Mitigating the Socioeconomic Effects of the COVID-19
Pandemic on Migrants and Communities in the
Russian Federation and Central Asia

The Role of Digital Remittances

Consolidated Findings from Supply and Demand Research





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The report was developed by: Donhatai Harris (lead author) and Anna Prohorova working under supervision of Michael Newson (Senior Labour Mobility and Human Development Specialist, Regional Office for South–Eastern Europe, Eastern Europe and Central Asia, International Organization for Migration, Vienna–Austria)

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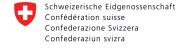
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Swiss Agency for Development and Cooperation SDC



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Acronyms and Abbreviations

CIS - Commonwealth of Independent States

DR - Digital Remittances

IMF – International Monetary Fund
 MTOs – Money transfer operators
 RSPs – Remittance Service Providers

IOM - International Organization for Migration/UN Migration Agency

USD - United States dollar

Executive Summary

Remittances from the Russian Federation and Kazakhstan to Central Asian countries play an important role in the economies of the region and provide a vital financial lifeline to families and communities throughout Central Asia. Many remittance recipients rely heavily on these funds being sent regularly, having accumulated only limited or no savings from previous transfers.

The COVID-19 pandemic created both an immediate crisis and longer—term social and economic challenges for migrants and remittance recipients alike. In the immediate term, social distancing and business lockdowns meant that traditional methods for transferring remittances (i.e. in cash or using branches of banks or MTOs) became more limited and complicated. The COVID-19 pandemic has also made the limitations and issues with the current remittance service system more salient both for Governments and for the customers of remittance service providers. This points to the need for change and innovation that can improve transfer services and encourage greater financial inclusion of migrants and their families in their home countries. In particular, promoting the use of digital remittances and additional financial products—including financial literacy and savings products—can ultimately improve remittance recipients' capacities to achieve longer—term savings and livelihood objectives, as well as enhance resilience in the face of future economic shocks.

This research project aims to examine the digital remittance systems and usage in the Russian Federation and Central Asian countries, the legal, infrastructure and the perception and behavioural barriers that may be limiting the uptake of digital financial services among migrants and remittance recipients. The research focuses particularly on the behavioural aspects of the process that may limit the engagement of migrants and remittance recipients in digital remittances and adjacent financial services. The results of this research will contribute to the evidence base for designing programmes to enhance the use of digital remittances among migrants and their recipient families and ultimately to improve the financial inclusion of this target group using digital services.

The scope of the research focuses on remittances transferred from the Russian Federation to Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) and from Kazakhstan to other Central Asian countries (Kyrgyzstan, Tajikistan and Uzbekistan).

The research consists of two components, namely the supply and demand sides. For the supply side, we examine existing legislations, infrastructure and products for digital remittance transfers. The research team utilized open–access data and conducted semi–structured interviews with representatives from Central Banks, financial regulators, commercial banks and Money Transfer Operators (MTO) in the target countries. A total of 11 interviews were conducted with relevant stakeholders.

On the demand side, we examine the behaviour, perceptions and decision—making processes of migrants and remittance recipients with respect to remittance transfers and usage, as well as existing obstacles and barriers to the use of digital financial services. Surveys were conducted with a total sample of 900 migrant respondents, including 500 migrants in the Russian Federation, 400 migrants in Kazakhstan; and 800 recipients (150 remittance recipients in Kyrgyzstan, 250 in Tajikistan, 300 in Uzbekistan and 100 in Kazakhstan).

Finally, a small—scale pilot intervention was implemented with a subset of the survey respondents in Kyrgyzstan and Tajikistan (a total of 85 participated in Kyrgyzstan and 66 in Tajikistan, including both treatment and control groups) to determine whether direct communications of the information on digital remittances could help encourage remittance recipients who already have smart phones, to try out digital tools for remittance transfers.

The key findings of the research are as follows.

- On the supply side, both banking/financial services and internet penetration in the Russian Federation and Central Asian countries are accessible and affordable, providing for either fully digital or one—end digital remittance transfers;
- Remittance Service Providers (RSP) in the region differ in terms of the digital services offered, with only two MTOs in the Russian Federation (Unistream and Contact) offering fully digital (card–to–card) services;
- · The pandemic has increased the competition in digital remittance market in the Russian Federation;
- Notwithstanding the pandemic–imposed limitations to cash-based remittances, a mixed pattern of remittance transfers persists in the region, i.e. sending digitally–receiving in cash;

- The cost of sending remittances digitally and non-digitally is equally low and thus, there is no financial incentive for consumers to switch to digital services;
- Data on digital remittances is largely unavailable in most countries in the region making it more difficult to measure trends in uptake and potential interventions to improve digital uptake;
- On the demand side, we find that most migrants and remittance recipients in our survey sample (between 80–90 per cent) have smartphones and are able to access internet through their phones, while the use/ownership of bank cards varies;
- From our survey respondents, it seems that access to bank cards is high among migrants in the Russian Federation (81 per cent) and remittance recipients in Kazakhstan (99 per cent), but there is considerably lower bank card ownership among migrants in Kazakhstan (44.5 per cent) and remittance recipients in Kyrgyzstan (62 per cent), Tajikistan (54 per cent) and Uzbekistan (49 per cent) in our sample;
- Migrants in the Russian Federation already prefer and use digital remittance services with high frequency (around 80 per cent of our respondents) while migrants in Kazakhstan demonstrate significantly lower use of digital remittance services due to limited ownership of bank cards/bank accounts;
- There is a correlation as well between ownership of smartphones and preference for digital transfers among migrants in the Russian Federation, but not in Kazakhstan;
- While there is some use of digital services for receipt of remittances, the majority of remittance recipients in Kyrgyzstan (78 per cent), Tajikistan (80 per cent) and Uzbekistan (76 per cent) choose to receive remittances in cash from bank or MTO branches. The pandemic does not appear to have significantly altered recipients' preferences or behaviour in terms of how they receive remittances;
- Bank card ownership is an important factor in migrants' and remittance recipients' use of digital services (bank
 cards being the preferred way of receiving digital transfers) with only small proportions of those without a bank
 card indicating that they use digital remittance services. Respondents without bank cards cited challenges in
 access (no bank branches in proximity) and problems with documentation as main reasons for not getting a bank
 card:
- Around 60 per cent of remittance recipients with a bank card use it to receive money which means there is a room for improvement in terms of increasing the uptake for the other 40 per cent;
- Higher levels of education, financial literacy and higher level of trust in the banking systems positively impacted respondents' preferences for digital services;
- There is also a gender gap for using of digital services with 64 per cent of male respondents preferring digital remittance services compared to only 54 per cent of female respondents;
- For those using digital remittance services and those using physical/cash services, convenience, ease and habit are cited as the main reasons for this choice.

While further research is needed to identify in more details the obstacles to digital remittances and related financial services for different segments of the migrant and remittance—recipient community, some recommendations can already be derived. Three clear and related areas of work emerge from this research to improve the uptake of digital financial services and promote financial inclusion among migrants and remittance recipients: Access to and uptake of the bank cards;

- (i) Access to and uptake of the bank cards;
- (ii) The shift to digital services for remittance recipients with bank cards;
- (iii) The uptake of complementary digital financial services for migrants and remittance recipients such as savings account.

Some specific **policy recommendations** from the research include:

- Assess penetration of financial services throughout the country including access to banks and ability to use digital payments in daily transactions;
- Enhance the attraction and value of bank cards for remittance recipients. In some cases, this may be addressed by bringing microfinance organizations into the national payment systems with capacity to process cashless payments and open savings accounts;
- Governments, commercial banks and other organizations in contact with migrants and prospective migrants (such as NGOs) should improve communications tools to promote financial inclusion and literacy and encourage the use of digital services;
- Financial literacy programmes and messaging should be designed for migrants and remittance recipients based on variables such as age, gender, education level and should be applied both at the pre—departure stage and while migrants are abroad;
- Digital financial tools should be developed with the end user's objectives, preferences and behaviour patterns in mind, in order to improve uptake, in line with a Human Centred Design (HCD) approach and learnings from behavioural insights;
- Pre—testing different types of messaging and products should be encouraged and results shared among institutions in order to enhance knowledge of the types of messaging, training modules and financial services that appear most successful and impactful among different migrant and remittance—recipient groups.

While there are a number of issues to look at and to be addressed in order to improve financial inclusion of migrants and their remittance recipient families, this research is a first step in addressing these topics in Central Asia and we have been encouraged by the strong partnership and cooperative spirit demonstrated by Government agencies and financial service providers throughout the course of this research.

I. Introduction

Remittances or international money transfers are widely used by migrant workers all over the world to support and provide for their families in the home countries. Currently, international migrants can choose between sending cash remittances or digital remittances through online remittance services provided by Money Transfer Operators (MTOs), banks or mobile operators. Thus, digital remittances are cross—border money transfers made over the internet by the migrant population to families in their home countries. Digital remittances have evolved in parallel with mobile and online banking technology and many new operators have entered the marketplace and developed global businesses in digital and mobile commerce in response to the increasing demand.

Over the past decades, the Russian Federation and Kazakhstan have become the main hubs to Central Asian migrants, making them two of the most active international migration corridors in the region. Most migrants travel to these two countries as migrant workers and most send remittances back to their families in their home countries. These migration corridors have become important lifelines for thousands of migrants and have lifted hundreds of thousands of Central Asian families out of poverty. Kyrgyzstan and Tajikistan are among the top—five remittance receiving countries in the world (as a share of their GDP): in 2020, remittances represented 29.4 per cent and 27.3 per cent of GDP in Kyrgyzstan and Tajikistan respectively (World Bank, 2021).

The cost of sending remittances in the Russian Federation—Central Asia corridor is one of the lowest in the world. Remittance—market leaders in the region such as Golden Crown, Unistream, CONTACT and Western Union, offer options for remitting from and to a bank card and bank account, using mobile applications. Yet, there has been little research which examines financial inclusion and financial behaviour of Central Asian migrants working in the Russian Federation and Kazakhstan and the recipients in the countries of origin, except a recent survey by NAFI which indicates that the majority of migrant workers in the Russian Federation have already been using financial services and bank cards (NAFI, 2017)¹.

The COVID-19 pandemic has created both an immediate crisis and longer–term social and economic challenges for migrants and remittance recipients as well as the overall Central Asian economies. The outflows of money from the Russian Federation to some of the Central Asian countries declined sharply in 2020, amid the COVID-19 travel restrictions. Money being sent to Tajikistan and the Kyrgyzstan, for example, dropped by 37 per cent and 17 per cent respectively in 2020 (World Bank, 2021). According to the Bank of the Russian Federation estimates, total outward personal remittances dropped in 2020 by 3.8 per cent compared to 2019, reaching USD 40.1 billion—the lowest level in the past four years.

Remittances from the Russian Federation to the Commonwealth of Independent States (CIS)² countries also declined in 2020 by 14.4 per cent, to USD 11 billion. It should be noted, however, that the USD value of remittances from the Russian Federation was also impacted by a sharp depreciation of the Russian currency, slumping 22 per cent against the USD in 2020 (Ratha et al., 2020).

The Bank of the Russian Federation estimates show that in 2020, the amount of cash transfers from the Russian Federation to the CIS countries through MTOs dropped by 38.2 per cent—to 97.3 billion rubles compared to 157 billion rubles in 2019. Such a sharp decline appears to be directly linked to the local and/or national lockdowns imposed for a few months in the Spring in the Russian Federation in 2020, when migrants were unable to send remittances in cash. Additionally, migrants lost their jobs and, consequently, in many cases had no money to send home. This has had a significant impact on the lives of many recipients.

The vast majority of remittances in the Russian Federation—Central Asia corridor are sent formally, through MTOs, which often requires migrants and recipient families to engage in a face—to—face transaction to send and receive money. The COVID-19 pandemic has raised concerns about potential transmission of the virus through this method and through the use of cash. Therefore, the increase in digital remittance uptake is viewed as both a positive and a necessary trend that is worth scaling up amongst the most vulnerable population, including migrants and their families. As a result, COVID-19 has significantly increased the uptake of digital remittance services globally, as shown by the reported growth of the digital business by international market leaders such as Western Union, MoneyGram.

Labor migrants use only the simplest financial products. Press release, dated November 17, 2017. https://www.nafi.ru/analytics/bolshinstvo-trudovykh-migrantov-polzuyutsya-finansovymi-uslugami-v-rossii/.

^{2.} Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan, Uzbekistan.

Similarly, the Russian Federation-based MTOs–Golden Crown, CONTACT, Unistream have seen their online transfers doubled, especially through mobile applications. However, most of these increases have been on the sender side (migrants); there is a lack of evidence of a similar increase in digital remittance uptake on the recipient side.

Digital remittances have a further role to play within the COVID-19 context as they have long been regarded as an instrument to facilitate financial inclusion of migrant households. It is known that the availability of remittance income alone has not led automatically to better financial inclusion, due to a number of reasons (e.g. lack of trust in financial institutions, lack of appropriate financial literacy training, lack of infrastructure, etc.). Consequently, people continue to spend most of their money on basic needs, save very little and keep money at home rather than in a bank account. The patterns of financial behaviour of migrant households appear difficult to change, even with remittance—backed financial products and interventions targeting financial literacy (Prokhorova, 2017). Digital remittances may play a role in incentivising saving behaviour and deepening financial inclusion.

Given the above context, digital remittance services could play a vital role in changing the landscape of remittance transactions in the region. First, it can provide an instrument for safe and quick money transfers abroad and therefore, it can provide a fundamental lifeline to migrants' family members in their home countries. Second, digital remittances can encourage the use of savings and financial inclusion. The potential of digital remittances to allow families in the countries of origin to increase their savings, build credit history and create collaterals would contribute to reducing poverty and financial vulnerability of households in these countries. Finally, the uptake of digital modes of transfer increases the share of remittances being sent through formal channels, which will help Government strengthen the formalization of financial institutions and an oversight over the amount of remittances sent abroad.

Based on this background context, this study aims to investigate and document the state of the current infrastructure and availability of services in the digital remittance industry in the Russian Federation and Central Asian countries and the extent to which Central Asian migrants and remittance recipients have been using digital remittances during the pandemic, their attitudes towards digital remittances compared to other modes of transfer and the state of the current remittance infrastructure in the Russian Federation and Central Asia.

Specifically, this study aims to get a better and holistic understanding of the supply and demand sides of the digital remittances market. On the supply side, this project undertakes a broad overview of the infrastructure, costs and availability of services in the region. It highlights potential barriers and policy challenges. The demand side undertakes novel data collection which examines both migrant and recipient behaviours (migrants in the Russian Federation and Kazakhstan and recipients in Uzbekistan, Kyrgyzstan, Tajikistan and Kazakhstan). The survey aims at understanding behavioural patterns of remittance transfers between migrants and recipients, behavioural barriers to digital remittances uptake and financial inclusion. This background research provides a basis for designing and testing a pilot intervention which uses direct communications in the form of text messaging to change the attitudes and behaviour of those who have not used digital remittances (even when they have smartphones) in order to increase the uptake of digital remittances.

II. Financial literacy and digital remittances

An additional enabling factor to increase the uptake of digital remittances is a relevant level of digital financial literacy, both on the sending and the receiving end. In this regard, both remittance sending and remittance receiving countries have been implementing Government—supported programs aimed at improving financial literacy of the population. For example, The Central Bank of the Russian Federation, in April 2020, became one of the key agencies in charge of implementing the Strategy of Improving Financial Literacy of the Population for the period 2017–2023. The National Bank of Kyrgyzstan has completed implementing the Program of Improving Financial Literacy of the Population for the period of 2016–2020 and Kazakhstan is in the process of implementing the Concept for the Improvement of the Financial Literacy for the period of 2020–2024.

In its special COVID-19 note, the International Monetary Fund (IMF) indicates that "Digital financial services (DFS) can be harnessed to respond to the COVID-19 shock and the crisis has the potential to accelerate their development and use. For countries where DFS have not been developed, making progress to satisfy important preconditions will smooth the transition toward DFS. These include having an adequate digital infrastructure (e.g. high—quality communication services that facilitate access to the internet and mobile connectivity) and putting in place legal and regulatory requirements that enable DFS (e.g. allow the use of third—party agents to facilitate access to DFS and develop a strong network of local agents, establish a risk-based and proportionate anti—money laundering (AML) framework, foster interoperability and competition). Incentives for local adoption and the existence of a national ID system can also facilitate the development of DFS." (IMF, 2020).

Digital finance needs to be included in the countries' financial literacy programs, addressing the need of taking measures against proliferation of COVID-19. Together with other important elements of financial literacy, digital finance is included into the collection of educational materials uploaded to the financial literacy information portals run by the Russian Federation, Kazakhstan, Tajikistan, Uzbekistan and Kyrgyzstan. The target audience of the financial literacy programmes, as a rule, includes children, elderly and women.

Besides the financial regulators, some commercial banks in the remittance receiving countries take efforts to improve financial literacy of their clients. For example, the Commercial Bank of Kyrgyzstan developed its own financial literacy educational module to be used in higher education institutions.

Remittances are also covered by the educational materials available at the financial literacy information portals. Remittance–related videos and articles address issues such as most effective ways of spending remittances sent from abroad. Digital remittances are also mentioned in the education videos as a digital financial service available to those working abroad. However, digital remittance schemes and options are not explained. The most detailed information on remittances—as internal and international money transfer options—is currently available at the Russian Federation's financial literacy portal Fincult.info,³ but only in the Russian language.

Nevertheless, digital remittances remain largely beyond the coverage of the national financial literacy programs as they are not identified as a specific or priority target market for financial literacy with their unique needs identified and addressed. In this report, we highlight the importance of identifying this as a priority target for policy recommendation.

 $^{3.\} https://fincult.info/article/denezhnye-perevody-kak-eto-rabotaet/.$

III. Research questions, hypotheses and methods

3.1 Research Questions

To understand the current state and usage of digital remittances in Central Asian countries, this project takes a holistic view of the remittances market by analysing the current infrastructure and availability of services, mapping the digital remittances infrastructure in the Russian Federation and the CIS countries; and examining the demand side through a novel approach of collecting primary data and an in–depth exploration of the behavioural and uptake barriers to digital remittances by both the migrants and recipient respondents.

Figure 1: Demand and Supply of Digital Remittances: Key questions Digital Remittances Market Russian Federation -Central Asia Migration Corridor Supply Demand **Key Questions: Key Questions:** (1) To what extent are digital modes of transfer currently being used by migrants and (1) What has been the evolution of the remittance market in the post-Soviet era? recipients? (2) What factors influence remittance-senders (2) What is the legislative framework for digital and recipients' choices of modes of transfer? remittances in the Russian Federtion and Central Asia? (3) What are concerns and obstacles that may limit uptake/use of digital remittances services? (3) What is the scope of international c opperation of the financial sector regulator in (4) 'Who' are the people who prefer digital the region? remittances, and do they have different socioeconomic profile and trust attitudes (4) What are the main suppliers and main forms of transfer in the region? compared to those who prefer cash? (5) For those who do not use digital/non-cash (5) What is the role of financial institutions in remittances, why do they not choose this the dissemination of financial literacy in the option? population?

3.2 Methodology

3.2.1 Methods for the supply side analysis

When considering the uptake of digital remittances, it is useful to distinguish between senders' and recipients' perspectives and what kind of services are available to them. In the framework of the supply–side research, the analysis of digital remittance infrastructure distinguishes between sending and receiving digitally. Thus, three patterns of digital remittances are explored:

- 1. Sending digitally-receiving in cash
- 2. Sending in cash-receiving digitally
- 3. Sending digitally-receiving digitally

Current research relies on the hypothesis that the pandemic provoked wider offer of digital remittance services, with Remittance Service Providers (RSPs) encouraging both remittance senders and remittance recipients to switch to digital means and methods of dealing with remittances.

Based on the above, digital remittance uptake is subject to (1) digital advancement of RSPs in both migration destination and origin countries and (2) financial inclusion of migrants in destination countries and financial inclusion of their family members in origin countries (Table 1).

Table 1: Conditions for digital remittances uptake by migrant workers and their families

Destination	on country	Origin (country
DEMAND-SIDE (senders, i.e. migrants)	SUPPLY-SIDE (RSPs, financial regulators)	DEMAND-SIDE (receivers, i.e. family members)	SUPPLY-SIDE (RSPs, financial regulators)
sender's financial inclusion	Digitalization of financial services by RSPs	recipients' financial inclusion	Digital payment infrastructure

According to the World Bank categorization, the four key types of (RSPs) include banks, MTOs, mobile operators and post offices. Each of these RSPs follows a different schema for providing digital remittances service—both in terms of sending and receiving money. This research will mostly focus on MTOs which account for 80 per cent of money transfers between the Russian Federation and the CIS (OECD, 2018).

In particular, when analysing senders' uptake of digital remittances in destination countries, the following issues will be explored:

- 1. The availability of digital remittances services provided by MTOs, banks, other relevant RSPs;
- 2. The accessibility of digital remittances services for senders (i.e. migrants) including ownership of a bank card/account, which is highly dependent on the requirements which banks apply to non–resident clients;
- 3. The affordability of digital remittances services by RSPs and particularly their costs and other associated expenses in comparison to cash-based remittance transfer services (Table 2).

Table 2: Key elements of digital remittance uptake across three analytical dimensions: availability, accessibility and affordability

		Key elements of digital remittances uptake
1.	Availability	 Bank card/bank account ownership (requirements); Mobile internet; ATMs proximity and non-cash payments infrastructure;
2.	Accessibility	 Mobile banking and internet banking provided by key local RSPs; International cooperation of RSPs and regulators;
3.	Affordability	Cost of transfer;Minimum amount of transfer (requirement).

The findings of this section rely on open access data and 11 semi–structured interviews conducted with the representatives of the financial sector regulators, commercial banks and Government agencies in the Russian Federation, Kyrgyzstan, Tajikistan, as well as with representatives of key Russian MTOs and KazPochta (the Postal Service) in Kazakhstan.

