





WORKING PAPER

Remittances and Financial Inclusion: A Demand-Side Analysis of Low-Income Jordanians and Syrian Refugees in Jordan

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The Digi#ances project is jointly implemented by GIZ and the Central Bank of Jordan, with whom CGAP partnered to conduct the baseline study.

TABLE OF CONTENTS

l.	INTRODUCTION
II.	RATIONALE AND METHODOLOGY
III.	REMITTANCES PATTERNS
IV.	ACCESS TO OTHER FINANCIAL SERVICES 8
V.	POTENTIAL FOR DIGITAL REMITTANCES AND MOBILE WALLETS
VI.	REACHING SYRIAN REFUGEES WITH DIGITAL FINANCIAL SERVICES
VII.	CONCLUSION
ВО	XES AND FIGURES
Box	1. Sample composition and key demographics
Box	2. Benchmarking financial inclusion data sources
Figu	re 1. Low-income Jordanians and Syrian refugees engaging in remittances5
Figu	re 2. Remittances amount per transaction, annual value, and cost
Figu	re 3. Remittances market sizing for low-income Jordanians and Syrian refugees (US\$)7
Figu	re 4. Comparison of data across sources10
Figu	re 5. Syrian refugees' access to ATMs (% of respondents)13
Figu	re 6. Phone ownership of Syrian refugees per income level14
Figu	re 7. Phone ownership of Syrian refugees per education level15

I. INTRODUCTION

Remittances volumes to low- and middleincome developing countries have a potentially large development impact because they are three to four times bigger than official development assistance and more stable than foreign direct investment. They are projected to reach US\$450 billion in 2017 (KNOMAD 2017). On such important volumes, the slightest decrease in transaction cost amounts to millions more channeled to end recipients. Over recent years, the global average cost for sending remittances has stuck at around 7 percent of the amount sent, still far from the goal of 3 percent by 2030 that is envisioned by the Sustainable Development Goal to "reduce inequality within and among countries." Understanding remittances behavior and designing adapted, innovative, and lowcost remittances services have thus become important issues for both financial inclusion and economic development.

In this environment, CGAP and GIZ initiated research in 2016 to assess the potential for digitizing domestic and international person-to-person (P2P) remittances as part of the broader Digi#ances project. Jordan has long been a net receiving country, with inbound remittances representing 11.3 percent

of GDP in 2016 (Verme et al. 2016). The protracted Syrian conflict and its uncertain resolution suggested remittances could be an important mechanism of family support. GIZ and CGAP sought to inform development interventions aimed at improving access to financial services for low-income Jordanians and Syrian refugees living in Jordan.

CGAP worked with IPSOS to conduct a demand-side survey of both low-income Jordanians and Syrian refugees in Jordan and with Developing Markets Associates (DMA) to conduct a supply-side analysis of the market, infrastructure, and regulations for domestic payments and for international remittances over selected corridors (CGAP, GIZ, and DMA 2017).1 This paper presents the main findings from the demand-side survey, with a specific focus on Syrian refugees. Data showed that remittances are probably not the primary entry point to formal and digital financial services for the studied population because only a limited number of Syrian refugees and low-income Jordanians engage in remittance activities.2 However, the survey provided valuable insights into the financial lives and use of financial services of both groups.

¹ This supply-side analysis found a sound infrastructure and regulatory framework for domestic mobile payments and a unique opportunity to digitize international remittances. However, both are highly cash-based and require business and consumer efforts to move toward digital solutions. Remittances also require a level playing field among all current actors, regardless of their registration type.

² Recent works reflect a diversity of situations when it comes to refugees' use of remittances. A forthcoming study by BFA on Uganda indicates 8 percent of refugees in camps receive remittances. Work by UNCDF suggests 22 percent of refugees in Tanzanian camps receive international remittances via mobile phone.

II. RATIONALE AND METHODOLOGY

This study used a quantitative analysis of the key remittance patterns and behaviors of low-income Jordanians and Syrian refugees in Jordan to understand the demand, use, and preferences of current and potential customers of both formal and informal domestic and international P2P remittance services. The study also focused on awareness of mobile wallets and broader access to financial services and technology.

