

---

# Country Profiles: Digital Financial Services in the MENA Region

---



**Recommended Citation:** Riley, Pamela, Sarah Romorini, Emma Golub, and Maggie Stokes. 2020. *Country Profiles: Digital Financial Services in the MENA Region*. Rockville, MD: Sustaining Health Outcomes through the Private Sector Plus Project, Abt Associates Inc.

**Cooperative Agreement:** AID-OAA-A-15-00067

**Submitted to:**

Amy Kay, Senior Health Advisor, Bureau for the Middle East, USAID

Elaine Menotti, AOR, Service Delivery Improvement Division, Office of Population, USAID

**About SHOPS Plus:** Sustaining Health Outcomes through the Private Sector (SHOPS) Plus is USAID's flagship initiative in private sector health. The project seeks to harness the full potential of the private sector and catalyze public-private engagement to improve health outcomes in family planning, HIV/AIDS, maternal and child health, and other health areas. SHOPS Plus supports the achievement of US government health priorities and improves the equity and quality of the total health system.

**Cover photo:** Recep Büyükgüzel



Abt Associates Inc.  
6130 Executive Boulevard  
Rockville, MD 20852 USA  
Tel: +1.301.347.5000  
abtassociates.com

American College of Nurse-Midwives | Avenir Health  
Broad Branch Associates | Banyan Global | Insight Health Advisors  
Iris Group | Population Services International | William Davidson Institute at the  
University of Michigan

This report is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of the report are the sole responsibility of Abt Associates and do not necessarily reflect the views of USAID or the United States government.

---

# Country Profiles

The following 11 country profiles are excerpted from the report, *Digital Financial Services in the MENA Region*. For each country, we show key statistics on mobile subscription rates, internet penetration, ownership of financial accounts, and percent of individuals who received or made digital payments within the past year. Definitions and sources for these statistics are as follows:

- Mobile subscriber penetration: The number of unique persons who subscribe to a mobile account as a percent of the total population of a country (Source: GSMA 2018).
- Internet penetration: The number of internet users as a percent of the total population of a country (Source: Hootsuite and We Are Social 2019).
- Account ownership: Number of adults who reported having an account (by themselves or together with someone else) at a financial institution or using a mobile money service (Source: World Bank FIndex, Demirgüç-Kunt et al. 2018).
- Made digital payments: Number of individuals who made or received digital payments (Source: World Bank FIndex, Demirgüç-Kunt et al. 2018).

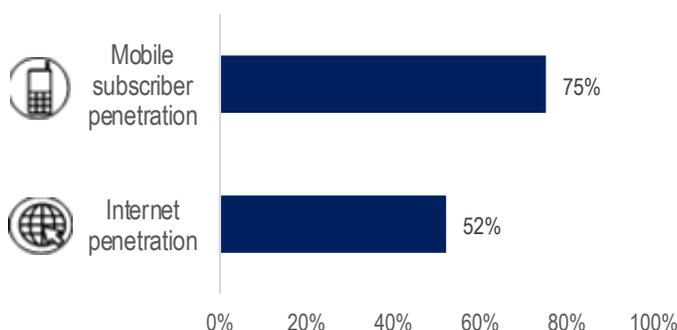
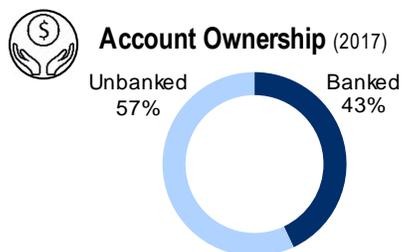
These statistics are from 2017, which is the most recent year the World Bank data were collected. Three years is a long time when measuring diffusion of digital technology. As the country snapshots highlight, many countries have implemented major DFS policy changes within the past two years, and most countries have seen a sharp increase in new service providers entering the DFS market. We do not have more up-to-date, comprehensive data on use of DFS in 2020, but, based on the major efforts underway, we expect that use is accelerating. The statistics should be viewed as a reliable baseline for measuring the market opportunity for DFS.

# Algeria

**Key takeaway:** Despite advances to introduce e-payment services in Algeria, uptake has been slow due to consumer distrust and weak enforcement. The political transition is likely to delay attention to DFS.



**Total Population:** 42.2 million (2018)  
**Rural Population:** 27%



**Digital Payments Received or Made in the Last Year (2017)** **26%**

Algeria is an oil-rich nation with relative socioeconomic stability. It is one of the few countries that have achieved a 20 percent poverty reduction in the past two decades. Algeria has experienced recent political turmoil and economic crises due to falling oil prices and the need for structural reforms (World Bank 2019d). In 2019, protests forced the exit of Algeria's President, who had ruled for 20 years.

## Health Sector Overview

Algeria's health system comprises the private sector, quasi-public sector, and a largely dominant public sector. Private health facilities are mostly for-profit, with private providers supplying mostly curative care. Public and private sector interaction is fairly uncommon, aside from government-provided contracts with the private sector in areas where there are health care shortcomings, such as a shortage of specialists. The quasi-public sector consists of large public firms that provide health care for their employees. All three sectors have grown rapidly in the past two decades: between 2000 and 2012, the number of medical practitioners nearly doubled, and the pharmaceutical market grew from \$500 million in 2000 to \$7 billion in 2016. Although the Algerian government formally recognizes the right to free health care services in the public sector, access to and utilization of public sector services varies across the population. Public sources cover approximately 75 percent of health expenditures, and out-of-pocket health expenditures are high (SHOPS Plus and HFG 2018).

## Digital Financial Services

**Algeria initiated early-stage financial inclusion efforts through its national postal service.** While Algeria's postal service is not a postal bank, it has offered basic checking accounts and

money transfer services for years, subsequently expanding financial services (OBG 2016). Between 2011 and 2017, the proportion of Algerian adults with a financial account increased from 33 percent to 43 percent (Demirgüç-Kunt et al. 2018). The postal service continues to evolve and launched a new money transfer service in 2019 (Saci 2020).

**Algeria issued an Information and Communications Technology (ICT) Action Plan 2015-2019 that promoted use of e-payments** (Ministry of Post and Telecommunications 2016). In 2016, Algeria created an organizing e-banking entity, Filiale Intervancaire Monetique (FIB) to increase collaboration, facilitate change, and encourage businesses to adopt e-payment services and introduced its first e-payment service. The e-payment service included 11 banks and nine companies, which accumulated approximately 930,000 subscribers by the end of 2016 (OBG 2017). Additional stakeholders, including state-owned utility and transportation companies, have since joined the service. Following the launch of e-payments in 2016, the e-banking entity distributed 16,000 electronic payment terminals to supermarkets, restaurants, and shops, for use by customers who have bank accounts.

**In 2018, the Central Bank of Algeria encouraged financial inclusion, but roll-out of DFS has stalled** (OBG 2017). The 2018 policies referenced previous laws that opened the banking sector to new actors and emphasized the rights of all Algerians to a bank account. The rules made installation of electronic payment terminals mandatory for all businesses. However, shopkeepers have resisted. Demand for card payments is low, and there is weak enforcement (OBG 2019a). Although DFS are available in Algeria, adoption has not been widespread and the number of e-wallet options available is limited.

**Recent regulatory reforms to improve the business climate may spur DFS investment.** A new legal framework for the protection of personal data was adopted in May 2018 (OBG 2017). Algeria introduced a biometric ID card in 2016 that enables access to e-government services like voter registration, tax collection, and passport issuance, and can be leveraged to facilitate DFS (GSMA 2019a). A key gap remains in the area of consumer protection laws, which are weak (Maranis 2019).

**Compared with other countries in the region, Algeria's use of mobile phones is largely for talking and texting.** MENA countries generally have a more engaged consumer profile than Algeria in regard to mobile phones, where smart phone penetration is less than the regional average. Algeria has lower use of phones for social networking, e-commerce, or financial services (GSMA 2019b).

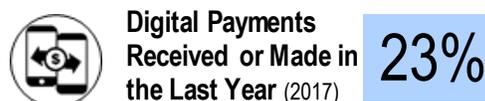
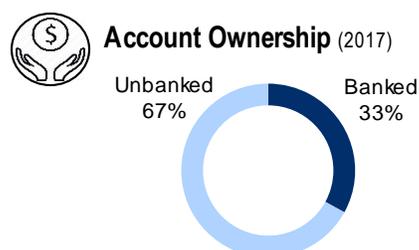
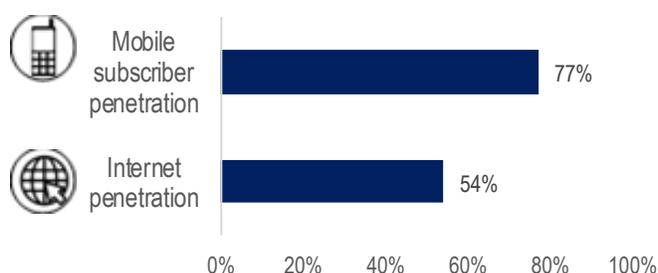
**Due to its current political transition and social unrest, policies to promote financial inclusion may not receive attention.** There have been persistent widespread protests and demonstrations as the government installs new leadership and economic conditions worsen (Al Jazeera 2020).

# Egypt

**Key takeaway:** Egypt has the most dynamic DFS environment in the region, enabled by political leadership on financial inclusion. New policies mandating public sector use of e-payments and easing documentation requirements to open accounts are spurring investments in e-payment platforms. DFS is currently seeing an annual growth of 30 percent.



 **Total Population:** 98.7 million (2018)  
**Rural Population:** 57%



Egypt is a stable state following a revolution in 2011 and military coup in 2012. The current president has been in power since 2014. The country has one of the largest and most diversified economies in the region, but an estimated 32 percent of its citizens live below the national poverty line, with higher rates in rural areas (World Bank 2020a). There is a large informal workforce, constituting 40 percent of GDP. The government has implemented an economic reform program to stabilize the economy and has prioritized improving its business environment and the efficiency of government services.

## Health Sector Overview

Egypt's health system is fragmented and includes a variety of health management and health service delivery entities belonging to the public, private, and quasi-public sectors. The public health sector consists mostly of primary care units and hospital networks, in addition to university hospital centers. The majority of hospitals, primary health care clinics, and pharmacies in Egypt operate in the private sector, both for-profit and nonprofit.

While Egypt's private health sector has grown significantly in the past several decades and policies aimed at facilitating cross-sectoral communication between public and private health sectors exist, the Government of Egypt's partnership with the private health sector has been limited. The quasi-public health sector is mostly supported by the country's largest health insurance provider, although often larger government institutions and larger companies opt out of this scheme in exchange for independent insurance providers and health services. Fee-for-service is the dominant method of payment. Health insurance schemes, both public and private, cover only part of the population and remain modest in terms of benefit packages ( SHOPS Plus and HFG 2018).

## Digital Financial Services

**Egypt's sustainable development strategy, Vision 2030, makes financial inclusion a national priority.** Led by the Central Bank of Egypt, the country is promoting e-money as a critical pathway to financial inclusion. To establish itself as a leader of financial inclusion in the region, Egypt has focused its efforts on coordination between regulators and financial service providers and increasing confidence in DFS (Khalil 2018). Due to its large population, high percentage of the unbanked relative to other stable states in the region, and a mobile phone penetration rate of 109 percent, a number of international partners have recognized the potential for Egypt to bring significant numbers of people into the formal financial sector. The World Bank's Financial Inclusion Global Initiative and AFI are both providing technical assistance through multi-year activities aimed at introducing international best practices, advancing research, and accelerating financial inclusion.

**Comprehensive policy reform to promote DFS is underway.** Egypt's efforts to spur economic development through financial inclusion include the establishment of a National Council for Payments in 2017, chaired by President El-Sisi. Under leadership of the Central Bank of Egypt, the Egyptian government announced in April 2018 the launch of the National Strategy for Non-Banking Financial Activities (2018-2022), which aims to enhance the ability of non-banking financial institutions to be partners in serving the national economy (Adam et al. 2019).

**The Central Bank has mandated service interoperability, which ensures users of one service can transact with users of another service.** Mobile banking providers are required to link to one another through a shared network known as Ta7weel. Ta7weel is jointly managed by the Central Bank of Egypt, the Ministry of Finance, and national and commercial banks (Ismail 2020). Payments must be executed by licensed financial service providers, with technology providers facilitating interaction with the customer, but these terms are under review (Amereller 2018).

**Tiered KYC requirements reduce the burden of producing extensive documentation for small account holders.** New Customer Due Diligence procedures for mobile payments have been designed to balance the risks of fraud and money laundering with the benefits of expanding access. Additional changes are under consideration to allow electronic identity checks so that accounts could be opened without the customer present, and to allow mobile money transfers from abroad without requiring users to open a bank account in Egypt (CBE and AFI 2019).

**Mandatory adoption of e-payments is a first for the MENA region.** Egyptian Decree No. 18 passed in 2019 requires public institutions and private companies to make all payments of salaries, suppliers, insurance, subsidies, and leases in electronic form. These provisions are to be enforced by fines. The government is in the process of installing point-of-sale machines at 22,000 government offices (Ismail 2020).

**Egypt approved a regulatory sandbox to encourage innovators to test new products under waivers.** In 2019, the Central Bank of Egypt established a \$58 million fund to invest in fintech start-ups. The first pilot cohort gained access to the sandbox in June 2019 and has been focusing on digital KYC applications (Fintech News Middle East 2019).

**Growth of DFS is driven by the government e-payment system.** Use of mobile payments grew 30 percent between 2017 and 2018, with 56 percent of adults making or receiving a digital payment (CBE and AFI 2019). One of the levers for this growth is the government's Meeza scheme, the Egyptian National Payment Scheme for pensioners, civil servants, and subsidy

recipients (Mounir 2019). Meeza payments can be made through phone or digitized cards, with 19 banks licensed to issue Meeza cards. Meeza subscribers can receive electronic government payments, transfer funds, and shop online using Meeza's payment gateway, PayFort. As of December 2019, 4 million Meeza cards have been issued (Egypt Today 2019).

**The number of DFS providers is growing.** The government signed MoUs with both Visa and Mastercard to extend digital services to Egyptians without bank accounts (ALEXBANK 2017). One of the largest payment-processing companies in Egypt is Fawry, established in 2009. Fawry enables phone-based transactions such as bill paying, charitable donations, government services, and mobile top-ups without the need for a bank account. Fawry currently services 20 million customers who conduct transactions through more than 100,000 locations (Nabil 2019). All four mobile network operators offer DFS products to their subscribers.

**Many barriers remain for reaching the most marginalized with useful services.** DFS may include transaction fees that the poor cannot afford, deterring use. Many people simply lack money to open accounts (Rashdan and Eissa 2019). High commission rates charged by banks and payment gateways are particularly problematic for small payments such as for transport, scratch cards, or items from kiosks. Both merchants and consumers need incentives to encourage their participation in the formal economy (Khalil 2018).

**Egypt is taking steps to address the gender gap in use of DFS.** Compared with men, 10 percent fewer women in Egypt have ever used financial accounts (Demirgüç-Kunt et al. 2018). Egypt's Vision 2030 sets women's financial inclusion and economic empowerment at the "heart of the national development reform agenda" (CBE and AFI 2019). Priority areas include: obtaining accurate gender-disaggregated data from banks, expanding the reach of DFS, and encouraging the use of e-payments. The Central Bank of Egypt and the National Council for Women signed a MoU to cooperate in empowering Egyptian women economically and financially, and accelerating women's entrepreneurship (ALEXBANK 2017).