3.2.2 Methods for the demand side analysis

Numerous studies have explored and studied remittance behaviour of both senders and recipients of migrant transfers in the CIS countries. The current findings in the literature indicate that migrants mostly use formal channels for money transfers, such as banks and MTOs (see our in–depth literature review in Supplementary Material). Digital remittances, however, have rarely been included in the scope of the existing research on migration and remittances. This is a significant gap in the knowledge base of remittances market. Financial literacy and financial inclusion assessments of the population of the Russian Federation and Central Asian countries suggest that there is untapped potential for using digital remittances in the Russian Federation—Central Asia corridor. Our aim is to fill this gap in the literature. Based on our extensive literature review, we have identified the following factors which are most likely to play an important role in determining the choice of mode of sending and receiving remittances:

- Ownership of a smart phone
- Access to internet
- Access to a bank card
- Trust in banking and financial institutions
- Habit
- Convenience of having cash in hand
- Financial and IT literacy

We conducted a **scoping survey questionnaire** (see the survey tools for migrants and recipients in the Annexes D and E) in order to address the following research questions:

- (i) What is the extent to which digital modes of transfer are currently being used by migrants and recipients?
- (ii) What are the factors that influence remittance-senders and recipients' choices of modes of remittance transfer?
- (iii) What are concerns and obstacles that may limit their uptake/use of digital remittance services?
- (iv) What type of individuals prefer the use of digital remittances? and do they have different socioeconomic profile and trust attitudes compared to those who prefer cash?
- (v) For those who do not use digital/non-cash remittances, why do they not choose this option?

The team conducted the scoping exercise in two steps. The first step was a pilot survey which was carried out around two months before the actual scoping survey. Then the results from the pilot survey were used to refine the scoping surveys to ensure that they were able to probe and obtain relevant information within the context of the countries in this study. All interviews took place between February and March 2021. A total of 500 migrants who were working in the Russian Federation were interviewed (100 from Kyrgyzstan, 125 from Tajikistan, 225 Uzbekistan and 50 from Kazakhstan). In Kazakhstan, 400 migrants were interviewed (50 from Kyrgyzstan, 50 from Tajikistan and 300 from Uzbekistan). For recipients of remittances, we interviewed 800 respondents in total (150 in Kyrgyzstan, 250 in Tajikistan, 300 in Uzbekistan and 100 in Kazakhstan). The findings of the scoping survey are used as a basis for our intervention design.

IV. Mapping digital remittance infrastructure: Supply-side key findings

This section reports the key findings of the supply–side analysis. It aims to explore whether and to what extent digital remittance services are available to remittance senders and recipients in the Russian Federation, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. The first part looks at the evolution of the remittance market in the Russian Federation and identifies key providers of remittance services for Central Asian migrants working in the Russian Federation and Kazakhstan. Additionally, it also outlines main legislative framework that regulates the remittance market and explains the role of the national payment systems in facilitating the digital remittances between the countries under study. The second part of this section addresses the patterns of digital money transfers and assesses availability, accessibility and affordability of digital remittance services. The third and final part highlights the relationship between the digital financial literacy and digital remittance uptake both by the senders and recipients.

4.1 Context

4.1.1 Evolution of remittance market in the post–Soviet space

The trend for outgoing remittances emerged in the post–Soviet Russian Federation only in the late 1990s. Labour migration from Central Asian countries to the Russian Federation, which intensified in the 2000s, served as an impetus for development of the money transfer system in the region. Between 1999 and 2004 the outflow of formal remittances from the Russian Federation increased by 200 per cent (71 per cent of this increase happened in 2004) (Interstate Bank, 2011).

In 1990s, the (the Russian Postal Service (also known as the Post of the Russian Federation)) remained the key remittance service provider (RSP) in the Russian Federation because Western Union and Money Gram could not yet deliver money to all CIS countries. Remittances sent by post were delivered to the post office indicated by the sender. As labour migration to the Russian Federation intensified, the remittance market started expanding. In 2002, a few more international MTOs entered the Russian market, such as Ria Envia and Travelex Worldwide Money Ltd whilst Russian banks started launching their own remittance systems and services (CONTACT by Russlavbank in 1999, Unistream by Uniastrum Bank in 2001, Migom by EuroTrust Bank in 2002 and Golden Crown in 2003).

In 2003, the Post of the Russian Federation introduced the service Cybermoney aimed at facilitating faster and cheaper money transfers. the Russian Federation-based MTOs set fees as low as 1–2 per cent of the transfer amount with funds to be delivered within one working day. Thus, the service became more affordable and convenient for Central Asian migrant workers.

At the initial stage of the international remittance system development in the region (early 2000s), the transferred money could only be collected by a recipient in cash at a particular pick—up point, e.g. a Russian MTO's partner bank branch or at an exact address to be indicated by the sender. By 2005/06, the remittances became "address—less", meaning that a recipient selected a particular address to collect the money, while the sender had to indicate only the country and the city.

By 2010, over 20 remittance service providers were functioning in the Russian Federation. However, the number of MTOs later decreased. Some service providers left the market after the Bank of the Russian Federation had revoked the licenses from the corresponding banks, e.g. Migom in 2014.⁴ Currently, as of 2021, market leaders in the Russian Federation are Russian MTOs: Golden Crown, CONTACT and Unistream, which account for more than 70 per cent of the market. The fourth significant player in the market is Western Union. In general, international MTOs account for only 16 per cent of the Russian remittance market (OECD, 2018). Russian MTOs are also major players of the remittance market in Kazakhstan, with about 80 per cent of the international money transfers being conducted through Golden Crown.⁵ Key destinations of remittances originating from Kazakhstan include Uzbekistan, the Russian

^{4.} Терновская, Т. (2014). «Мигом» без лицензии. РБК, от 19 марта 2014 г. rbc.ru/newspaper/2014/03/19/56bf299c9a7947299f72d3d0.

National Bank of Kazakhstan's statistics on transborder money transfers. nationalbank.kz/ru/news/perevody-mezhdunarodnye-i-vnutristranovye/rubrics/1682.

Federation, Kyrgyzstan and Turkey.⁶

Digitalization of remittance services started with Russian MTOs offering a transfer to a bank account, including a bank account abroad. Such options became available in 2010 via CONTACT. At that point, the MTO also added various payment services to the clients, such as credit payments. Starting in 2015, money transfers from bank cards became available via Russian MTOs websites and, most recently, via mobile applications. Offline venues for remittance sending, especially mobile operators' retail stores, remain strategically important for MTOs (e.g. in 2020, CONTACT renewed its partnership with Svyaznoy stores and Golden Crown continues collaboration with MTS mobile operator's retail stores).

As of 2021, money transfers from the Russian Federation to Central Asian countries can be conducted in Russian rubles, USD and Euros. When the currency of sending and the currency of receiving the money differs, the cost of remittance increases due to the currency exchange. On average, the cost of international remittances in Russian Federation—Central Asia corridor remains among the lowest in the world.

4.1.2 Legislative framework of digital remittances in the Russian Federation and Central Asia

The legal framework for remittance service providers in the Russian Federation was introduced in 2011, when the long-awaited Federal Law No. 161–FZ "On the National Payment System" was adopted. By that time, the remittance market in the Russian Federation had already matured in terms of the number of (RSPs) and required formal rules to codify and standardize operations.

The "National Payment System" (NPS) Law introduced the concept of "money transfer", defined "e—money", clarified the role of "e—money transfer operators" and established basic regulatory requirements to govern the market. The NPS Law laid the foundation for the rapidly developing market of cash—free transactions in the Russian Federation. Between 2010 and 2018, the number of cash—free transactions in RF increased 30—fold, from 5.7 to 172 transactions per individual per year.

The three main laws which are applicable to remittance service providers in the Russian Federation. are:

- 4. Federal Law No. 161–FZ "On the National Payment System" dated 27 June , 2011;
- 5. Federal Law No. 395-FZ "On Banks and Banking Activity" dated 2 December, 1990;
- 6. Federal Law No. 115–FZ "On Combating Legalisation (Laundering) of Illegally Gained Income and Financing of Terrorism" dated 7 August, 2001.

The Central Bank of the Russian Federation is the main regulator for RSPs, as well as for almost all other financial market participants. Additionally, the Federal Financial Monitoring Service (Rosfinmonitoring) is responsible for enforcing anti–money laundering and counter–terrorism financing rules that extend to e–money operators. The Federal Anti–Monopoly Service (FAS) enforces anti–monopoly and fair competition rules, including advertising of financial products and services.

The NPS Law defines e-money in a way which is compatible with the European approach:

"E—money is monetary funds provided in advance by one party (funds provider) to another party (obligor) that must record the information on the amount of funds provided by the funds provider without opening a bank account to enable the funds provider to perform its monetary obligations in relation to third parties and in respect of which the funds provider is entitled to send instructions only using electronic means of payment."

In order to make transnational digital remittances possible, the legislation of the migrants' origin countries should also adopt e-money legislation. In this regard, all Central Asian countries receiving remittances from the Russian Federation, have relevant provisions in their national payment systems legislation. Both remittance sending and receiving countries recognize the importance of the existing opportunity for sending and receiving money across borders without opening a bank account. However, they also monitor the trends and take measures to prevent the misuse of the existing system.

In December 2019, the National Bank of Tajikistan launched the National Remittance Processing Center to process all cross—border money transfers conducted without opening a bank account. This step served as a measure to prevent the destabilization of the financial market due to the insolvency of the payment systems. Earlier, the Russian MTO, Leader, went bankrupt and could not repay the money transfers paid by local credit organizations in Tajikistan.

Additionally, the National Remittance Processing Centre allows for online monitoring of remittance inflows, establishes a common exchange rate and facilitates a more convenient mode of work with payment systems for local banks.

Recently, the The Central Bank of the Russian Federation also took measures to increase transparency of remittance operations. Starting 3 August, 2020, users of electronic wallets in the Russian Federation cannot anonymously deposit cash to their electronic wallets. Previously, this could be done through payment terminals and offices of mobile operators. Now, in order to deposit funds, a person needs to identify themselves and link a bank account to the wallet. These innovations were deemed necessary to combat financing of drug trafficking, terrorism, etc., as these amendments allow authorities to track the source of funds. These innovations mainly affected Russian citizens, however. For migrant workers from Central Asia, another measure was more important as described below.

Earlier, in 2019, The Central Bank of the Russian Federation issued a recommendation to limit the total amount of remittances transferred from one person to 100,00–150,00 rubles per month⁷ (USD 1,356–2,035, with exchange rate of 73.7 rubles/ one USD as of 18 May, 2021). This measure was taken to stop conspicuous transfers conducted by the same person multiple times within one day. Following this recommendation, in 2019 MTOs had to lower the total amount of money to be transferred by one person within a month.⁸ As a result, the group remittance—when one person sent remittances to several recipients abroad on behalf of his compatriots—became inaccessible.

4.1.3 National payment systems and bank card ownership

4.1.3.1 Russian Federation and Kazakhstan

Remittance—sending countries—Russian Federation and Kazakhstan—have higher rates of bank card ownership in the region. Moreover, digital payments have been rapidly developing in these countries. In 2020, the number of credit cards in Kazakhstan doubled, while the number of debit cards grew by 40 per cent. As a result, there are 189 debit cards per 100 residents in Kazakhstan, with Almaty and Nur—Sultan as leading cities by card ownership rate. Kazakhstan also reported an increase in bank card ownership and cashless transactions. By the beginning of June 2020, there were 38.8 million payment cards in circulation in Kazakhstan, which is 54.7 per cent more compared to the same period of 2019 (25.1 million). The number of cardholders increased over the year by 52.3 per cent to 33.2 million people. The issuers of payment cards in Kazakhstan are 22 banks and Kazpochta. From the perspective of digital remittance uptake, these figures suggest that remittance recipients in Kazakhstan should be well—equipped to receive money digitally from their relatives working abroad. However, statistics on the uptake of digital remittances amongst migrants working in Kazakhstan and remittance recipients living in Kazakhstan are currently not available. Our research fills this knowledge gap.

As for the Russian Federation, a survey conducted in 2017 showed that 76 per cent of migrant workers, including those from Central Asian countries, do use the services of Russian financial organizations, and 63 per cent of respondents had a bank card. In other words, the potential for digital remittance uptake by migrants working in the Russian Federation is rather high. Commercial banks also facilitated the issuance of virtual payment cards with distance "know your customers" procedures, where the national financial regulators approved such a measure, as for example, in the Russian Federation. In Kazakhstan, the pandemic pushed innovation by Kaspi Bank, in the form of a "kartomat"—a terminal which allowed for a payment card issuance without visiting a bank branch. In

4.1.3.2 Tajikistan, Kyrgyzstan and Uzbekistan

The COVID-19 pandemic facilitated the increase of cashless transactions within remittance receiving countries, as evidenced by the national banks' statistics (see Figure 2). In this context, the national payment system cards served as an instrument to ensure continuation of the Government payments to the population. In Kyrgyzstan, all commercial banks can issue Elcard—a national payment system card. Those working in the public sector received Elcard salary cards and social benefits are also paid to these cards. For example, 43 per cent of retired persons currently get pension payments through Elcard cards issued by commercial banks.¹² HUMO and UzCard are two payment system operators registered with the Central Bank

^{7.} Recommendations of the Bank of the Russian Federation dated January 14, 2019 No. 2-MP «On increasing the attention of credit institutions to individual Customer transactions».

^{8.} Eremina, A. Money transfer systems have introduced limits on sending money to some countries. Vedomosti, dated April 29, 2019 vedomosti.ru/finance/articles/2019/04/28/800419-denezhnih-perevodov-limiti.

^{9.} Overview of the cashless payments market by the end of 2020. Report of the Association of Financiers of Kazakhstan, February 2021

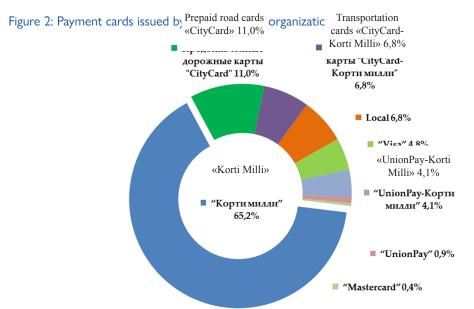
Migrant workers use only the simplest financial products. Press release, dated November 17, 2017. https://www.nafi.ru/analytics/bolshinstvo-trudovykh-migrantov-polzuyutsya-finansovymi-uslugami-v-rossii/.

Kaspi.kz He patented a unique Kaspi Cartomat device. zonakz.net/2020/07/29/kaspi-kz-zapatentoval-unikalnoe-ustrojstvo-kaspi-kartomat/.

^{12.} The main directions of development of the payment system of the Kyrgyz Republic for 2018-2022.

of Uzbekistan.¹³ In May 2019, HUMO cards started to be issued in Uzbekistan. As of December 2020, over 4 million cards have been issued (roughly 15 per cent of the adult population over 15 years). In April 2021, UzCard and HUMO announced integration of the payment systems, which would allow to use the same POS-terminals for offline payments.¹⁴

Over the course of the pandemic in 2020, bank card ownership in Tajikistan increased significantly, with Korti Milli–national payment system cards–constituting the majority of issued cards–65.2 per cent (Figure 2). The National Bank of Tajikistan reported 24.2 per cent increase in the number of bank card transactions and 65.7 per cent increase in the value/volume of transactions in the first half of 2020, compared to the same period of 2019.



Source: National Bank of Tajikistan.

4.2 Digital Payment Patterns

The Global Findex Database (Demirguc–Kunt et al., 2018) suggests that the use of digital payments has increased significantly (for most of the countries in the region) between 2014 and 2017. The report estimates that in Tajikistan, around 58 per cent of the entire population in the labour force (domestic and international) made or received digital payments in 2017 compared to only 12 per cent in 2014. In Kyrgyzstan, the per centage of the population in the labour force (domestic and international) that made/received digital payments went up to 59 per cent in 2017 from 19 per cent in 2014. However, for Uzbekistan the share of people sending/receiving digital payments (domestic and international) has gone down from 39 per cent in 2014 to 36 per cent in 2017 (Table 3).

Table 3: Digital remittances and payments in the Russian Federation and Central Asian countries

	domestic remittances via mobile phone		digital payment made/received in the past year	
	2014	2017	2014	2017
Kazakhstan	1.80%	15.30%	53.7%	63.50%
Kyrgyzstan	0%	3.80%	19.40%	42.40%
Russian Federation	8%	39.10%	67.60%	79.60%
Tajikistan	n/a	13.50%	11.70%	57.90%
Uzbekistan	n/a	n/a	39.50%	36.10%

Source: Global Findex Database 2019.

These indicators suggest that there is some untapped potential for using digital remittances in the Russian Federation—Central Asia corridor which could also be used for enhancing the investment–oriented behaviour of both senders

^{13.} cbu.uz/ru/payment-systems/history/.

 $^{14. \}quad uzcard.uz/ru/news/post/uzcard-i-humo-podpisali-memorandum-o-sotrudnichestve$

and recipients of remittances. So far, the prevailing pattern of remittance spending among recipient households is consumption, meaning that the major portion of the received money is spent for immediate needs such as food and clothing whereas greater used of digital financial services could promote greater use of remittances towards savings and investment schemes. In general, money transfer routes can be divided into three "miles". The first mile relates to the digital and cash remittance infrastructure available in a destination country. The second mile refers to the intermediary hub, i.e. payment systems licensed in the remittance sending country and remittance receiving country. The third and last mile deals with remittance receiving method and is determined by availability of corresponding infrastructure which depends on the chosen method of remittance receipt (Table 4).

Table 4: Remittance routes across borders

1 st	mile	2 nd I	mile	3 rd mile
remittance sending venue	remittance funding method	remittance service provider	payment system	remittance receiving method
MTO/bank office Mobile app website	Cash/bank card	MTO Bank	VISA, Elcart, etc.	Cash/bank card

Source: compiled by the lead supply researcher based on the existing patterns in the Russian Federation—Central Asia remittance corridor.

Existing remittance infrastructure in the Russian Federation and Central Asian countries allows for three patterns of digital remittance:

- 1. sending digitally-receiving cash;
- 2. sending cash-receiving digitally;
- 3. sending digitally-receiving digitally.

These patterns require availability of various elements of remittance infrastructure on both sending and receiving ends and differ in terms of accessibility and cost. Variability against these three parameters may influence a sender's or a recipient's choice of remittance sending or receiving method. Below three digital remittance patterns are considered in detail based on the three assessment criteria: availability, accessibility and affordability.

4.2.1 Sending digitally-receiving in cash

The first stage of digital remittance in the Russian Federation—Central Asia corridor occurs in the first mile when MTOs provide migrants an option of sending remittances digitally on website or mobile application. This stage started in the Russian Federation in 2015.

Table 5: Sending digitally-receiving in cash

	Sending country –sender's perspective	Receiving country –recipient's perspective
Availability	MTOs websites MTOs mobile apps	MTO to be licensed by a national financial regulator and to meet regulator's requirements (e.g. National Remittance Processing Centre in Tajikistan)
Accessibility	For a bank card issued in the Russian Federation, the required documents include national ID, phone number and a migration card;	ID, remittance tracking number
Affordability	Around 1%; may vary depending on a country and amount to be sent; 0% if received in USD or Euro	Wide network of pick-up points- zero transportation costs; remittance fee is paid by the sender.

4.2.1.1 Availability

All four key MTOs providing remittance services in the Russian Federation and Central Asia countries (Golden Crown, Contact, Unistream and Western Union) run websites and mobile applications which can be downloaded for free both for Android and IOS smart phones and allow for cashless remittances. The leader is Golden Crown (over 5 million downloads), followed by Unistream (over 500,000 downloads) and Contact and Western Union (both over 100,000 downloads).¹⁵

Unistream launched its app in autumn 2017 and within one year the reported structure of digital remittances changed in favour of mobile app channel (80 per cent of transfers via mobile app, 20 per cent via website). As of 2019, the general divide between cash and non–cash remittances in Unistream is 50/50. In its mobile app, Unistream also offers other payment service products such as payment for work permit and mobile connection in origin countries. Mobile applications were launched by MTOs long before the pandemic of 2020. For example, the first online transaction via Unistream mobile app occurred in 2017. When digital remittance services started to be offered, the MTOs focused primarily on the scheme 'from card to cash', meaning that remittances could be sent digitally, but had to be received in cash. This pattern remains the most preferable among the clients of the Russian MTOs. 16

In order to deliver the money sent from the Russian Federation in a receiving country of Central Asia, an MTO has to be officially registered in both remittance receiving and remittance sending countries. Geographical coverage of key MTOs differs which is reflected in the payment systems registers compiled by the national banks in the Russian Federation, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Additionally, MTOs may be required to comply with the requirements set by local financial regulators. For example, after the launch of the National Processing Centre for Remittances in Tajikistan in 2019, Golden Crown stopped providing services in Tajikistan having failed to comply with the new rules.

4.2.1.2 Accessibility

To send remittances online from the Russian Federation via a Russian MTO, a migrant needs a bank card issued in the Russian Federation. Russian banks issue cards to foreigners when certain requirements are satisfied. The list of the required documents depends on the bank but is governed by money laundering legislation. As a rule, a debit card can be issued if a foreigner can confirm his or her local mobile phone number, identity (using a national passport) and legal entry to the Russian Federation (migration card with a date and purpose of entry) and, in some cases, legal stay in the Russian Federation based on the work permit (valid patent) or residence permit.¹⁷ Foreigners with long—term residence permit which is valid for five years (available to those who have been legally residing in the Russian Federation for more than three years) or temporary residence permit (available for those who have legally resided in the Russian Federation for one to three years) are most trusted by banks.¹⁸

In Kazakhstan the same list of requirements applies. Sberbank in the Russian Federation¹⁹ and Kaspi Bank in Kazakhstan²⁰ provide specific information for non–residents about the debit card application process. An applicant can choose between three payment systems–Visa, MasterCard and MIR (in the Russian Federation only). Upon receiving a debit card, a migrant can download a mobile app, register his/her card and send remittances digitally to the home country using their bank account as a funding method.