The methodology consisted of a quantitative survey of 2,132 Syrian refugees and low-income Jordanians, the latter defined as belonging to socioeconomic classes D and E (i.e., with a household income of less than 400 JOD [US\$560] per month). Jordanian respondents were recruited in seven geographic areas that host the largest number of low-income people. Syrian respondents were recruited in five areas that host the largest number of refugees based on data from the United Nation's Refugee Agency (UNHCR), in addition to two camps. The survey ensured representativeness only on key criteria such as gender and age given the scarce and sometimes outdated availability of other demographic data on low-income Jordanians and Syrian refugees (Box 1).

Surveys were carried out between June and August 2016 in two phases: before and after Ramadan. Individual surveys were complemented by a series of eight qualitative focus groups that were conducted in Amman and in the large northern cities of Irbid and Mafraq.

The raw data, detailed quantitative and qualitative methodologies, questionnaires, and full results are available on the World Bank's microdata library website.³ Those data include participants' profile; access to information and technology; access to financial services; mobile wallet awareness; remittances behavior, market sizing, and forecasting; concept testing for mobile remittances; and product suggestions. A summary presentation is available on the Microfinance Gateway (see CGAP 2017).

Data Limitations

- Though efforts were made to ensure a randomized sample, there are no reliable data on the demographic makeup of low-income Jordanians and of Syrian refugees in Jordan. Therefore, the data were not weighted, and should not be considered representative.
- Irregularities in declared occupation status and income sources confirm that respondents may have misreported financial issues, including remittances. This is particularly the case with Syrian refugees, who may be inclined to under report income to meet donor criteria for aid.
- No Syrian refugee declared a house-hold income of more than 400 JOD (US\$560). This may be due to a sampling bias toward lower-income Syrian refugees and/or to under reporting to meet criteria to receive aid. However, the majority of Syrian refugees in Jordan are considered poor (see Section VI).
- The survey did not screen for people who specifically engage in

³ See http://microdata.worldbank.org/index.php/catalog/2908.

⁴ Other studies have documented the under reporting of income in a refugee context and have used expenditure aggregates as indicators of welfare. See Verme et al. (2016).

⁵ Donors may ask similar questions in surveys aimed at identifying the poorest households that qualify to receive aid.

BOX 1. Sample composition and key demographics

Respondents to the survey included 1,041 (49 percent) Syrian refugees and 1,091 (51 percent) low-income Jordanians.

Location

- In line with population distribution, 68 percent of low-income Jordanians and 62 percent of Syrian refugees in Jordan who live outside camps were in urban areas, and 32 percent and 38 percent, respectively, lived in rural areas. Since 80 percent of Syrian refugees do not live in camps, only 20 percent of interviews were conducted in camps (Zaatari and Azraq).
- The study found that Syrians originate mainly from Daraa (51 percent), followed by Homs (16 percent), Damascus (10 percent), Aleppo (9 percent), Raqqa (5 percent), and other locations (10 percent). A quarter of refugees from Daraa live in camps. This is more than for respondents from Damascus and Aleppo who are the least likely to be living in camps (10 percent and 9 percent, respectively) and is probably explained by the time of migration and geography.

Employment and income^a

- Of low-income Jordanian men, 51 percent reported an occupation. Thirty-four percent had full-time paid employment, and 17 percent were self-employed or reported a temporary or part-time occupation. Eighty-one percent of Jordanian women were housewives, and only 6 percent had full-time paid employment. Sixty percent of households relied on wages and salaries as a source of income, followed by retirement plans and government aid.
- Thirty-five percent of Syrian men were working, with the majority (22 percent) engaged in part-time or temporary work. Only 5 percent of Syrian men reported having a work permit, which indicates that occupation is largely informal. Ninety percent of Syrian women were housewives, and 2 percent reported some type of part-time or self-employment. A majority of Syrian households rely on aid: 73 percent receive aid or assistance; 40 percent rely exclusively on aid. Twenty-eight percent rely on wages and salaries, and 25 percent rely on temporary or seasonal work income.