Egypt's efforts to promote women's empowerment are supported by a joint program of AFI, the Arab Monetary Fund, and GIZ called the Promotion of the Microfinance Sector in the MENA Region (MFMR). MFMR launched FIARI to formulate a regional action plan to close the gender gap. The strategy set targets for women's financial inclusion, established a mentorship program to promote women leaders, and identified rural women facilitators to raise awareness around financial education (GIZ n.d.).

**Awareness of DFS options and economics remains low, with gaps in understanding how electronic money would be beneficial.** Consumers mistrust DFS, fearing fraud, loss of privacy, and other risks using digital payment channels. The government has launched social behavior change campaigns to increase consumer interest, motivation, and confidence, urging everyone to enroll in financial accounts to benefit their own financial standing as well as the country's economy (Nabil 2019). Additional efforts are needed to build financial and digital literacy. Challenges also exist due to Egypt's expansive geography, with large areas where there are no DFS agents or points of service.

## Iraq

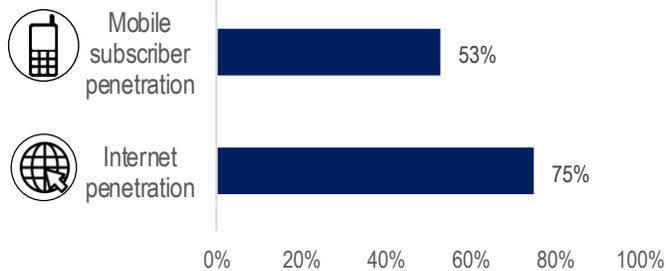
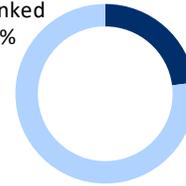
**Key takeaway:** Iraq remains one of the Middle East region's most underbanked countries and access to financial services is underdeveloped. The Central Bank of Iraq is taking positive steps but ongoing conflict and political upheaval make it unlikely that substantial reforms will take place in the near future.



 **Total Population:** 38.4 million (2018)  
**Rural Population:** 30%

 **Account Ownership** (2017)

Unbanked 77% Banked 23%



 **Digital Payments Received or Made in the Last Year** (2017) **19%**

Iraq has been devastated by cycles of war, violence, terrorism, and massive population displacement. It faces an economic contraction stemming from the collapse of international oil prices, compounded by its political and social turmoil. Oil resources sustain the economy, and institutions are state-run. Mass demonstrations began in October 2019 over socioeconomic grievances including high unemployment and lack of basic services such as electricity and clean water (Shbaikat, Dehmej, and Hegazy 2019). The Prime Minister resigned in December 2019, although as of early 2020 he remains in a caretaker role. The workforce is largely public sector, and many salaries are paid in cash.

### Health Sector Overview

Iraq's health care system is fragile as a result of decades of conflicts in the country. Persistent issues include lack of access to health services, especially for rural populations, medicine shortages, damaged infrastructure, inadequate funding, and a loss of health workers. The public sector dominates the health care system, but private entities provide a significant portion of care in urban areas. The Government of Iraq has laid out national health policies and strategies to improve the country's health system but regulation, standardization, and implementation have not been operationalized. Aside from provider referrals, coordination and interaction between public and private sectors is uncommon. Significant socioeconomic disparities exist regarding private sector service uptake: Iraqis belonging to a higher socioeconomic status are much more likely than poorer populations to seek health care from private facilities. Health insurance for the general population is non-existent and out-of-pocket expenditures are high (SHOPS Plus and HFG 2018).

## Digital Financial Services

**While Iraq does not have a formal strategy for financial inclusion, the Central Bank of Iraq has launched schemes to promote it.** The Central Bank's efforts include steps to modernize payment systems, promote electronic payments, and encourage banks to open more branches (Shbaikat, Dehmej, and Hegazy 2019). The Central Bank aims to improve regulations and strengthen supervision, including taking steps to address money laundering and the financing of terrorism. The Bank is engaged in efforts to improve the architecture of the financial sector such as developing a deposit insurance scheme. The Central Bank signed a MoU with Mastercard in 2018 to foster Iraq's "emerging digital payments ecosystem" (Mastercard 2017). While these are positive steps, Iraq's financial sector is underdeveloped compared with other MENA countries and further reforms are needed (Shbaikat Dehmej, and Hegazy 2019).

**Iraq has successfully deployed large-scale DFS to streamline public sector payments.** Approximately 7 million Iraqis – about one-sixth of the population – now receives public sector salaries and welfare benefits through biometric debit cards called Qi cards, deployed through the ISC's electronic payment system (Cornish 2019). The ISC is a company jointly owned by private investors (70 percent) and state banks (30 percent). Its Qi cards use biometric data such as iris scans to identify users.

Prior to implementation of the cards, public sector employees received their salaries in cash, and recipients of pensions and welfare benefits collected the payments from public bank branches on one designated day every two months – a substantial inconvenience. With the Qi cards, the recipients obtain payments electronically each month. Moreover, ISC created a network of local agents to convey benefit payments to people who are physically unable to travel to a branch. As noted by the company's chief executive, "We had salary-to-home delivery when at that time pizza delivery was not available in Baghdad" (Cornish 2019).

**The impact of the Qi cards is significant.** ISC's technology helped to eliminate thousands of fraudulent beneficiaries. The company expanded to providing access to loans: in 2018, it facilitated \$2 billion in loans from Iraq's largest bank to Qi cards. Sixty percent of the borrowers used their loans to launch small businesses. Currently, ISC is looking to expand to other MENA countries such as the West Bank and Gaza and Libya (Cornish 2019).

**Beyond the Qi cards, three digital wallets have launched in recent years.** Taif eWallet was established in 2016, the product of a partnership between Taif Money Transfer, Iraq's largest remittance company, and Ideal Payments, an electronic payment provider (Finextra Research 2016). The entrepreneurs, who have experience with Goldman Sachs and the Trade Bank of Iraq, aim to create a solution for the unbanked that allows them to receive their salaries in the app, pay for fees, and send money to friends and family. Two other digital wallets, ZainCash and Asia Hawala, were launched in 2015 (Fintech News Middle East 2018). Their impact is not yet clear.

**Iraq's prolonged conflict and political crises have dramatically affected its telecommunications infrastructure.** Iraq's telecommunications market is one of the least developed in the MENA region due to the country's fragility. The mobile sector comprises three major operators that are all associated with foreign companies: Zain Iraq, Asiacell, and Korek Telecom (BuddeComm 2020). The operators have been struggling to maintain their networks and have not invested significantly in infrastructure. In 2018, the International Finance Corporation provided \$269 million to Zain Iraq to help the company improve the capacity and quality of its 3G network, expand coverage to underserved areas, upgrade its networks in northern Iraq, and stimulate economic growth (ReliefWeb 2018). Restoration of networks

damaged by war has contributed to some growth in mobile data usage and revenue (BuddeComm 2020).

**Iraq's banking system needs restructuring due to a low deposit base and low capitalization.** Needed reforms include improved cybersecurity and reduced costs for users (Shbaikat, Dehmej, and Hegazy 2019). The International Monetary Fund recommends policies to promote stronger competition from private banks in order to promote innovation and diversification of financial products, especially for small businesses.

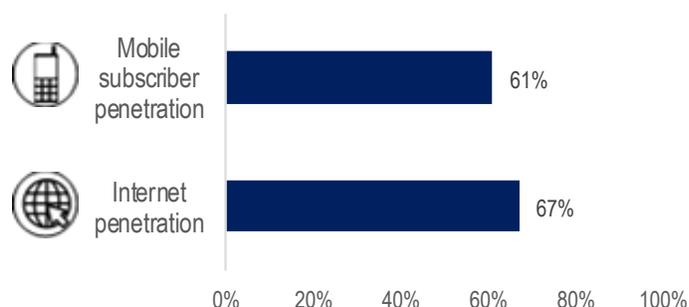
**Consumer trust in banks is very low due to years of corruption and weak governance.** Public banks lack independence from government officials. The lack of comprehensive published audits and an operational deposit insurance scheme undermines confidence in the financial system (Shbaikat, Dehmej, and Hegazy 2019). There is no framework for consumer protection in financial services (Saleh and Yeon 2018).

## Jordan

**Key takeaway:** Financial inclusion is a high priority in Jordan. DFS access is improving, bolstered by international partnerships and a strong ICT infrastructure, but access is concentrated in urban areas. Foundational regulations have been implemented, but there are key gaps. Programs are in place to help strengthen digital literacy.



 **Total Population:** 9.9 million (2018)  
**Rural Population:** 9%



Jordan is a politically stable country that has taken in more than 670,000 registered Syrians (IRC, n.d.). Unregistered refugee numbers are estimated to be higher. Slowed economic growth and rising public debt have contributed to Jordan's 18.7 percent unemployment rate (World Bank 2019e). Due to the availability and quality of jobs and the higher wages in the GCC, many Jordanian workers have migrated (Mryyan 2012). An estimated 14 percent of the population lives below the national poverty line (World Bank 2019e). Having few natural resources, Jordan has developed a strong ICT ecosystem that is supported by a highly educated workforce (Statham 2019).

### Health Sector Overview

The Jordanian health sector is relatively well developed and provides a range of both advanced medical services and basic primary care to most citizens at low cost. Jordan's health system is diverse and fragmented with multiple public, semi-public, and private programs both financing and delivering care. The public sector is dominated by the Ministry of Health; the Royal Medical Services, which serves the armed forces; and the university hospitals, Jordan University Hospital and King Abdullah University Hospital. The Jordanian Association of Manufacturers of Pharmaceuticals works with the Jordanian Food and Drug Administration and Ministry of Health to develop and enforce pharmaceutical legislation and guidelines. Though the public sector is dominant, the private sector, both for-profit and nonprofit, plays an important role in service delivery. A 2017-2018 Population and Family Health Survey indicates that 58 percent of women and 50 percent of men age 15-49 have some type of health insurance coverage, most with the Ministry of Health or the Royal Military (SHOPS Plus and HFG 2018).

### Digital Financial Services

**In 2015, Jordan introduced the National Financial Inclusion Strategy, the first in the Arab region.** Supported by AFI and GIZ, Jordanian policy makers developed a roadmap and governance structure in 2017 to enable DFS (GIZ 2019). The Strategy included targets for

digitizing government payments, enhancing the regulatory oversight of agents, expanding cross-border remittances, automating dispute resolution, and publishing comprehensive rules (GIZ 2017).

In 2019, the Central Bank of Jordan mandated that no bank can refuse any customer the ability to open a basic bank account. The new rules include simplified due diligence procedures associated with opening accounts and no minimum balance requirement. This new measure is intended to improve the culture of saving, contribute to improving living standards, and boost economic development (The Jordan Times 2019).

**Jordan has a high level of interconnectivity among service providers.** JoMoPay is the national mobile payment switch infrastructure that enables low-cost purchases and bill payment transactions, as well as other transaction types. Five Payment Service Providers comprise Jordan's e-wallet sector, and all must interface with JoMoPay. Al Holool, with its products branded Mahfazti, Dinarak, and Zain Cash, has the largest number of registered subscribers. Aya Pay and Middle East Payment Services are nascent (Nzebile and Denadi 2019). Thirty banks and financial institutions now offer e-payment services through eFAWATEERcom, an online bill payment service (The Jordan Times 2018).

**Refugees applications are a major focus of innovation in DFS.** The large population of Syrian refugees in Jordan receives support from UNHCR and its partners. Several initiatives are addressing refugees' urgent need for financial services with research and partnerships. The GIZ-funded Digi#ances project is focused on improving access to cross-border transfers with a focus on refugees in Jordan (Funke and Sindlinger 2019). The MM4R project, funded by the Gates Foundation, is also aimed at expanding refugee access to DFS.

**Regulatory gaps inhibit growth of DFS.** In a comprehensive report by USAID's LENS project in 2019, a number of regulatory gaps were identified: low cash-in/cash-out limits, which limits use of DFS for remittances, the lack of clarity on tax requirements, the lack of authorization for electronic signatures, restrictions on MFIs taking deposits, a low commission structure for DFS providers, and the lack of an approved standard for card-based technologies (Nzebile and Denadi 2019).

**Barriers to DFS use include low financial literacy and a cultural preference for cash, similar to other countries in the region.** For those with mobile wallet accounts, only an estimated 20 percent are active (Nzebile and Denadi 2019). Consumers are unclear on how to use mobile wallets and the role of JoMoPay, which is an enabling backbone payment system rather than a customer-facing service. Customers also are constrained by low cash-in/cash-out limits (Statham 2019). Consumer awareness campaigns are needed to educate consumers about the simplified rules for opening an account and resolving potential disputes. To address this gap, Jordan's DFS Council launched the DFS Financial Literacy Strategy that is developing standardized communication plans and materials. The Ministry of Education has instituted a mandatory Financial Literacy Program on money management and saving for students in grades 7 through 12 (Nzebile and Denadi 2019).

**DFS are not available where they are most needed.** Bank branches are concentrated in Amman (60 percent). MFI branches are more well-distributed across governorates than banks, with 34 percent of MFI branches in Amman (Hauser et al. 2017). Service providers have not yet developed substantial agent networks, which require substantial resources to manage (Nzebile and Denadi 2019). Efforts to address these gaps are underway. The MM4R project is collaborating with the Jordan Post Company to use its branches as DFS agents for all mobile payment providers (JoPACC 2019). Jordan Islamic Bank is prioritizing inclusion of woman and

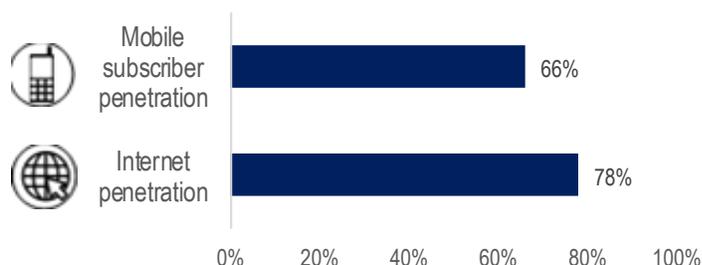
rural populations in its services. The bank currently serves 177,000 customers, and helps build awareness through workshops and seminars (World Finance 2019).

## Lebanon

**Key takeaway:** Lebanon has made some progress toward financial inclusion, but non-banks have not yet been authorized to provide DFS, limiting innovation. Lebanon faces serious challenges to the expansion of DFS, foremost an economic crisis and high-cost mobile services.



 **Total Population:** 6.8 million (2018)  
**Rural Population:** 11%



 **Digital Payments Received or Made in the Last Year (2017)** **45%**

Lebanon has been in a state of economic emergency since September 2019. Until the past few years, the banking sector was a strong pillar of the Lebanese economy despite political and security instability. Lebanon has historically received substantial remittances from the expansive Lebanese diaspora (Haboush 2019). Lebanese workers in the Gulf contributed about one-fifth of Lebanon's GDP and between 43 and 60 percent of remittances in 2015. However, remittances have been declining in the past few years, largely due to tensions between Lebanon and Saudi Arabia. Remittances to Lebanon decreased by 7 percent in 2017 and are expected to stagnate or fall (Alami 2018). As the government accumulated debt, the banking sector expanded to 425 percent of the country's GDP (Haboush 2019). Lebanon's other main revenue-generating sectors, real estate and tourism, are also not faring well (Alami 2018). These declines, combined with decades of waste and poor governance in the public sector as well as tremendous debt and diminishing trust in the banking sector have led to a financial crisis, street protests, and the resignation of the Prime Minister in October 2019.