In 2019, Sberbank launched digital remittance service using its mobile app through partnership with Western Union. Initially, the money could be received in cash in any pick—up point of Western Union in a receiving country. In 2020, Sberbank online app started to provide fully digital remittance service (i.e. sending remittances to debit cards of several commercial banks in Kyrgyzstan and Tajikistan) with a fee of around 1 per cent. Additional convenience is that such a transfer requires entering only the recipient's phone number. The data on incoming remittances in Kyrgyzstan by MTOs shows almost three—fold increase in the volume of incoming remittances through Western Union in 2020, compared

^{15.} According to GooglePlay, as of January 2021.

^{16.} Interview with Unistream, March, 2021.

 $^{17. \}quad sberbank.com/common/img/uploaded/pdf/pl_cr.pdf?_ga=2.84403984.848679557.1619092036-715696923.1610633972.$

^{18.} In October 2019, Rosbank and Association of e-money and remittance market actors in the Russian Federation applied to the Bank of the Russian Federation with a request to abolish the legislation requiring them to verify migration documents of foreign citizens. rbc.ru/finances/21/10/2019/5da9e0dd9a7947b6d19ed81d?utm_source=yxnews&utm_medium=desktop&utm_referrer=https%3A%2F%2Fyandex.ru%2Fnews.

^{19.} sberbank.ru/ru/person/bank_cards/debit/foreign.

^{20.} kaspi.kz/guide/gold/receive/general/q14620/.

to 2019, although it remained far behind the market leader-Golden Crown (Table 6).

Table 6: Incoming remittances in Kyrgyzstan by Money transfer operators

	2019		2020	
МТО	number (thousand units)	volume (million soms)	number (thousand units)	volume (million soms)
Western Union	704	13,681.5	2.398,7	36,120.7
Contact	249.4	8,161.2	245,2	9,730,4
Money Gram	85.6	3,386	93,5	4,134,3
Unistream	646.9	16,380.7	240	8,367
Golden Crown	8,724.9	131,741.6	6,892.8	131,244.8
Total	10,427.2	173,821.6	9,891.2	190,348.6

Source: Bulletin of the National Bank of the Kyrgyz Republic, 11/2020.

The data above can serve only as an indirect indication of migrants' switching to digital remittances in 2020. Migrants with a Sberbank card can use Sberbank online application to send remittances digitally via Western Union. KazPochta, which delivers cash remittances in Kazakhstan, also reported increase in Western Union remittance inflow in 2020, against the general drop of inflows by 20 per cent compared to 2019.²¹

On the receiving end, remittances in cash can be collected from any pick–up point upon confirming the identity of the recipient and the tracking number of the remittance. As a rule, MTOs partner with banks in remittance receiving countries. In Kazakhstan, though, an important partner of MTOs is KazPochta (Post Service of Kazakhstan), ²² because it has wide geographic penetration in the country with over 3.5 thousand offices.

4.2.1.3 Cost

The average cost of cash and digital remittance transfers in the Russian Federation—Central Asia corridor is around 1 per cent, which is the second lowest fee in the world, according to the World Bank database, Remittance Prices Worldwide.²³ However, the fee imposed by RSPs is only one of the two–constituents of the remittance cost, the other being foreign exchange rate.

Table 7: The cost of online remittance from the Russian Federation to Tajikistan, sent in Russian rubles

	Fee for sending via mobile app or website
Golden Crown*	0.99%;
Contact	1.4% –regular fee; 0.85% –special offer in Feb–April 2021
Unistream	0.9% if using Unistream bank card;
Western Union	1% (credit card can be used)

^{*}Currently, Golden Crown cannot transfer money to Tajikistan, the fee indicated is valid for other Central Asia countries.

The fee varies slightly, depending on the remittance destination country. For example, the fee for sending money from Kazakhstan to Uzbekistan via Contact is 1.2 per cent, to Tajikistan and Kyrgyzstan–1 per cent. The fee may also depend on the amount to be sent: the larger the amount, the lower the fee, as a proportion of the amount. For Russian MTOs the fee for digital remittance sending from Kazakhstan also depends on the local partner–a financial organization to process the payment. For example, the the Russian Federation-based MTO requires a local partner in Kazakhstan to process money transfer originating from Kazakhstan, which increases the total cost of the remittance service.

The total cost of sending remittance digitally should also consider expenses associated with issuance and/or service of

^{21.} Interview with KazPochta, February 2021.

^{22.} interfax.ru/pressreleases/648271.

 $^{23. \}quad remittance prices. worldbank.org/ru.$

a bank card (e.g. Sber bank charges around 2 USD per month, or nothing if it is a salary card). On the recipient's end, the cost of receiving cash remittance is zero, due to the wide geographical coverage of MTO pick—up points both in large cities and rural areas where pick—up points are usually located within walking distance.

4.2.2 Sending cash-receiving digitally

It may not seem logical but sending cash and receiving funds digitally (i.e. getting money on an online bank account/ payment card) – is also an option offered by all MTOs, both Russian and international. Besides migrants, this option could be useful for those parents who transfer money to their children studying abroad.

Table 8: Sending cash-receiving digitally

	Sending country—sender's perspective	Receiving country –recipient perspective	
Availability	MTOs office/Bank branch Mobile operators retail stores	MTO mobile app to transfer remittance to the card, a smartphone with internet access.	
Accessibility	National ID, recipient's bank card/account details	A bank card of a particular payment system.	
Affordability	Varies depending on RSP	Bank card service/issuance fee; Travel costs if ATM or a bank branch are far.	

4.2.2.1 Availability

Cash remittance sending services are delivered not only in MTOs' offices, but also in bank branches and in mobile operators' retail stores. Two options are currently available to send cash to a bank card. The first option requires a recipient to have a bank card of a national payment system. For example, a migrant, while being in the Russian Federation, can use cash to top up a Korti Milli card of his/her family member waiting for remittances in Tajikistan. Spitamen Bank in Tajikistan, thus, informs its card holders about this option, indicating the partners' network in the Russian Federation which includes Russian mobile operator Megafon, Russian mobile service retail store Svyaznoy, Qiwi terminal and Sberbank online app (Figure 3).

Figure 3: How to top up a Spitamen Korti Milli bank card from the Russian Federation



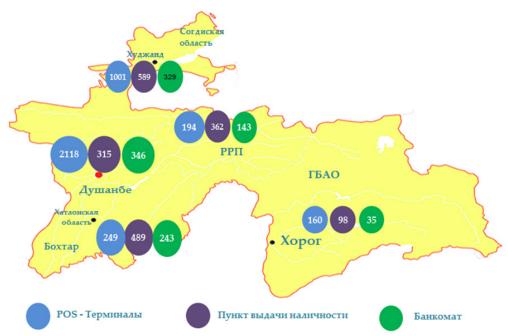
A second option for sending cash—receiving digitally requires that a recipient downloads a mobile application of an MTO, which processes the remittance and transfers the money to the recipient's bank card. They are required to enter the remittance tracking number and their bank details. Such an option is available in Golden Crown mobile app and website. Western Union provides a service of transferring money to a bank account but requires the sender to enter the recipient's bank account details and takes longer than transferring to a bank card directly.

4.2.2.2 Accessibility

On the receiving end, bank card ownership is a key enabling factor for digital remittance receipt in Central Asia countries. As shown above in section 4.1.3, the national payment system cards in remittance receiving countries appear to be the most accessible e–payment instrument. However, when recipients prefer to withdraw cash instead of spending it online or using for payment in stores, the rate of penetration of ATMs and POS–terminals²⁴ becomes important. When these are not easily available/accessible, the recipients may still prefer to pick–up money in cash.

Financial infrastructure in Central Asian countries is still concentrated in large, capital cities. For example, POS–terminals penetration in Tajikistan is growing but covers mainly the largest cities (Figure 4). A similar situation is observed in Kyrgyzstan²⁵ and Uzbekistan.²⁶ This lack of coverage limits the advantages that the population, including remittance recipients, may see in using bank cards.

Figure 4: POS-terminals penetration in Tajikistan



Note: This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the International Organization for Migration (IOM).

Source: nbt.tj/ru/payment_system/card_market.php.

4.2.2.3 Cost

The costs of receiving remittances digitally include the fee for issuance/service of a bank card in remittance receiving countries. The national payment system card issuance is affordable in terms of cost because it is used for Government transfer of social benefits, including pension payments. However, digital remittance receipt can involve additional expenses associated with traveling to a bank branch from rural areas. Nevertheless, national payment system cards issuance is still more affordable than international payment system cards such as VISA, MasterCard, etc.

4.2.3 Sending digitally—receiving digitally

Finally, fully digital remittance pattern is considered, assuming that migrants and their family members have e-payment instruments and know how to use them.

^{24.} A point–of–sale (POS) terminal is a hardware system for processing card payments at retail locations.

^{25.} Financial Access for the Population in the Kyrgyz Republic. Analytical paper by the National Bank of the Kyrgyz Republic, #2, 2019.

^{26.} Ahunov, M. (2018). Financial Inclusion, Regulation and Literacy. ADBI Working Paper Series. August 2018.

Table 9: Sending digitally-receiving digitally

	Sending country – sender's perspective	Receiving country – recipient perspective
Availability	MTOs websites MTOs mobile apps Sberbank online mobile app E–wallet, Mobile money account	MTO to be licensed by a national financial regulator and to meet regulator's requirements; Bilateral agreement btw commercial banks; Bank cards which allow for incoming international money transfers.
Accessibility	For a bank card issued in The Russian Federation the required documentation—national id, Russian mobile phone number and a migration card; Recipient's bank card number or a phone number.	A bank card of a payment system: Visa/Mastercard/Maestro in KZ Elcard in KG Korti Milli in TJ UzCard or HUMO in UZ
Affordability	Around 1%; May vary depending on a country and amount to be sent; 0% if sent by MTO and received in USD or Euro; Bank card service/issuance fee.	Bank card service/issuance fee; Travel costs if ATM or a bank branch are far (to pick up the issued card).

4.2.3.1 Availability

Fully digital remittance can vary by source of funding (a bank card, e–wallet) and instrument of receiving (a bank card, a bank account, e–wallet). The easiest, however, is a transfer from card to card. Transfer to a bank card is faster and cheaper compared to a transfer to a bank account. Currently, two Russian MTOs–Contact and Unistream–support digital remittance scheme from card to card. Russian Sberbank also provides transfers to bank cards issued by selected commercial banks in Tajikistan and Kyrgyzstan (Figure 5).

Figure 5: Step-by-step guide for sending remittance to a bank card issued in Tajikistan



Step 2:

Select Payments; Step 3:

Select "Abroad";

Step 4:

Enter card number of remittance recipient and confirm; Step 5:

Enter amount of remittance and confirm.

4.2.3.2 Accessibility

Card–to card remittance is available when both sender and recipient have a bank card. This requires accessibility of the banking services for migrants in destination countries and for their family members in the receiving countries. Penetration of the national payment system cards has contributed to a wider set of options for fully digital remittance. In April 2020, national payment system of Uzbekistan HUMO announced partnership with two Russian banks—Sberbank and Agrobank—on money transfers from the Russian Federation to HUMO cards. Remittances senders can use Sberbank online app to send money from Sberbank card to HUMO card. The other national payment system of Uzbekistan—UzCard—allows for receiving money from abroad sent through two MTOs—CONTACT and Unistream, since December 2019.²⁷

4.2.3.3 Cost

Affordability of bank services and accessibility of bank infrastructure may add to the final cost of digital remittances. Thus, compared to half-digital remittance patterns, fully digital remittance is the costliest, i.e. additional expenses (although not significant) are encountered both by senders and recipients, as bank card holders.

The analysis above shows that three different digital remittances patterns, including fully digital remittances, are available in the Russian Federation, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Russian and international MTOs provide senders with affordable services, while national banks make efforts to increase bank card ownership among the population in the remittance receiving countries. However, the performance of the existing infrastructure is to be judged through its ability to actually facilitate digital remittances flows between the countries, especially in the most critical period—during the lockdown months of 2020. Therefore, the demand—side part of our research aims to answer the questions about the usage of the digital remittances among senders and recipients, the level of their financial inclusion and help identify the reasons behind their preferences when choosing between cash and digital remittance options.

 $^{27. \}quad https://uzcard.uz/ru/news/post/bystrye-denezhnye-perevody-na-karty-uzcard.\\$

V. Practicing digital remittances: Demand side key findings

This section reports the key findings from the scoping surveys. We look at cross—country comparisons and then we look at sending and receiving country results, as well as unique findings across countries. The information which we aim to uncover includes: what are preferred methods of transfer for migrants (senders) and households (recipients) back home? To what extent do people in the region use digital remittances? Who uses it? What is their socioeconomic profile? Why do they use it/not use it? Are there variations across countries? Are there variations across migrants and recipients?

5.1 Preferences for digital remittances

First, we examine the question "What is the most preferred method of sending/receiving remittances?" for both types of respondents (recipients and senders) and across countries as shown in Table 10. We define digital remittances in the survey as the transfers which are done either "online using bank mobile app or app of MTO" or "via the internet from the bank card on the website of the bank, mobile operator (MTS and MTO)". Significant proportions of senders in the Russian Federation from all countries of origin stated that digital channels were their most preferred mode of transfer (column 2 in Table 10). On the contrary, much smaller proportions of senders working in Kazakhstan preferred to use digital remittances. Instead, they preferred to send money in cash through friends and relatives or through branches of MTOs (72 per cent of senders from Kyrgyzstan, 76 per cent of senders from Tajikistan and 74 per cent of senders from Uzbekistan).

From the recipient side, Kazakhstan stands out in terms of preference for digital remittances at 68 per cent. The proportions are much lower in other recipient countries. Hence, it seems that, apart from Kazakhstan, there appears to be a mismatch between the preferences of the senders (migrants) living in the Russian Federation and those of the recipients, particularly for senders from Kyrgyzstan who preferred to send money back home digitally (75.25 per cent), but only a small proportion of the recipients wanted to receive it digitally (23.53 per cent).

Table 10: Preferences for I	Digital F	Remittances acros	s countries an	d by type of	respondents

	recipients, % of total respondents (by country)	Senders in the Russian Federation, % of total respondents (of the same origin)	Senders in Kazakhstan, % of total respondents (of the same origin)
Kyrgyzstan	23.53	75.25	22.00
Kazakhstan	68.00	56.86	N/A
Tajikistan	31.87	53.23	20.00
Uzbekistan	17.67	59.38	24.00

When we look at the data from the recipient side in more detail, 68 per cent of recipients in Tajikistan, 73 per cent in Kyrgyzstan and 80 per cent in Uzbekistan preferred to receive remittances in cash either through the branch of the MTO (majority) or through friends and relatives.

5.2 Actual usage of digital remittances

But how much do stated preferences match actual behaviour? In order to address this, we look at two survey questions. From the sender's side, we examine the question "In the past 12 months have you used your bank card to transfer money abroad, from (the Russian Federation or Kazakhstan) to your relatives in your home country, via web or mobile app?" and from the recipient's side, we look at the question "Have you received money transfers to your bank card/bank account in the last 12 months?". We find, however, that it is less common, particularly in recipient countries, for respondents to have a bank account. Table 11 presents the numbers and per centages of respondents who have a bank card, a bank account and have sent (or received) money via their bank cards. Table 10A presents the data for migrants living and working in the Russian Federation; Table 10B presents the data for migrants living and working in Kazakhstan; and Table 10C presents the data for recipient countries.

^{28.} It is worth noting that with these questions, they only take into account the respondents who already own a bank card or have a bank account. The reason the question was designed in this way was because only a small number of respondents actually use other digital modes of transfer such as mobile wallet and the results from the literature review, the supply side research and the pilot survey also suggest that the most common form of digital transfer is through a bank card.

Table 11: Ownership of a bank card and a bank account and usage of digital remittances through a bank card (or a transfer to bank account)

11A. Migrants in the Russian Federation (total N = 500)

	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan	Total
	(total N =51)	(Total N =101)	(Total N =124)	(Total N =224)	(N = 500)
Have a bank card	44	85	107	194	403
	(86.3%)	(85%)	(84.9%)	(86.2%)	(80.6%)
Have a bank account	22	36	40	61	159
	(43.1%)	(36%)	(31.7%)	(27%)	(31.8%)
Have sent remit- tances via a bank	34	69	79	141	323
card (in the past	(66.7% of total	(69% of total N)	(62.7% of total	(62.7% of total	(64.6% of total N)
12 months)	N)	(81.2% of those	N)	N)	
12 monensy	(77.3% of those	with a bank	(73.8% of those	(72.7% of those	(80.1% of those
	with a bank card)	card)	with a bank card)	with a bank card)	with a bank card)

Note: Final total number of respondents from the database submitted by the survey company is 500 (rather than 502 as stated in the field report—also submitted by the survey company).

11B. Migrants in Kazakhstan (total N = 400)

	Kyrgyzstan	Tajikistan	Uzbekistan	Total			
	(Total N =50)	(Total N =50)	(Total N = 300)	(N = 400)			
Have a bank card	28	17	133	178			
	(56%)	(34%)	(44.3%)	(44.5%)			
Have a bank account	33	21	155	209			
	(66%)	(42%)	(51.7%)	(52.3%)			
Have sent remit-	24	17	120	161			
tances via a bank	(48% of total N)	(34% of total N)	(40% of total N)	(40.3% of total N)			
card (in the past 12	(85.7% of those with a	(100% of those with	(90.2% of those	(90.4% of those			
months)	bank card)	a bank card)	with a bank card)	with a bank card)			

11C. Recipients (Total N = 800)

	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan	Total
	(Total N = 100)	(Total N =153)	(Total N = 250)	(Total N = 300)	(N = 800)
Have a bank card	99	95	136	147	477
	(99%)	(62%)	(54.4%)	(49%)	(59.6%)
Have a bank account	91	47	35	39	212
	(91%)	(30.7%)	(14%)	(13%)	(26.5%)
Have received remittances on a bank card (in the past year)	62 (62% of total N) (62.5% of those with a bank card)	58 (37.9% of total N) (61% of those with a bank card)	78 (31.2% of total N) (57.4% of those with a bank card)	72 (24% of total N) (49% of those with a bank card)	270 (33.8% of total N) (56.6% of those with a bank card)

Our data confirms that owning a bank card is indeed more common than having a bank account for our population interest. This is likely due to the fact that the respondents are secondary holders. Over 60 per cent of the migrants living and working in the Russian Federation from all countries in our sample have transferred money back home using their bank cards via an online platform or mobile application. In Kazakhstan, it is less common for migrants from Kyrgyzstan, Tajikistan and Uzbekistan to use their bank cards to send remittances home as less proportions of migrants actually own a bank card.

Interestingly, significant proportions of recipients residing in countries of origin own a bank card, particularly in Kazakhstan almost all of our respondents (recipients of remittances from the Russian Federation) reported to have a bank card and a large proportion (91 per cent) also have a bank account, suggesting a high degree of financial inclusion for the local population. However, the same cannot be said about migrants in Kazakhstan. For other recipient countries, at least half of our respondents in each country stated that they owned a bank card (less so for bank accounts) and about half of those who owned a bank card reported to have received remittances electronically.

We have also carried out cross—tabulation of preferences for remittances and actual behaviour i.e. for those who have sent or received money using digital means, how many of them actually prefer these methods? We find that for most migrants living in the Russian Federation, their preferences match their behaviour (28 out of 34 migrants from Kazakhstan (82 per cent); 63 out of 69 migrants from Kyrgyzstan (91 per cent); 55 out of 79 (69.6 per cent) of migrants from Tajikistan; and 117 out of 141 (83 per cent) of migrants from Uzbekistan who have sent money via a bank card also said they preferred digital remittances). In Kazakhstan, we observe less usage of digital remittances as discussed above.

Of those who have actually used them, only small portions have stated that they preferred digital remittances (most of them still preferred cash even if they have used digital modes of transfer in the past 12 months). For recipients, we observe better alignments between preferences and actual behaviour. In Kazakhstan, 62 out of 79 recipients of digital remittance (78 per cent) also preferred this method. In Kyrgyzstan, Tajikistan and Uzbekistan, preferences and actions are slightly less aligned–28 out of 58 (48 per cent), 78 out of 143 (54.5 per cent) and 37 out of 72 (51 per cent) respectively–although still about half of those who have used digital remittances also preferred this method. The misalignment between preferences and behaviour could be due to infrastructure constraints or other behavioural factors such as habit and the psychological comfort of having cash in hand. This is explored further in the next section.

5.3 Factors driving the choices of sending/receiving remittances

Our results so far suggest that over half of respondents who have a bank card tend to use it to send or receive remittances, except for migrants in Kazakhstan who seem to prefer cash transfer despite having a bank card. There appears to be some mismatch between stated preferences and actual behaviour, however. We now turn to the factors that may drive this misalignment. First, we examine structural factors such as smart phone ownership, internet coverage and whether they live in rural areas (for recipients) where infrastructure constraints may prevent them from using digital modes of transfer. Then we examine behavioural factors including socioeconomic profiles and trust attitudes of those who prefer cash and those who prefer digital remittances in order to see whether these characteristics drive their preferences and decisions. The variables of interest include age, gender, employment, level of education, financial literacy and trust attitudes (particularly trust in banks).