Education

- Thirty percent of low-income Jordanians have completed only primary school, and 42 percent have completed secondary school. Low-income Jordanian women are more likely to be illiterate or to have no formal education (7 percent vs. 4 percent of men) and less likely to have completed primary school (28 percent vs. 32 percent). However, the completion rate above this level (secondary school, university) is relatively comparable across men and women.
- Sixty-five percent of Syrian refugees have completed only primary school, and 20 percent have completed secondary school. The completion rate of primary and secondary is similar for men and women. However, women are more likely to be illiterate or to have no formal education (12 percent vs. 8 percent of men). Men are twice as likely to have an undergraduate or master's degree (6 percent vs. 3 percent).

a. The survey did not collect information on the sectors of professional activity.

remittances because researchers wanted to assess the share of this segment within a random sample of Jordanian and Syrian refugee populations. The small number of actual remitters among respondents limited the relevance of insights on remittances and prevented disaggregation at times. Analysis of other

- financial services, however, covers all respondents.
- Practically no information was collected on informal remittances channels going through third parties, although informal channels usually represent a significant share of remittances markets.

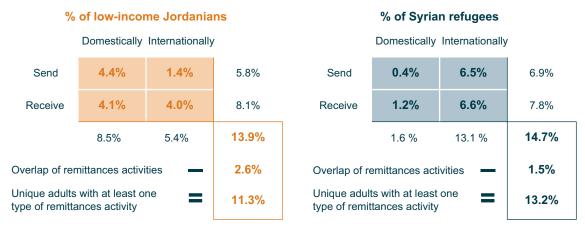
III. REMITTANCES PATTERNS

A small proportion of the surveyed populations engage in remittances. Of low-income Jordanians, 11.3 percent engage in P2P remittance activities. Of Syrian refugees in Jordan, 13.6 percent engage in P2P remittance activities. Respondents usually engaged in only one type of remittance activity: They either send or receive, domestically or internationally. However, there is a small number of remitters who perform more than one type of transaction (see Figure 1). A large share of domestic and international remittances is channeled through exchange houses, the largest group of formal and regulated nonbank financial institutions in the country.⁶ Even though remittances may involve electronic fund transfers or compensation between exchange houses, most transactions are either initiated or terminated in cash at the customer level.

Low-income Jordanians most often engage in domestic remittance activities, and are most often receiving. Of these Jordanians, 8.5 percent send or receive domestically, while 4.0 percent receive internationally. They tend to be middle-aged men who reside in urban areas, with about half working part or full time. In comparison, Syrian refugees in Jordan engage in international remittances far more often than domestic: 13.1 percent either send or receive internationally, and only 1.6 percent engage in remittance activities within Jordan. They are both men and women, middle-aged, residing outside of camps, mostly unemployed although working more than the average, and generally with a low level of education.

Gulf countries are the main source of international remittances for recipients in both groups (50 percent for Syrian refugees, 52 percent for low-income Jordanians). Neighboring countries follow with 25 percent of low-income Jordanians receiving money from Lebanon or Turkey, and 17 percent of Syrian refugees in Jordan receiving remittances from Syria. Syria, in turn, is the destination for 90 percent of Syrians sending internationally. The flows of domestic remittances reported

FIGURE 1. Low-income Jordanians and Syrian refugees engaging in remittances



Source: CGAP, based on IPSOS survey, 2016.

⁶ For a detailed introduction to the business model and regulation of exchange houses in Jordan and their role in remittances, see CGAP, GIZ, and DMA (2017).

by low-income Jordanians appear concentrated in the cities of Amman and Irbid, on both the sending and receiving side.

The main channel for domestic remittances is informal. Nearly 50 percent of domestic remittances are performed by handing over cash directly to another person. A third goes through exchange houses, and the remainder through other formal channels. Domestic remittances were analyzed only for low-income Jordanians because few Syrian refugee respondents engage in such transactions.

International remittances are mostly formal, and exchange houses dominate this market. Nearly 80 percent of remitters, Syrian refugees or low-income Jordanians alike, use exchange house services. When they do not, low-income Iordanians use other formal (and usually banking) channels whereas Syrian refugees use informal channels, mainly sending or receiving through third-party individuals. However, focus group discussions have shown that customers do not always differentiate between exchange houses and international money transfer organizations (IMTOs) of which they are agents. In several cases, exchange houses' premises are the service point and IMTOs are the remittances channel.

