2. Trusted Financial Rails:

The rails for the financial activities must rely on trustworthy financial institutions, with capabilities to monitor and supervise the flow of funds. Currently, unsupervised money exchangers and domestic banks—often controlled and misused by Hamas—are dominating Gaza’s economy. Instead, the funds flow should be conducted via reliable global financial rails, such as leading global payment companies, backed by first-tier international banks, clearing services, and accounting firms, ensuring that funds are monitored and always reach their intended recipients.

⁸ The European Parliament's Resolution # RC-B9-0068/2024, dated January 18th, 2024. Please see in particular Section 8 and 12. The full document is available here: https://www.europarl.europa.eu/doceo/document/TA-9-2024-0051_EN.html.

According to various sources, the personal wealth of Hamas's leaders is estimated to be in the billions of USD. For instance, Mousa Abu Marzook, the deputy chair of the Hamas Political Bureau, is reported to have a net worth of \$3-4 billion, while senior leaders Khaled Mashal and Ismail Haniyeh each have an estimated net worth of about \$4 billion. See, for example: <https://mackenzieinstitute.com/2023/11/hamass-top-leaders-are-worth-billions-heres-how-they-continue-to-grow-rich/>.

⁹ *Draining the Existing New Israeli Shekels from Gaza:* The Gaza economy currently holds a significant amount of cash, primarily in New Israeli Shekels (NIS), due to substantial commerce and trade with Israel. This includes activities by domestic importers and exporters for buying and selling goods transferred to Gaza through Israel. To reduce reliance on cash, Israel needs to establish a mechanism to "drain" these large cash reserves and accept (limited) cash transactions through a dedicated unified coordinated effort aimed at "resetting" the economy and minimizing the cash available for use. Such an effort could require monitoring the domestic trends of NIS usages for purchasing goods abroad, depositing them with Israeli authorities, in a well-designed and pre-approved manner. After a grace period, import/export activities should only be permitted with written proof of payment for each shipment via a digital payment system.

Domestic banks in Gaza are branches of Palestinian banks, which are managed from the West Bank and should be supervised by the Palestinian Authority. However, due to the limited presence and supervision of the Palestinian Authority in Gaza, and the even less transparency and control over private sector financial institutions, the degree of supervision on their activities, and the level of their compliance with the regulatory requirement to identify and mitigate money laundering and terrorism financing risks, are highly doubtful.

Moreover, it is important to highlight that the level of compliance of the entire Palestinian financial system with the international obligatory money laundering and terrorism financing requirements is very limited. Unlike any other jurisdiction in the world, the Palestinian financial system has *never been reviewed and evaluated* by the professional international organization that is responsible for reviewing and evaluating all jurisdictions around the globe, the Financial Action Task Force (FATF), according to its [obligatory standards](#). The FATF's evaluation of the Palestine Authority has been postponed numerous times, with no new date in the near future.¹⁰ Therefore, in addition to the other difficulties of supervision by the West Bank and the Palestinian government, the overall compliance with the global obligatory standards has never been verified and is assumed to be very limited.

In practice, Gaza's banks do not seem capable of resisting Hamas's de-facto control over their activities. Moreover, the Palestinian Authority is currently paying, in an institutionalized manner, [monthly stipends directly to terror activists or their families](#), honoring individuals who commit, or have committed, acts of terrorism. Therefore, it is extremely challenging to assume that the formal Palestinian financial system, under government supervision, can be trusted to monitor terrorism financing activity. It follows that any plan for the "day after", including international aid for reconstruction, should not rely on unsupervised local banks that openly support terror-related activity.¹¹

Money exchangers are also very popular in Gaza and many of them are being used for "underground banking", an alternative to the traditional financial system, including international money transmissions. They rely heavily on informal "Hawala" practices - unsupervised money transmits carried out outside of the traditional banking system via setoffs with a trusted counterpart located in a different country and without any physical money movement. Another method is through engaging with cryptocurrencies, transmitted to Gaza, sometimes as the proceeds of fundraising for Hamas. Money exchangers are transferring tens of millions of dollars from Iran to Hamas and the Islamic Jihad, [fueling terrorism](#). An example of this can be seen in the cases of Hamed Ahmed Khudari¹² and Subhi Farwanah¹³, who provided money-

¹⁰ See the IMF Country Report on the West Bank and Gaza (Sep. 13, 2023), at page 20.