Figure 6: Structural constraints (smart phone ownership, internet coverage and geographical location (urban/rural)) and remittance preferences

Figure 6A: Migrants in the Russian Federation (per cent of total sample)

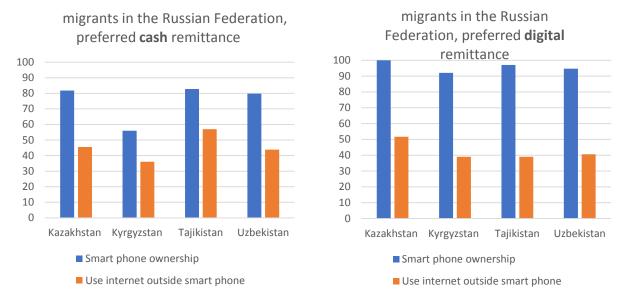


Figure 6B: Migrants in Kazakhstan (per cent of total sample)

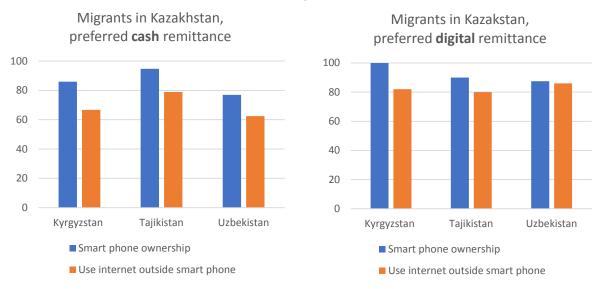
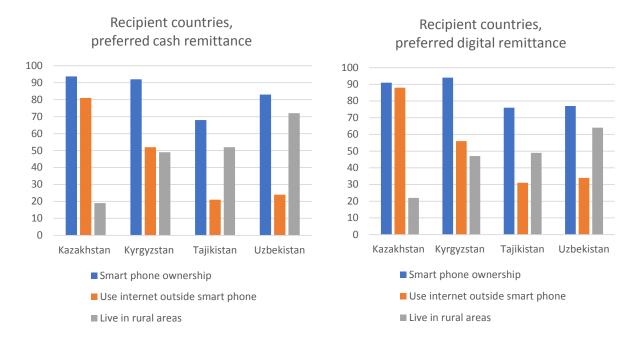


Figure 6C: Recipient countries (per cent of total sample)



For migrants in the Russian Federation (Figure 10A), we see that those who stated that they preferred digital modes of transfer are more likely to own smart phones, although there is no significant difference in terms of internet usage outside of smart phones. Most of our respondents living and working in the Russian Federation know how to install apps on their smart phones (83.5 per cent) and 51.7 per cent use their smart phones to check their bank balance.

In Kazakhstan (Figure 10B), there is no clear difference between those who preferred cash and those who preferred digital remittances in terms of smart phone ownership (except for Kyrgyzstan which is slightly higher). Internet usage outside of smartphone is slightly higher for those who preferred digital remittances, particularly in Kyrgyzstan and Uzbekistan.

For recipient countries (Figure 10C), it seems that most respondents in Kazakhstan own smart phones and use internet outside of smart phones, regardless of their preferences for remittance. Most are also living in urban areas. In Kyrgyzstan, Tajikistan and Uzbekistan, there is no clear difference in terms of smart phone ownership between the two groups. There is slightly more internet usage outside smart phones for those who preferred digital remittances and geographical locations in terms of living in urban or rural areas do not seem to be driving their preferences.

If most respondents seem to have a smart phone and thus, are able to access the internet through their phones, what prevents them from using digital remittances? We now turn to socioeconomic characteristics of the two groups.

Figure 7: Socioeconomic characteristics

Figure 7A: Migrants in the Russian Federation (% of total sample)

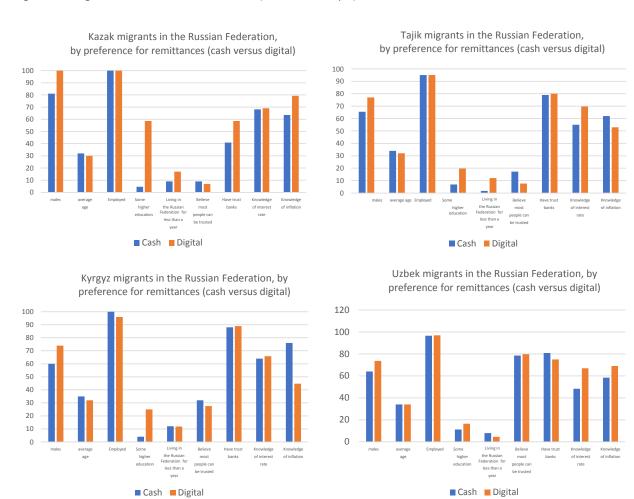
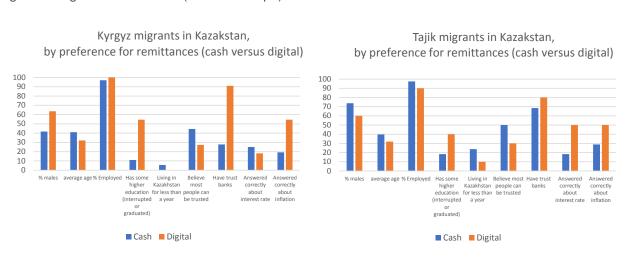
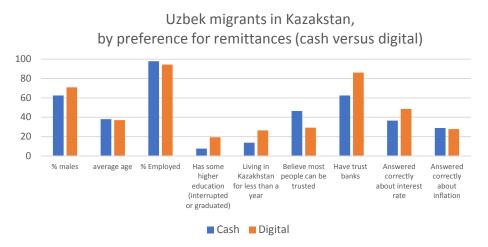


Figure 7B: Migrants in Kazakhstan (% of total sample)





Migrants who live and work in the Russian Federation tend to prefer digital remittances as shown above. In addition, most of our respondents (73.8 per cent) are the main financial providers of their families and most (71 per cent) also make financial decisions for their households. Most work in retail, construction, restaurant and food services. When asked about their current financial situation, most could buy everything they need but could not make savings. Over half (57 per cent) send money home once a month and about a quarter send money once every three months. The main purpose for sending money is for regular financial support (77.6 per cent). When we examine the profiles of those who prefer cash and those who prefer digital transfer, we find that more male respondents preferred digital remittance (Figure 12A). It is worth noting that, although our sample for female respondents was small (150 compared to 348 male respondents), 54 per cent of our female respondents preferred digital remittances—slightly lower than male respondents at 64 per cent—but it is still quite encouraging. Respondents with higher education and financial literacy as well as those with higher levels of trust in banks also tend to prefer to transfer money via bank cards, online, or via mobile app/e—wallet.

We also embedded an unincentivized "trust game" into the scoping survey, which aims to address the level of trust for specific banks. The question for the trust game is as follows:

Now I'm going to ask you to think about a scenario.

- Imagine that you've received USD 250 as a payment for the work you've recently completed (put an equivalent amount in the local currency). How much of this amount would you be willing to deposit into a bank account at Sberbank? (Imagine that the account can be opened without any administrative issues)
- You can withdraw your money at any time using a bank card or go to the branch. There is no restriction on your account.
- The account gives an interest of 10 per cent per year.

Please now state the amount that you would like to put into this account [from 0 to 250, in integer and in increments of USD 5]:

We implemented the scenario with three different bank names randomized across respondents and we did the same in all countries, using the three most well–known local banks. The average amount that the respondents who preferred cash chose in the trust game was slightly more (USD 103.2) than that chosen by those who preferred digital remittances (USD 92.4). When we looked at the data by countries of origin, we also observed the same patterns. This result slightly contradicts the results from the survey question about trust in banks ("how much confidence you have in banks" (1 = 0 a great deal, 0 = 0 a lot, 0 = 0 a not very much, 0 = 0 a none at all) which suggests that respondents who preferred digital had a higher level of trust in banks than those who chose cash. Therefore, we would need to explore the trust issue further. It seems that the way people answered these questions is influenced by the way they are asked, although trust seems to play some role in their preferences.

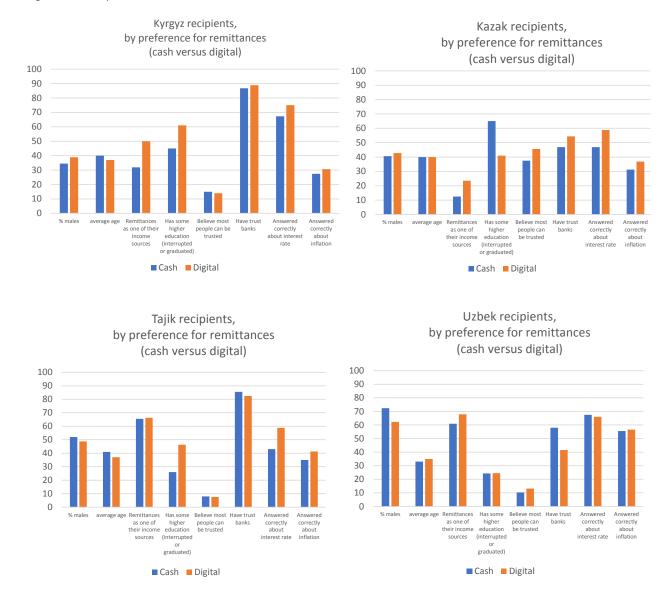
Finally, we also asked an open—ended question why the respondents did not use a bank card (to those respondents who stated they did not have a bank card) and 29 per cent said "it's not needed", 24 per cent said they "don't trust banks", 14 per cent said because of "documentation/identification issues". Other reasons mentioned are "I am paid in/used to cash", "a friend/family has it (bank card)" (assuming that they then use their friend/family's bank card) and "there is no accessible bank". We also asked an open—ended question about the reasons for their preferred choice of remittances (not just bank cards). Interestingly respondents in both groups (those who preferred cash and those who preferred

digital remittance) cited 'convenience' as a main reason for their preferred choice.

Similarly, migrants in Kazakhstan (Figure 12B) in our sample are also the main financial provider in their families (75 per cent) and most also make the financial decisions in their households (75 per cent). Most work in retail, construction and wholesale and retail trade. When asked about their current financial situation, more than half said they only had money for essentials (52 per cent), whilst 28 per cent said they could buy everything they needed, but could not make savings. Forty—four per cent send money back home once a month and 39 per cent once every three months to support family and relatives (74.5 per cent).

Similar profiles emerge as for the migrants in the Russian Federation, respondents who preferred digital remittance have higher education, higher financial literacy and higher trust in banks. In the trust game, the average amount that the respondents who preferred digital remittance chose to (hypothetically) deposit in a bank was higher (USD 81) compared to those who preferred cash (USD 70.7), which are in line with the trust in banks question in the survey.

Figure 7C: Recipient countries



When we look at respondents by countries of origin, we also observe the same pattern (more amount deposited to the banks in the trust game for those who preferred digital remittance), except for respondents in Tajikistan and the amounts are much lower than in migrants from Kyrgyzstan and Uzbekistan, which is worth noting and investigating further. This line with the answers for the question which asked for the reasons for not using a bank card, most respondents stated that they "don't trust banks" (40 per cent), followed by "documentation/identification issues" (36 per cent) and "there is no accessible bank" (10 per cent).

For recipient countries (Figure 12C), we see similar profiles in terms of respondents who prefer digital remittances: they have higher levels of education (except for those in Kazakhstan), have higher financial literacy and stated that remittance is one of their main sources of income. However, we also observe some heterogeneity across countries. For example, trust in banks seems to play a role in Kazakhstan and to an extent in Kyrgyzstan, but not in Tajikistan and Uzbekistan. In fact, in Uzbekistan the opposite was observed—those who stated that they had high level of trust in banks actually preferred cash transfer.

The trust game data also vary across countries. In all countries, except for Tajikistan, those who preferred digital remittances actually stated a lower amount to be "deposited" hypothetically in the three banks compared to those who preferred cash. It is also interesting to note that, except for Kazakhstan, the level of generalized trust is very low amongst our respondents in the other three countries.

When asked why they do not use a bank card, most respondents said that "there is no need", followed by "there is no accessible bank". Some of the other answers include "problem with documentation", "do not know how to use/ get a bank card", "not enough money". Some people said they are "planning to get one", whilst others said they had "no interest".

There is also a lack of information and knowledge about what is actually needed to get a bank card. Also, with digital remittances, there are other means to transfer and receive money in addition to using a bank card. The issue may be due to lack of information about what options are available. Our pilot intervention aims to address this issue.

Finally, we also asked an open—ended question about the reasons for their preferred method of transfer. Recipients in Kyrgyzstan who preferred cash mentioned "comfort", "safety" and "they send it this way (implying that it's the migrants who make the choice)" as the main reasons. In Tajikistan, those who preferred cash mentioned "accessibility", "easy" and the fact that they "did not have a bank card" as the main reasons. Similarly, in Uzbekistan "convenience" was mentioned several times, "fast and easy", "Don't know any other methods" and "accustomed to bank branches" as the main reasons. In Kazakhstan, the reasons were also similar to the other three countries for preference for cash.

For those who preferred digital remittances, in all countries respondents cited "convenient", "fast and easy" and "lower fee". Therefore, it seems that once they start using digital modes of receiving remittances, they also find it convenient and easy. Our results suggest that the key issue here is how to encourage remittance recipients to try digital remittances instead of cash, as opposed to any regulatory or infrastructure obstacles (for full results see Annex E).

VI. Bringing together supply and demand: Prospects and opportunities for enhancing the uptake of digital remittances.

This research carries out a holistic study of the role of digital remittances in the Russian Federation—Central Asia Corridor. By examining the supply and demand sides of digital remittances, this study provides a comprehensive view of the role of digital remittances in the region and bridges the knowledge gaps from the perspective of providers and users of remittance transfer services—both migrants and remittance recipients.

The findings in this report from both supply and demand research reveal that the problem appears to be more behavioural rather than structural. From the supply side, it seems that digital remittance infrastructure is accessible and affordable as the cost of sending digital remittances is low. From the demand side, the findings suggest that the majority of our respondents own a smart phone and a bank card and thus, they have a means to use digital remittances. Most are also IT literate, but IT literacy does not correlate with financial literacy. It seems that in most countries more educated and more financially literate respondents prefer to use digital modes of transfer to send and receive money. Our findings suggest that migrants tend to send money digitally/electronically, but the recipients prefer to receive it in cash. However, of those who have a bank card, around 60 per cent do use them to receive remittances (and most migrants who own a bank card use them to send money home—around 80–90 per cent). Therefore, it seems that if RTS users have bank cards, they tend to use them to transfer remittances digitally.

However, the preference and behaviour are not aligned for about half of those who use bank cards—i.e. they use it but if they could choose, they would rather receive cash. Interestingly, when asked about the reasons for their preferences, both groups (cash and digital) mentioned "convenience" and "ease" as their reasons. Some of those who preferred cash also mentioned that they "did not know any other way".

Below we identify key conclusions based on the findings of the supply-side and demand-side analysis:

Key Finding 1: Similar infrastructure but different bank card ownership by remittance senders in the Russian Federation and Kazakhstan

Key the Russian Federation-based MTOs have been running websites and/or launched mobile applications enabling cashless remittance sending from the Russian Federation and Kazakhstan. In other words, migrant workers with smart phones and access to the internet should, in theory, have access to the affordable digital remittance services provided by MTOs or commercial banks' mobile applications in each country.

The results of the scoping survey confirm that migrants in the Russian Federation have made use of the available digital remittance infrastructure during the pandemic–80 per cent of the respondents with bank cards remitted digitally.

Majority of the Central Asia migrant workers in the Russian Federation have a bank card (80 per cent). Among those, 87 per cent were using a Sberbank card to send money home from the Russian Federation.

In Kazakhstan, despite formal accessibility of financial services to non–residents, less than half of the respondents–44.5 per cent –have a bank card, with 56 per cent of those having a Kaspi bank payment card. However, most migrants in Kazakhstan still prefer to send cash via friends and relatives. For those who are bank card holders, 90 per cent of them reported to have sent money digitally using their bank card. Therefore, if they have a bank card, they tend to use it, but the majority still do not have access to cards.

The difference in bank card ownership among the migrant population in the Russian Federation and Kazakhstan may be indicative of potential challenges associated with financial inclusion of migrants in practice.

Self-reported reasons for not having a bank card can point at existing barriers: e.g. almost 40 per cent of the surveyed migrants without a bank card in Kazakhstan said they did not trust banks, while another 36 per cent had problems with documentation.

In the Russian Federation, almost 28 per cent of migrants without a bank card reported to have no need in this payment instrument, while another 24.5 per cent also reported lack of trust to banks as a reason for not having a bank card and 14.3 per cent said they had problems with documents.

Key Finding 2: Preferences and practices of remittance senders do not coincide, revealing that switching to digital methods is still in progress

From the context analysis and the supply side research, we find that the COVID-19 pandemic has increased the demand and use of digital remittance services in the Russian Federation and Central Asian countries.

The analysis of the remittance infrastructure confirmed that RSPs did speed up their digitalization products, launching mobile applications and concluding bilateral agreements for fully digital transborder remittances (see Chapter 3).

However, the findings of our scoping survey revealed that some of the migrants with bank cards still prefer sending in cash: 33 per cent of respondents in the Russian Federation and 74 per cent in Kazakhstan. These figures suggest that switching to digital remittances has been progressing differently in the two countries.

Key Finding 3: Remittance recipients with bank cards still prefer cash, except for Kazakhstan

On the receiving side, the digitalization of the last mile of the remittance route is conditioned by financial inclusion of remittance recipients, in particular, bank card ownership. Our analysis of the accessibility of electronic payment instruments for remittance recipients in Central Asian countries shows that national payment system cards appear to be most accessible for the population.

These cards can be used for receiving remittances as Russian Federation-based MTOs do provide such option for almost all countries with national payment systems (i.e. Kyrgyzstan, Tajikistan and Uzbekistan).

However, the results of our scoping surveys reveal that, so far, these cards are rarely used for receiving remittances. Both in the Russian Federation and in Kazakhstan, only around half of the surveyed migrants (46 per cent in Kazakhstan and 54 per cent in the Russian Federation) said that their family members receiving remittances have a bank card.

The share of national payment system cards among those was 23 per cent as reported by migrants working in Kazakhstan and around 32 per cent—as reported by migrants in the Russian Federation.

These figures suggest that remittance recipients in Central Asian countries may not be aware of the possibility to use their national payment system cards for receiving remittances from relatives working abroad. Awareness, in particular, refers to the objective advantages of digital means which make this option convenient, i.e. speed and safety.

Interestingly, in Kazakhstan, where no national payment system exists but bank card ownership is higher than in other countries in our study (Tajikistan, Kyrgyzstan and Uzbekistan), remittance recipients prefer receiving money digitally–68 per cent of the respondents. Thus, in Kazakhstan, we observe a direct correlation between bank card ownership among remittance recipients and digital remittance receipt penetration, unlike other remittance receiving countries where the correlation is much weaker.

Context for the intervention

The above findings reveal that the uptake of digital remittance in the Russian Federation and Central Asian countries is constrained more on the receiving end (except for Kazakhstan) as remittance recipients still prefer cash. This has motivated us to design our intervention which targets remittance recipients in two Central Asian countries—Kyrgyzstan and Tajikistan—who are equipped to receive remittances digitally—from a technological infrastructure perspective—but who still prefer receiving remittances in cash. We use behavioural insights and information to try to shift first the attitudes and then behaviour towards digital remittances. The design and findings of the intervention are discussed in the next section.

VII. Remittance behaviour intervention: Pilot design

Based on the results from supply and demand research and the project's Theory of Change (see Annex D), we designed and tested a pilot intervention which addresses the first principle problem identified which is "lack of information". There have been several studies that have shown that directing messaging interventions can be very powerful in changing behaviour, particularly in health²⁹ and tax compliance.^{30,31}

Adapting a similar method but also including social norms and social identity narratives by providing information about what others "like you" do, we use direct messaging through SMS as a means to provide information about digital remittances with the aim to change (i) knowledge and (ii) attitude about digital remittances which can lead to an increased uptake and usage.

Our intervention focuses on two recipient countries, Tajikistan and Kyrgyzstan. As discussed above, most recipients in these countries still prefer to receive remittances in cash despite having high smartphone ownership. Our intervention, therefore, focuses on the subsample of those who own a smart phone and have access to the internet and yet, still prefer to receive remittances in cash. The sample size in Tajikistan was 66 respondents and in Kyrgyzstan 85 respondents.

7.1 Experimental Design

We randomly assigned half of each subsample to the control and the other half to the treatment group. The control group received a "standard" SMS message which utilizes social norms in that it gives information about the proportion of respondents who participated in the scoping survey who preferred to use digital remittances:

Standard SMS (Control Group)

According to our scoping survey that you also took part in, 60 per cent of Kyrgyz respondents (55 per cent for Tajik respondents) opt for receiving remittances to their bank card or directly to their bank account. WHY?

- 1. It is faster: in 5 seconds money arrives right in your pocket where you keep your bank card/bank account.
- 2. It is safe: no hand-contact with cash prevents COVID-19 infection and it won't be easily stolen.
- 3. It is wise: you can cash—out immediately or save money securely for a rainy day.

Why not find out more about how to switch to digital remittances? Click here.

The treatment group also receives the standard SMS and a poster which presents a story of a migrant and a recipient in a difficult situation where the migrant has lost his job and needs the recipient's help. Then we present two scenarios that could happen: one in which the recipient has received remittances in cash and spent it all and another in which the recipient uses digital remittances and has saved up, so she can send some money back to the migrant in need. We then explain the potential benefits of digital remittances and provide the same link as in the standard SMS at the bottom of the poster. The idea behind the poster is to make the message more engaging by inviting the respondents to imagine a situation that happens to someone "like them"—using social identity to trigger attitudinal and then behavioural change (i.e. uptake/usage of digital remittances).

^{29.} Suffoletto, B. (2017) "Text Message Behavioural Interventions: From Here to Where?", Current Opinion in Psychology, Feb, 9:16–21. doi: 10.1016/j.copsyc.2015.09.012.

^{30.} Mascagni, G. (2017) "From the lab to the field: a review of tax experiment", Journal of Economic Surveys, 32(2), pp. 273–301. onlinelibrary.wiley.com/doi/10.1111/joes.12201

^{31.} documents1.worldbank.org/curated/pt/472181576511865338/pdf/Behavioral-Insights-for-Tax-Compliance.pdf (De Neve et al., 2021) journals. uchicago.edu/doi/10.1086/713096.