The reported average transaction size of US\$259 for international remittances is slightly higher than the lower-end global benchmark of US\$200, and is relatively lower for Syrian refugees (US\$144 for sending, US\$270 for receiving, with about three transactions a year) than for low-income Jordanians (US\$358 for receiving, less than three times a year).

Domestic remittance amounts are lower than international ones for low-income Jordanians, at US\$137 for sending and US\$287 for receiving. They are also more frequent (five times a year).

A common pattern found between the domestic remittances of low-income Iordanians and the international ones of Syrian refugees is that remittances received are usually for larger amounts than those sent, and are divided into fewer but larger transactions. Remittances sent represent a smaller annual amount and are sent in more frequent and smaller transactions (see Figure 2). In the case of low-income Jordanians, it can be assumed that the differences in size of amounts between sent and received domestic remittances is the result of transfers to low- from higher-income Iordanians, the latter are not covered by this survey.

The reported cost of sending remittances domestically and internationally is around 20 percent of the amount sent. This figure is higher than that indicated by the supply-side analysis, which covered international remittances only and pointed to a cost of sending remittances ranging between 1.8 percent and 6.2 percent. The difficulty to recall the price of past transactions over a period of one year may be a factor of inaccuracy in answers received by the demand-side survey.⁷

The reported cost for receiving remittances ranges from 4 percent to 12 percent of the amount received. This is closer to, although still higher than, the level suggested by the supply-side analysis, which showed a 2.7 percent to 9.9 percent price range. The diversity of answers received, in terms of channels, transaction amounts,

⁷ Other studies observed that although the costs of informal money transfer services were perceived to be lower than that of formal services, in reality, they were higher than the cost of formal ones. See e.g., Wilson and Krystalli (2017).

1,205 25% Amounts, USD 1,200 1,000 932 20% 20% 19% 796 800 703 15% 600 505 10% 358 400 287 270 5% 137 200 n 0% Received by Sent by Sent by Received by Received by Syrian refugees Syrian refugees low-income low-income low-income **Jordanians** Iordanians **Jordanians** International remittances Domestic remittances ■ Total annual value ■ Average amount per transaction Cost

FIGURE 2. Remittances amount per transaction, annual value, and cost

Source: CGAP, based on IPSOS survey, 2016.

and origin or destination of the funds may explain the wide range. Also, it is possible that respondents included the assumed or informed price paid by the sender in addition to the one they had to pay personally while receiving the funds.

Extrapolating the survey results (percentage of adults engaging in remittances, average amounts sent and received)

to the total number of low-income Jordanians and of Syrian refugees in Jordan points to a P2P remittances market of US\$231 million per year for these categories of the population (Figure 3). Overall, this would classify them as niche segments in the context of a total Jordanian international remittances market estimated by the supply side at US\$4 billion inbound and US\$500 million outbound.

FIGURE 3. Remittances market sizing for low-income Jordanians and Syrian refugees (US\$)

	Domestic	International	
Send	62 M	11 M	73 M
Receive	77 M	81 M	158 M
	139 M	92 M	231 M

Source: IPSOS (2016).

IV. ACCESS TO OTHER FINANCIAL SERVICES

The study found much lower access to financial services among Syrian refugees as compared to low-income Jordanians.

At least one out of four low-income Jordanians is banked—26 percent of respondents reported having an account at a financial institution. This figure is higher than the 16 percent account ownership found in the Global Findex in 2014 for the poorest 40 percent, a segment that roughly overlaps with the survey respondents according to available data (Box 2). Over-sampling in Amman and in other urban areas may have caused this discrepancy. This figure also shows a significant gender gap: men are nearly four times more likely to have an account than women (41 percent vs. 11 percent).

Access to formal accounts for Syrian refugees is close to zero. Only two respondents reported having a current account or a checking account at a financial institution.8 Twenty-two percent reported withdrawing cash at ATMs through the iris-scan technology used by UNHCR for cash transfers. Eight percent reported having an ATM card, which is also likely linked to humanitarian aid distribution because none of them also reported having an account. These digital payment schemes allow beneficiaries to receive subsidies through channels such as ATMs. However, because they do not go through individual accounts owned by beneficiaries, beneficiaries do not have access to a range of financial services and transactions. These digital payment schemes simply represent individual drawing rights on pooled accounts held by disbursing organizations. As such, beneficiaries of these schemes cannot be considered "banked." Besides, since cash transfers usually bear an expiry date that requires beneficiaries to use or withdraw the funds within three weeks, these mechanisms cannot be used to store value.⁹