### Health Sector Overview

In Lebanon, for-profit and nonprofit private health entities dominate the health care system. Primary, secondary, and tertiary care, including specialized and general medical services, are available through the private health sector. Most providers who practice in Lebanon and over 90 percent of laboratories and pharmacies are part of the private health sector. However, regulation of both private and public services through the Lebanese government is limited. The Ministry of Public Health plays a significant role in health care with contracting through both government and private facilities. Slightly under half of Lebanese citizens are covered by health insurance schemes, with the remaining uninsured citizens able to use services provided by the Ministry of Public Health. The dominant sources of health financing in Lebanon are out-of-pocket expenditures and private health insurance (SHOPS Plus and HFG 2018).

## Digital Financial Services

**Lebanon lacks a national strategy for financial inclusion.** Political instability has hampered efforts to pass enabling legislation related to promotion of financial literacy, and data privacy and security. Bank account ownership is relatively high for the region, but low for rural low-income populations (Holtmeier 2019). Most financial transactions are conducted at financial access points such as ATMs and bank branches (Clark and Iradian 2016).

**Non-banks are not authorized to offer financial services.** In June 2019, the Central Bank of Lebanon issued a statement indicating its intention to license and supervise fintech companies, but no progress has been made (Holtmeier 2019). The regulatory framework limits opportunities for innovation and DFS growth. Electronic signatures are not allowed, creating transaction burdens (Clark and Iradian 2016).

**In 2018, Lebanon launched its first digital strategy, a four-year roadmap that places digital transformation at the center of public service reform.** The strategy includes the development of a payment platform that individuals and businesses can use to pay for all manner of government services. The government strategy is inward-focused and does not advance DFS development outside of government activities (Republic of Lebanon Office of the Minister of State for Administrative Reform 2018).

**Several bank-led digital services have been developed.** PinPay, the Lebanese market's first mobile payment app, was launched in 2011. PinPay users must have a bank account with one of PinPay's partners in order to use the app – it does not target the unbanked (IDAL 2018). While the application has established itself as the national leader, anecdotal evidence suggests it may be largely inactive or underused. Other bank-led DFS have been created including Bank Audi's Tap2Pay, Fransabank, and a mobile payment option by the CSC Group, a financial institution regulated by the Bank of Lebanon (Farhat 2014). Banks continue to develop new services; in 2019, the commercial Bank of Beirut launched the mobile payment app DiGi (AMEInfo 2019).

**Lebanon is launching its first fintech hub, StartechEUS FinHub, at the Beirut Digital District.** The role of the "Levant home of fintech" is to accelerate and incubate fintech start-ups developing solutions in mobile applications, blockchain, and artificial intelligence. Working with the Central Bank of Lebanon, the hub provides financial support to promising fintech players and operates a learning center (Consultancy-me 2019). However, recent start-ups Anachron and Juno report that they are unable to locate bank partners and have exited Lebanon due to regulatory uncertainty (Holtmeier 2019).

**The development of DFS is constrained by weak ICT infrastructure and high costs.** The telecommunications industry is largely state owned and strictly governed. The state-owned company, Ogero, owns the infrastructure for phone and internet connections, and two state-run mobile phone companies dominate the market (Hodali 2019). Costs for cellular data are high, and internet services are slow (Clark and Iradian 2016).

**Lebanon is host to a large number of Syrian refugees, creating pressure on public sector support.** Lebanon's refugee populations are receiving financial benefits from humanitarian organizations through pre-paid ATM cards, which serve as an entry point for DFS expansion. Around 33,000 refugee families receive multi-purpose cash transfers from UNHCR digitally, and this number is expected to rise significantly (UNHCR Lebanon 2019).

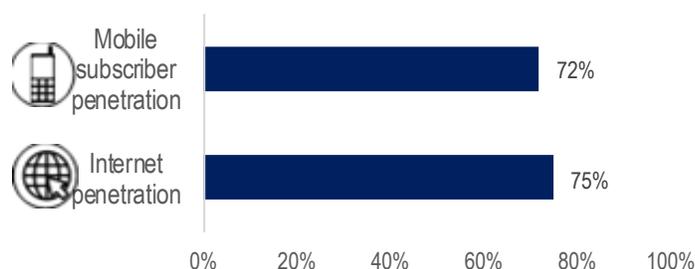
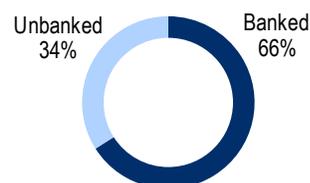
# Libya

**Key takeaway:** Regulatory reform is needed to catalyze widespread adoption of DFS. Libya's economic and political instability make progress on financial inclusion unlikely in the near term.



 **Total Population:** 6.7 million (2018)  
**Rural Population:** 20%

 **Account Ownership** (2017)



 **Digital Payments Received or Made in the Last Year** (2017) **32%**

Libya is an unstable state in its ninth year of civil war and political unrest, with two rival factions vying for power. Its economic and security crises have facilitated the proliferation of non-state armed militias and weakened government institutions. Local institutions are largely unable to provide protection and basic services, especially for those already affected by the conflict. The financial system has faced a protracted liquidity crisis leading to long lines at banks and mistrust of financial institutions (Kırıkçioğlu 2019). Health care has deteriorated as the humanitarian crisis continues, with decreasing medical supplies and a struggling health care system (Valle Ribeiro 2017).

## Health Sector Overview

Due to the civil conflicts, Libya's health care system faces severe regulatory and service provision shortages. Of the few health facilities that are functioning in Libya, many face issues with resource availability and overwhelming numbers of patients. A significant number of health facilities no longer exist due to destruction or electricity or water shortages. Approximately 1.9 million people in Libya are in need of humanitarian aid because in-country health care services have essentially collapsed. Before 2014, the Libyan health care system was fairly functional but relied significantly on assistance from foreign health staff and the private sector was noted as "emerging." The private health sector has suffered severely since then, and the social and political conflict has been significantly detrimental to its presence in Libya. The Libyan government discussed plans for national health insurance coverage through social health insurance schemes, private insurance, and welfare funds in 2009, but these plans were never implemented. Before Libya's major conflict years, service delivery funding sources for the private sector were primarily households, out-of-pocket expenditures (fee-for-service), and government contracting (SHOPS Plus and HFG 2018).

## Digital Financial Services

**Libya aspires to introduce DFS, which could help address its dual challenges of a liquidity crisis and a thriving black market for currency.** The Central Bank of Libya adopted regulations in 2018, but critical reforms needed to improve the macroeconomic situation have not been possible under dual political authorities. A major reason for the liquidity crisis is the lack of infrastructure for electronic payments and deposit or credit card usage, leading to long lines at banks (Kırıkçioğlu 2019).

**Libya has one of the highest rates of mobile phone subscriptions in the region, but service is unreliable.** In spite of infrastructure damaged during the conflict, Libya's mobile penetration is reported at 170 percent. This provides a strong basis for better leveraging technology to transition away from cash-based transactions. Investment in mobile broadband has been slow, contributing to uneven internet access (Justice.gov 2019).

**The majority of banks and telecommunications companies are state-owned, reducing incentives for innovation.** Card-based services, a form of DFS, are offered by the major banks, but use of credit cards and debit cards is limited. In 2017, there were just 12 ATMs per 100,000 people, but point-of-sale terminals have been proliferating in shops and businesses in urban areas (Mercy Corps 2017). Two mobile operators and several banks offer electronic payment services, but there has been limited traction in the market.

**DFS initiatives launched by private companies are in early stages.** A mobile wallet introduced by MIZA, a fintech company, has enrolled 300,000 users since 2017 (Hinchberger 2019). Medicate, launched in 2019, is the first Libyan company to issue health cards including options to receive discounts and make payments (Medicate Int., n.d.). Earlier start-ups such as mobile wallet provider Floos-E exited the market due to poor consumer response (Ramali 2019).

**Libya's preference for cash-based transactions is attributed to weak regulatory oversight and mistrust in the banks.** A revised telecommunications regulatory framework drafted in 2014 has not been approved (Mercy Corps 2017). A consumer protection law drafted in 2010 have still not been adopted (Justice.gov 2019). Bank resources were drained following the revolution in 2011, and many financial transactions take place on the black market due to low confidence in ability of banks to safeguard deposits (Kırıkçioğlu 2019).

## Morocco

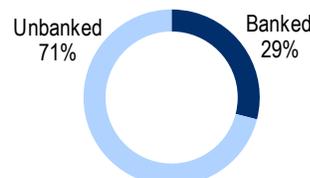
**Key takeaway:** The Moroccan government has demonstrated its commitment to financial inclusion. The liberalization of banking laws in 2015 paved the way for new entrants to provide DFS, including the introduction of the national DFS platform, M-Wallet, in 2018. More than a dozen licenses have been issued, but the market is still emerging.



**Total Population:** 36.0 million (2018)  
**Rural Population:** 38%



**Account Ownership** (2017)



Mobile subscriber penetration 71%



Internet penetration 69%

0% 20% 40% 60% 80% 100%



**Digital Payments Received or Made in the Last Year** (2017)

**17%**

Morocco enjoys political stability and is one of the MENA region's most financially developed countries. Financial inclusion and the expansion of the country's banking sector has been a national priority in Morocco for nearly a decade, and the government continues to roll out pro-poor reforms (World Bank 2020b). Morocco has a mature mobile market and a mobile penetration rate which is among the highest in the region. Smart phones account for about 80 percent of all mobile phones in use (Bombourg 2020).

### Health Sector Overview

Morocco's health system comprises both private and public sectors. The Ministry of Health provides a significant proportion of services to the population such as public health programs and other basic services, and is also responsible for regulating such services. All citizens of Morocco are eligible for health care in ministry facilities, although the quality of these services has come into question. Issues with health facilities often include staff shortages and disparities in accessibility to health services due to geographic location. The private health care sector in Morocco is substantial, provides both specialized and general care, and employs almost all pharmacists, approximately half of doctors, and about 10% of paramedics in Morocco. A quasi-public health sector consists of clinics and health centers and is managed by the health insurance associations. As of 2017, the country's two public health insurance schemes coupled with private health insurance plans covered approximately 62 percent of the population of Morocco. In the private sector, most patients pay out of pocket on a fee-for-service basis (SHOPS Plus and HFG 2018).

### Digital Financial Services

**Morocco maintains an active agenda for the development of DFS.** As a long-time member of AFI, Morocco's central bank, Bank Al-Mahgrib, is recognized for its commitment to financial inclusion. Morocco laid out an ambitious digital strategy in 2016 called "Maroc Digital 2020,"

which aimed to “combat the digital divide,” expand the digital market, and expand access to the internet (Foch and Rossotto 2016). Morocco’s National Financial Inclusion Strategy is sustained through a collaboration between the Ministry of Economy and Finance and Bank Al-Maghrib, and is still in the strategy stage (EIU 2019). The strategy includes eight levers, with a particular focus on the most excluded populations (unemployed women in rural areas, youth, and small businesses).

**Morocco expanded access to banking in 2010 through postal service accounts.** This initiative created a subsidiary banking institution, Al-Barid Bank, which targeted low-income populations and made significant strides in the number of adults with bank accounts, adding approximately 400,000 to 500,000 accounts per year (Apolitical 2017).

**In 2015, a new banking law laid the foundation for the expansion of the financial sector to non-banking stakeholders** (OBG 2019b). Morocco’s earlier efforts to promote DFS beginning in 2010 failed to gain traction in the market, with very low use of bank-led products such as MobiCash (Women’s World Banking 2017). Under the new law, fintech companies, mobile operators, and others are able to apply for a payment license to provide financial services or issue e-money (Women’s World Banking 2017). More than a dozen licenses have been issued, including both mobile money providers (Maroc Telecom Cash, Orange Money, inwi money) and mobile banking options (BMCE’s Pocket Bank, Attijariwafa’s Wafa Cash, ABB’s Barid Pay) (Ecofin Agency 2018).

**Morocco’s Central Bank Al-Maghrib and the National Telecommunications Regulatory Agency launched a national mobile payments platform called M-Wallet in late 2018.** The platform is intended to reduce the use of physical cash, and will support peer -to-peer transfer, merchant payments, and basic deposits and withdrawals at participating agents (OBG 2019b). Providers must connect with other platforms under mandatory interoperability requirements.

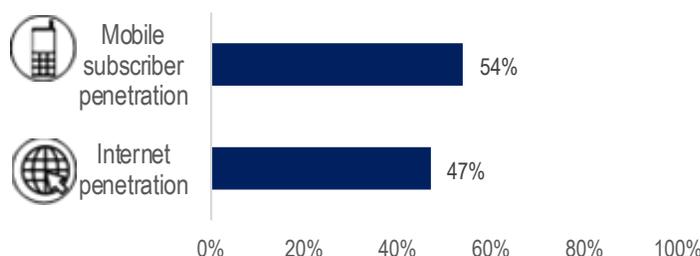
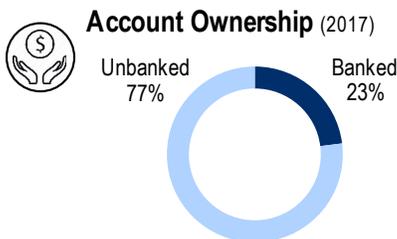
In November 2019, Morocco announced the award of a contract for a biometric ID card for all Moroccans, designed to make online transactions more secure and increase consumer confidence (Business Wire 2019).

# Syria

**Key takeaway:** Government plans to digitize basic services and transactions have not progressed. News stories report high reliance on informal money traders to get money into the country. For regime-controlled areas, there are recent efforts to transition to online payments for some government services.



**Total Population:** 16.9 million (2018)  
**Rural Population:** 36%



**Digital Payments Received or Made in the Last Year (2017)** N/A

Syria’s ongoing civil war has harmful ramifications on all aspects of society, including the country’s economy, infrastructure, demography, and health. While the war may be near to a close, there is no clear path to restoration. The economy is one-third of its pre-war size, and the value of the Syrian pound halved over the past year (Cornish and al-Omar 2020; Rosenberg 2020). More than 80 percent of people live below the poverty line (Makki 2018), and two-thirds of the population are refugees or internally displaced (Rosenberg 2020). Outside of areas held by the Syrian regime, formal banking services have long been shut down (Hogan 2016).

## Health Sector Overview

Prior to the severe conflict in Syria, the country’s Ministry of Health was the central provider of health care, although the private sector was also well established. The public sector provided care to Syrian citizens at no cost and was overseen by the ministries of Health, of Higher Education, of Defense, and of Social Affairs and Labor. Approximately 95 percent of the rural population had access to health care services. Health care financing came mostly from government spending and out-of-pocket payments from Syrian citizens. Dual practice between the private and public sectors was common.