<https://www.imf.org/en/Publications/CR/Issues/2023/09/12/West-Bank-and-Gaza-Report-to-the-Ad-Hoc-Liaison-Committee-539149>

¹¹ See, in addition, the US Spending Bill, adopted on March 22, 2024, at section 7037, page 851 - 861. Available at: <https://docs.house.gov/billsthisweek/20240318/WDI39597.PDF>.

¹² <https://www.wsj.com/world/middle-east/hamas-needed-a-new-way-to-get-money-from-iran-it-turned-to-crypto-739619aa> and see also: <https://twitter.com/IDF/status/1125081985578409989>

¹³ https://www.timesofisrael.com/liveblog_entry/idf-says-top-hamas-money-man-killed-in-gaza-airstrike/

transmitting services from Iran to Hamas and Islamic Jihad via Hawala. The Hawala networks are well organized and coordinated with exchangers located mostly in Lebanon and Turkey.¹⁴

While the focus of this framework is on financial transactions, the necessity of overseeing the distribution and use of physical goods warrants brief mention. Essential materials such as fuel, iron, and cement, crucial for building vital infrastructure like hospitals and schools, can also be misappropriated. Establishing a monitoring system for physical goods is equally important to prevent their diversion into illicit activities. Those aspects are briefly discussed in recommendations 3 and 4 below and should be further explored in a subsequent project, as part of the holistic approach required for Gaza's reconstruction.

Recommendation #2 - Trusted financial rails:

To prevent the misuse of funds, all financial transactions should be processed through reputable global financial institutions and Fintech companies, with robust AML/CFT protocols. This approach will replace the current reliance on local banks and money exchangers known to be exploited by Hamas.

3. Utilizing Blockchain Technology:

Blockchain technology can revolutionize the financial system in Gaza and aid distribution. This transformation could include launching a unique Stablecoin, possibly named "GazaCoin," on a private blockchain, or introducing a digital currency akin to a Central Bank Digital Currency (CBDC), backed by a sovereign authority (its identity to be determined).¹⁵

Such a bespoke digital coin, operating within a private blockchain, offers transparency for donors regarding the coin's legitimate use while maintaining the privacy of individual users.

The ecosystem for this digital currency can be structured as a "closed-garden" model, incorporating "smart contracts" to restrict expenditures to specific pre-approved uses, such as designated shops or services. Rigorous control measures are essential at the points where traditional currency is exchanged for this digital currency (the onramp and offramp points), to ensure accountability. These measures would include, for example, stringent AML/CFT protocols, Know Your Customer (KYC) processes, identity and biometric verifications, and continuous monitoring, echoing the systems set up for digital wallets as previously discussed.

The inherent transparency of blockchain technology, which logs every transaction, enables the use of blockchain analytics to ensure that usage patterns align with established policies. Being a private blockchain, this monitoring is restricted to pertinent stakeholders, such as donors, and excludes access to users' personal data.

¹⁴ <https://home.treasury.gov/news/press-releases/jy1816>

¹⁵ In the case of Gaza, and the concerns raised regarding the integrity of its financial system, which openly supports terrorism, the identity of such a sovereign entity needs to be defined carefully, and can be quite complicated given the need to have international assurances for such a mechanism.

In order to protect the privacy of individuals, personal data of specific users would be accessed only when there is a reasonable suspicion that the policy has been compromised, allowing stakeholders to retrieve identified data under such circumstances. In order to facilitate that, privacy preserving technologies should be utilized, ensuring the needed balance between privacy and protecting the integrity of the financial activity.

In addition, blockchain technology can also be used to monitor the supply chain of commodities and physical goods, i.e., monitoring every product that enters Gaza throughout the supply chain until its final recipient (clothes, food, iron infrastructure, etc.). This technology is widely used for commercial purposes and can be easily implemented.