Syrian refugees use informal borrowing sources much more than formal credit. Twenty-six percent of Syrian refugees declare borrowing but only 3 percent (nine respondents) do so through formal channels. In comparison, 29 percent of low-income Jordanians borrow from financial institutions and 12 percent borrow informally, mostly through family and friends. Among refugees, the most frequent credit users seem to be the most vulnerable. Refugees who live in a camp are twice as likely to have a loan as those who live outside a camp (43 percent of those living in a camp had a loan compared to 21 percent of those living outside a camp). Refugees living in a household that receives aid are also three times more likely to have a loan (31 percent of aid recipients had a loan as compared to 10 percent for those not getting aid). The question remains, at this stage, whether people with such a profile borrow more because they have a greater need for loans or because they have a greater access to loans. From a supply perspective—even for informal lenders—residence in camps could be perceived as limiting flight risk, and aid subsidies could be seen as a stable income that guarantees repayment.

Access to insurance is more widespread. It covers almost two-thirds of low-income Jordanians (59 percent)

⁸ Feedback from various stakeholders indicates banks have been reluctant to open accounts for Syrians who do not have a residence permit—a document that *de facto* disqualifies them from refugee status. Syrians also indicate that the documentation required is so important that they tend to drop out before opening an account.

⁹ In countries where individual accounts are set up for aid disbursement, recipients do not always understand that the individual account can be used for purposes other than receiving aid. This is especially that case if they did not previously have a formal account in their country of origin.

BOX 2. Benchmarking financial inclusion data sources

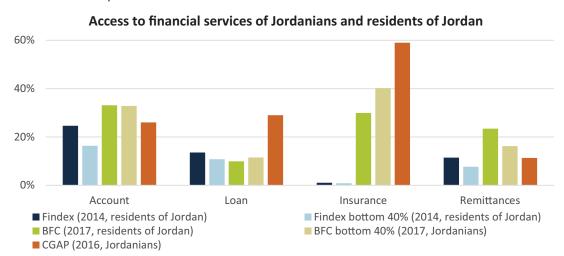
This survey is thought to be the first large-scale financial inclusion survey of Syrian refugees in Jordan or in any of the neighboring refugee-hosting countries, which makes it difficult to set benchmarks. The following presents other sources of data known to the authors at the time this paper was published:

- Findex 2014 data for the bottom 40 percent of Jordanians indicate 16 percent own an account, 33 percent are engaged in borrowing (11 percent through financial institutions), and 10–11 percent are either receiving or sending domestic remittances. They are less likely than the average to have access to financial services (the average being 25 percent account ownership; 32 percent borrowing with 14 percent through financial institutions; 9 percent receiving domestic remittances and 11 percent sending).
- Findex data are available for Syria only as of 2011. The data indicate a 23 percent formal account ownership rate. This rate is surprisingly uniform across income brackets, unlike in Jordan. The data also indicate 62 percent had a loan in the past year, but only 13 percent had a loan from a financial institution.
- The 2017 national financial inclusion survey, led by Business & Finance Consulting (BFC) and GIZ for the Central Bank of Jordan (field work conducted by IPSOS Jordan; publication forthcoming), provides the latest quantitative data for 1,000 respondents in Jordan. Results show progress since the 2014 Findex survey: 33.1 percent of adults living in Jordan indicate that they have an account, 9.9 percent a formal loan, 29.9 percent insurance, and 23.4 percent engage in remittances. Data for the bottom 40 percent of Jordanians mostly differ from this paper's findings in lower reported access to formal loans (11.5 percent) and insurance (40.2 percent), whereas account ownership (32.8 percent) and remittances (16.2 percent) are more in line with this paper's findings. Data for Syrian refugees show an overall higher access to financial services (7.5 percent report having an account, 35.6 percent insurance, and 24 percent engaging in remittances). Formal borrowing is the exception at 1.5 percent. The latter needs to be interpreted with caution in light of several other studies that show rising debt levels among Syrian refugee households, which may indicate a shift from formal to informal borrowing. For example, the CARE (2017) survey of 1,447 Syrians found that 89 percent borrow from their neighbors. It also found that 81 percent of 465 vulnerable Jordanians borrow from their families. Similarly, UNHCR (2016) found that 67 percent of Syrian households owe an average of US\$818, including unpaid rent. Methodological choices may otherwise explain the differences with the results shown in this paper (Figure 4). BFC surveyed all governorates whereas CGAP focused on the largest refugee hosting communities; BFC surveyed people residing in Jordan for over two years whereas CGAP did not screen respondents based on the duration of residence in Jordan.