Syria currently faces immense challenges in its health sector due to its humanitarian crisis. Approximately half of hospitals and community health centers are closed or not functioning at full capacity. Provider and staffing shortages are a main challenge, as many trained personnel have fled the country. Other effects of long-term high-intensity conflict have permeated the Syrian health care system in the past several years and led to its deterioration including lack of funding, infrastructure challenges, and basic resource shortages (SHOPS Plus and HFG 2018).

## Digital Financial Services

**There is limited information on Syria that is reliable and up-to-date.** The Central Bank of Syria is a member of the coordinating body FIARI but has not been an active participant. Recent news stories report that the government of Syria is rolling out an online payment system in 2020 (Enab Baladi 2019). This is led by the Syrian Electronic Payments Company, a company aligned with the Syrian Central Bank and other regime entities. The company is working on two payment channels: one for Syrians with existing bank accounts and the other “the internet bank.” The details regarding the latter are unclear. A pilot is underway with communication, transportation, and water services in two provinces to allow for electronic bill paying.

**Government plans to digitize basic services and transactions have not progressed.** There are currently no government services online (Abdelnour, Darwish, Hafezi 2020).

**A new innovation lab is encouraging Syrian entrepreneurs to tackle pressing challenges and help rebuild the country through digital innovation.** The Syria Digital Lab is a tech incubator founded in 2018 to support Syrian digital innovations. Its mission is to link Syrian tech developers, entrepreneurs, donors, civil society, and the private sector in order to help address the country’s challenges (Seraj 2019; Syria Digital Lab 2020). The initiative is inclusive and aimed at all of Syrian society, within the country and abroad, with a focus on youth (Seraj 2019). Funded by the European Union and GIZ, the Syria Digital Lab offers funding, mentorship, and training. In its first start-up competition, the organization sought applications in education, health, and youth engagement. DFS may be generated through this community.

**The war has taken a heavy toll on Syria’s telecommunications infrastructure.** The regime-controlled capital, Damascus, has fared relatively well while rural and remote areas bore the “brunt of the destruction” (BuddeComm 2019). Telecommunications are decentralized. Urban areas use the (“highly regulated”) government-owned Syrian Telecommunications Establishment’s network. Some remote areas are reliant on expensive satellite communications.

**Digital surveillance by the regime is widespread, and digital systems are not trusted.** The civil war has a digital dimension, with dissidents targeted with cyberattacks and hacking of accounts and websites. Network monitoring systems filter and censor communications (Al Khatib and Xynou 2015).

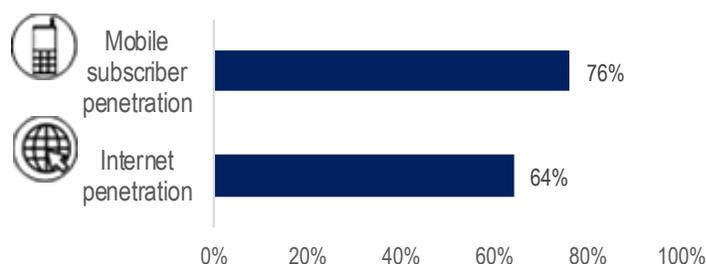
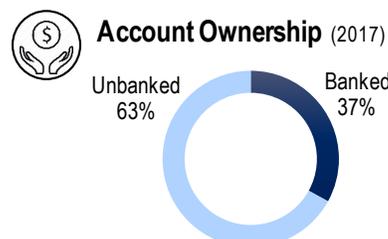
**Since the use of remittances has become extremely difficult amid the war, many Syrians are using in-person networks to transfer money across borders.** Remittances are a lifeline, but channeling them into the country is extremely challenging due to international financial restrictions and sanctions and the unstable environment (Aron 2017). Many people rely on the hawala system, which is a network of informal traders who transfer funds across border, engendering risks. While there is anecdotal evidence that the hawala trade is booming (Hogan 2016), remittances into Syria have not been well tracked since the war began (Aron 2017).

## Tunisia

**Key takeaway:** Tunisia was an early adopter of DFS through its postal network and has made recent investments in a national digital payment platform. New services are just entering the market, several targeting the unbanked.



 **Total Population:** 11.5 million (2018)  
**Rural Population:** 31%



 **Digital Payments Received or Made in the Last Year** (2017) **29%**

Tunisia witnessed a national revolution in 2011, which resulted in widespread protest and violence, but it has transitioned to a democratic political system. Conflicts in neighboring Libya have affected Tunisia's economy. The banking sector has been challenged by high debt, weak governance, and limited liquidity (The Conversation 2017). The country has experienced intermittent political unrest, persistent economic challenges, and lack of employment, particularly for women and youth.

### Health Sector Overview

Tunisia operates in a mixed public-private health system, which is mainly managed by the Ministry of Health and regional directorates. Health care is primarily provided by public facilities, which account for 87 percent of all hospital beds (Arfa and Algazzar 2013). Tunisia has a para-public sector, which provides care for people covered by the country's social health insurance scheme, as well as the semi-public medical services provided by national firms and the private sector. Overall, Tunisia's health system has adequate levels of infrastructure, health professionals, and general medical equipment; however, the system suffers from insufficiently skilled personnel (particularly nonmedical), poor equipment maintenance, and limited regulatory and information system capacities (SHOPS Plus and HFG 2018).

### Digital Financial Services

**The Tunisian Post has long been a driver of financial inclusion.** Bank branches are concentrated mainly in urban areas, and the Tunisian Post network provides financial services to rural populations thus reducing geographic disparities in financial access. Tunisia's first electronic payment service, e-DINAR, was offered via the internet in 2000. In 2008, the Tunisian

Post established e-DINAR SMART cards, which provided virtual account accessibility through the use of smart card technology. In 2010, the Tunisian Post introduced MobiDinar, which allows Tunisians to pay bills, make transfers, and manage electronic wallets (e-DINAR) through their mobile phones (Suedekum and Berthaud 2014).

The Tunisian Post continues to introduce new digital platforms, several in partnership with telecom operators. The Tunisian Post is the most extensive financial institution in the country (Clotteau, Avsec and Grin 2016; Suedekum and Berthaud 2014). As of 2014, approximately half of the banked adult population in Tunisia held financial accounts with the Tunisian Post (Hyunh 2014).

**In 2018, the Ministry of Finance introduced the National Financial Inclusion Strategy** for 2018-22, which is to be implemented by a multi-stakeholder National Financial Inclusion Council (African Development Bank 2019). In 2018, Tunisie Telecom launched Telecomoney, which enables account holders to transact with subscribers to other electronic payment services, a key goal of the government strategy (Donkin 2018).

**New DFS service are proliferating, introduced by telecom operators, government institutions, and tech companies.** MobiFlouss was introduced in 2019 by the Tunisian telecom company. In May 2019, the Tunisian Ministry of Finance launched new digital services, which allow users to pay fines or taxes through electronic methods (Ecofin Agency 2019). The Arab Banking Corporation opened a 24-hour digital bank specifically in Tunisia to encourage a national shift toward digital banking (Adouni 2019). Paymee was launched in June 2018 and allows users to make mobile transactions without a formal bank account. A Tunisian start-up called Kaoun recently introduced a mobile application called Flouci, a mobile application, which allows users to create free bank accounts (Jackson 2019). Another product, MobiPoste, specifically targets the financial inclusion of students, youth, and other individuals who may not be typically enrolled in banking services (Mastercard 2016).

**In spite of growing numbers of accounts, many are inactive and consumer use has been limited.** The transition from a cash-based culture will take time as the service providers improve and adapt their products. Lessons shared by telecom partners launching new services include the need to establish clear roles and responsibilities for the bank and non-bank partners, and the need to invest in strong marketing (Coye Benson et al. 2017).

## West Bank and Gaza

**Key takeaway:** Major policy reforms are in development, supported by international assistance. Structural economic challenges stemming from the Israeli-Palestinian conflict remain obstacles to the advancement of financial inclusion.

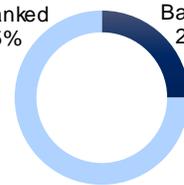


**Total Population:** 4.5 million (2018)  
**Rural Population:** 24%



**Account Ownership** (2017)

Unbanked 75% Banked 25%



Mobile subscriber penetration

45%



Internet penetration

64%

0% 20% 40% 60% 80% 100%



**Digital Payments Received or Made in the Last Year** (2017)

**14%**

The Israeli-Palestinian conflict has ramifications for all aspects of Palestinian life. The Palestinian economy is structurally dependent on Israel, which limits the Palestinian Authority's autonomy in managing its economy. Conflict in Gaza, movement and access restrictions in the West Bank and Gaza, and falling donor aid limit economic growth. Prolonged negotiations with Israel regarding distribution of tax revenues in 2019 exacerbated existing economic challenges, triggering a deeper financial crisis and unstable public funding (Bar'el 2019).

## Health Sector Overview

The West Bank's public health sector is generally overseen by the Ministry of Health and the Military Medical Service under the Ministry of Interior, which serves a significant portion of the population's security forces and their families. The public health sector is highly reliant on external assistance and foreign contributions for its funding. The private sector in the West Bank and Gaza includes both nonprofit and for-profit entities and NGOs, with the United Nations Relief Work Agency (UNRWA) as the largest nonprofit private provider serving Palestinian refugees. Dual practice between private and public sectors is legal and common. Referrals are an integral part of the West Bank and Gaza health care system. Insurance coverage is generally high at around 82 percent. Health financing sources in West Bank and Gaza include taxes, premiums from public sector employees, donors, and out-of-pocket payments.

## Digital Financial Services

**The West Bank and Gaza have adopted a financial inclusion strategy.** The development of the National Financial Inclusion Strategy in 2018 was led by the Palestine Monetary Authority (PMA), the territories' central bank, and the Palestinian Capital Market Authority (PCMA), which regulates non-banking financial institutions, with support from AFI. Hailed by AFI's Executive Director as "smart, realistic, and relevant," the strategy is focused on empowering consumers through stronger protection and education; improving access to quality, relevant financial

services; and closing the gender gap. It aims to increase financial inclusion in terms of current account, bank credit, and insurance holders from 36.4 percent of adults to 50 percent or more by 2025 (Rahn and Kaiser-Yuecel 2019).

**Through international support, the PMA is promoting electronic payments.** To operationalize the financial inclusion strategy, the PMA has implemented several initiatives over the past decade to lower transaction costs, promote development of the West Bank and Gaza's financial sector, and foster its transition toward a cashless economy (Lukonga 2018). In 2018, the Palestinian Authority approved a national plan to cultivate the use of electronic payment methods, which includes developing the legal environment and strengthening the regulatory framework for service providers (Abu Amer 2018). The GIZ-funded Financial Inclusion in the MENA Region program and a regional impact investment fund are assisting the PMA to create a comprehensive fintech strategy, which was to have been completed by the end of 2019.

**The DFS landscape in the West Bank and Gaza is underdeveloped and use is low, but policy changes are beginning to bear fruit.** The leading mobile network operator Jawwal launched in 2019 the first mobile money service, Jawwal Pay (Abumaria 2019). This will provide competition to PalPay, a bank-led services established in 2010 by the Bank of Palestine and PCNC IT Solutions. PalPay has a large network, consisting of more than 6,000 points of sale. Its agent network can now transact on behalf of unbanked citizens, taking cash or credit card payment to electronically pay bills, send university fees, or top-up mobile accounts (PalPay, n.d.).

**Some preconditions for DFS growth and uptake – especially social factors – are promising.** Mobile penetration in the West Bank and Gaza is high, its youth population is the second highest in the 11 MENA countries surveyed, and the society is generally tech-savvy (Rahn and Kaiser-Yuecel 2019). The West Bank and Gaza is one of the largest recipients of remittances relative to GDP. DFS could facilitate connectivity between the physically separated territories of the West Bank and Gaza (Rahn and Kaiser-Yuecel 2019). All of these factors signal promise for DFS adoption, given a conducive political environment and strong legal and regulatory frameworks.

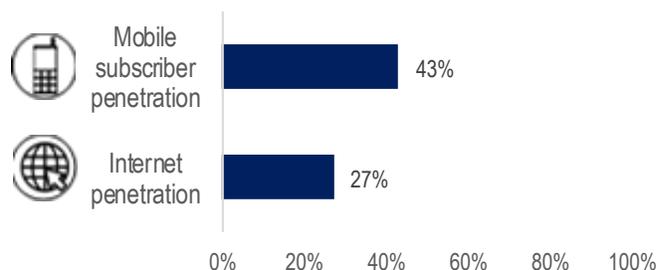
**Cryptocurrencies such as bitcoin have “become a lifeline” for an increasing number of Palestinians.** With the lack of a national currency and dependence of the financial sector on Israel, access to the global economy is constrained for Palestinians, and especially for Gazans, as banks do not deal with Hamas, the Palestinian Islamist political organization and militant group that is the de facto authority in Gaza (Taskin 2019). Lack of access to digital services such as PalPay render it difficult for Palestinian businesses to engage in international business (AlAboudi 2018). In this environment, the use of cryptocurrencies such as bitcoin, is growing, as bitcoin cannot be vetoed by an intermediary (Cuen 2018). Use of bitcoin has especially surged in Gaza (Taskin 2019). The PMA has been considering introducing a digital currency, but it is not permitted to do so per the 1994 Paris Protocol (Jones 2017). There is disagreement as to whether cryptocurrencies offer a sustainable solution to the West Bank and Gaza's financial challenges, including economic concerns and the fact that Gazans regularly face electricity blackouts of 20 to 22 hours a day (UNOCHA 2019).

## Yemen

**Key takeaway:** Yemen's devastating civil war has created a humanitarian crisis, and economic prospects are uncertain. An ambitious partnership among Yemen's 11 banks and private companies have announced plans for its first mobile banking platform. The new service is seeking to connect more than 100,000 retailers.



 **Total Population:** 24.5 million (2018)  
**Rural Population:** 63%



 **Digital Payments Received or Made in the Last Year** (2017) **3%**

Yemen's civil war has resulted in an economic and humanitarian crisis and a decimated health system. An estimated 75 percent of the population lives below the poverty line. If fighting continues through 2022, Yemen will rank as the poorest country in the world (UNDP 2019). While the Central Bank of Yemen has been deeply affected by the civil war, the economy began to show signs of stabilization in 2018 (World Bank 2019g). However, economic prospects are uncertain and depend on the political and security situation. Both electricity and internet are unreliable.

### Health Sector Overview

Yemen's already fragile health system has come under additional strain as armed conflicts have continued. In 2019, the WHO indicated that the emergency health care needs of the population have become so great that health workers are struggling to provide essential health care, and that international and Yemeni health workers are focusing on emergency health provision. Access to health services is deteriorating due to intense fighting, which has resulted in the destruction of health clinics, and increased demand due to internal displacement. Children are especially at risk as 2 million children under the age of 5 are classified as acutely malnourished and living in near-famine conditions (International Medical Corps 2020). In addition to the fragile public sector, international state and non-state stakeholders, including the International Committee of the Red Cross, WHO, Doctors Without Borders, International Medical Corps, and others, are providing assistance and supplementary health sector support.

### Digital Financial Services

**The Central Bank of Yemen first authorized mobile banking licenses in 2014, with the aim of expanding banking services.** Service growth was slow, due to a bank-led model that requires nonbanks such as mobile network operators to operate through banks (Lukonga 2018).

This model limits competition and scope for innovators to reach unbanked populations (GSMA 2015). Mobile banking services were supported by less stringent KYC rules for reaching new population, developed in partnership with USAID, the World Bank, and GIZ (Owens 2015).