Recommendation #3 - Implementation of blockchain technology:

Utilizing the transparent blockchain technology may provide an innovative solution for a “closed garden” model that closely monitors the onramp and offramp of users, approving all participants and users, in a traceable and secured ecosystem over a transparent ledger of all transactions, while preserving the privacy of individual users. This innovative technology can also aid in supply chain monitoring of physical goods, ensuring that all materials and goods entering Gaza are used for their intended purposes.

4. Central Oversight Mechanism:

A central oversight mechanism is essential to prevent the misallocation of resources. This is required to ensure there is no “double spending”, namely multiple resources spent by different stakeholders for the same project, allowing funneling of the excess funds to terrorism. For example, each project should be monitored by multinational experts to assess the needed resources vs. actual spending.

Recommendation #4 - Robust monitoring and oversight:

A centralized oversight body, comprising international experts and stakeholders, will monitor aid distribution to prevent duplication of efforts and ensure alignment with reconstruction goals. This mechanism ensures that resources are allocated efficiently and in support of Gaza's civil infrastructure development, and not for terrorism. Such an oversight board must acknowledge the existence of Israel and ensure resources are not spent on adverse initiatives.

Framework and Leadership:

The identity of the stakeholders leading these efforts may be determined at a later stage, depending on the overall governance model established.

Such stakeholders must acknowledge Israel's right to exist and to peaceful co-existence with the state of Israel, and ensure resources are not allocated towards goals that contradict this principle.¹⁶

It is also suggested that the agreed-upon framework serve as a mandatory channel for providing funds and support to Gaza by any country or international organization, ensuring a unified approach that prevents the unintentional funneling of resources into terrorism.

Collaboration with the private sector is crucial in order to succeed in this plan. A variety of Fintech companies will be enthusiastic to support this project.

The situation in Gaza, while unique, is emblematic of broader systemic issues in humanitarian aid and economic development. The high visibility and potential resources directed towards Gaza present an unparalleled opportunity. By building back better, we have the chance not only to address the immediate needs of over 2 million people but also to influence broader regional stability. This approach could serve as a blueprint for addressing similar challenges in other disaster-stricken areas, demonstrating the power of innovative financial solutions in building resilience against future crises.

In the near future, we intend to expand this proposal with a list of suggested potential Fintech solutions. Interested companies with relevant technologies are welcome to contact the author.

Conclusion:

The proposed Fintech-based financial framework offers an innovative solution to the longstanding challenge of ensuring that aid for Gaza's reconstruction is used as intended for the benefit of the civilian population and not diverted to finance terrorism. By leveraging digital technologies for transparency and accountability, and by instituting robust oversight mechanisms, this framework aims to rebuild Gaza's civil infrastructure and foster a foundation for lasting peace and prosperity.

This financial framework transcends the immediate need for recovery by laying the groundwork for a resilient and thriving economy. By preventing the diversion of funds to terrorist organizations, we not only avert the worst-case scenarios but also foster an environment conducive to long-term prosperity. The implementation of robust financial infrastructure is not just about avoiding terrible outcomes; it's also about laying the groundwork for a functioning economy, which is ultimately the only way to prevent more war. It is pivotal for transitioning from aid dependency to financial independence.

Extreme poverty is the ideal breeding ground for terrorism and extremism to thrive. This framework, along with any other business infrastructure, is the cornerstone of what can become a future flourishing economy. Furthermore, enhancing financial access and attracting

¹⁶ See similar approach which is expressed in the US Spending Bill, adopted on March 22, 2024. section 7037, page 853, line 4-5. Available at: <https://docs.house.gov/billsthisweek/20240318/WDI39597.PDF>.

foreign private investment are critical steps towards building a flourishing economy, making Gaza a case study in transforming extreme poverty and conflict into opportunities for growth and stability.

This initiative requires the concerted effort of the international community, combining policy, technology, and operational expertise to abolish terrorism financing and transform Gaza into a model of post-conflict reconstruction and development. The aforementioned steps will serve Gaza well past immediate reconstruction efforts to promote enduring prosperity and civil development, and potentially establish it as a model Fintech hub as well.