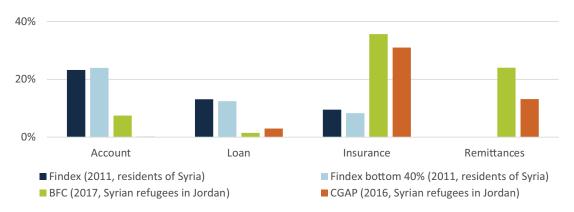
and a third of Syrian refugees (31 percent). In the case of Syrian refugees, it is assumed that the free or subsidized access to health facilities may have been misconstrued as a health "insurance" by survey respondents although it is not a financial product per se. This would

explain the high number of refugees in camps who declare having health insurance (71 percent), but it also represents a bias outside camps where refugees have access to health services on a subsidy model supported by either the Government of Jordan or UNHCR.

FIGURE 4. Comparison of data across sources



Access to financial services of Syrian refugees and residents of Syria



Notes: Findex and BFC data for adults include non-nationals, except for BFC bottom 40 percent. Findex data for Syria as of 2011. Proxy for insurance in Findex is "Personally paid for health insurance." Proxy for remittances in Findex is the greater of two values: "Sent domestic remittances in the past year" or "Received domestic remittances in the past year" (not available for Syria in 2011).

V. POTENTIAL FOR DIGITAL REMITTANCES AND MOBILE WALLETS

On their own, international P2P remittances for the groups studied are probably not sufficient to foster large-scale adoption of formal digital financial services, given the limited number of respondents who engage in such activities. The largest volumes are indeed inbound, sent by white-collar workers located in Gulf countries, through formal channels. Amounting to a higher total and going more often through informal channels, domestic P2P remittances bear some digitization potential.¹⁰ However, users report very high satisfaction rates with the services they currently use, despite relatively high reported costs. Across products and populations, the optimal pricing was estimated at 3-4 percent.

The quantitative survey and the qualitative focus group discussions also tested the awareness of, and interest in, mobile wallets. At a time when mobile wallets had not been rolled out beyond the pilot stage in Jordan, it is not surprising that awareness of mobile wallets was very low (less than 3 percent), as was the interest for such a service in survey results. However, qualitative research revealed interest and enthusiasm for mobile transfers and remittances services after detailed explanations and illustrations of the potential services, calling for significant awareness-raising efforts to support rolling out mobile wallets. Such services were deemed "convenient" and "helpful," even though some focus group participants had concerns related to the security of the funds and the risk of losing the phone.

¹⁰ The untapped market potential among low-income Jordanians did not appear to exceed 30 percent across domestic and international remittances, although figures are ultimately too small to be meaningful. Syrian refugees did not report any untapped need during the quantitative survey.

VI. REACHING SYRIAN REFUGEES WITH DIGITAL FINANCIAL SERVICES

In late 2016, the Central Bank of Jordan made a public commitment, under the Maya Declaration,¹¹ to provide refugees access to formal digital financial services. Since then, UNHCR cards were legally recognized as eligible identification documents for refugees to open mobile wallets—the first time this has been initiated anywhere in the world. This is significant because not having valid identification documents that satisfy customer due diligence requirements is regularly cited as a key barrier faced by refugees in accessing financial services.12 However, refugees in Jordan still may have issues accessing financial products other than national payments, notably international remittances, because mobile wallets are not yet linked to international money transfer services.

Nearly 655,000 Syrian refugees live in Jordan. Their high poverty level presumably is a key contributing factor to this group's relatively low access to financial services. In 2016, a World Bank study found that 69 percent of Syrian refugees in Jordan were poor according to UNHCR's poverty line, and 87 percent were poor according to Jordan's domestic poverty line. It also found that refugees in Jordan were poorer than refugees in Lebanon and that poverty had increased over time but decreased among the poorest refugees.