**In January 2020, ONE, the go-to-market brand by the National Wallet Company, announced it will soon launch Yemen's first mobile money platform.** The investors are the fintech investment vehicle Murooj, which holds a majority interest in the Yemen Financial Services Company, and the Hayel Saeed Anam Group. The Yemen Financial Services Company is owned by 11 banks and operates Yemen's National Switch interbank network. The National Wallet Company intends to integrate banks, private sector, telecoms, and government institutions for financial transactions. The ONE platform is accessible via basic mobile phones or smart phones and does not require internet access. ONE's key partners are some of Yemen's largest private companies, which have committed their network of more than 100,000 direct and indirect retailers and distributors in Yemen to support this initiative. Yemen's 11 major banks also support the initiative and will ensure the widest possible reach across the country, including more remote communities (Telepin Software 2020).

**Yemen operates a large-scale Government to People program and an emergency cash transfer project.** Cash transfers include social transfers, and wage and pension payments. Emergency cash transfers are typically used for food, schooling, and medicine and are supported by international donors including the World Bank, UNICEF, and the US State Department (World Bank 2018b). Yemen's emergency cash payments could be an opportunity to leverage the newly introduced e-wallet from the National Wallet Company to facilitate access to medicine or health services.

# Implications and Recommendations

The DFS market is still in formative stages in the MENA region. Egypt, Jordan, and Morocco are the most advanced markets, with the most comprehensive regulatory frameworks, stable e-payment infrastructure, and growing number of authorized DFS providers. However, use is still low in all countries. Barriers to growth include low awareness and demand for DFS among underserved populations and a supply side that serves mainly wealthier urban customers. The fragile states of Yemen, Syria, Libya, and Iraq are coping with severe humanitarian emergencies and active conflicts that prevent progress on financial inclusion, but some DFS efforts are proceeding with UN partners. Recent political crises in Lebanon, Tunisia, Algeria, and West Bank and Gaza create uncertainty regarding whether earlier efforts to improve access to financial services will remain a priority.

We conducted this landscape in order to identify opportunities to leverage private sector initiatives in DFS and make progress toward UHC. Once DFS is widely integrated into a country's economy, it can contribute to financial protection from health costs through enhanced options for savings, credit, and insurance. The more mature the DFS market, the more opportunities there are for health applications. In the early stages of DFS adoption, as exists in the MENA region, efforts are needed first to help increase financial inclusion. In this market-building phase, the health sector can serve as an anchor partner, to help move health clients from cash to e-payments. Due to the relatively nascent status of DFS in the MENA region, SHOPS Plus found no information on health facility experience with digital payments and few examples of consumer applications designed for health needs.

**The impact of COVID-19.** The research and synthesis for this report was conducted in 2019 and early 2020, prior to the coronavirus pandemic. We recognize that we are now in a new world, as the virus has dramatically spread its way across the globe and triggered an unparalleled economic and health crisis. COVID-19 has exposed social inequalities and has heavily impacted the informal economy and small and medium-sized businesses. The pandemic and economic lockdown has disproportionately affected the livelihoods and incomes of vulnerable groups, including the economically disadvantaged, women, small business owners, and forcibly displaced persons.

The role of digital technology in all aspect of the response to COVID-19 is undeniable. DFS are a potentially powerful tool to help mitigate negative effects of the crisis by promoting contactless payments and reducing contamination through bank notes and coins; bolstering the resilience of payments infrastructure to enable seamless remote payments during the pandemic; enhancing consumer protection for vulnerable groups; and digitizing stimulus packages for micro, small, and medium-sized enterprises, which are among the worst-hit by the pandemic (AFI 2020).

At the same time, the momentum for DFS expansion could be slowed if economies continue to retrench during the protracted lockdown. Urgent priorities to mobilize new resources for testing, tracking, treatment, and prevention among already strained health systems have side-tracked many important initiatives. Central bankers may simply lack the time and motivation to focus on digitizing transactions in the face of unprecedented financial pressures due to liquidity crises and declines in loan repayments. DFS providers may see a fall-off in customers and exit the market in the face of disrupted supply chains and lower consumer spending. The COVID-19 pandemic is thus both a barrier and an opportunity for meeting the financial needs of the poor.

To support the dual objectives of financial inclusion and financial protection, we have organized our recommendations into two categories: recommendations to advance DFS in the region, and recommendations focused on the health sector. We have added a third set of recommendations relevant to the pandemic, to help position COVID-19 as a catalyst for greater use of DFS.

## Recommendations to strengthen financial inclusion

- **Support DFS regulatory reform through cross-border exchanges and technical assistance:** The Central Banks of Egypt, Jordan, and Morocco have updated their banking regulations to encourage innovative applications to lower barriers to access. USAID should promote peer learning for regulators grappling with similar reforms in countries such as Tunisia, Algeria, and Lebanon through study tours, regional working groups, or online communities of practice. Consultants with expertise can share best practices and model language on particular topics such as cross-border remittances, biometric IDs, and consumer dispute resolution.
- **Invest in consumer education for improved financial literacy:** To improve knowledge about DFS benefits and build demand for financial services, USAID should support financial literacy campaigns and skill-building courses. The need to increase awareness and technology skills for underserved populations exists across the region. USAID can leverage its initiatives in other sectors to engage local leaders, project teams, and community partners in financial education efforts through rural public service points such as schools or agriculture extension offices.
- **Engage with DFS initiatives to enhance targeting of the most vulnerable:** USAID should partner with DFS providers such as Morocco's M-Wallet or Egypt's Fawry to incentivize introduction of products that meet the needs of the poorest. Research on market opportunities to serve underserved populations can persuade companies to broaden their customer base and design services that better meet the needs of the poor. Costs to extend agent networks to new areas where customers need more cash-out points can be shared through public-private partnerships. USAID should steer qualified providers to apply for seed funding from existing innovation funds such as its [Development Innovation Ventures](#).
- **Close the gender gap:** USAID should identify, broker, and nurture DFS partners who commit to co-designing services specifically designed to meet the needs of women. Egypt has prioritized financial inclusion for women in its national financial inclusion strategy and can serve as a test bed for gender experts to develop DFS marketing strategies tailored for women. Country-specific research can identify gaps and solutions such as bundling DFS with other high-demand products to increase account ownership.

## Recommendations to expand DFS within the health system

- **Build awareness among health sector stakeholders about financial inclusion:** DFS provides benefits and opportunities for patients, clinics, and program managers, but these opportunities are not well recognized within the health sector. As a substantial portion of a country's GDP, the health sector has significant payment flows and could help normalize the use of digital payments. Through its relationships with health ministries, private provider associations, health research facilities, pharmacies, and other institutions, USAID can help build demand for digital services in the health sector. At a minimum, USAID

should promote and enforce the use of e-payments in its regional health contracts, grants, and cooperative agreements as required by USAID procurement guidance (USAID 2014).

- **Promote inclusion of health system actors in DFS initiatives:** USAID should establish an inter-agency process with interested country partners to coordinate and structure inputs for health-specific initiatives for DFS. Central banks throughout the region want to advance the uptake of DFS. Health system stakeholders want to improve the efficiency and responsiveness of health services. Bringing together DFS stakeholders with representatives from the ministry of health, national health insurance providers, trade associations of clinical providers, large hospitals, and pharmacy chains can identify promising opportunities for collaboration.
- **Organize cross-regional learning opportunities for expanding health insurance through DFS:** Sub-Saharan African and Asian countries such as Kenya, Ghana and India are pioneering new DFS to serve excluded populations with simple low-cost mobile-enabled insurance products through public and private insurance providers. USAID should bring together stakeholders from the MENA region to meet with insurance regulators, implementers, and innovators to learn how they are using DFS to reach informal economy households.
- **Evaluate DFS use cases in health:** The potential for DFS to promote UHC would be strengthened with more evidence on how and under what conditions DFS affects health system performance. As public and private health facilities adopt DFS in the MENA region, USAID should fund research to measure the impact of DFS on health system quality, responsiveness, and efficiency. Formal or academic research is also needed on the role of DFS such as mobile-enabled health insurance, savings, and remittances in reducing out-of-pocket spending.

## Recommendations tailored to COVID-19 response

- **Co-fund campaigns to promote the use of DFS in the public and private sectors as a tool to prevent transmission of the novel coronavirus and to promote economic activity:** Remote transactions and contactless payments reinforce social-distancing requirements, limiting the need to visit banks, utilities, and service providers. Campaigns should also highlight the use of DFS as a means of keeping local businesses open during lockdown or quarantines. DFS transactions reduce interpersonal contact and risk for exposure to COVID-19, which helps control the spread of the virus and can mitigate negative health, economic, and social effects.
- **Assist central banks in designing incentives for merchants and consumers to use DFS during the pandemic:** Options include temporary waivers of transaction fees on payments or transfers, which might otherwise create a financial barrier for new users. Other regulatory waivers could raise the limits on transaction amounts to promote more use. USAID could host technical advisors from AFI and from outside the MENA region to share lessons learned from other countries and regions on expanding DFS as part of the COVID-19 response.

# Conclusion

The MENA region is primed to move from a cash-based culture to one in which all adults have access to secure and useful financial accounts. Mobile phone use is prevalent and growing, providing new opportunities to offer convenient and low-cost financial services for underserved populations. There is momentum among policy makers and product developers to address barriers around consumer awareness and trust. Key enablers such as government e-payments for social welfare benefits may be the turning point for enrolling the most vulnerable into the formal financial system at mass scale.

The urgency for USAID operating units to work with the private sector to solve development challenges has never been greater. DFS have the potential to link public and private sector stakeholders in addressing urgent regional priorities including job creation, gender equality, and refugee support. DFS provides significant opportunities to collaborate in the design and evaluation of pro-poor services with mass market potential to further the Agency's goals for market-driven approaches.

As financial account ownership increases, there will be more opportunities for improving financial protection from out-of-pocket costs for health care. DFS can improve the resilience of the health system by streamlining financial processes, extending the reach of risk-pooling schemes, and enhancing the ability to track and analyze service utilization. The coronavirus pandemic amplifies the benefits of DFS and should spur enhanced efforts to accelerate the progress underway in financial inclusion across the region.

# Annex: List of Key Informants

Organization	Contact
Abt Associates	Dr. Sabry, Chief of Party, Health Service Delivery Jordan
CGAP	Nadine Chehade, Senior Researcher
Democrance	Michele Grosso, Founder
GIZ	Attila Kaiser-Yuecel, Financial Inclusion MENA
International Rescue Committee	Ahmed Abbadi, Regional Manager, Technology for Programs, Jordan
Kiva	Lev Plavas, Senior Investment Manager, Refugees
Lebanon Microfinance Association	Ilda Nahas, General Manager
Making Cents	Tim Nourse, President
Souktel	Gina Assaf, Digital Design Lead
Vitas Group	Elissa McCarter-Laborde, CEO
World Bank	Leora Klapper, Lead Economist in the Finance and Private Sector Research Team

# Bibliography

Abdelnour, Nour, Ali Darwish and Khawla Hafezi. 2020. "Server does not exist' ... E-government in Syria is merely ink on paper." <https://english.enabbaladi.net/archives/2020/04/server-does-not-exist-e-government-in-syria-is-merely-ink-on-paper/>.

Abu Amer, Ahmad. 2018. "Can PA's push for e-payments help ease its cash crunch?" Al-Monitor. <https://www.al-monitor.com/pulse/originals/2018/06/palestine-electronic-payment-system-national-plan-providers.html>.

Abumaria, Dima. 2019. "Expotech Introduces Fintech to Palestinians." The Media Line. <https://bit.ly/36CwKqW>.

Adam, Mohamed, Yasmin Hashim, Kei Sakamoto, and Yuki Yoshida. 2019. "Microinsurance: A Tool to Enhance Financial Inclusion in Egypt." Japan International Cooperation Agency. [https://www.jica.go.jp/egypt/english/office/topics/c8h0vm0000ex4msq-att/190426\\_01.pdf](https://www.jica.go.jp/egypt/english/office/topics/c8h0vm0000ex4msq-att/190426_01.pdf)

Adouni, Sana. 2019. "Bank ABC Begins First-Ever Digital Operations in Tunisia." *The Arab Weekly*, <https://the arabweekly.com/bank-abc-begins-first-ever-digital-operations-tunisia>.

African Development Bank. 2019. "Tunisia: Financial Sector Modernisation Support Programme II (PAMFSI II)." <https://www.afdb.org/sites/default/files/documents/projects-and-operations/tunisia-ar-financial-sector-modernisation-support.pdf>.

Al Jazeera. 2020. "Algerians Mark a Year of Protests with Fresh Demonstrations." <https://www.aljazeera.com/news/2020/02/algerians-mark-year-protests-fresh-demonstrations-200214151236109.html>.

Al Khatib, Hadi and Maria Xynou. 2015. "Syria's digital civil war." Open Democracy. <https://www.opendemocracy.net/en/opensecurity/syrias-digital-civil-war/>.

AlAboudi, Ubai. 2018. "Palestine & PayPal: Towards Financial Equality." Arab Center for the Advancement of Social Media. <https://7amleh.org/2018/12/19/palestine-and-paypal-towards-economic-equality-new-report-by-7amleh/>.

Alami, Mona. 2018. "Lebanon's Perfect Financial Storm." Carnegie Endowment for International Peace. <https://carnegieendowment.org/sada/77521>.

ALEXBANK. 2017. "Empowering Women Via Financial Inclusion." <https://www.alexbank.com/en/retail/about-us/media-and-news/2017/9-october.html>.

AFI (Alliance for Financial Inclusion). 2016. "Digital Financial Services Basic Terminology": Kuala Lumpur, Malaysia. <https://www.afi-global.org/sites/default/files/publications/2016-08/Guideline%20Note-19%20DFS-Terminology.pdf>.

AFI (Alliance for Financial Inclusion). 2017. "2017 Maya Declaration Progress Report: Commitments to Impact." [https://www.afi-global.org/sites/default/files/publications/2017-09/2017\\_MAYA\\_progress%20report\\_digital.pdf](https://www.afi-global.org/sites/default/files/publications/2017-09/2017_MAYA_progress%20report_digital.pdf).

AFI (Alliance for Financial Inclusion). 2018a. "Financial Inclusion through Digital Financial Services and Fintech: The Case of Egypt." [https://www.afi-global.org/sites/default/files/publications/2018-08/AFI\\_Egypt\\_Report\\_AW\\_digital.pdf](https://www.afi-global.org/sites/default/files/publications/2018-08/AFI_Egypt_Report_AW_digital.pdf).

AFI (Alliance for Financial Inclusion). 2018b. "Fintech for Financial Inclusion: A Framework for Digital Financial Transformation." <https://www.g24.org/wp-content/uploads/2018/09/G-24-AFI-FinTech-Special-Report-AW-digital.pdf>.

AFI (Alliance for Financial Inclusion). 2019. "KYC Innovations, Financial Inclusion and Integrity In Selected AFI Member Countries." <https://www.afi-global.org/sites/default/files/publications/2019-03/KYC-Innovations-Financial-Inclusion-Integrity-Selected-AFI-Member-Countries.pdf>

AFI (Alliance for Financial Inclusion). 2020. "Financial Inclusion for the Arab Region Initiative (FIARI)." <https://www.afi-global.org/financial-inclusion-arab-region-initiative-fiari>.