Figure 8: Poster Intervention



We implemented the intervention in two stages. The first stage was the standard message which was sent to both control and treatment groups in Week 1. Then a week later in Stage 2, we sent a brief reminder text to the control group to check out the link, while the treatment group received the same reminder plus the poster. Before the intervention started, we carried out a "pre-intervention survey" which is used as a baseline measure of financial attitudes and preferences (risk and inter-temporal preferences) and we also embedded an incentivized experiment which is explained further below.

After the intervention, we carried out a "post-intervention survey" which asks similar questions as the pre-intervention survey and some additional questions around the intervention itself to ascertain whether the respondents actually understood the information provided in the link, whether they have shared the link with remittance senders and whether they found the information useful.

The reminder texts for the control and treatment groups are:

Control group:

"Have you tried using digital remittances already? not yet? Then click here (put the link) to find out how to do it (and share with your relatives abroad and friends)"

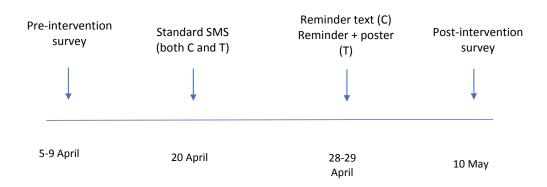
Treatment group:

"Have you tried using digital remittance already? not yet? Read this story (put the PDF link here) and see why digital remittance can be useful to you!"

Click here to find out how to do it (and share with your relatives abroad and friends)"

The timeline of the intervention is shown in Figure 14, which covered a period of around one month. This is very short for an intervention to show an effect. However, due to the time constraint of this pilot, we had to work with this timeline. For the next phase, we will be able to expand the timeline and increase the intensity of the treatment.

Figure 9: The timeline of the intervention



The key outcome measures are:

- (i) The click rates of the standard SMS first (baseline responses);
- (ii) The click rates after week 2 (reminder +the poster);—check this on 3 of May;
- (iii) Actual behaviour observed in the incentivized experiment (as part of pre– and post–intervention surveys);
- (iv) Risk and Inter–temporal preferences as measured by the pre–/post–surveys.

Incentivized experiment

In order to compensate for the respondent's time, we agreed to pay USD 10 for each of the pre—and post—intervention surveys (a total of USD 20). As a way to measure actual behavioural change, we embedded an incentivized choice experiment in both surveys. The respondents are asked how they would like to be paid this USD 10. The actual question is as follows:

As a token of our appreciation, we will be providing you with USD10 again for completing the survey. How would you like to be paid this time around?

- (i) Cash—pick up at local bank branch;
- (ii) transfer to e-wallet;
- (iii) transfer to your bank card.

We ask this question in both pre— and post—intervention surveys so that we can calculate the difference in the choice before and after the intervention as a measure of impact. Of course, our timeline is very short and the intervention is light—touch, but using a combination of outcome measures (objective and subjective) helps shed some light on the mechanism which drives the treatment effect (if observed).

The prediction is that the treatment group would have higher click rates on the website which provide information about digital remittances (we used the links provided by Commercial Bank of Kyrgyzstan and Spitamen Bank in Tajikistan, which already have comprehensive information about how to use digital remittances. We worked together with the banks to obtain click—rate statistics). We also expect that the treatment group would opt for more digital modes to receive the compensation from the experiment compared to the control group and the change (pre—post intervention) for the treatment group in terms of their choice would be larger than that of the control (using Difference—in—Difference econometric analysis).

Given the time constraint as mentioned above, we were not be able to observe any significant treatment effect (difference between the control and treatment groups). We only had one month to implement the experiment, which may not be sufficient to see any behavioural change. However, since this is a pilot, we will use the results as a basis for the next refinement/iteration of the intervention design.

7.2 Analysis of Results

7.2.1 Sample selection and sample characteristics

From the scoping survey, we randomly selected individuals and assigned half of each subsample to the control and the other half to the treatment group. Table 12 below includes summary statistics for all the individuals and a comparison of sociodemographic characteristics for treatment and control groups. Confirming the validity of the randomization, differences in the means are not statistically significant and therefore no differences in observables driving differences between the control and treatment samples (both aggregate and by country see panels b and c in Table 12). Close to two thirds of the sample are female, 73 per cent are married and the average age is 39. Also, close to 40 per cent have attained higher education (university) and more than half are employed (52 per cent).

Table 12: Summary statistics—Mean comparison of control and treatment groups

Variable	All	Treatment	Control	Difference in mean (p-val- ue)
		All		
Gender (female =1)	0.649	0.634	0.666	0.557
Age	39.092	39.14	39.02	0.940
Higher-Education	0.397	0.402	0.391	0.244
Married	0.735	0.659	0.828	0.020
Employed	0.523	0.537	0.507	0.612
N	151	82	69	
		Kyrgyzstan		
Gender	0.74	0.72	0.77	0.599
Age	39.9	38.68	40.25	0.849
Higher Education	0.45	0.46	0.45	0.979
Married	0.69	0.64	0.77	0.200
Employed	0.58	0.58	0.57	0.938
N	85	50	35	
		(c) Tajikistan		
Gender	0.530	0.50	0.55	0.638
Age	38.03	38.31	37.76	0.870
Higher Education	0.318	0.312	0.323	0.924
Married	0.787	0.687	0.882	0.054
Employed	0.454	0.468	0.441	0.825
N	66	32	34	

We also obtained background information and the changes between the pre— and post—intervention surveys. Some of these results are presented in Table 13. Given the short window of out intervention, it is not surprising to see there is not much change in these underlying characteristics over time. For example, not many had dramatic changes in their financial situation. All the questions in pre—treatment and post—treatment surveys are included in Annexes F and G.

Table 13: Other characteristics of the sampled population

	Cor	ntrol (%)	Treatme	ent (%)
	N	= 138	N = .	164
	Before (N = 69)	After (N = 82)	Before (N = 69)	After (N = 82)
Has your financial situation changed?				
Yes, it has gotten worse	5.80	1.41	9.76	1.22
Yes, it has gotten a lot worse	10.14	5.80	10.98	6.10
Yes, it has gotten better	66.67	59.42	51.22	53.66
No, it has not changed	17.39	33.33	38.05	39.02
Have you received money from abroad? (yes)	52.1	53.62	36.59	43.90
How did you receive this money?				
Cash	72.73	72.22	86.54	81.48
E–wallet	9.09	25.00		1.85
Bank card	18.18		13.46	14.81
Mobile account		2.78		
Did you discuss with the sender how you prefer to receive remittances? (yes)	69.7	63.89	55.7	62.96
Familiarity with specific financial products				
Cashback for purchases paid by card	27.5	26.8		
Cashback for money transfers	36.2	30.4		
Savings account in the name child	46.37	39		
Invest in gold	11.5	12.2		
Invest in bitcoin				

7.2.2 Click rates of the standard SMS and click rates after two weeks

Table 14 reports the total click rates from the SMS messages. These are direct hits or unique visits. Unfortunately, the system did not allow us to track individually whether the click corresponded to individuals in either the treatment or the control group. However, in addition to the unique hits, we are able to gather additional qualitative data including the countries of visit. This is likely the fact that the surveyed individuals passed along this information to their family members abroad. Countries of visit included: the Netherlands, Austria, the Russian Federation, Italy, India, Tajikistan, Romania and Oatar.

Unfortunately, we did not get the click data over the period of the intervention from Spitamen Bank in Tajikistan as the bank did not realize that the software only allowed the data to be recorded for 30 days. Therefore, we did not have the data from the whole period of the intervention. We decided to drop this data (the past 30 days) from our analysis.

In Kyrgyzstan, the survey company came up with two different versions of the text messages (which was not part of the original design) and thus, we are not able to distinguish the number of clicks made by the same individual multiple times and in different languages (we were also not able to obtain the IP addresses which would have been vital in determining the number of click per individual). The total number of clicks for the treatment and control as of the 16 June is shown in Table 14. For the Russian version of the text message, we observe a higher number of total clicks for the treatment group (534) compared to the control. However, for the Kyrgyz version the opposite result is observed and thus, we are not able to say much about what this result means in terms of the treatment effects.

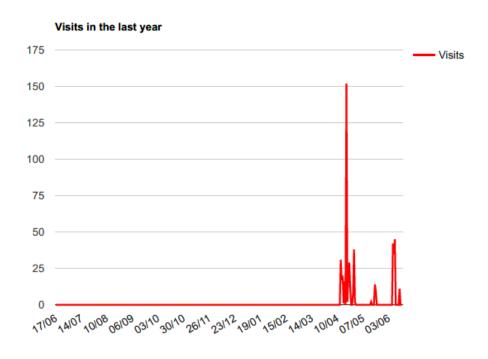
Table 14: Click rates from SMS message (direct hits)

Click rate	Treatment	Control
Commercial bank of Kyrgystan (Russian)	534	505
Commercial bank of Kyrgystan (Kyrgyz)	472	511

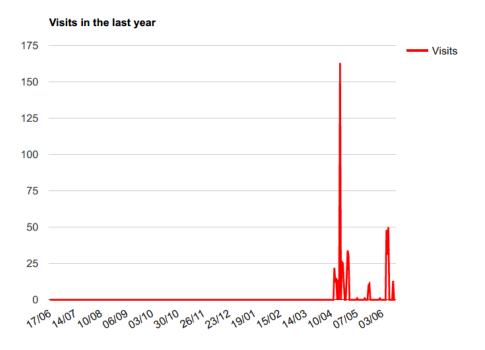
We also examine the number of clicks after the first SMS and after the second reminder/poster message. After the first SMS, we observed a high click rate in both treatment and control groups (152 for the control group and 163 for the treatment group in Russian; 155 for the control and 158 for the treatment groups in Kyrgyz). After the second reminder SMS and poster, we did not see many additional clicks in the Russian version (38 in the control and 34 in the treatment). However, we did see more clicks in the Kyrgyz version (95 in the control and 117 in the treatment). If we can infer anything from these results, it seems that the first SMS was sufficient in generating an interest amongst our respondents in both control and treatment groups. With the reminder and poster, it seemed to work better in Kyrgyz rather than in Russian and there seemed to be a slight indication that the poster generated more additional clicks (117 compared to 95 in the control)—see Figure 15 (panels (a)—(d)).

Figure 10: Click rates for respondents in Kyrgyzstan

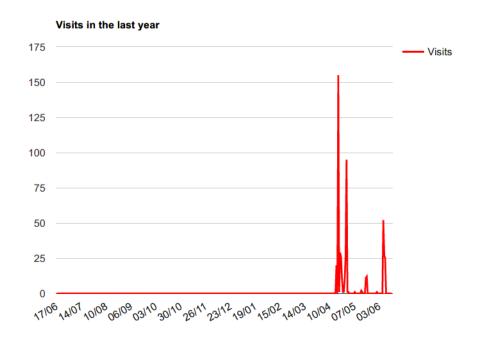
(a) Russian version Control (505 visits)

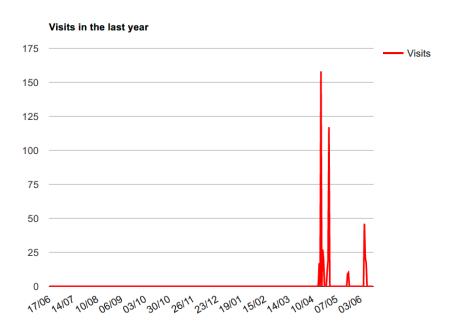


(b) Russian version Treatment (534 visits)



(c) Kyrgyz version Control (511 visits)





(d) Kyrgyz version Treatment (472 visits)

However, since we are not able to know whether the increased click rates were generated by the same individuals or different individuals who did not click after the first SMS message (which we would be able to if we had the IP addresses), we refrain from making any conclusion or further inference about these results at least for this pilot. However, the key lesson learned here for the next round of the intervention is that we need to obtain IP addresses and make sure that we are able to obtain the full data of the click rates over the course of the intervention. This will require setting up our own webpage and obtaining IP addresses in order to track the actual click rates.

7.2.3 Behaviour in incentivized experiment

We compensated respondents for their time for USD 10 for each of the pre— and post—intervention surveys (a total of USD 20). As a way to measure actual behavioural change, we embedded an incentivized choice experiment in both surveys. The respondents were asked how they would like to be paid the USD 10 in the pre— and post—survey. The actual question is as follows:

As a token of our appreciation, we will be providing you with USD 10 for completing the survey. How would you like to be paid?

- (i) Cash-pick up at local bank branch;
- (ii) transfer to e-wallet;
- (iii) transfer to your bank card.

In order to analyse the results, we conducted a series of difference in difference estimations of the following form:

$$y_it=\beta_0+\beta_1$$
 [Time]_t+ β_2 [Treated]_i+ β_3 [(Time]_t*[Treated]_i)+ μ_it

Where y is the outcome of interest, in our case the incentivized choice of preference for receiving the money, Time is a dummy variable for the second time period and Treated is a dummy variable for the treatment group. The interaction term, $[(Time]_t^*[Treated]_i)$, gives us the estimated coefficient β_3 which is our outcome of interest. The results are presented in Table 4, column (1) presents the results from equation (1) while column (2) includes covariates including gender, age, education, marital status and employment. Colum (3) shows the results for Kyrgyzstan and column (4) the results from Tajikistan. The coefficient of interest is β_3 which in the table is represented as DiD (for Difference in Difference).

The results show no significant impact on the incentivized experiment. No significant outcome effects may be the result of the short period allowed for the intervention. Interesting insights, however, do come from the control variables. In particular, women and higher educated people are less likely to prefer to receive cash (from the incentivized experiment), whilst older people more likely to prefer to receive cash.

Table 15: Difference in difference of actual behavioural outcomes

	(1)	(2)	(3)	(4)
	Preference	e of receiving cash		
Time	0.0145	0.0144	0.0286	0.000
	(0.0746)	(0.071)	(0.111)	(0.100)
Treated	0.0535	0.057	0.134	-0.0441
	(0.0697)	(0.067)	(0.097)	(0.105)
DiD	0.022	(0.022)	-0.069	0.156
	(0.0966)	(0.094)	(1.371)	(0.137)
Cons	0.739***	0.716***	0.686***	0.794***
	(0.0532)	(0.105)	(0.079)	(0.070)
		electronic wallet	0.000	
Time	-0.0145 (0.500)	-0.0145 (0.0476)	-0.029 (0.094)	
Treated	-0.0649	-0.0634	(0.074) -0.140	
Treated	(0.042)	(0.040)	(0.076)	
DiD	0.0267	0.0267	0.0486	
5.5	(0.0593)	(0.0573)	(0.107)	
Cons	0.10**	-0.0373	0.20*	
	(0.037)	(0.0456)	(0.068)	
	Transfe	er to bank card	·	
Time	0.000	0.000	0.000	0.000
	(0.063)	(0.063)	(0.077)	(0.100)
Treated	0.011	0.006	0.006	0.044
	(0.061)	(0.060)	(0.072)	(0.105)
DiD	-0.049	-0.049	0.02	-0.156
	(0.084)	(0.083)	(0.103)	(0.137)
Cons	0.159***	0.322***	0.114***	0.206**
	(0.044)	(0.097)	(0.054)	(0.070)
	Digital remittances (transfer e			0.000
Time	-0.014 (0.075)	-0.014	-0.029	0.000
T	(0.075)	(0.071)	(0.111)	(0.100)
Treated	-0.054 (0.70)	-0.057 (0.067)	-0.134 (0.097)	0.044 (0.105)
D:D	` ′	` ′	` ′	
DiD	-0.022 (0.097)	-0.022 (0.094)	0.069 (0.137)	-0.156 (0.137)
Cons	0.261***	0.284***	0.314***	0.206***
Cons	(0.053)	(0.105)	(0.079)	(0.070)
	(0.053)	(0.103)	(0.077)	(0.070)

Note: Difference in difference estimations. Column (1) pools both countries together, column (2) includes both countries with control variables, column (3) Kyrgystan, column (4) Taijikistan.

7.2.4 Post-treatment outcomes

Finally, we also explore the outcomes of questions we included in the post–treatment survey. These questions are included in a level difference regression equation of the following form:

$$y_it=\beta_0+\beta_2$$
 [Treated]_ $i+\mu_it$

Where " y_it " is the outcome of interest and it refers to questions related to the usefulness of the link, discussion of the link with the family member abroad, weather the information in the link was useful, etc. The coefficient " β_3 " which is our outcome of interest gives us the estimated result for the treatment effect. The results are presented in Table 16. Interestingly, the results—although not significant for most of the variables, do show significance in the discussion of the link. That is, those that were in our treatment group—received the poster in addition to the SMSs, where more likely to discuss the link with the family member that resides abroad and sends remittances. This is an encouraging result given the short period of time in which this pilot intervention took place.

Table 16: Post-intervention outcomes-level differences

	1	2	3	4
Cash use	0.0756	0.722	0.054	0.107
	(0.066)	(0.657)	(0.092)	(0.092)
E–wallet use	-0.038 (0.041)	-0.032 (0.0375)	-0.088 (0.069)	
Bank card use	-0.039	0.0.39	0.259	-0.107
	(0.058)	(0.058)	(0.072)	(0.092)
Digital Remittances use	-0.0756	-0.0722	-0.0548	-0.107
	(0.0669)	(0.0657)	(0.092)	(0.092)
Discuss preferences for sending money	0.081	0.0871	0.172*	0.009
	(0.079)	(0.0807)	(0.100)	(0.127)
Impact of the Link				
Followed the link	0.425	0.039	0.062	-0.029
	(0.0561)	(0.060)	(0.097)	(0.302)
Discussed the link	0.085 *** (0.310)	0.084*** (0.032)	0.140*** (0.051)	X
Found information of link useful	-0.052	-0.0659	-0.139	-0.0413
	(0.078)	(0.0779)	(0.105)	(0.115)
Link induced to change methods to digital remittances	0.082	0.080	0.192	-0.0943
	(0.081)	(0.081)	(0.110)	(0.121)
Link inspired to spending choice	0.053 (0.045)	0.0428 (0.0494)	0.599 (0.082)	X

Note: Each row is a separate regression with the reported coefficient being treatment (treatment ==1). Column (1) pools both countries together (1), column (2) includes all with control variables, (3) Kyrgystan (4) Taijikistan. (X) = no one answered this question.

7.3 Discussions of the results

Our small pilot intervention focuses on direct messaging treatment through SMS text messages. We started with this intervention as our hypothesis is that the lack of uptake is due to lack of information and thus, providing direct information delivered through a text message should help improve the knowledge about how digital remittances work and how one can use them. Despite our short (one month) intervention timeline, we find that direct messaging has an effect in generating interest (clicking on the link) particularly the first time it is sent out to the respondents. Enhancing the format of the communication using personalized narrative that the respondents (as a recipient of remittances) can identify with helps increase the likelihood that the respondents would communicate this information with their family members working abroad (the migrants/senders of remittances). That is, the likelihood of discussing the link with the migrant (sender of remittances) was 8.5 per cent higher compared to those that did not receive the poster. We find this result encouraging as the decision on the remittance methods is often made by both senders and recipients (or at least both sides have to come to an agreement). This social interaction effect could play a vital role in shifting remittance behaviour. Social interactions and social networks are powerful tools for behavioural change and, despite the short intervention timeline and low dosage of the treatment (two text messages), we are able to observe the treatment effect. This paves the way for further research and better intervention design to increase the uptake of digital remittance and savings products in the region.

VIII. Conclusion and Policy recommendations

Digital remittance uptake emerged as an important financial tool for migrants and recipients during the COVID-19 pandemic of 2020, when limited access to physical infrastructure increased demand for cashless, remote methods of sending money across borders. Our research aims to fill the gap in the knowledge concerning existing digital remittance infrastructure in the Russian Federation and Central Asian countries and financial behaviour of remittance senders and recipients during the pandemic. Our findings obtained through mapping exercise exploring the remittance system in the region, the scoping surveys of the migrants' and recipients' preferences and behaviour with regards to sending and receiving remittances in the five countries and a small pilot intervention conducted in two remittance receiving countries (Kyrgyzstan and Tajikistan), provide the basis for some preliminary policy recommendations outlined below.

For remittance sending countries: the Russian Federation and Kazakhstan

- (1) Digital remittance uptake by migrants is dependent upon the degree of financial inclusion, in particular, accessibility of bank cards issued to non–citizens by commercial banks. The existing know–your–customer rules, applicable to non–citizens, should not be a barrier for this access.
- (2) Financial literacy of migrants is an enabling factor for long—term development impact of remittances, as well as a tool for ensuring safety and transparency of remittance flows. Government programs aimed at increasing financial literacy of the population should be inclusive enough to target migrant populations as well, especially those coming from key migration source countries. Strengthening cooperation in the area of financial literacy between financial regulators and commercial banks can facilitate the uptake of digital remittances by migrants.
- (3) Commercial banks should consider expanding an array of products available to non–citizen clients, taking into account their remittance behaviour as a criterion of trustworthiness. Cash–back on sent remittances which is deposited in a savings account could be used as a financial incentive for migrants.
- (4) Digital remittance uptake by migrants can also be supported by employers when they issue salary cards for their workers and to help increase their awareness of available options for digital remittance sending.
- (5) Raising awareness of digital remittance options by banking institutions and the national bank, including fully digital remittance scheme, can also be supported by diaspora organizations and consulate services in migration destination countries.
- (6) Collecting data on digital and cash remittance on a regular basis, as well as developing a set of indicators for monitoring financial inclusion of the migrant population, will contribute to better understanding of the financial behaviour of non–citizens and will help identify best strategies and instruments for financial inclusion of migrants.