The extensive use of informal financial services and financial management tools, however, indicates a potential for formal financial services. The fact that some Syrian refugees report

not using financial institutions because they do not have enough money to do so (28 percent) or because they do not need a financial institution (42 percent) suggests financial education and awareness-raising on the benefits of formal financial services may be key drivers of demand.¹³ In this respect, however, the supply gap is not fully bridged given that the formal financial services available to refugees-mobile wallets, lending by some microfinance institutions are in an early stage of development and growth. Financial institutions that want to serve this segment will need to identify target groups, understand their financial circumstances, and work out how they can offer formal financial tools that provide more added value than the informal ones the potential customers currently use.

The survey also highlights aid disbursement as an opportunity to offer formal transaction and savings accounts to Syrian refugees in Jordan. Data collected, notably on ATM and mobile phone access and use, provide valuable insights into different segments. With 48 percent of aid recipients having ATM access, aid distribution appears to be a powerful tool linking refugees to formal financial channels. Statistically significant relationships can also be observed between certain segments and ATM access: men, overall, have greater access, though female household heads are well-integrated, and youth are less likely to have ATM access (Figure 5). This may be due to the design of targeting techniques and distribution

¹¹ For more, see AFI (2016).

¹² A forthcoming KNOMAD study on the impact of the regulatory environment on refugees' ability to use formal remittances channels finds that refugees face a number of challenges sending and receiving remittances, first of which are identification requirements. Two other recent policy papers reveal the same issue. See AFI (2017) and GPFI (2017).

¹³ Recent empirical evidence suggests that education is a much more important determinant of financial inclusion than wealth (see Cook [2017]).

50% 37% 40% 35% 32% 32% 27% 30% 25% 22% 20% 11% 10% 10% 0% Women 18-24 Nο Women Men Gender Household Aid recipient Aid recipient Age head (individual) (household)

FIGURE 5. Syrian refugees' access to ATMs (% of respondents)

Source: IPSOS survey, 2016.

modes for aid (e.g., household rather than individual level). Refugees from Homs and Daraa have the most access to ATMs (37 percent and 27 percent, respectively) and they rely the most on aid income (83 percent and 74 percent of households, respectively). As such, aid recipients, men, female household heads are good candidates for further financial inclusion because they already have access to formal financial tools, are more familiar with these tools, and are likely to be more comfortable using them than other segments of the population. Conversely, these data also indicate that additional efforts will be needed to integrate women and vouth into the formal financial system. While youth are less acquainted with the systems created by aid disbursement, they are more tech-savvy and may be early adopters of digital financial services. More generally, it can be assumed that a significant number of Svrian households either collect or have at some time collected aid through digital transfer schemes.¹⁴ However, bottlenecks will need to be overcome for aid mechanisms to lead to financial inclusion. First, cash transfers usually end with the withdrawal of the full amount upon receipt because the funds expire if they are not withdrawn. Second, the Jordanian economy remains largely cash-based, so the vast majority of transactions happen in cash. Third, and perhaps more importantly, beneficiaries' privacy concerns will need to be addressed, because fear of losing benefits makes them wary of formal financial services.¹⁵

Nearly universal mobile phone penetration offers another opportunity to integrate Syrian refugees into the formal financial system through digital financial services. Eighty-six percent of survey respondents own a mobile phone, and 10 percent have access to a shared phone. Phone ownership appears to be unrelated to age, household income, or whether a person lives inside or outside a camp.¹⁶ However,

¹⁴ There is no readily available information on the aggregate unique number of aid recipients among Syrian refugees. Interviews with various stakeholders indicate that at least 30,000 households receive cash transfers through UNHCR, and that at least as many are served by international nongovernment organizations. This is at least 23 percent of Syrian refugee households (based on 655,000 Syrian refugees and five members per household, the total number of households would be of 131,000).

¹⁵ See Wilson (2017).

¹⁶ A recent webinar by the Social Performance Task Force's Refugee Working Group highlighted the challenges to using digital channels such as mobile phones for financial services, especially in refugee camps. Among these, the bandwidth in the absence of nearby cell-phone towers and scarce electrical access increase the opportunity and financial cost of recharging phones. See SPTF (2017).