AMEInfo. 2019. "Banks in Lebanon: To digitize or die." <https://www.ameinfo.com/industry/finance/banks-lebanon-digital-banking-services>.

Amereller. 2018. "Banking Without Banks? The Regulation of Fintechs in Egypt." Lexology. <https://www.lexology.com/library/detail.aspx?g=69e90347-4379-4736-a7f0-4c1912f36e23>.

Apolitical. 2017. "Morocco uses postal service to double the level of banking access." [https://apolitical.co/en/solution\\_article/morocco-uses-postal-service-double-level-banking-access](https://apolitical.co/en/solution_article/morocco-uses-postal-service-double-level-banking-access).

Arab Women's Enterprise Fund. n.d. "Dinarak Jordan: How Mobile Money Can Empower Female Agents and Clients." Seepnetwork.org. <https://seepnetwork.org/Event/Dinarak-Jordan-How-Mobile-Money-Can-Empower-Female-Agents-and-Clients>.

Arenaza, Sonia. 2014. "Digital Financial Services and Microfinance: State of Play A framing note to inform the Evolution of the Client Protection Standards." Accion Channels and the SMART Campaign. [http://www.smartcampaign.org/storage/documents/Tools\\_and\\_Resources/20140821\\_EoS\\_DfS\\_MFIs.pdf](http://www.smartcampaign.org/storage/documents/Tools_and_Resources/20140821_EoS_DfS_MFIs.pdf).

Arfa, Chokri and Heba Elgazzar. 2013. "Consolidation and Transparency: Transforming Tunisia's Health Care for the Poor." World Bank. <https://openknowledge.worldbank.org/handle/10986/13313>.

Aron, Daniel. 2017. "The Challenges of Transferring Money in Syria." Developing Markets Associates (DMA). <https://www.developingmarkets.com/perspectives/challenges-transferring-money-syria>.

AXA Magazine. 2020. "In Egypt, strategic partnerships to expand inclusive insurance." <https://bit.ly/3doqfKQ>.

Baghdad Post. 2019. "E-health System in Iraqi Hospitals Soon." <https://www.thebaghdadpost.com/ar/Story/150306/>.

Banerjee, Abhitjit, Esther Duflo, Richard Hornbeck. 2014. "Bundling Health Insurance and Microfinance in India: There Cannot Be Adverse Selection If There Is No Demand." *American Economic Review* 104 (5): 291-97. <https://www.aeaweb.org/articles?id=10.1257/aer.104.5.291>.

Bar'el, Zvi. 2019. "The Palestinian Economy is Collapsing. Its Future Depends on Israel." *Haaretz*. [www.haaretz.com/amp/middle-east-news/palestinians/premium-the-palestinian-economy-is-collapsing-its-future-depends-on-israel-1.7835992](http://www.haaretz.com/amp/middle-east-news/palestinians/premium-the-palestinian-economy-is-collapsing-its-future-depends-on-israel-1.7835992).

Barnieh, Yisr, Habib Attia, Nadine Chehade, and Antoine Navarro. 2017. "Financial Inclusion Measurement in the Arab World." Consultative Group to Assist the Poor (CGAP). [https://www.cgap.org/sites/default/files/Working-Paper-Financial-Inclusion-Measurement-in-the-Arab-World\\_1.pdf](https://www.cgap.org/sites/default/files/Working-Paper-Financial-Inclusion-Measurement-in-the-Arab-World_1.pdf).

Biallas, Margarete, Khaled Walid Qutob, and Mati Malamud. 2014. "IFC Digital Scoping Country Report: Palestine." International Finance Corporation (World Bank). <https://bit.ly/3euPA6k>.

Bolze, Lizzy. 2017. "How Can Microfinance Institutions in the Middle East and North Africa Manage Risk and Meet Client Demand? Governance Is Key!" (Blog). Center for Financial Institution. <https://www.centerforfinancialinclusion.org/how-can-microfinance-institutions-in-the-middle-east-and-north-africa-manage-risk-and-meet-client-demand-governance-is-key>.

Bombourg, Nicolas. 2020. "Morocco's mobile market is one of the more mature in the region, with a penetration rate of about 125%." BuddeComm. <https://bit.ly/3erT75e>.

Boudiba, Fadoua. 2018. "Microfinance in the MENA countries: addressing societal needs and shortfalls." Interview by Triodos Investment Management. <https://www.triodos-im.com/articles/2018/microfinance-in-mena--interview-with-fadoua-boudiba>.

BuddeComm. 2019. "Mobile broadband penetration reaches around 15% in Syria." In *Syria - Telecoms, Mobile and Broadband - Statistics and Analyses*. <https://www.budde.com.au/Research/Syria-Telecoms-Mobile-and-Broadband-Statistics-and-Analyses>.

BuddeComm. 2020. *Iraq - Telecoms, Mobile and Broadband - Statistics and Analyses 2020*. "Mobile sector opportunities exist in Iraq." <https://www.budde.com.au/Research/Iraq-Telecoms-Mobile-and-Broadband-Statistics-and-Analyses>.

Burt, Chris. 2019. "UNHCR and Zain Wallet use IrisGuard biometrics for refugee aid disbursement." Biometricupdate.com. <https://www.biometricupdate.com/201908/unhcr-and-zain-wallet-use-irisguard-biometrics-for-refugee-aid-disbursement>.

Business Wire. 2019. "IDEMIA to Supply Morocco's Latest National Electronic ID Cards." <https://www.businesswire.com/news/home/20191129005131/en/IDEMIA-Supply-Morocco%E2%80%99s-Latest-National-Electronic-ID>.

Careem. n.d. "What is in ride insurance?" <https://help.careem.com/hc/en-us/articles/115010884527-What-is-in-ride-insurance->.

Casswell, Jenny and Matthew Wilson. 2018. "Recognising Urban Refugees in Jordan: Opportunities for mobile-enabled identity solutions." GSMA. <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2018/12/Recognising-urban-refugees-in-Jordan.pdf>.

Casswell, Jenny. 2019. "The digital lives of refugees: How displaced populations use mobile phones and what gets in the way." GSMA. <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/The-Digital-Lives-of-Refugees.pdf>.

CFI (Center for Financial Inclusion). 2018. "Palestine to Develop a National Financial Inclusion Strategy." <https://www.centerforfinancialinclusion.org/palestine-to-develop-a-national-financial-inclusion-strategy>.

CBE (Central Bank of Egypt) and the AFI (Alliance for Financial Inclusion). 2019. "Integrating Gender and Women's Financial Inclusion into the Central Bank of Egypt's (CBE) Framework." AFI. <https://www.findevgateway.org/library/integrating-gender-and-womens-financial-inclusion-central-bank-egypts-cbe-framework>.

Central Bank of Jordan. 2018. "Mobile Money for Resilience Initiative: Enhancing Resilience of Refugees and Low-Income Jordanians." <https://bit.ly/36xkisir>.

Central Bank of Jordan. 2020. "The National Financial Inclusion Strategy 2018-2020." <http://www.iopacc.com/echobusv3.0/systemassets/nfis18-20.pdf>.

Chamberlain, Elaine. 2015. "Microfinance in Algeria, Tunisia, and Lebanon." Orlando, Florida: University of Central Florida. <https://stars.library.ucf.edu/honorstheses1990-2015/1698>.

Cehade, Nadine, Antoine Navarro, and Danielle Sobol. 2017. "Remittances and Financial Inclusion: A Demand-Side Analysis of Low Income Jordanians and Syrian Refugees in Jordan." Consultative Group to Assist the Poor (CGAP). <https://data2.unhcr.org/en/documents/download/63323>.

Cehade, Nadine. 2017. "To the Future and Back: Financial Inclusion in the Arab World (Blog)." Consultative Group to Assist the Poor (CGAP). <https://www.cgap.org/blog/future-and-back-financial-inclusion-arab-world>.

Cehade, Nadine. 2019. "Mapping Fintech Innovations in the Arab World (blog)." Consultative Group to Assist the Poor (CGAP). <https://www.cgap.org/blog/mapping-fintech-innovations-arab-world>.

Clark, Lauren and Garbis Iradian. 2016. "Lebanon: Raising Financial Inclusion." Institute of International Finance. <http://www.databank.com.lb/docs/Raising%20Financial%20Inclusion%20IIF-2016.pdf>.

Clotteau, Nils, David Avsec, and Yury Grin. 2016. "Role of Postal Networks in Digital Financial Services." International Telecommunications Union (ITU). <https://bit.ly/2yGb7JO>.

Collins, D., R. Amoah, K. Wilson, M. Hassan, and S. Mutinda. 2018. "Refugees and their Money: The Business Case for Providing Financial Services to Refugees." FSD Africa and UNHCR. <https://www.findevgateway.org/paper/2018/03/refugees-and-their-money-business-case-providing-financial-services-refugees>.

Consultancy-me. 2019. "First fintech hub launched in Lebanon at Beirut Digital District." Consultancy-me.com. <https://www.consultancy-me.com/news/2129/first-fintech-hub-launched-in-lebanon-at-beirut-digital-district>.

Cornish, Chloe. 2019. "Iraq's Financial Inclusion Drive Boosted by Homegrown Fintech." *Financial Times*. <https://www.ft.com/content/19b10528-4b36-11e9-bde6-79eaea5acb64>.

Cornish, Chloe and Asmaa al-Omar. 2020. "Syrian regime struggles to stop currency freefall." *Financial Times*. <https://www.ft.com/content/b2edf98e-1cc9-11ea-97df-cc63de1d73f4>.

Coye Benson, Carol Coye, Charles Niehaus, Mina Mashayekhi, Nils Clotteau, Trevor Zimmer, Bruno Antunes, Yury Grin, Peter Potgieser, Quang Nguyen, Graham Wright, Nathalie Feingold, Ashwini Sathnur, Johan Bosini, Jeremy Leach, Oksana Smirnova, and Evgeniy Bondarenko. 2017. "ITU-T Focus Group Digital Financial Services." International Telecommunications Union (ITU). [https://www.itu.int/dms\\_pub/itu-t/opb/tut/T-TUT-DFS-2017-PDF-E.pdf](https://www.itu.int/dms_pub/itu-t/opb/tut/T-TUT-DFS-2017-PDF-E.pdf).

Cuen, Leigh. 2018. "Palestinians Are Using Bitcoin to Transact Across Borders Amid Conflict." CoinDesk. <https://www.coindesk.com/crypto-gaza-west-bank-bitcoin-palestine>.

Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Overview booklet. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/332881525873182837/The-Global-Findex-Database-2017-Measuring-Financial-Inclusion-and-the-Fintech-Revolution>

Democrance. 2020. [www.democrance.com](http://www.democrance.com).

Donkin, Chris. 2018. "Tunisia Operators Make Mobile Money Interoperable." Mobile World Live (blog). <https://www.mobileworldlive.com/money/news-money/tunisia-operators-make-mobile-money-interoperable/>.

Duff, Schan. 2017. "Modernizing Digital Financial Regulation." The Aspen Institute. <https://assets.aspeninstitute.org/content/uploads/2017/07/Modernizing-Reglabs.pdf>.

Ecofin Agency. 2018. "Morocco Creates Mobile Money Service 'm-Wallet.'" <https://www.ecofinagency.com/telecom/1411-39266-morocco-creates-mobile-money-service-m-wallet>.

Ecofin Agency. 2019. "Tunisia: The Finance Ministry Launches Digital Services for Users." <https://www.ecofinagency.com/public-management/0305-40011-tunisia-the-finance-ministry-launches-digital-services-for-users>.

Egypt Today. 2019. "CBE Official: Banks Issue 4m Meeza Cards so Far." <https://www.egypttoday.com/Article/3/78947/CBE-official-Banks-issue-4m-Meeza-cards-so-far>.

EIU (Economist Intelligence Unit). 2019. "Global Microscope 2019: The enabling environment for financial inclusion." New York, NY. [https://www.eiu.com/public/topical\\_report.aspx?campaignid=microscope2019](https://www.eiu.com/public/topical_report.aspx?campaignid=microscope2019).

Elbokl, Ahmed, Tamer Emara, and Hoda MF Wahba. 2019. "The Egyptian-African Telemedicine Network: The Treat and Teach Comprehensive Model." Chapter 12 in *Telemedicine Technologies*. Academic Press. <https://www.sciencedirect.com/science/article/pii/B978012816948300012X>.

Enab Baladi. 2019. "Syria to roll out online payment system in 2020." <https://english.enabbaladi.net/archives/2019/12/syria-to-roll-out-online-payment-system-in-2020/>.

Farhat, Reine. 2014. "PinPay leads mobile payments trend in Lebanon." <https://www.wamda.com/2014/08/pinpay-leads-mobile-payments-trend-lebanon>

Finaccess. 2019. "2019 FinAccess Household Survey." [https://s3-eu-central-1.amazonaws.com/fsd-circle/wp-content/uploads/2020/02/06095110/2019-FinAccess\\_Household\\_SurveyReport\\_FIN\\_Web.pdf](https://s3-eu-central-1.amazonaws.com/fsd-circle/wp-content/uploads/2020/02/06095110/2019-FinAccess_Household_SurveyReport_FIN_Web.pdf).

Finextra Reseach. 2016. "Ideal Payments Implements First Mobile Payments App in Iraq." <https://www.finextra.com/pressarticle/65918/ideal-payments-implements-first-mobile-payments-app-in-iraq>.

Fintech News Middle East. 2018. "Iraq Underdeveloped Financial System Both A Challenge And An Opportunity For Fintech." <https://fintechnews.ae/692/iraq/iraq-underdeveloped-financial-system-challenge-opportunity-fintech/>.

Fintech News Middle East. 2019. "Egypt's Central Bank Announces and EGP1 Bil Fintech Fund and Regulatory Sandbox." <https://fintechnews.ae/3799/fintechegypt/central-bank-egypt-fintech-fund-financial-technology-unit-regulatory-sandbox/>.

Foch, Arthur and Carlo Maria Rossotto. 2016. "Broadband: the platform of the digital economy and a critical development challenge for Morocco." The World Bank Group. <http://documents.banquemonddiale.org/curated/fr/547301493384118940/pdf/114660WP-v2-P151545-PUBLIC.pdf>.

Funke, Ilka and Marc Sindlinger. 2019. "Can Digital Financial Services Improves Access to Remittances in the Context of Forced Displacement? Lessons from the Digi#ances Project in Jordan." GIZ. [http://microfinance-mena.org/wp-content/uploads/2019/10/Lessons-Learned-Report\\_Digiances-Project.pdf](http://microfinance-mena.org/wp-content/uploads/2019/10/Lessons-Learned-Report_Digiances-Project.pdf).

Galdava, Ellen, Amani M'Bale, and Sonali Rohatgi. 2019. "The Role of Digital Financial Services in Accelerating USAID's Health Goals." USAID. [https://www.usaid.gov/sites/default/files/documents/15396/DFS\\_Accelerating\\_USAID\\_HealthGoals.pdf](https://www.usaid.gov/sites/default/files/documents/15396/DFS_Accelerating_USAID_HealthGoals.pdf).

GIZ (German Agency for International Cooperation). n.d. "Egyptian Women's Financial Inclusion Journey: A Roadmap." [https://genderstrategy.giz.de/?wpfb\\_dl=1088](https://genderstrategy.giz.de/?wpfb_dl=1088).