For remittance receiving countries: Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan

- (1) Digital remittance uptake by recipients is conditioned on the availability and accessibility of financial infrastructure, particularly to withdraw cash (considering that people prefer using cash).
- (2) Commercial banks which issue national payment systems cards should inform their customers about the possibility and processes to receive remittances on these cards directly. Additional incentives could be considered, including specific investment or savings products.
- (3) Knowledge products about digital financial services (developed under Government financial literacy programs) should explicitly inform about digital remittance schemes available both to senders and recipients.
- (4) IOs and NGOs working with migrants need to inform them about the availability and advantages of digital remittances before departure. They can facilitate the procedure of obtaining a bank card upon arrival, including applying for a card remotely.

For remittance service providers (RSPs)

- (1) Commercial banks and MTOs can contribute to higher digital remittance uptake by better informing their customers about advantages of the digital remittance schemes, including about health safety and time–saving advantages. Additionally, providing information in different languages in mobile applications could be complemented by providing interpretation services in offline venues.
- (2) To ensure better access of migrants to e-payment instruments, RSPs should work closely with financial regulators to standardize identification rules applicable to Central Asian migrants, taking into account the epidemiologic situation and, if necessary, extending special measures of providing services remotely, as adopted in 2020. Finally, RSPs may want to expand their cooperation with IOM to conduct research on how to best adapt their financial products to migrants' needs.

IX. Annexes

Annex A. National payment systems in selected CIS countries

Country	National payment system	Website link
Russian Federation	MIR	nspk.ru/
Kyrgyzstan	Elcard	elcart.kg/
Tajikistan	Korti Milli	N/A
Uzbekistan	UzCard	uzcard.uz/
Ozbekistari	HUMO	humocard.uz/ru/

Source: compiled by the lead supply researcher.

Annex B: Financial literacy portals launched by the national financial regulators in the Russian Federation and Central Asia countries

Kazakhstan fingramota.kz
Kyrgyzstan finsabat.kg/
The Russian Federation fincult.info/

Tajikistan nbt.tj/ru/Protection/baland_savod_mol.php

Uzbekistan finlit.uz/

Annex C: Sampling framework for data collection

This study based its sampling framework on administrative data and country level statistics. Migrant populations are typically known as "hard—to—reach" populations. However, statistical background can give us a basis for a more accurate representative sampled population. The study targeted two destination countries: **the Russian Federation** and **Kazakhstan** and three recipient countries: **Kyrgyzstan, Tajikistan** and **Uzbekistan**. The study also interviewed remittance recipients in **Kazakhstan** (families from migrants in the Russian Federation).

All interviews took place between February and March 2021. In what follows, a summary of the sampling framework for senders and recipients is presented.

C1. Sampling frame for migrant respondents

(i) Russian Federation

The sample for the respondents (senders) in the Russian Federation was based on the stock of foreign citizens residing in the Russian Federation as of October 2010 (latest information from the Russian Census). The analysis took 300 as the maximum sample size and the following samples for the migrant workers (senders) were calculated.

Table C1: Sampling framework for migrants in the Russian Federation

	Population	%	Sample (300 max)
Population, total	142,856,536	100%	_
Indicated their citizenship	138,721,465	97 %	
Foreigners, of them:	686,993		_
Kazakh	28,060	4%	50
Kyrgyz	44,611	6.5 %	100
Tajik	87,123	12.7 %	125
Uzbek nationals	131,062	19 %	225

The final sampling for the Russian Federation was agreed with the survey company aimed to be representative by gender. The targeted quota of the distribution is as follows:

Table C2: Proposed Sampling for the Russian Federation

Country of opinion	Tourst Compile	Ci	ty	Ge	nder
Country of origin	Target Sample	Male		Female	
V. may make n	100	Moscow	50	25	25
Kyrgyzstan 100	100	St Petersburg	50	25	25
T	125	Moscow	63	32	31
Tajikistan		St Petersburg	62	31	31
l leb aldatan	225	Moscow	113	57	56
Uzbekistan	225	St Petersburg	112	56	56
IZ	50	Moscow	25	13	12
Kazakhstan	30	St Petersburg	25	13	12

However, the survey company had difficulties interviewing migrant women due to cultural and societal factors. In particular, they faced resistance from women who were reluctant to take part of the interview and, in other cases, it was simply difficult to locate them. Therefore, the sampling selection was as follows:

Table C3: Actual Sampling for the Russian Federation

Country of opinion	Total Campala	Cir	City		Gender		
Country of origin Total Sample		Male		Female	Male		
V. vez vzete e	100	Moscow	50	34	16		
Kyrgyzstan 100	100	St Petersburg	50	36	14		
Tajikistan	126	Moscow	64	47	17		
		St Petersburg	62	43	19		
I I-la al data a	225	Moscow	113	80	33		
Uzbekistan	225	St Petersburg	112	77	35		
Kazakhstan	F4	Moscow	25	19	6		
	51	St Petersburg	25	15	11		

Each respondent was interviewed face—to—face (personal interview) and all protocols followed to be in compliant with all sanitary standards and COVID-19 prevention.

(ii) Kazakhstan

For **Kazakhstan** as a destination country, the calculation was based on net migration data from 2018 and 2019 from the Ministry of National Economy of the Republic of Kazakhstan Committee on Statistics (see Table C4). The net migration amongst CIS countries is negative because most people do not return from the Russian Federation once they migrate there. Kazakhstan is also one of the key participants of the Russia's compatriot resettlement programme (return of Russian diaspora programme). Based on these statistics, migrants from Uzbekistan accounted for the largest proportion in Kazakhstan, followed by Kyrgyzstan and Tajikistan. Taking 300 as the largest sample size, the following number of migrant workers/senders in Kazakhstan were selected as included in Table C4.

Table C4: Sampling framework for migrants in the Kazakhstan

Country of origin	Net Migr	Net Migration		
	2018			
Kyrgyzstan	293	197	50	
Tajikistan	223	167	50	
Uzbekistan	4140	3734	300	
The Russian Federation	-26,263	-28,950		
Total CIS	-27,681	-31,526		

Source: taldau.stat.gov.kz/en/Search/SearchByKeyWord.

The final sampling for Kazakhstan as agreed with the survey company aimed to be representative by gender, age, place of residence and country of residence. The selection of the respondent was via debt—snowball method and the selection criteria included migrant workers who work in Kazakhstan and send money to family members. Additional criteria for selection of migrants included those actively working and those looking for a job in low skilled industries in construction, hospitality and retail.

The fieldwork took place between 3 and 15 March 2021. Each respondent was interviewed face—to—face (personal interview) and all protocols followed to be in compliance with all sanitary standards and COVID-19 prevention. Surveys were conducted in Kazakh, Russian or the native language of the respondent. The final quota of the distribution of targeted sample was as follows:

Table C5: Quota of the sampling distribution of migrants in Kazakhstan

Country of	Total sample				Age)	
origin		Male	Female	18–29	30–45	46–60	61+
Kyrgyzstan	50	25	25	12	16	16	6
Tajikistan	50	25	25	12	16	16	6
Uzbekistan	300	150	150	85	85	80	50

C.1.2 Sampling frame for recipient respondents

For the recipients, the calculation was also based on remittance flows from the Russian Federation to the four destination countries. A general finding was that remittance flows were proportionate to the number of migrant workers residing in the Russian Federation with Uzbekistan having the highest remittance flows, followed by Tajikistan, Kyrgyzstan and Kazakhstan with the smallest outflow.

The fieldwork in Kyrgyzstan aimed at surveying 150 recipients with a targeted sample of individuals aged between 18 and 65 years who had family members residing abroad either in the Russian Federation or Kazakhstan (and who send remittances to them). The sampling aimed at covering all regions of the suggest using Kyrgyzstan and this was achieved through 56 interviews in the northern regions and 94 in the southern regions. The data collection was done via telephone due to concerns regarding COVID-19 and the biosecurity.

The telephone interviews took place between 18 and 25 February of 2021. An interesting finding from the fieldwork was that some families also had migrant members in Turkey or in Qatar.

(ii) Tajikistan (n=250)

The fieldwork in Tajikistan aimed at surveying 250 individuals who had family members residing abroad either in the Russian Federation or Kazakhstan (and who send remittances to them). The sample was 50 per cent rural and 50 per cent urban and was drawn from the five main regions from the Republic.

The data collection was done via telephone interview due to concerns regarding COVID-19 and the biosecurity. The telephone interviews took place between 18 and 25 February 2021.

(iii) Uzbekistan (
$$n = 300$$
)

The fieldwork in Uzbekistan aimed at surveying 300 individuals who had family members residing abroad either in the Russian Federation or Kazakhstan (and who send remittances to them). Other criteria included in the selection was the urban/rural distribution. We aimed for 20 per cent from rural areas and 80 per cent from urban areas who were likely to have access to the internet and/or own a smart phone.³² The data collection was done via telephone due to concerns regarding COVID-19 and the biosecurity. The telephone interviews took place between 19 February and 4 March 2021.

(iv) Kazakhstan (n=100)

Kazakhstan was also included as a recipient country. As mentioned above, Kazakhstan is one of the key participants of the Russian Federation's compatriot resettlement programme (return of Russian diaspora programme). One hundred recipients of remittances in Kazakhstan were interviewed with a representative geographic distribution. The interviews were also carried out over the phone between 3 and 15 of March 2021.

C.1.3 Final Sampling framework

The final sample sizes for the demand—side survey for each destination country for senders (migrant workers) and recipients are shown in the table below. We further include the final sample achieved in each country.

Table C6: Final sampling framework

Country	Target Sample of respondents (senders)	Actual Sample of respondents (senders)	Target Sample of respondents (re- cipients)	Actual Sample of respondents (recipients)
Russian Federation (destination)				
Uzbekistan	300	225	300	300
Tajikistan	200	126	250	250
Kyrgyzstan	100	51	150	150
Kazakhstan	100	100	100	100
Kazakhstan (destination)				
Uzbekistan	300	300		
Tajikistan	50	50		
Kyrgyzstan	50	50		

^{32.} We had an initial target of 30/70 but the survey company advice that this was going to be difficult to fulfil given the characteristics of the targeted population.

Annex D: Survey tool-Remittance Sender (Migrants)

Migrants Survey

These questions are to be filled by the interviewer

Date of the interview	
City	
Name of the interviewer	
The interview was conducted in accordance with the field guide	(signature of the interviewer)
Location of the interview (city)	
Participant's phone number	
Introduction Interviewer: "Hello, my name is We are conduction"	ing a survey with people from Kyrgyzstan, Tajikistan and
Uzbekistan who live and work in Kazakhstan. The aim of your work, livelihood and to understand the challenges you transfers from your family while you are living in The Russia is completely anonymous, no personal data will be collected your responses will not be shared with any third party.	the survey is to understand how COVID-19 has impacted ou have to face in sending remittances home or receiving n Federation. Your participation is voluntary and the survey
The survey will take about 30 minutes to complete. There is not be judged or assessed in any way. As a token of our applical survey company) for completing the survey.	, ,
Please be reassured that no one will be able to link the res We only need your contact details to be able to reach you It is your honest opinion that we are interested in and if you want to answer' at any time.	again in case we need to have a follow-up phone interview.
Your answers to the following questions are vital to the undeand what infrastructures and information are needed in order.	
Please note that you may only participate in this survey if y	ou are 18 years of age or over.
□ I certify that I am 18 years of age or over.	
Are you ready to begin the survey now? □ Yes □ No	
[only proceed if the participant says 'YES', if 'No' sugrefuses, thank and terminate the interview.]	ggest making an appointment for interview later, if
Mark the gender of the respondent:	
□ Male □ Female	

Interviewer: "Ok, we are now going to proceed with the interview. Can I ask a few introductory questions?"

To the attention of the interviewer:

- 1. Please, do not voice out the option 'Do not want to answer' when reading the list of possible answers to the question.
- 2. If the number of possible answers is three or less, you can read them or, first, listen to the reply of the respondent and select/identify the appropriate answer option.
- 3. If the number of answer options exceeds three, please offer to the respondent a card with the list of options so that he could read them and select.
- 4. Some of the questions we do not want the interviewers to read out the options, we put a note for these specific questions.

I. Background /Screening questions

try have you sent money?

1.1) How long have you been living in this country?	 Less than 3 months More than 3 months 1 year or more 3 years or more Since birth (terminate the interview)
1.2) What is your purpose of coming to The Russian Federation?	 To work To study Family circumstances Other (please specify):
1.3) Are you working now?	 Yes No, but actively searching for work No and not searching for work currently (terminate the interview)
1.4) From which country did you come to The Russian Federation?	 Tajikistan Kyrgyzstan Uzbekistan Kazakhstan Another country (terminate the interview)
1.5) Do you have citizenship of:	 Tajikistan Kyrgyzstan Uzbekistan Kazakhstan (Q. 1.7.) Other (specify and terminate the interview)
1.6) Do you a long-term residence permit in The Russian Federation?	1. Yes 2. No
1.7) In the past 12 months, have you sent money from Kazakhstan to your home country (as per Q. 1.4.)?	 Yes No (terminate the interview)
1.8) To which city/settlement/region in your home coun-	insert the name of the location and specify the region

2. Sociodemographic characteristics

2.1) How old are you?	[insert number]			
2.2) What is your level of education?	 Higher (graduated from institute, university) Unfinished higher (entered institute/university but didnot complete it) Specialized secondary (completed college) Secondary (completed school) Incomplete secondary and lower (did not complete school) 			
2.3) What is your marital status?	 Married/civil union Engaged Divorced/Separated Single Widowed/widower Other			
2.4) Are any of your family members living with you here?	 No (Q. 2.6) Yes (please, specify: Spouse Elderly parents Children under 16 Brother/sister Other relatives 			
2.5) In total, how many people—adults and children—currently live in your household in Kazakhstan, including yourself?	Insert the number			
2.6) Who is the main financial provider in your family left abroad back home? (do not read out the option but select as per the respondent's answer)	 Me Another family member (specify) Together with member living in my home country Together with another family member (specify) Other (specify) 			
2.7) Who makes the financial decisions in your family? (do not read out the option but select as per the respondent's answer)	 Me The family members living at home Other (specify) 			
TRUST QUESTIONS (Don't read out the section heading)				
2.8) Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?	 Most people can be trusted Need to be very careful 			
2.9) Could you tell me how much confidence you have in the following organizations (in the country where you live now)? (1 = a great deal, 2 =quite a lot, 3 = not very much, 4 = none at all)	the religious organizationsthe pressBanks			

Activity I: (note to the survey firm—this needs to be randomized between subjects—i.e. split the interviewers into 3 groups, each group gets only one version. Each version will have different banks (1 bank per version). This is version 3.

Now I'm going to ask you to think about a scenario.

- Imagine that you've received USD 250 as a payment for the work you've recently completed (put an equivalent amount in the local currency). How much of this amount would you be willing to deposit into a bank account at Sberbank? (Imagine that the account can be opened without any administrative issues)
- You can withdraw your money at any time using a bank card or go to the branch. There is no restriction on your account.
- The account gives an interest of 10 per cent per year.

Please now state the amount that you would like to put into this account [from 0 to 250, in integer and in increments of USD 5]:

3. EMPLOYMENT

3.1) What is your type of employment? Как вы работаете? (If respondent is currently looking for work, ask about type of employment he is looking for)	 I work for an employer/ Работаю по найму (есть работодатель) I run my own business (can hire other people and handle accounting)/Владею бизнесом (могу нанимать и веду бухгалтерию сам) I work as self-employed, providing services for multiple clients/ Работаю сам на себя (есть клиенты, без найма других в сфере услуг) Other (specify)
3.2) In what sector are you currently working?(If respondent is currently looking for work, ask about the sector where he is looking for job)	 Hospitality Retail Construction Domestic work Agriculture/forestry Mining and quarrying Fishing Manufacturing/other factory work Food processing Transport Wholesale and retail trade Repair of motor vehicles and motorcycles Public administration and support services, including cleaning, landscape care Health care and social work Arts/entertainment/recreation Restaurant, food services Other services, such as washing clothes, hairdressing, beauty treatments Ad hoc/temporary work Other (please specify):
3.3) What is your average monthly salary (in rubles/USD)? Skip this question if respondent is currently only looking for job	Indicate the amount and currency Added by the survey company

- 3.4) How do you get paid? (Skip this ques- 1. In cash, officially, with a signature tion if respondent is currently only looking for job)

 - 2. Paid to my bank card
 - 3. In cash, unofficially
 - 4. Other (specify)___
 - 5. Do not want to answer

4. Impact of COVID-19

Interviewer: "Many people have been affected financially by the coronavirus. We'd like to know how you have been affected and how you and your household are coping."

4.1. What is your financial situation at the present time?	1. 2. 3. 4.	Can buy everything I need and make savings Can buy everything I need, but cannot make savings Only have money for essentials (food, clothes and so on) There's not enough money even for the essentials (food, clothes and so on)
4.2. Has your financial situation changed due to the COVID-19 pandemic?	1. 2. 3. 4.	Yes, it has gotten worse Yes, it has gotten a lot worse Yes, it has gotten better No, it has not changed
4.3. What difficulties have you experienced in connection with the COVID-19 pandemic? (select all that apply)	1. 2. 3. 4. 5. 6. 7. 8. 9.	I am mentally stressed Earn less money than usual I have a debt (debts) now I have started eating worse I lost my job, I had to look for a new one Had to postpone return home Other (specify) I do not want to answer Nothing has changed
4.4. In the period March–June of 2020 (during the lockdown period) did you send any money abroad (to the country/countries indicated in the previous question)	1. 2. 3. 4. 5.	No Yes, but less amounts Yes, but less frequently Yes, just as I usually do Yes, more than I usually do
4.5. After the COVID-19 pandemic lock-down (starting July 2020), are you still able to send money back home?	1. 2. 3. 4. 5.	Yes, but less amount Yes, the same amount as before No, because I have lost my job No, because I am planning to return home Other (please specify):

5. Remittances and financial inclusion

5.1) How often do you usually send money abroad?	2.	Once a month Several times a month Once a quarter (3 months) Once a year (12 months) Depends (please specify):
5.2) What is your main purpose for sending the money abroad to your home country? (multiple selection allowed)	1. 2. 3. 4. 5. 1. 2. 3. 4. 5.	To support my family and relatives A gift for family celebration E.g. wedding To renovate my house in the country of origin For a funeral To pay off my debt (loans, consumer credits including mortgage) (ипотека, кредит любой, займ) Buy an asset note to the interviewer: need to be ready to provide an example—(for example, a car, a plot of land, cattle, agricultural machinery) Invest in a new property (purchase or building a new housing) To pay for my children's education To put in a savings account Other (please specify):
5.3) On average, how much money do you usually send each time?	Inse	ert the amount and currency (Rubles/USD/Euro) Added by the survey company
5.4) Please choose your most preferred way of sending remittances.	3. 4. 5. 6. 7. 8.	 In cash, via MTO/Bank office In cash, via friends or relatives Transferred via bank account/card Online using bank website/app Online using MTO website Other (specify): If none of your choices appeared in the above option please specify your preferred method:
5.5) What makes you not use other options?	[en	tre text]
5.6) Is the preferred option always available?	1. 2.	Yes No
5.7) Have your preferences in the mode of money transfer changed due to the COVID-19 pandemic?	1. 2.	Yes, it has changed (specify: how) No, it remains the same
5.8) Do you have a bank account?	1. 2.	Yes (specify the bank:) No
5.9) Do you have a bank card?	1. 2.	Yes (please, specify which bank issued the card and go to Q. 5.11) No (go to Q. 5.10)
5.10) Why don't you have a bank card?	1. 2. 3. 4.	There is no accessible bank Documentation/identification issues Don't trust banks Other (specify): (Go to Q. 5.12)
5.11) In the past 12 months have you used your bank card to transfer money abroad, from Kazakhstan to your relatives in your home country, via web or mobile app?	1. 2. 3. 4.	Yes No, because I do not know how to do it No, because I prefer to send money in cash No, because of another reason (specify)

5.12) Does your family member receiving	1.	Yes (Go to Q. 5.13
remittances have a bank card?	2.	No (Go to Q 5.15)
5.13) Please specify, which card it is:	1.	Korti Milli
	2.	Elcart
	3.	Uzcard
	4.	HUMO
	5.	Visa/Mastercard/UnionPay
	6.	Do not know
	7.	Other (specify)
5.14) In the past 12 months have you ever	1.	Yes
transferred the money to your family	2.	No, because they do not know how to use the bank card
member's bank card?	3.	No, because they prefer to receive money in cash
4	4.	No because of another reason (specify)
5.15) In the past 12 months have you	1.	Yes, in cash, transferred via MTO
received any money from your home	2.	Yes, in cash, transferred via relatives
country, sent to you by your friends	3.	Yes, as a transfer to my card
or relatives?	4.	No

6. IT Skills and Financial Literacy

6.1) Do you have a smart phone with internet access?	1. 2.	Yes (go to 6.2) No (go to 6.4)
6.2) Do you know how to install apps on your smart phone?	1. 2.	Yes No
6.3) In the past 12 months, have you used your mobile phone to do the following: (select all that apply)	1. 2. 3. 4.	To check a bank account balance To make an online purchase To send money abroad Nothing of the above
6.4) Do you use internet (not on your phone but on other devices e.g. laptop, work computer, etc)?	1. 2.	Yes (go to 6.6) No (go to 6.5)
6.5) Why do you not use internet?	1. 2. 3. 4. 5.	No internet coverage Too expensive Don't like technology Don't understand technology Don't need to use technology Other (specify):

Interviewer: "This is now the final section, we would like you to think about these questions carefully before you answer them. You can take a break if needed before we start."