35% 47% Own a smartphone 13% Own a feature phone 11% Own a basic phone 37% 29% Access to a shared phone No access or no answer 11% 10% 4% < 27 JOD > 27 IOD Household income per capita

FIGURE 6. Phone ownership of Syrian refugees per income level

Source: IPSOS survey, 2016.

those who share a phone are more than twice as likely to be women (68 percent of phone sharers are women), indicating that women may be less able to access digital financial services without specific targeting. That said, 49 percent of those who share phones have their own SIM card, which would allow them to open a mobile wallet. Those who share phones without owning the SIM card may be the most vulnerable group: they are the least likely to have any formal education, are the most likely to be living inside a refugee camp, and have the lowest income.

The type of phones used varies, as does the availability of internet access. Syrian households below the US\$37 (27 JOD) per month poverty line are more likely to own basic phones (37 percent have a basic phone vs. 29 percent for Syrian refugees above

the poverty line).¹⁷ Reaching out to this segment would require USSD channels, unless these households are able to gain better access to smart phones (Figure 6) and to 3G or internet services. Indeed, 45 percent of Syrian refugees surveyed have no access to the internet. Sixty-four percent of refugees in camps do not have access to the internet, and 20 percent have access on a weekly basis or less frequently. Forty-nine percent of refugees outside camps have internet access at least daily, but 40 percent don't have access at all. In general, aid recipients report less access to internet.

Access to electricity, another important factor when considering digital readiness, is highly dependent on the living location. Only 33 percent of refugees who live inside a camp report regular access to electricity, while 90 percent of those who live outside a camp say

¹⁷ Equivalent to the international poverty line of US\$1.25 per day. In 2014, the Jordanian poverty line was of 3.6 JOD or US\$5 per day.

they have regular access. Having only limited access to power in camps poses a technical and financial barrier because a fee may have to be paid to charge a telephone. Those with higher incomes are typically more likely to have regular access to electricity, as well as to the internet.

Building up digital literacy will be another challenge when trying to use digital channels to inform and serve refugees. The majority of Syrian refugees surveyed would trust information on financial services provided on television the most, followed by information through the radio. But only 53 percent of those who own or share a phone have performed a function beyond calling or sending text messages—this figure mirrors the penetration of smart and feature phones (Figure 7). Those who have performed an advanced function (sending or receiving pictures or video, accessing the internet, etc.) are evenly split between men and women, are younger (61 percent are under 34 years old vs. 53 percent of the overall population), and are slightly better educated (29 percent have a secondary education or above vs. 24 percent of the overall population).

100% Own a smartphone 18% 42% 6% 42% 75% 49% Own a feature phone 60% Own a basic phone 12% 13% 50% 54% 10% Access to a shared 12% phone 33% 32% 25% 25% No access or no answer 26% 16% 9% 14% 10% 6% 4% 0% Illiterate or no Primary -Secondary University respondents formal middle school school education

FIGURE 7. Phone ownership of Syrian refugees, by education level

Source: IPSOS survey, 2016.

VII. CONCLUSION

The survey showed a very low level of formal financial inclusion for Syrian refugees in Jordan. Levels of formal account ownership are close to zero, as is the use of formal credit, although many Syrian refugees, especially those who live in camps and those who receive aid, rely on informal borrowing sources. Access to health insurance for this group seems more widespread than access to other financial services, although survey results suggest that free access to health facilities in camps is often misunderstood as being a form of insurance. That said, many Syrian refugees have access both to formal financial tools, through aid disbursement mechanisms, and to digital channels, as implied by the high rates of (smart) phone ownership. There may be an opportunity for Syrian refugees in Jordan to integrate into formal finance,

particularly if the focus is on women and youth who currently have low access.

The need for formal financial services and opportunities for the development of digital channels extends to the broader scope of low-income Jordanians. Given the limited use of remittances by the target groups surveyed, remittances are not likely to be the main entry point to digital financial services in Jordan. Digitizing international remittances is likely to first depend on the up-take of mobile wallets in Jordan and, eventually, on digital humanitarian payments as a push factor for the segments studied. In all cases, significant awareness-raising and marketing campaigns would be needed to leapfrog from low financial inclusion, particularly for refugees, to digital financial inclusion.

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