GIZ (German Agency for International Cooperation). 2017. "Promoting Women's Financial Inclusion, Yemen." <https://www.oecd.org/dac/dac-global-relations/Promoting-womens-financial-inclusion-May%202017.pdf>.

GIZ (German Agency for International Cooperation). 2018. "Digital#ances: Improving Access to Remittances and Other Financial Services Through Digital Solutions in Jordan." PowerPoint presented at Digital Solutions European Microfinance Week, Luxembourg. [http://www.e-mfp.eu/sites/default/files/resources/2018/11/EMW2018\\_GIZ\\_S.%20Mehta.pdf](http://www.e-mfp.eu/sites/default/files/resources/2018/11/EMW2018_GIZ_S.%20Mehta.pdf).

GSMA (Global System for Mobile Communications). n.d. "Network Coverage Maps: Syria." <https://www.gsma.com/coverage/#445>

GSMA (Global System for Mobile Communications). 2015. "Is Regulation Holding Back Financial Inclusion? A Look at the Evidence." *Mobile for Development* (blog). <https://www.gsma.com/mobilefordevelopment/programme/mobile-money/is-regulation-holding-back-financial-inclusion-a-look-at-the-evidence/>.

GSMA (Global System for Mobile Communications). 2018. "The Mobile Economy Middle East & North Africa 2018." <https://www.4yfn.com/wp-content/uploads/2018/12/2018-11-26-Mobile-Economy-Middle-East-North-Africa-2018.pdf>.

GSMA (Global System for Mobile Communications). 2019a. "Access to Mobile Services and Proof of Identity 2019: Assessing the impact on digital and financial inclusion." [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/ProofofIdentity2019\\_WebSpreads.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/ProofofIdentity2019_WebSpreads.pdf)

GSMA (Global System for Mobile Communications). 2019b. "Mobile Economic Impact: Algeria." <https://www.gsma.com/betterfuture/wp-content/uploads/2019/08/Mobile-Economic-Impact-2018-Algeria.pdf>

GSMA (Global System for Mobile Communications). 2019c. "The Mobile Economy: Middle East & North Africa 2020." <https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/03/GSMA-MobileEconomy2020-MENA-Eng.pdf>.

Haboush, Joseph. 2019. "Is it too late to save Lebanon from financial collapse?" Middle East Institute. <https://www.mei.edu/publications/it-too-late-save-lebanon-financial-collapse>.

Hauser, Peter, Dan Pavelesku, and Artur Vacarciuc. 2017. "Financial Inclusion Diagnostic Study in Jordan" Central Bank of Jordan and GIZ. <http://www.cbj.gov.jo/EchoBusv3.0/SystemAssets/PDFs/2018/Financial%20Inclusion%20Diagnostic%20Study%20in%20Jordan%202017.pdf>

Hawkins, Allyson and Kim Wilson. 2017. "Striking the Match: Digital Financial Inclusion for Jordan's Refugees." Medford, MA: The Fletcher School of Law and Diplomacy. <https://sites.tufts.edu/journeysproject/files/2019/05/Striking-the-Match.pdf>.

Hinchberger, Bill. 2019. "Mobile Cash In The Midst Of Libya's Chaos" in *Global Finance Magazine*. <https://www.gfmag.com/magazine/june-2019/mobile-cash-midst-libyas-chaos>.

Hodali, Diana. 2019. "Lebanon - Telecommunication in government hands." DW Akademie. <https://www.dw.com/en/lebanon-telecommunication-in-government-hands/a-48634796>.

Hogan, Caelainn. 2016. "Syria war: Money transfer 'a matter of life or death'." Al Jazeera. <https://www.aljazeera.com/news/2016/08/syria-war-money-transfer-matter-life-death-160821115021928.html>.

Holtmeier, Lauren. 2019. "How Lebanon's Dollar Shortage Sparked an Economic Crisis." <https://english.alarabiya.net/en/business/economy/2019/10/07/How-the-Lebanese-pound-peg-began-to-crack-under-pressure->.

Hootsuite and We Are Social. 2019. "Digital 2019 Global Digital Overview." <https://datareportal.com/reports/digital-2019-global-digital-overview>.

Hyunh, Isabelle. 2014. "La Poste Tunisienne: A Powerful Tool for Financial Inclusion." Consultative Group to Assist the Poor (CGAP). <https://www.cgap.org/blog/la-poste-tunisienne-powerful-tool-financial-inclusion>.

IFC (International Finance Corporation). 2018. "Digital Access: The Future of Financial Inclusion in Africa." [https://www.ifc.org/wps/wcm/connect/96a4f610-62b1-4830-8516-f11642cfeafd/201805\\_Digital-Access-The-Future-of-Financial-Inclusion-in-Africa\\_v1.pdf?MOD=AJPERES&CVID=mdz-QF0](https://www.ifc.org/wps/wcm/connect/96a4f610-62b1-4830-8516-f11642cfeafd/201805_Digital-Access-The-Future-of-Financial-Inclusion-in-Africa_v1.pdf?MOD=AJPERES&CVID=mdz-QF0).

International Medical Corps. 2020. "Conflict, Hunger, and Disease in Yemen." <https://internationalmedicalcorps.org/emergency-response/yemen-conflict-hunger/>.

IRC (International Rescue Committee). n.d. "Jordan." <https://www.rescue.org/country/jordan>.

IDAL (Investment Development Authority of Lebanon). 2018. "Fintech Sector in Lebanon." <https://investinlebanon.gov.lb/Content/uploads/SideBlock/181109110837646~IDAL-Fintech%20Factbook%202018.pdf>.

Ipsos Public Affairs. 2019. "Internet Security and Trust." Cigionline. <https://bit.ly/2B71Efn>.

Ismail, Zaynab. 2020. "The Start of Digital Payment and Collection Systems in Egypt." Youssry Saleh & Partners. <https://bit.ly/3cgg96F>.

ITUNews. 2019. "FIGI Symposium 2019: How Egypt Plans to Build Trust in Digital Financial Services." <https://news.itu.int/how-egypt-builds-trust-digital-financial-services/>.

Jackson, Tom. 2019. "This Startup Boosts Financial Inclusion by Helping Tunisians Create Free Bank Accounts." Disrupt Africa. <https://disrupt-africa.com/2019/07/this-startup-boosts-financial-inclusion-by-helping-tunisians-create-free-bank-accounts/>.

JAsEHN. 2018. "Main Morocco eHealth Policies and Activities." *Information Paper on Main eHealth Activities Outside of the EU*. [https://ec.europa.eu/health/sites/health/files/ehealth/docs/ev\\_20180515\\_co20\\_en.pdf](https://ec.europa.eu/health/sites/health/files/ehealth/docs/ev_20180515_co20_en.pdf).

Jones, Marc. 2017. "Palestinian officials hope to launch e-currency in 5 years." Reuters. <https://www.reuters.com/article/us-palestinians-currency-idUSKBN18820A>.

JoPACC (Jordan Payments and Clearing Company). 2019. "JoPACC-MM4R Cooperation Expanding Agent Network and Access to DFS." [http://www.jopacc.com/ebv4.0/root\\_storage/en/eb\\_list\\_page/jopacc\\_mm4r\\_cooperation-0.pdf](http://www.jopacc.com/ebv4.0/root_storage/en/eb_list_page/jopacc_mm4r_cooperation-0.pdf).

Justice.gov. 2019. "Freedom on the Net 2019 – Libya." <https://www.justice.gov/eoir/page/file/1234876/download>.

Khalil, Aziza. 2018. "Digital Financial Inclusion in Egypt." PowerPoint presented at ITU Regional Development Forum. <https://bit.ly/3gx9orp>.

Kırıkçioğlu, Elif Binici-Mustafa. 2019. "Libyan Citizens Grieve Protracted Liquidity Crisis in Banking System." *Daily Sabah*. <https://www.dailysabah.com/finance/2019/09/16/libyan-citizens-grieve-protracted-liquidity-crisis-in-banking-system>.

Klaib, Ahmad and Maryam Nuser. 2019. "Evaluating HER and Health Care in Jordan According to the International Health Metrics Network (HMN) Framework and Standards: A Case Study of Hakeem." <https://ieeexplore.ieee.org/document/8693495>.

Knomad. n.d. "Remittances Data." <https://www.knomad.org/data/remittances>.

Lukonga, Inutu. 2018. "Fintech, inclusive growth, and financial risks: Focus on the MENAP and CCA Regions." International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2018/09/11/Fintech-Inclusive-Growth-and-Cyber-Risks-Focus-on-the-MENAP-and-CCA-Regions-46190>

MAGNiTT. 2019. "MENA FinTech Venture Report." <https://magnitt.com/research/50675/2019-mena-fintech-venture-report>.

Making Cents International. 2018. "Syrian Refugees In Jordan To Receive Digital Economic Identities Thanks To SANAD TAF, Making Cents, And MFW." [https://a4d9c8db-9857-4a13-a1a0-8ea2e41e4367.filesusr.com/ugd/cf5fc8\\_c3a97ec365cf4fae8e0d79903523b1eb.pdf](https://a4d9c8db-9857-4a13-a1a0-8ea2e41e4367.filesusr.com/ugd/cf5fc8_c3a97ec365cf4fae8e0d79903523b1eb.pdf).

Makki, Danny. 2018. "Syria's war economy exacerbates divide between rich and poor." Middle East Institute. <https://www.mei.edu/publications/syrias-war-economy-exacerbates-divide-between-rich-and-poor>.

Manyika, James, Susan Lund, Marc Singer, Oliva White, and Chris Berry. 2016. "How digital finance could boost growth in emerging economies." McKinsey Global Institute. <https://www.mckinsey.com/featured-insights/employment-and-growth/how-digital-finance-could-boost-growth-in-emerging-economies>.

Maranis, Chris. 2019. "Challenge or Opportunity? North Africa and the Unbanked." Exus. <https://www.exus.co.uk/en/library-blog/posts/exus-debt-collections-software/blog-posts/challenge-or-opportunity-north-africa-and-the-unbanked/>.

Mastercard. 2016. "Mastercard Signs MoU with Tunisian Post to Develop New Digital Financial Services." Mastercard Social Newsroom. <https://newsroom.mastercard.com/mea/press-releases/mastercard-signs-mou-with-tunisian-post-to-develop-new-digital-financial-services/>.

Mastercard. 2017. "Mastercard's MoU with Central Bank of Iraq Signals Bright Future for the Country's Emerging Digital Payments Ecosystem." Mastercard Social Newsroom. <https://newsroom.Mastercard.com/mea/press-releases/Mastercards-mou-with-central-bank-of-iraq-signals-bright-future-for-the-countrys-emerging-digital-payments-ecosystem/>.

McKee, Katherine, Michelle Kaffenberger, and Jamie M. Zimmerman. 2015. "Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks." Consultative Group to Assist the Poor (CGAP). <https://www.cgap.org/sites/default/files/Focus-Note-Doing-Digital-Finance-Right-Jun-2015.pdf>.

Medicate Int. n.d. "Our Services." <https://www.medicare.ly/en/our-services/>.

Mercy Corps. 2017. "Cash Delivery Mechanism Assessment: for Refugees, Migrants, and Asylum Seekers in Libya." <https://reliefweb.int/sites/reliefweb.int/files/resources/CASH%20DELIVERY%20MECHANISM%20ASSESSMENT%20REPORT.docx.pdf>.

Mercy Corps. 2018. "Mobile Wallet Pilot Report – Jordan." <https://www.mercycorps.org/sites/default/files/2019-11/Mobile%20Wallet%20Pilot%20Preliminary%20Report.pdf>.

Middle East Insurance Review. 2019. "Egypt: Regulator keen for insurers to digitise." <https://www.meinsurancereview.com/News/View-NewsLetter-Article/id/48930/type/MiddleEast/Egypt-Regulator-keen-for-insurers-to-digitise>.

Ministry of Post and Telecommunications. 2016. "The Action Plan of 2015-2019." <https://www.mpttn.gov.dz/en/content/action-plan-2015-2019>.

Mounir, Hossam. 2019. "Is Egypt ready for Electronic Payments Law as it comes into force?" *Daily News Egypt*. <https://www.dailynewssegypt.com/2019/04/21/is-egypt-ready-for-electronic-payments-law-as-it-comes-into-force/>.

Mryyan, Naden. 2012. "Demographics, Labor Force Participation, and Unemployment in Jordan." Economic Research Forum. <https://erf.org.eg/wp-content/uploads/2014/08/670.pdf>.

Nabil, Yasmeen. 2019. "Banking for the unbanked: The growth of fintech in Egypt." Wamda. <https://www.wamda.com/2019/05/banking-unbanked-growth-fintech-egypt>.

Nzebile, Peter and Dawy Denadi. 2019. "Digital Finance Country Report: Jordan." USAID. [http://tanmeyahjo.com/Portals/0/Digital%20Finance%20COUNTRY%20REPORT%20\(USAID%20LENS\).pdf?ver=2019-04-02-133749-100](http://tanmeyahjo.com/Portals/0/Digital%20Finance%20COUNTRY%20REPORT%20(USAID%20LENS).pdf?ver=2019-04-02-133749-100).

OBG (Oxford Business Group). 2016. "Algeria's Financial Sector Ready to Tackle Upcoming Economic Challenges." In *The Report: Algeria*. <https://oxfordbusinessgroup.com/overview/moving-forward-sector-ready-tackle-new-economic-challenges>.

OBG (Oxford Business Group). 2017. "Algeria's First e-Payment Service Reshaping Finance Sector." In *The Report: Algeria*. <https://oxfordbusinessgroup.com/analysis/modern-money-rollout-first-e-payment-service-reshaping-sector>.

OBG (Oxford Business Group). 2019a. "E-Payments yet to Gain Widespread Use in Algeria" in *The Report: Algeria*. <https://oxfordbusinessgroup.com/analysis/card-bargain-despite-legal-changes-e-payments-struggle-gain-foothold>.

OBG (Oxford Business Group). 2019b. "Financial inclusion in Morocco has improved, but some gaps in access remain." *The Report: Morocco 2019*. <https://oxfordbusinessgroup.com/analysis/reaching-out-financial-inclusion-has-improved-some-gaps-access-remain>.

OBG (Oxford Business Group). 2019c. "New Egyptian insurance law and proposed mandatory lines expected to increase coverage and premiums." <https://oxfordbusinessgroup.com/overview/assuring-growth-new-insurance-law-and-proposed-mandatory-lines-are-expected-increase-coverage-and>.

Owens, John. 2015. "Central Bank of Yemen issues new mobile banking regulations." Alliance for Financial Inclusion (AFI). <https://www.afi-global.org/blog/2015/03/central-bank-yemen-issues-new-mobile-banking-regulations>.

Ozili, Peterson K. 2018. "Impact of Digital Finance on Financial Inclusion and Stability." *Borsa Istanbul Review* 18 (4): 329–40. <https://www.sciencedirect.com/science/article/pii/S2214845017301503?via%3Dihub>

PalPay. n.d. "About PalPay." <https://www.palpay.ps/#individual>.

Pearce, Douglass, Loretta Michaels, Nomsa Kachingwe, and Sheirin Iravantchi. 2017. "Digital Financial Inclusion: Emerging Policy Approaches." Global Partnerships for Financial Inclusion (GPFI). <https://www.gpfi.org/sites/gpfi/files/documents/Digital%20Financial%20Inclusion-CompleteReport-Final-A4.pdf>.