- 6.6) Financial Literacy A: "Suppose you had USD 100 in a savings account and the interest rate was 2 per cent per year. After 5 years, how much do you think you would have in the account if you left the money to grow!"
- A) More than USD 102
- B) Exactly USD 102
- C) Less than USD 102
- D) I don't know
- 6.7) Financial Literacy B: "Imagine that the interest rate on your savings account was 1 per cent per year and inflation was 2 per cent per year. After 1 year, with the money in this account, would you be able to buy..."
- A) More than today
- B) Exactly the same as today
- C) Less than today
- D) Don't know
- 6.8) Can you read or understand at least some of the following paragraphs? В соответствии с приказом МВД РФ от 30.07.2020 № 533, с 1 января 2021 года вступают в силу новые утвержденные МВД формы заявлений для оформления разрешения на работу иностранному гражданину, его продления, внесения изменений и выдачи дубликата документа.]
- 1. Yes
- 2. No

Annex E: Survey tool-Remittance Recipient (Households)

1. Recipient Survey

These questions are to be filled by the interviewer

Date of the interview				
City				
Name of the interviewer				
The interview was conducted in accordance with the field guide	(signature of the interviewer)			
Location of the interview (city)				
Participant's phone number				
Number of call attempts before the interview				
Introduction				
Hello, my name is We are conducting Tajikistan and Uzbekistan who have a family member (mem Kazakhstan. The aim of the survey is to understand how C the challenges you have to face in receiving remittances or Russian Federation and/or Kazakhstan. Your participation is personal data will be collected. Your answers will be used the shared with any third party.	nbers) who live and work in the Russian Federation and/or COVID-19 has impacted your livelihood and to understand transfers from your family while they are living in the s voluntary and the survey is completely anonymous, no			
The survey will take about 30 minutes to complete. There is no right or wrong answer to these questions and you will not be judged or assessed in any way. As a token of our appreciation, we will be providing you with (specified by the survey firm) for completing the survey.				
Please be reassured that no one will be able to link the responses to you, so please feel free to tell us what you think. We only need your contact details to be able to reach you again in case we need to have a follow—up phone interview. It is your honest opinion that we are interested in and if you do not want to answer any question, please say 'I don't want to answer' at any time.				
Your answers to the following questions are vital to the understanding of how remittances are affected by the pandemic and what infrastructures and information are needed in order to facilitate the continuation of remittance flows.				
Please note that you may only participate in this survey if y	ou are 18 years of age or over.			
$\hfill \hfill \hfill$ I certify that I am 18 years of age or over.				
Are you ready to begin the survey now?				
□ Yes □ No				
[only proceed if the participant says 'YES', if 'No' surrefuses, thank and terminate the interview.]	ggest making an appointment for interview later, if			
If the respondent agrees to participate right away, mark the	e gender of the respondent			
□ Female □ Male				

To the attention of the interviewer:

- 5. Please, do not voice out the option 'Do not want to answer' when reading the list of possible answers to the question.
- 6. If the number of possible answers is three or less, you can read them or, first, listen to the reply of the respondent and select/identify the appropriate answer option.
- 7. If the number of answer options exceeds three, please offer to the respondent a card with the list of options so that he could read them and select.
- 8. Some of the questions we do not want the interviewers to read out the options, we put a note for these specific questions.

II. Background/Screening Ouestions

ii. Background/screening Questions	
2.1) Do you have citizenship of:	 Tajikistan Kyrgyzstan Uzbekistan Kazakhstan Another citizenship (specify):
2.2) Do you have a family member(s)/persons close to you working (currently or regularly) in the Russian Federation or Kazakhstan?	 Yes Russian Federation Yes Kazakhstan Yes Both countries No (terminate the interview)
2.3) Where does your family member(s) reside in the Russian Federation/Kazakhstan?	[insert the text–name(s) of the city]
2.4) In the past 12 months did you receive remittances from your family member working abroad?2. Sociodemographic characteristics	 Yes (proceed) No (terminate the interview)
2.1) How old are you?	[insert number]
2.2) What is your level of education?	Higher (graduated from institute, university)

2.1) How old are you?	[insert number]
2.2) What is your level of education?	 Higher (graduated from institute, university) Unfinished higher (entered institute/university but did not complete it) Specialized secondary (completed college) Secondary (completed secondary school) Incomplete secondary and lower (did not complete secondary school)
2.3) What is your marital status?	 Married/civil union Engaged Divorced/Separated Single Widowed/widower Other Do not want to answer
2.4) In total, how many people—adults and children—are in your family living with you here, including yourself?	Insert the number of Adults [number] Elderly [number] Children under 16 [number]
2.5) What are the current sources of income of your family?(multiple answers permitted)	 Main job Part time job(s) Temporary work Remittances State benefits Other (specify)

2.6) Who is the main financial provider in your family? (do not read out the option but select as per the respondent's answer)	 Me Another family member working in this country (specify) Family member working abroad Other (specify) 				
2.7) Who makes financial decisions in your family? (do not read out the option but select as per the respondent's answer)	 Me The family member working abroad Another family member (specify) Other (specify) 				
TRUST QUESTIONS (Don't read out the section heading)					
2.8) Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?	 Most people can be trusted Need to be very careful 				
2.9) Could you tell me how much confidence you have in the following organizations?(1 = a great deal, 2 =quite a lot, 3= not very much, 4 = none at all)	the religious organizations the press Banks the Government United Nations				

Activity I: Trust Game unincentivized (note to the survey firm—this needs to be randomized between subjects—i.e. split the interviewers into 3 groups, each group gets only one version. Each version will have different banks (1 ban per version). This is version 1.

Now I'm going to ask you to think about a scenario.

- Imagine that you've recently received USD 250 (put an equivalent amount in the local currency) from your family members working abroad. How much of this amount would you deposit into a bank account at Sberbank? (imagine that the account can be opened without any administrative issues)
- You can withdraw your money at any time using a bank card or go to the branch. There is no restriction on your
 account.
- The account gives an interest of 10 per cent per year.

Please now state the amount that you would like to put into this account [from 0 to 250, in integer and in increments of USD 5]:

3. Employment

1.1) Are you?	1. Employed (in private sector) (Q.3.2.)
	2. Employed (in public sector) (Q.3.2.)
(if not options 1, 2, 3, or 4 Go to the next section –	3. Part-time job with daily payments (Q.3.2.)
section 4)	4. Self-employed (Q.3.2.)
	5. Unpaid family work
	6. Student
	7. Retired
	8. Unemployed
	9. Hired by private person (domestic worker) (Q.3.2.
	10. Other
	11. Do not want to answer
1.2) What is your average monthly salary, if known (in	Insert amount and currency
local currency)?	Offer a range of options here

1.3) How do you get paid?	1. In cash, officially, with a signature
	2. Paid to my bank card
	3. In cash, unofficially
	4. Other (specify)
	5. Do not want to answer
4. Impact of COVID-19	
Interviewer: "Many people have been affected financially by affected and how you and your household are coping."	y the coronavirus. We'd like to know how you have been
4.1) What is your financial situation at the present time?	Can buy everything I need and make savings
	 Can buy everything I need, but cannot make savings Only have money for essentials (food, clothes and
	so on) 4. There's not enough money even for the essentials
	(food, clothes and so on)
4.2) Has your financial situation changed since March	1. Yes, it has gotten worse
2020, due to the pandemic?	2. Yes, it has gotten a lot worse
	3. Yes, it has gotten better4. No, it has not changed
4.3) What difficulties have you experienced in connec-	I am mentally stressed
tion with the COVID-19 pandemic?	My salary has decreased/insufficient income
don was the comb to participate.	3. I have a debt (debts) now
(do not read out the options, wait for respondents	4. I have started eating worse
to mention and select all that apply)	5. Access to medicine has deteriorated
	6. I lost my job, I had to look for a new one
	7. Other (specify)
	8. I do not want to answer
4.4) Did you receive any money from abroad during	1. No
pandemic in April–June 2020?	2. Yes, but less amounts
	3. Yes, but less frequently
	4. Yes, just as I usually do
	5. Yes, more than I usually do
4.5) After the COVID-19 pandemic (starting July 2020),	1. Yes, but less amount
are you still able to receive money from abroad?	2. Yes, the same amount as before
	3. No, because they have lost their job
	4. No, because they have returned home 5. Other (please specify):
	5. Other (please specify):
5. Remittances and financial inclusion	
5.1) How often do you usually receive money from- abroad?	1. Once a month
	2. Several times a month
	3. Once a quarter (3 months)
	4. Once a year (12 months)
	5. Depends (please specify):
5.2) On average, how much money do you usually	Insert the amount and currency (Rubles/USD/

receive each time?

Euro) Offer to indicate a range

5.3) What was the intended allocation of the money received from abroad in the past 12 months? (multiple selection allowed)	 To support the family and relatives A gift for family celebration E.g. wedding To build and/or renovate the house For a funeral To pay off debts Buy an asset note to the interviewer: need to be ready to provide an example—(for example, a car, a plot of land, cattle, agricultural machinery) Invest in a property To pay for children's education To put in a savings account Other (please, specify):
5.4) Please choose your most preferred way of receiving remittances.	 In cash, via MTO/Bank office In cash, via friends or relatives Transferred to my bank account/card Transferred to a mobile wallet Other (specify):
5.5) What made you choose this option and not the others?	[entre text]
5.6) Is this option always available?	1. Yes 2. No
5.7) Have your preferences in the mode of receiving the remittances changed after COVID-19 pandemic?	6. Yes, it has changed (specify: how)7. No, it remains the same
5.8) Do you have a bank account?	1. Yes 2. No
5.9) Do you have a bank card?	 Yes (please, specify which bank issued the card and go to Q. 5.11) No (go to Q. 5.10)
5.10) Why do you not have a bank card?	 There is no accessible bank Documentation/identification issues Don't trust banks Other (specify):
5.11) In the past 12 months have you received remittances on your bank card/bank account?	5. Yes6. No (please specify why)
5.12) In the past 12 months have you used this bank card to buy goods and/or services?	 8. Yes, for online shopping or payment (Go to Q. 5.13) 9. Yes, for purchasing goods or services in store (Go to Q. 5.13) 10. No, I only use cash (Go to Q. 5.14)
5.13) Please specify, which card it was (and the name of the bank):	 Korti Milli Elcart Uzcard HUMO Visa/Mastercard Other (specify): Do not know Note to interviewer: ask the respondent to check their card if they say 'Don't know'
5.14) In the past 12 months have you sent any money to your family member abroad?	 Yes, in cash, transferred via MTO/bank Yes, in cash, via friends/relatives Yes, as a transfer to his/her card No Other

6. IT skills and Financial Literacy

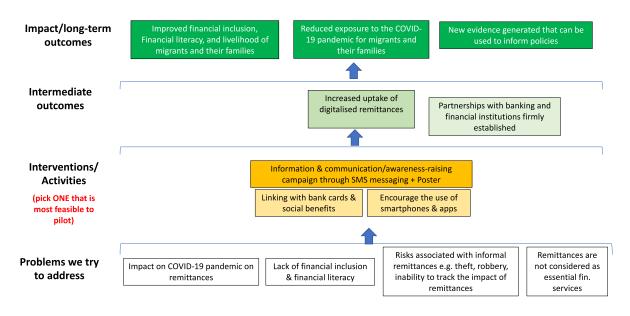
1.1) Do you have a smart phone with internet access? Yes (go to 6.2) No (go to 6.4) 1.2) Do you know how to install apps on your smart 1. Yes phone? 2. No 1.3) In the past 12 months, have you used your mobile To check a bank account balance 1. phone to do the following: (select all that apply) To make an online purchase 2. To send money abroad 3. Nothing of the above 1.4) Do you use internet (not on your phone but on 1. Yes (go to 6.6) other devices e.g. laptop, work computer, etc)? 2. No (go to 6.5)

Interviewer: "This is now the final section, we would like you to think about these questions carefully before you answer them. You can take a break if needed before we start."

1.5)	Why do you not use internet?	1. 2. 3. 1. 2. 3.	No internet coverage Too expensive Don't like technology Don't understand technology Don't need to use technology Other (specify):
1.6)	Financial Literacy A: "Suppose you had USD 100 in a savings account and the interest rate was 2 per cent per year. After 5 years, how much do you think you would have in the account if you left the money to grow?"	1. 2. 3. 4.	More than USD 102 Exactly USD 102 Less than USD 102 I don't know
1.7)	Financial Literacy B: "Imagine that the interest rate on your savings account was 1 per cent per year and inflation was 2 per cent per year. After 1 year, with the money in this account, would you be able to buy"	1. 2. 3. 4.	More than today Exactly the same as today Less than today Don't know

Annex F: Theory of Change

Updated Theory of Change



KAZAKHSTAN (migrants):

Preferred Cash (i.e. reasons for not preferring digital remittances):

REFUSAL TO RESPOND (x200)

As everyone (x3) Cheaper (x2)

Friends visit constantly (x1) Good enough for me (x1) I don't have bank account (x5)

I don't have time to go to the bank (x1)

I don't know different ways (x1)

I don't trust (x8)

I don't understand how to use Internet (x1)

I send money to parents where my children are raised (x1)

I trust bank (x1) I trust my friends (x1) I will trust it more (x1) I'm used to it (x7)It's convenient (x30) Interest–free (x2)

It depends (x1) It is easier (x2)

It is not beneficial to me (x1)It is not convenient for me (x1)

It is not reliable (x1) It needs to be done (x1)

It's fast (x2)

It's the right thing (x3) No problem (x1) Profitably (x1) Reliably (x8)

There are no other ways (x1)There is no ATMs in the village (x2) There is no different ways (x1) Transfers are convenient (x1)

Via my brother (x1)

Wife doesn't have a bank account (x1)

Preferred Digital (i.e. the reasons for not preferring cash):

REFUSAL TO RESPOND (x29)

Dangerous (x1) Easy (x4)

Haven't tried other ways (x2) I don't know other way (x3) I don't like other ways (x7)

I get used to it (x1)

I know someone in bank (x1)

I like it (x1) I trust (x1)

I use it if I need (x1) I'm afraid (x1)

I'm okay with everything (x1)

I'm used to it (x5)It's convenient (x22) I've only use bank transfers for a long time (x1)

It is easier (x1)

It is easy to transfer money (x1) It is not convenient for me (x1)

It's fast (x1)

It's the right thing (x1) Only transfer (x1)

Only transfer, I don't like other ways (x1)

Sometimes (x1)

Transfers are convenient (x3) We transfer together (x1)

RUSSIAN FEDERATION

Preferred Cash (i.e. reasons for not preferring digital remittances):

Advised (x1)

Affordable (x2)

bank is more reliable (x1)

better (x1)

better via a bank (x1) better-known (x1) can no longer (x1) can't use it (x1) cheaper (x1) constantly (x1) constantly like this(x1) convenient (x17)

convenient, cheap (x1) don't have a card (x1) don't know (x4) don't know how (x5)

don't know how to use it (x2)

don't like it (x1) don't trust (x10) don't understand (x1) don't want (x3)

easier, a small commission (x1)

easier for me (x1)

everybody sends, everything is good (x1)

expensive (x1) friends advise so (x1) have no cards (x1) have not tried (x1)

I am satisfied with everything in this way (x1)

I do as my friends do (x1)

I do not know how and do not trust (x1)

I don't know any others (x3)

I don't want to use another way (x1) I don't know, we're used to it. (x1)

I don't trust anyone (x1) I know how cheaper (x1) I was advised to. (x1) I was shown, I use (x1) I'm afraid (x1)

I'm used to it (x6)

it is easier and cheaper (x1)

a lot to pay (x1)

acceptable and convenient (x1)

Annex G: Qualitative results: reasons for preferred mode of transfer

G1: Migrant reasons for preferred method of transfer:

These are the—mostly—unmodified answers respondents provided to the open question:

"What makes you not use other [transfer method] options?"

```
it is possible and safe (x1)
                                                             always use (x1)
it's cheap (x1)
                                                             as I can (x1)
it's convenient (x9)
                                                             because I have a card (x1)
it's convenient for me (x2)
                                                             because you can send from home (x1)
                                                             can be sent via phone (x1)
it's easier (x1)
it's safe (x1)
                                                             card is the most convenient (x1)
little interest via the bank (x1)
                                                             cheap via korona (x1)
more convenient (x1)
                                                             cheaper (x4)
more convenient in cash (x1)
                                                             complicated (x1)
more convenient via bank (x1)
                                                             convenient (x36)
more habitual (x1)
                                                             convenient and fast (x1)
more reliable (x2)
                                                             convenient by phone (x1)
my method is cheaper because we pay for the
                                                             convenient from card to card (x1)
                                                             convenient from home as money is already on the card
   translation together (x1)
no commission via friends (x1)
no need (x1)
                                                            convenient in the way that I use (x1)
no one at home uses other translations (x1)
                                                             convenient online. no need to go to the bank. all
no time (x1)
                                                                checks on hand (x1)
not convenient (x1)
                                                             convenient to send from home (x1)
not convenient for me (x1)
                                                             convenient via phone (x1)
out of habit (x1)
                                                             convenient, fast (x1)
prompted (x1)
                                                             convenient, for others there is no time (x1)
prompted so and I'm sending (x1)
                                                             Convenient, I don't waste time going to the bank (x1)
rubles aren't accepted in Uzbekistan (x1)
                                                             convenient, trust (x1)
safe (x1)
                                                             convenient. do not waste time (x1)
satisfied with this (x1)
                                                             convenient. saves time. can be sent at any time (x1)
satisfied with this way (x1)
                                                             conveniently (x3)
sberbank (x2)
                                                             conveniently from home (x1)
taxes (x1)
                                                             conveniently via the app (x1)
the most reliable (x1)
                                                             conveniently you can immediately send (x1)
there was no time to send money (x1)
                                                             different ways (x1)
this one is better (x1)
                                                             do not trust and do not know how to use (x1)
this one suits me better. (x1)
                                                             don't quite trust others (x1)
this way is convenient (x1)
                                                             don't know (x5)
                                                             don't know any others (x1)
this way is well-known (x1)
trust sberbank (x1)
                                                             don't like it (x1)
unreliable (x1)
                                                             don't trust (x2)
use it sometimes (x1)
                                                             don't want (x4)
used to it (x1)
                                                             don't want, it's convenient for me (x1)
used to send like that (x1)
                                                             easier (x1)
usually via bank (x1)
                                                             easier to send online (x1)
zoloraya korona have big interest (x1)
                                                             easier, interest is less (x1)
I don't know how to use others. (x1)
                                                             easy (x1)
small commission (x1)
                                                             fast and better and the commission is small (x1)
Preferred Digital (i.e. the reasons for not preferring cash):
                                                             fast, profitable (x2)
                                                             fast, profitable (x2)
500 rubles more expensive (x1)
                                                             friends advise so (x1)
```

habitually, I already know

I always send like this (x1)

I can't (x1)	sberbank online (x1)
I didn't know I wasn't interested in. I'm used to and the	small commission for sending via Sberbank (x1)
functions are convenient (x1)	so convenient via the Internet (x1)
I don't know another (x1)	so familiar already (x1)
I don't know other ways (x1)	that's better (x2)
I don't want to pay interest (x1)	that's easier and convenient (x1)
I know and got used to this way (x1)	the fastest (x1)
I like it (x2)	the most comfortable, little interest (x1)
I was advised this way (x1)	the most convenient (x3)
I'm used to it (x4)	the most convenient way (x4)
I'm used to it, it's convenient (x1)	the most reliable (x1)
is transferred everywhere (x1)	the other is more expensive (x1)
it is cheaper via zolotaya korona (x1)	there is a card in Uzbekistan (x1)
it is easier to use the app than stand in line at the	there is interest (x1)
bank. (x1)	there is no commission on Zolotaya korona (x1)
it is more convenient why go somewhere to pay	there is no need to provide documents in the mobile
commissions (x1)	app of Sberbank (x1)
	this is a fast and reliable way (x1)
it works well (x1)	, , ,
it's better (x1)	this is normal and faster (x1)
it's comfortable (x1)	this is the best (x1)
it's convenient (x19)	this is the most convenient (x1)
it's convenient for me (x8)	this is the most effective (x1)
it's convenient for me by phone (x1)	this one is convenient (x1)
it's convenient for us, we're used to it (x1)	This suits me (x1)
it's convenient online (x1)	this way is convenient (x1)
it's difficult (x1)	unprofitable (x1)
it's easier (x1)	used another before (x3)
it's familiar (x1)	used to it (x1)
it's more convenient (x9)	usually via bank (x1)
it's more profitable (x1)	very difficult (x1)
it's profitable (x1)	we use zolotaya korona (x1)
just don't want (x1)	all of ours use it (x1)
less commission via Sberbank (x1)	big commission (x1)
like it (x2)	can be sent at any time of the day (x1)
modern (x1)	convenient (x1)
more convenient (x7)	conveniently (x1)
more familiar (x1)	everybody uses (x1)
more profitable (x3)	fast (x2)
more reliable (x2)	modern (x1)
no answer (x1)	more profitable (x1)
no interest (x1)	no need to go anywhere (x1)
no need to go anywhere, convenient (x1)	no need to go to the bank and fill out paperwork (x1)
no need to go anywhere, the limit is large (x1)	no need to leave home (x1)
no need to go back and forth (x1)	profitable (x3)
no need to leave the house (x1)	saving time (x1)
no other way (x1)	wont (x1)
not convenient (x5)	zolotaya korona takes a lot of interest (x1)
not interested (x1)	
now this way suits me (x1)	
only western union, there is no zolotaya korona (x1)	
only zolotaya korona is convenient (x1)	
others are more expensive, for example, a bank takes	
interest (x1)	
otherwise a large interest (x1)	
practical (x1)	
profitable (x5)	
sberbank is convenient (x1)	
Sberbank is more accessible (x1)	

G2: Recipient reasons for preferred method of transfer:

These are the—mostly—unmodified answers respondents provided to the question:

"What made you choose this [transfer method] option and not the others?"