Rachidi, Soukaina. 2019. "Overcoming the Odds: The Challenges for Women's Financial Inclusion in the MENA Region." InsideArabia. <https://insidearabia.com/overcoming-odds-women-financial-inclusion-mena/>.

Rahn, Thomas and Atilla Kaiser-Yuecel. 2019. "Digital Financial Services ready to boost financial inclusion: Fintech Strategy in Palestine." FIMENA. <http://microfinance-mena.org/news/digital-financial-services-ready-boost-financial-inclusion-fintech-strategy-palestine/>.

Ramali, K. 2019. "Digital Payment Methods in Libya." Medium.com. [https://medium.com/@k\\_libya/digital-money-libya-11883c69242e](https://medium.com/@k_libya/digital-money-libya-11883c69242e).

Rashdan, Abeer and Noura Eissa. 2019. "The Determinants of Financial Inclusion in Egypt." *International Journal of Financial Research* 11(1). [https://www.researchgate.net/publication/336691304\\_The\\_Determinants\\_of\\_Financial\\_Inclusion\\_in\\_Egypt](https://www.researchgate.net/publication/336691304_The_Determinants_of_Financial_Inclusion_in_Egypt).

ReliefWeb. 2018. "IFC Invests \$269 Million in Iraq to Reconstruct Telecom Operations and Drive Growth [EN/AR] - Iraq." <https://reliefweb.int/report/iraq/ifc-invests-269-million-iraq-reconstruct-telecom-operations-and-drive-growth-enar>.

Republic of Lebanon Office of the Minister of State for Administrative Reform. 2018. "Digital Transformation Strategy in Lebanon." <https://www.omsar.gov.lb/Publications/Strategies/DigitalTransformationStrategy?lang=en-us>.

Robson, Gemma, Leon Isaacs and Nana Yaa Boakye-Adjei. 2017. "Paving the Way for Digital Financial Services in Jordan." Consultative Group to Assist the Poor (CGAP). <https://www.cgap.org/sites/default/files/researches/documents/Working-Paper-Paving-the-Way-for-Digital-Financial-Services-in-Jordan-Jun-2017.pdf>.

Rosenberg, David. 2020. "The War Is Over, but Syria's Economic Misery Is Growing Worse." *Haaretz*. <https://www.haaretz.com/middle-east-news/syria/.premium-the-war-is-over-but-syria-s-economic-misery-is-growing-worse-1.8433530>.

Rowntree, Oliver. 2019. "Connected Women: The Mobile Gender Gap Report 2019." GSMA. <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/GSMA-The-Mobile-Gender-Gap-Report-2019.pdf>.

Saci, Yasmine. 2020. "Algeria Post Launches New Money Transfer Service." Algeria Press Service. <http://www.aps.dz/en/health-science-technology/32528-algerie-poste-launches-new-money-transfer-service>.

Saleh, Marwah Saadi and Asmah Laili Yeon. 2018. "An Analysis of Consumer Protection in the Financial Service in Iraq: Consumer Loan Contract" in *Journal of Law, Policy and Globalization*. <https://www.semanticscholar.org/paper/An-Analysis-of-Consumer-Protection-in-the-Financial-Saleh-Yeon/5275d45e3924bf9a2c89a1ad2239e9fc17821d06?p2df>.

Sanabel Network (Sanabel Microfinance Network of Arab Countries). 2020. <https://www.findevgateway.org/organization/sanabel-microfinance-network-arab-countries>.

Sanz, Francesc, Lima de Pedro, Ramon Ynaraja, Luciana Tomozei, and Ogedey Kiziltan. 2012. "Mobile financial services in Mediterranean Partner Countries." European Investment Bank. [https://www.eib.org/attachments/country/femip\\_study\\_mobile\\_financial\\_services\\_en.pdf](https://www.eib.org/attachments/country/femip_study_mobile_financial_services_en.pdf).

Seraj, Junaid. 2019. "Syria Digital Lab: Unlocking The Potential Of The Syrian Digital Space." Entrepreneur Middle East. <https://www.entrepreneur.com/article/339043>.

Shbaikat, Gazi, Salim Dehmej, and Amgad Hegazy. 2019. "Iraq." International Monetary Fund.

<https://www.imf.org/en/Publications/CR/Issues/2019/07/25/Iraq-Selected-Issues-48528>.

SHOPS Plus (Sustaining Health Outcomes through the Private Sector Project) and HFG (Health Financing and Governance Project). 2018. "Trends in Health Financing and the Private Health Sector in the Middle East and North Africa." Bethesda, MD: Sustaining Health Outcomes Through the Private Sector Project, Abt Associates. <https://www.shopsplusproject.org/resource-center/trends-health-financing-and-private-health-sector-middle-east-and-north-africa>.

Simpson, Robert, Teresa Moreira, Amau Izaguerri, Julieta Coca Graham Mott, and Ana Candida Muniz. 2017. "Guidelines on Consumer Protection: Consumer Protection." United Nations. [https://unctad.org/en/PublicationsLibrary/ditccplp2017d3\\_en.pdf](https://unctad.org/en/PublicationsLibrary/ditccplp2017d3_en.pdf).

Software Group. 2018. "Software Group launched a DFA solution with Sandah in Egypt." <https://www.softwaregroup.com/about-us/news/details/2018/05/14/software-group-launched-a-dfa-solution-with-sandah-in-egypt>.

Statham, Chris. 2019. "The Jordan DFS Landscape: A Situation Analysis." Digital Frontiers Institute. <https://www.digitalfrontiersinstitute.org/the-institute/wp-content/uploads/2019/04/Chris-Statham-April-2019-1.pdf>

Suedekum, Guilherme and Alexandre Berthaud. 2014. "Tunisia: The Post and financial inclusion through mobile telephony. Universal Postal Union. [http://www.upu.int/uploads/tx\\_sbdownloader/caseStudyTunisiaEn.pdf](http://www.upu.int/uploads/tx_sbdownloader/caseStudyTunisiaEn.pdf).

Syria Digital Lab. 2020. "Unlocking the Potential of the Syrian Digital Space." <https://www.syriadigitallab.com/>.

Taskin, Gizem. 2019. "Can Bitcoin save Gaza's economy?" TRT World. <https://www.trtworld.com/magazine/can-bitcoin-save-gaza-s-economy-23800>.

Telepin Software. 2020. "Telepin Selected to Power Economic Development and Humanitarian Initiative in Yemen." Cision PR Newswire. <https://www.prnewswire.com/ae/news-releases/telepin-selected-to-power-economic-development-and-humanitarian-initiative-in-yemen-300989404.html>.

The Conversation. 2017. "Why Tunisia's banks are its main economic weakness." <https://theconversation.com/why-tunisia-s-banks-are-its-main-economic-weakness-75800>.

The Jordan Times. 2018. "200 per cent increase in eFAWATEERcom e-payments." <http://www.jordantimes.com/news/local/200-cent-increase-eFAWATEERcom-e-payments>.

The Jordan Times. 2019. "CBJ mandates banks to open basic accounts for 'financially excluded'." <http://www.jordantimes.com/news/local/cbj-mandates-banks-open-basic-accounts-%E2%80%98financially-excluded%E2%80%99>.

UNHCR (United Nations High Commissioner for Refugees). 2019. "Middle East and North Africa: Middle East." <http://reporting.unhcr.org/sites/default/files/pdfsummaries/GA2020-MiddleEast-eng.pdf>.

UNHCR (United Nations High Commissioner for Refugees) Jordan. n.d. "Middle East and North Africa: Middle East: Jordan." <http://reporting.unhcr.org/node/2549>.

UNHCR (United Nations High Commissioner for Refugees) Lebanon. n.d. "Middle East and North Africa: Middle East: Lebanon." <http://reporting.unhcr.org/node/2520>.

UNHCR (United Nations High Commissioner for Refugees) Lebanon. 2019. "UNHCR Lebanon: Multi-Purpose Cash Assistance Programme (MCAP): Outcome Monitoring Report: 2018/2." ReliefWeb.

<https://reliefweb.int/report/lebanon/unhcr-lebanon-multi-purpose-cash-assistance-programme-mcap-outcome-monitoring-report>.

UNOCHA (United Nations Office for the Coordination of Humanitarian Affairs). 2019. "Improvements to Gaza electricity supply" in *The Monthly Humanitarian Bulletin*.  
<https://www.ochaopt.org/content/improvements-gaza-electricity-supply>.

UNDP (United Nations Development Programme). 2019. "Prolonged conflict would make Yemen the poorest country in the world, UNDP study says." [https://www.undp.org/content/undp/en/home/news-centre/news/2019/Prolonged\\_conflict\\_would\\_make\\_Yemen\\_poorest\\_country\\_in\\_world\\_UNDP.html](https://www.undp.org/content/undp/en/home/news-centre/news/2019/Prolonged_conflict_would_make_Yemen_poorest_country_in_world_UNDP.html).

USAID (United States Agency for International Development). 2014. "Guidance for Electronic Payments Under USAID Awards." [https://www.usaid.gov/sites/default/files/peb2014\\_06.pdf](https://www.usaid.gov/sites/default/files/peb2014_06.pdf).

USAID (United States Agency for International Development). 2019. "How to: Create Digital ID for Inclusive Development." <https://www.usaid.gov/digital-development/digital-id/how-to-guide>.

Valle Ribeiro, Maria. 2017. "Resident/Humanitarian Coordinator Report on the use of CERF Funds: Libya." United States Central Emergency Response Fund.  
[https://cerf.un.org/sites/default/files/resources/17-UF-LBY-24004-NR01\\_Libya\\_RCHC.Report.pdf](https://cerf.un.org/sites/default/files/resources/17-UF-LBY-24004-NR01_Libya_RCHC.Report.pdf).

Vital Voices Global Partnership. 2012. "Ready for Growth: Solutions to Increase Access to Finance for Women-Owned Businesses in the Middle East and North Africa." <https://insidearabia.com/overcoming-odds-women-financial-inclusion-mena/>.

Wahdwa, Diwanshi. 2019. "More men than women are literate."  
<https://blogs.worldbank.org/opendata/more-men-women-are-literate>

Women's World Banking. 2017. "Breaking through the nascent mobile money market in Morocco with women." <https://www.womensworldbanking.org/insights-and-impact/breaking-nascent-mobile-money-market-morocco-women/>.

World Bank. 2005. "The Role of Postal Networks in Expanding Access to Financial Services."  
[http://www.ruralfinanceandinvestment.org/sites/default/files/1172699563671\\_role\\_postal\\_networks\\_vol2.pdf](http://www.ruralfinanceandinvestment.org/sites/default/files/1172699563671_role_postal_networks_vol2.pdf)

World Bank. 2008. "West Bank and Gaza Financial Sector Review."  
<http://documents.worldbank.org/curated/en/134601468320930463/West-Bank-and-Gaza-financial-sector-review>.

World Bank. 2014. "Digital Financial Inclusion." G20 Global Partnership for Financial Issues Paper (CGAP). <https://www.worldbank.org/en/topic/financialinclusion/publication/digital-financial-inclusion>.

World Bank. 2016. "Financial Sector Assessment Program, Kingdom of Morocco: Financial Inclusion Technical Note." <https://bit.ly/2AkkQG4>.

World Bank. 2018a. "Account Ownership at a Financial Institution or with a Mobile-Money-Service Provider (% of Population Ages 15+) – Algeria."  
[https://data.worldbank.org/indicator/FX.OWN.TOTL.ZS?locations=DZ&name\\_desc=true](https://data.worldbank.org/indicator/FX.OWN.TOTL.ZS?locations=DZ&name_desc=true).

World Bank. 2018b. "New US\$140 Million Support for Ongoing Emergency Cash Transfers in Yemen."  
<https://www.worldbank.org/en/news/press-release/2018/12/13/new-us140-million-support-for-ongoing-emergency-cash-transfers-in-yemen>.

World Bank. 2018c. "Project Appraisal Document on a Proposed Loan." Transforming Egypt's Healthcare System Project. <http://documents.worldbank.org/curated/en/796381530329773770/pdf/Egypt-PAD-06082018.pdf>.

World Bank. 2018d. "The Role of Digital Identification for Healthcare: The Emerging Use Cases." Washington, D.C.: World Bank. <http://documents.worldbank.org/curated/en/595741519657604541/The-Role-of-Digital-Identification-for-Healthcare-The-Emerging-Use-Cases.pdf>.

World Bank. 2018e. "Urban population (% of total population)." <https://data.worldbank.org/indicator/sp.urb.totl.in.zs>.

World Bank. 2019a. "Data for Jordan, Upper middle income." <https://data.worldbank.org/?locations=JO-XI>

World Bank. 2019b. "Liquidity Crisis Weighs on An Already Strangled Palestinian Economy." <https://www.worldbank.org/en/news/press-release/2019/09/19/liquidity-crisis-weighs-on-an-already-strangled-palestinian-economy>.

World Bank. 2019c. "Project Appraisal Document on a Proposed Loan." GovTech: Digital Transformation for User-Centric Public Services. <https://bit.ly/3eufN4I>

World Bank. 2019d. "The World Bank in Algeria: Overview." <https://www.worldbank.org/en/country/algeria/overview>.

World Bank. 2019e. "The World Bank in Jordan: Overview." <https://www.worldbank.org/en/country/jordan/overview>.

World Bank. 2019f. "Tunisia Takes a Step Closer to a New Economy and Digital Transformation." Washington, D.C. <https://www.worldbank.org/en/news/press-release/2019/06/14/tunisia-takes-a-step-closer-to-a-new-economy-and-digital-transformation>.

World Bank. 2019g. "Yemen's Economic Update – October 2019." <https://www.worldbank.org/en/country/yemen/publication/economic-update-october-2019>.

World Bank. 2020a. "The World Bank in Egypt: Overview." <https://www.worldbank.org/en/country/egypt/overview>.

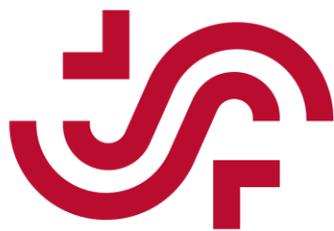
World Bank. 2020b. "The World Bank in Morocco: Overview." <https://www.worldbank.org/en/country/morocco/overview>.

World Finance. 2019. "Jordan's improved financial inclusion still leaves room for growth." <https://www.worldfinance.com/banking/islamic-banking/jordans-improved-financial-inclusion-still-leaves-huge-room-for-growth>.

WHO (World Health Organization) n.d. Digital Health Atlas. <https://digitalhealthatlas.org/en/-/>.

WHO (World Health Organization). 2018. "Classification of Digital Health Interventions." <https://apps.who.int/iris/bitstream/handle/10665/260480/WHO-RHR-18.06-eng.pdf?sequence=1>.

WHO (World Health Organization). 2019. "WHO Guideline: Recommendations on Digital Interventions for Health Systems Strengthening." Geneva: World Health Organization. <https://apps.who.int/iris/bitstream/handle/10665/311977/WHO-RHR-19.8-eng.pdf?ua=1>.



# SHOPS PLUS

Public-private engagement for better health

[SHOPSPlusProject.org](http://SHOPSPlusProject.org)