KYRGYZSTAN

Preferred Cash (i.e. reasons for not preferring digital remittances):

it is safer (x10) comfort (x40)

can be obtained in any time\no need to (x9)

quickly and efficiently (x4) can get it in any bank (x2)

habit (x18)

they send it this way (x27)

because there is no a credit card (x2)

there are problems with the credit card (x1)

I do not trust the cards (x1)

it is more beneficial (x1)

can immediately pay off the loan (x1)

do not know other ways (x5)

can't answer (x3)

Preferred Digital (i.e. the reasons for not preferring cash):

comfort (x18)

ability to use in the shops (x1)

can be obtained in any time\no need to (x22)

they send it this way (x3)

TAJIKISTAN

Preferred Cash (i.e. reasons for not preferring digital remittances):

Accessible (x2)

Accessible for us (x1)

Accessible, easy (x1)

Already used to (x1)

Always convenient (x3)

Arrives faster (x1)

Because my husband did it (x1)

Because of low rate (x1)

Because of rate (x1)

Because of sending through the bank (x1)

Because they are from Moscow (x1)

Better (x1)

Better, no lacks (x1)

Close (x2)

Comfortable and polite (x1)

Convenient (x6)

Convenient, better (x1)

Due to the fact that it is so convenient for children to

send (x1)

Easier (x30) Easier, I don't have a card (x1)

Easier, conditions (x1)

Easy (x22)

Easy access (x3)

Easy and accessible (x3)

Easy and convenient (x2)

Easy to use (x1)

Easy, next to the house (x1)

Easy, there is trust (x1)

Everything is fine (x1)

Exchange at a high rate (x1)

For a while I was sick and couldn't go to the bank (x1)

For convenience, as there are friends who work at the

bank (x1)

From abroad to the bank (x1)

Good (x1)

I didn't get the card (x3)

I didn't get the card for it (x1)

I don't have a card (x1)

I don't have a card, so I go to Bank (x1)

I don't know (x4)

I don't understand a card (x2)

I get my money without limits (x1)

I go to the district on business, after which I get money

I have a little child and that's why I cannot go out (x1)

It was easy (x1)

It's difficult to rely (x1)

It's easier because the ATM is not always nearby (x1)

It's not impossible with card (x1)

It's suitable in the bank (x1)

Learned (x1)

Nearer (x1)

No problems in getting money (x1)

Originally got it (x1)

Quick (x3)

Reliable (x5)

Safe (x1)

Send money through a bank, we do not have a card (x1)

Send money through the bank (x3)

Simple and reliable (x1)

Simpler, useful (x1)

The bank is close (x1)

The bank is next to me (x1)

The bank is next to us (x1)

The bank was close (x1)

The only bank that issues new cards (x1)

The per centage was lower (x1)

The road was close (x1)

There is just bank next to us (x1)

There is no money in ATM (x1)

There is the trust from people to the bank (x1)

There is the trust to relatives (x1)

There is trust (x1)

There is trust which never lost (x1)

There isn't a wallet (x1)

There was a cheap tariff of Zolotaya Korona (x1)

There was no person to send (x1)

To get easy and without any problems (x1)

To the bank (x1) Very reliable (x1)

We don't care, but because the card wasn't prepared by the bank (x1)

We don't have a card, so we take it from the bank (x1)

We get money without worry (x1)

We pick up a bank transfer (x1)

Wherever we go, we get (x1)

With the better bank (x1)

Without problems (x2)

Without queue (x1)

Preferred Digital (i.e. the reasons for not preferring cash):

Accessible in each convenient time (x1)

Always available (x1)

Always convenient (x3)

Because it's convenient, you can go whenever you want (x1)

Because of it was easier (x1)

Because we don't have time to go to the bank (x1)

Convenient (x3)

Could not send with the bank (x1)

Easier (x24)

Easier, quicker (x1)

Easier, take without queue (x4)

Easier, without queue, without high rate (x1)

Easy and convenient (x2)

Easy and quick (x1)

Easy and understandable (x1)

Easy, convenient (x1)

Easy, quick access (x1)

Easy, without problems (x1)

Easy, without queue, work without interruption (x1)

Fast and accessible (x1)

Fast and convenient (x1)

In order not to stand in queue, it is convenient to withdraw money from ATMs using a card (x1)

It is easy to withdraw money from the card (x1)

It takes less time (x1)

It was easy and cheaper rate (x1)

It's easy for me (x3)

It's the better option (x1)

More comfortable (x1)

No difference, we often get it through the card (x1)

Quick and easy (x1)

Quick and easy access (x1)

Safe and convenient (x1)

Taking money is easy (x1)

The bank is away from home (x1)

The bank is close (x1)

The best, any money I get (x1)

The per centage was lower (x1)

There is always money (x1)

To take easier and without queue (x1)

We get money from the ATM without waiting in queue (x1)

We have opened the card, we won't go to another bank (x1)

Without problems (x2)

Without queue (x1)

You get as much as you need, the rest remains (x1)

UZBEKISTAN

Preferred Cash (i.e. reasons for not preferring digital remittances):

Accustomed to through bank branches (x6)

Close location of bank branches (x3)

Close location of the branch of the Zolotaya Korona

Convenient (x107)

Convenient and fast (x2)

Convenient and reliable (x12)

Convenient for money senders (x2)

Convenient, but soon I will switch to a bank card (x1)

Convenient, easy and fast (x5)

Don't have a card (x1)

Due to the absence of a card, through a bank branch it is possible to receive currency (x1)

Easy (x5)

Fast (x8)

Fast and reliable (x5)

I don't know any other methods (x2)

I don't understand other methods of receiving money

I only know how to receive money through bank

branches (x2)

In cash (x4)

No options (x1)

Out of habit (x4)

Receive in sums, not in dollars (x1)

Reliability (x55)

Reliable and fast (x1)

Small per centages (x7)

The choice of money senders (x2)

They are sent only through bank branches (x1)

Preferred Digital (i.e. the reasons for not preferring cash):

Convenient (x30)

Convenient and fast (x3)

Convenient and reliable (x1)

Convenient for money senders (x1)

Convenient no need to go to the bank (x1)

Convenient, easy and fast (x4)

Due to the impossibility of withdrawing a large amount of money, convenient to use (x1)
Fast (x1)
Fast and easy (x1)
Fast and modern (x1)
It is convenient when sending small amounts (x1)
No need to go to the bank, you can withdraw money at ATM (x2)
Reliability (x3)
Small per centages (x1)
The choice of money senders (x1)

KAZAKHSTAN

There is a possibility of saving (x1)

Preferred Cash (i.e. reasons for not preferring digital remittances):

It is fast (x2)
As it happens (x1)
Convenient (x14)
I don't have a card (x1)
I don't know (x5)
I used to it (x1)
I've been doing this way for a long time (x1)
It is convenient to send from the Russian Federation (x1)
It is quickly (x1)
It is reliable (x1)
Low interest rates (x1)
No interest rates on withdrawal (x2)
There give us cash, so we send money by transfer (x1)
Transferring takes 5–10 minutes (x1)
Trust it more (x1)

Preferred Digital (i.e. the reasons for not preferring cash):

Convenient (x1) It is available (x2) It is easy (x1) It is fast (x6) It is reliable (x2) Safely (x1) The most preferable option (x1) Can transfer immediately (x1) Convenient (x38) Fast receiving (x1) Fast transfer (x2) I don't know (x11) I withdrawal money from ATM by myself (x1) It is quickly (x9) It is reliable (x2) It is safe (x1) It's a very option (x1)

The pension transfers on this card (x1)

Annex H: Pre-intervention survey

Mitigating the Socioeconomic Effects of the COVID-19 Pandemic on Migrants and Communities in the Russian Federation and Central Asia

Recipient Pre-Intervention Survey

Are you ready to begin the survey now?

□ Yes

These questions are to be filled by the interviewer

These questions are to be filled by the interviewer	
Date of the interview	
City	
Name of the interviewer	
The interview was conducted in accordance with the field guide	(signature of the interviewer)
Location of the interview (city)	
Participant's phone number	
Number of call attempts before the interview	
Introduction Hello, my name is You spoke to my	colleague (or "we spoke") a few weeks ago. As mentioned in
our last call, I work for M–Vector on behalf of Internation the end of the last call that we would be contacting some	al Organization for Migration (IOM) and it was mentioned at a respondents for follow-up interviews.
	y and the survey is completely anonymous, no personal data ourpose only and your responses will not be shared with any
This survey will be shorter than before and will take about to these questions and you will not be judged or assessed	t 20 minutes to complete. There is no right or wrong answer I in any way.
We may reach you again in case we need to have a followinterested in and if you do not want to answer any quest	w-up phone interview. It is your honest opinion that we are ion, please say 'I don't want to answer' at any time.
(Note to the interviewer: This is an important outcome	measure—i.e. the choice that the respondent makes)
As a token of our appreciation, we will be providing you to be paid?	with USD 10 for completing the survey. How would you like
(iv) Cash-pick up at local bank branch;(v) transfer to e-wallet;(vi) transfer to your bank card	
Full name of the respondent	
Bank card number	
E-wallet details	
Phone number to be used for the transfer	

Section 1: Current situation

1.1	Has your financial situation changed since we last spoke in February?	1. 2. 3. 4.	Yes, it has gotten worse Yes, it has gotten a lot worse Yes, it has gotten better No, it has not changed
2.1	Have you received any money from abroad since we last spoke (in February–March 2021)?	1. 2.	No (Go to the next section) Yes (Q.3)
3.1	How did you receive this money?	1. 2. 3. 4. 5. 6.	Cash Transferred to E-wallet Transferred to Bank card Transferred using Mobile money Transfer to my bank account Other (please specify)
4.1	Did you discuss with the person that sent the money how should this money be sent?	1. 2.	Yes No
5.1	How did you spend the remittance?	1. 2. 3. 4. 5.	I saved it all I saved part of it (specify per cent) Paying off debt I spent it all Other: If (2) or (4) please specify:
6.1	Did you discuss with the person that sent the money how should this money be spent?	1. 2.	Yes No
7.1	Have you signed up for any of these products since we last spoke?	1. 2. 3.	E-wallet Bankcard Other (specify)

Section 2: Preferences (Patience and Risk)

- 2.1 What is, in your opinion, safer to do:
- a) Keep money in a wallet
- b) Keep money on a bank card
- c) Keep money in e-wallet and pay using a mobile phone
- d) Other (please specify)

Instruction: We now ask you for your willingness to act in a certain way. Please indicate your answer on a scale from 0 to 10, where 0 means "you are completely unwilling to do so" and 10 means you are "very willing to do so". You can also use any number between 0 and 10 to indicate where you fall on the scale (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

Patience

2.2. How willing are you to give up something that is beneficial for you today in order to benefit you more in the future?

0 1 2 3 4 5 6 7 8 9 10

2.3 Suppose you were given the choice between receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each situation, we would like to know which you could choose. Please assume there is no inflation i.e. future prices are the same as today's prices.

Please consider the following scenarios:

Would you rather receive USD 100 today or USD 154 in 12 months?

[need to put the staircase time task here for the interviewer to go through]

Risk taking

Instruction: How well do the following statements describe you as a person? Please indicate your answer on a scale from 0 to 10. 0 means "does not describe me at all" and 10 means "describe me perfectly". You can also use any numbers between 0 and 10 to indicate where you fall on the scale (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

2.4 Please tell me in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and 10 means you are "very willing to take risks". You can also use any numbers between 0 and 10 to indicate where you fall on the scale (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

0 1 2 3 4 5 6 7 8 9 10

2.5 (Sequence of five interdependent quantitative questions): Please imagine the following situation. You can choose between a sure payment of a particular amount of money, or a draw, where you would have an equal chance of getting amount X or getting nothing. We will read out 5 different situations.

What would you prefer: A draw with a 50 per cent chance of receiving amount X and the same 50 per cent chance of receiving nothing, OR the amount of USD 300 as a sure payment?

[put the 'tree' logic here for the interviewer to go through]

Section 3: Financial Health Scale

- 3.1. Which of the following statements best describes how your household has paid its bills over the last 12 months? My household has been financially able to:
- a) Pay all of our bills on time
- b) Pay nearly all of our bills on time
- c) Pay most of our bills on time
- d) Pay some of our bills on time
- e) Pay very few of our bills on time
- 3.2. At your current level of spending, how long could you and your household afford to cover expenses, if you had to live only off the money you have readily available, without withdrawing money from retirement accounts or borrowing?
- a) 6 months or more
- b) 3–5 months
- c) 1-2 months
- d) 1–3 weeks
- e) Less than 1 week
- 3.3. How would you rate your credit score? Your credit score is a number that tells lenders how risky or safe you are as a borrower.
- a) Excellent
- b) Very Good
- c) Good
- d) Fair
- e) Poor
- f) Don't know

Section 4: Knowledge

- 4.1. Which of the following financial services belong to digital financial services?
- a) Internet banking
- b) Mobile banking
- c) Non-cash remittances
- d) All above
- 4.2. Which of the following three statements is true:
- a) Digital financial services are more expensive (than non-digital);
- b) Digital financial services are less expensive;
- c) No difference in cost between digital and non-digital financial services.
- 4.3. Do you know that the National Bank of Kyrgyzstan/Tajikistan is implementing a programme of increasing financial literacy of the population?
- a) Yes
- b) No
- 4.4. Which of the following financial products you have heard of?
- a) Cash-back on purchases paid by a card
- b) Cash-back on incoming remittances
- c) Savings account for a child
- d) Investment in gold
- e) Investment in Bitcoin

Section 5: Financial Behaviour

- 5.1. Do you or your household keep track of your income and expenses?
- a) Yes
- b) No
- 5.2. Have you set aside emergency funds that would cover your expenses for a few months in case of sickness, job loss, economic downturn, or other emergencies?
- a) Yes, cash savings
- b) Yes, bank savings
- c) Yes, both of the above
- d) No
- e) Don't know
- 5.3. Do you or your household use automatic transfers to transfer money to savings or investments?
- a) Yes
- b) No
- c) Don't know
- 5.4. Do you have savings targets you aim to achieve each month?
- a) Yes (Q. 5.5)
- b) No (end of the survey)
- 5.5. Have you been always able to achieve these targets in the past 12 months?
- a) yes
- b) no (please specify, why not)

Thanks very much for your time today. We will be in touch again for another follow up and we may send you some further information in the meantime by text messages.

Do you have any questions before we finish the interview today?

We will send you a message on your mobile phone once we have made the payment of the US10 for your participation today. Thanks again.

Annex I: Post-intervention survey

Mitigating the Socioeconomic Effects of the COVID-19 Pandemic on Migrants and Communities in the Russian Federation and Central Asia

Recipient Post–Intervention Survey

These questions are to be filled by the interviewer

Date of the interview	
City	
Name of the interviewer	
The interview was conducted in accordance with the field guide	
	(signature of the interviewer)
Location of the interview (city)	(signature of the interviewer)
Location of the interview (city) Participant's phone number	(signature of the interviewer)
	(signature of the interviewer)

Introduction

Hello, my name is______. You spoke to my colleague (or "we spoke") a few weeks ago. As mentioned in our last call, I work for M-Vector on behalf of International Organization for Migration (IOM) and it was mentioned at the end of the last call that we would be contacting you again for follow-up interviews.

As explained in the last call, your participation is voluntary and the survey is completely anonymous, no personal data will be collected. Your answers will be used for research purposes only and your responses will not be shared with any third party.

This survey will take no longer than 20 minutes to complete. As we mentioned in our previous calls, there is no right or wrong answer to these questions and you will not be judged or assessed in any way.

It is your honest opinion that we are interested in and if you do not want to answer any question, please say 'I don't want to answer' at any time.

(Note to the interviewer: This is an important outcome measure—i.e. the choice that the respondent makes)

vAs a token of our appreciation we will be providing you with USD 10 again for completing the survey. How would you like to be paid this time around?

- (vii) Cash—pick up at local bank branch;
- (viii) transfer to e-wallet;
- (ix) transfer to your bank card

Full name of the respondent	
Bank card number	
E-wallet details	
Phone number to be used for the transfer	

Phone number to be used for the transfer	
Are you ready to begin the survey now? ☐ Yes ☐ No	
Section 1: Information about the intervention	
1.1 Did you receive a text message last week?	 Yes No
1.2 Did you find the information in the text message useful? Why/why not?	 Yes (please explain: text) No (please explain: text)
1.3 (for treatment group only) Did you find the poster informative?	 Yes (please explain: text) No (please explain: text)
1.4 Did you visit the link that was sent to you in the text message?	 Yes No
1.4.1 (for Kyrgyzstan only) In which language did you choose the link?	 Kyrgyz Russian
1.5. How many times did you visit the website?	[number of visits]
1.5.1 (for Kyrgyzstan only)	 In Kyrgyz [number of visits] In Russian [number of visits]
1.6. [knowledge about the website]	1. Yes
For Tajikistan:	 No (go to Q.1.9.) I don't know (go to Q.1.9)
Do you think it is possible to top up a Korti Milli card with cash while being in The Russian Federation?	
1.7. How can it be done?	 Via a Sberbank terminal Via a Qiwi terminal (the correct answer)
For Kyrgyzstan:	1. Yes 2. No (go to Q.1.9)
1.7 Do you think it is possible to send remittances from Russian bank card on your bank card issued in Kyrgyzstan?	3. I don't know (go to Q.1.9.)
1.8 How can it be done?	 via Sberbank online app using Kyrgyz bank card number; via Sberbank online app using the phone number linked to the Kyrgyz bank card (correct answer)
1.9. Is there any additional information you think would	1. No
have been useful (in addition to what was on the website)?	2. YES (please specify): [text]

Section 2: Current situation

	Has your financial situation changed since we last spoke a few weeks ago?	 Yes, it has gotten worse Yes, it has gotten a lot worse Yes, it has gotten better No, it has not changed
	Have you received any money from abroad since we last spoke (in March 2021)?	3. No (Go to the next section)4. Yes (Q.3)
2.3	How did you receive this money?	 Cash Transferred to E-wallet Transferred to Bank card Transferred to mobile money account Transferred to my bank account Other (please specify)
	Did you discuss with the person that sent the mon- ey how you prefer to receive this money?	3. Yes 4. No
	Did you discuss (or share) with that person the information from the link that was sent to you via text message?	1. Yes 2. No
	If you could change the way you receive money, what would you use (different from what you currently use)?	 Cash Transferred to E-wallet Transferred to Bank card Transferred to Mobile money account Transfer to my bank account Other (please specify)
	Has the information in the link that you received made you re—think the way you spend remittances?	 Not at all Yes, I am thinking about saving more cash Yes, I'm thinking about opening a savings account Yes, I'm thinking about spending more on necessities Yes, I'm thinking about investing more Other (please specify): [text]
	[If the answer was "YES" to the previous question] What next steps do you plan to take to achieve this?" [Don't read out the options, interviewer should check all answers that applies]	 3. I will look up more information 4. I will talk to the person who sends me remittances 5. I will talk to my family/friends 6. I will speak to the bank 7. I will get a bank card 8. I don't know
	Did you discuss or share with the person that sent the money how should this money be spent?	9. Yes 10. No
	Have you started using any of these products since we last spoke?	 E-wallet Bank card Other (specify

Section 3: Preferences (Patience and Risk)

3.1 What is, in your opinion, safer to do:

- a) Keep money in a wallet
- b) Keep money on a bank card
- c) Keep money in e-wallet and pay using a mobile phone
- d) Other (please specify)

Instruction: We now ask you for your willingness to act in a certain way. Please indicate your answer on a scale from 0 to 10, where 0 means "you are completely unwilling to do so" and 10 means you are "very willing to do so". You can also use any number between 0 and 10 to indicate where you fall on the scale (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

Patience

3.2. How v	willing are	you to	give up	something	that i	is beneficial	for y	ou today	in	order to	benefit	you	more	in the
future?														

0 1 2 3 4 5 6 7 8 9 10

3.3 Suppose you were given the choice between receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each situation, we would like to know which you could choose. Please assume there is no inflation i.e. future prices are the same as today's prices.

Please consider the following scenarios:

Would you rather receive USD 100 today or USD 154 in 12 months?

[exactly the same task as last time]

Risk taking

Instruction: How well do the following statements describe you as a person? Please indicate your answer on a scale from 0 to 10. 0 means "does not describe me at all" and 10 means "describe me perfectly". You can also use any numbers between 0 and 10 to indicate where you fall on the scale (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

3.4 Please tell me in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and 10 means you are "very willing to take risks". You can also use any numbers between 0 and 10 to indicate where you fall on the scale (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

0 1 2 3 4 5 6 7 8 9 10

3.5 (Sequence of five interdependent quantitative questions): Please imagine the following situation. You can choose between a sure payment of a particular amount of money, or a draw, where you would have an equal chance of getting amount X or getting nothing. We will read out 5 different situations.

What would you prefer: A draw with a 50 per cent chance of receiving amount X and the same 50 per cent chance of receiving nothing, OR the amount of USD 300 as a sure payment?

[exactly the same task as last time]

Section 4: Financial Health Scale

- 4.1 Do you think in the next 12 months your household will be financially able to?
- a) Pay all of our bills on time
- b) Pay nearly all of our bills on time
- c) Pay most of our bills on time
- d) Pay some of our bills on time
- f) Pay very few of our bills on time
- 4.2 Do you think you will change the way you receive remittances in the future?
- 1. No need to change. I prefer the way I receive money as I do now.
- 2. Yes, I would consider changing from receiving cash to receiving remittances on a bank card
- 3. Yes, I would consider changing from receiving cash to receiving remittances in my e-wallet
- 4. Yes, I would consider changing from receiving cash to using mobile money account
- 5. Yes, I would consider changing from using a bank card to cash
- 6. Yes, I would consider changing from using e-wallet to cash
- 7. Yes, I would consider changing from using a mobile money account to cash

Thanks very much for your time today. We will be in touch again for another follow up and we may send you some further information in the meantime by text messages.

Do you have any questions before we finish the interview today?

We will send you a message on your mobile phone once we have made the payment of the US10 for your participation today. Thanks again

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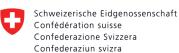
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Mitigating the Socio-Economic Effects of the COVID-19 Pandemic on Migrants and Communities in the Russian Federation and Central Asia

The Role of Digital :Remittances

Consolidated Findings from Supply and Demand Research



Swiss Agency for Development and Cooperation SDC