

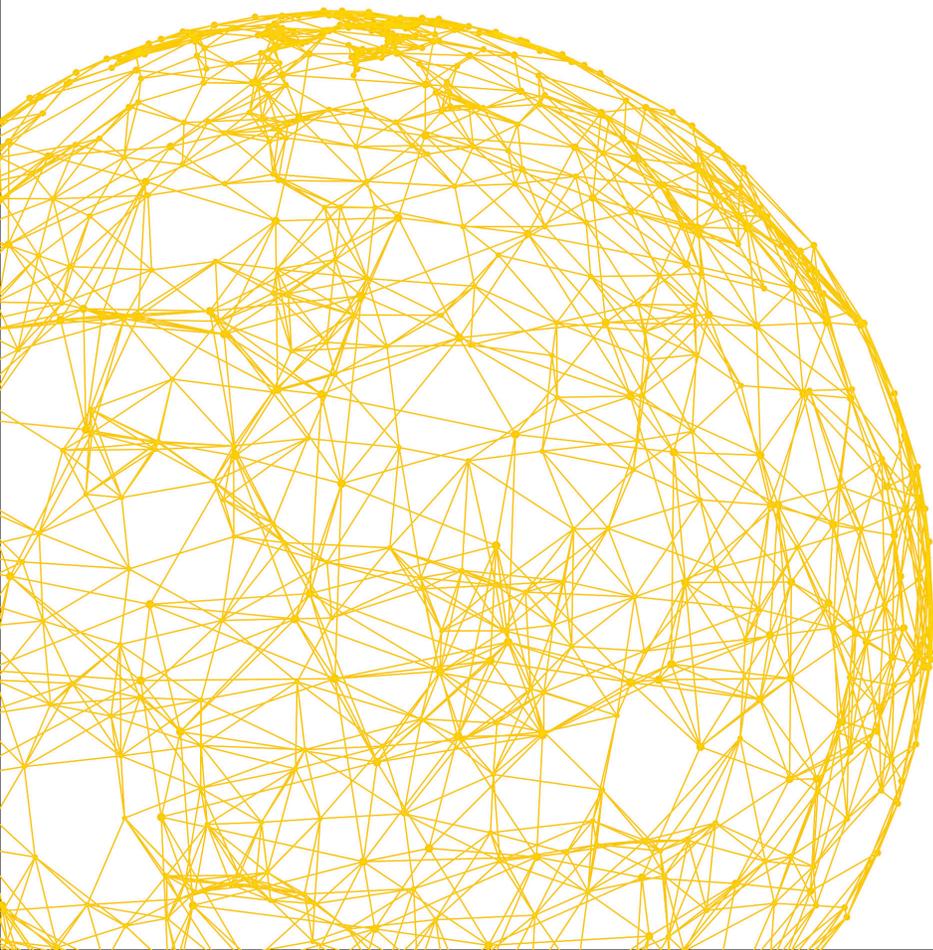


Imagining an open
future for payments

The economic empowerment of digital remittances:

How to unlock the benefits
of innovation and competition

Remittances are born of sacrifice and separation. These monetary lifelines sent back home by migrant workers are crucial for hundreds of millions of families and for scores of countries that depend on them. This paper examines the latest global remittance trends; describes the advantages of digital remittances and the transparency they afford; and offers recommendations for further unlocking these benefits for migrant workers, their families, businesses, and communities.



Synopsis

Remittances are monetary lifelines sent by migrant workers back home. They are crucial for hundreds of millions of families and for many countries that depend on them. In this paper, the Visa Economic Empowerment Institute (VEEI) examines remittance trends, highlights the advantages of digital remittances, and offers recommendations for continuing to improve global money movement. By examining World Bank data and performing our own remittance modeling, we find that digital remittances are on an excellent cost trajectory. We find that remittance innovation, in the form of new digital business models paired with global network capabilities, is achieving faster speed, better transparency, and lower costs for people who depend on them. Further reductions in remittance costs will require compliance and license streamlining and—just as importantly—digital enablement for recipient families and countries, so that remittance flows are truly digital end to end. In this paper, we offer five recommendations for unlocking the benefits of remittance innovation and competition for everyone, everywhere.



The economic empowerment of digital remittances:

How to unlock the benefits
of innovation and competition



Visa Economic Empowerment Institute





Acknowledgments

This study was authored by Chad Harper from the Visa Economic Empowerment Institute and Ram Rakkappan from Visa Government Engagement, with strong research and analytical support from Jacob Levy. The authors thank the following colleagues for their input and review: Peter Conti-Brown, Tierney Deggelman, Hanif Dharamsi, Brendan Fitzgibbon, Tania Garcia-Millan, Aida Hadzibegovic, Aysen Kenar, Barbara Kotschwar, and Dan Roesbery. The following colleagues from DevTech Systems made impactful research contributions: Matthew Dietz, Nemanja Jovanovic, Jose Pineda, Haykuhi Sekhposyan, Gabrielle Sinnott, and Adrienne Uselman. For their helpful comments and contributions, we also gratefully thank Jen Swetsoff for editorial assistance and the design team from 451.

About the Visa Economic Empowerment Institute

The VEEI is a non-partisan center of excellence for research and public-private dialogue established by Visa.

The VEEI's overarching mission is to promote public policies that empower individuals, small businesses, and economies. It produces research and insights that inform long-term policy within the global payments ecosystem. Visa established the VEEI as the next step in its ongoing work to remove barriers to economic empowerment and to create more inclusive, equitable economic opportunities for everyone, everywhere.

Visit: visaeconomicempowermentinstitute.org

Index

Key insights	7
Introduction	11
Remittance inflows are critical—and they have been resilient in challenging times	12
Digital remittances were key to the resilience of inflows, but we need to enable more of them	17
Costs are still high for the “average” remittance, but are much lower for digital remittances and in cases where a migrant worker can compare multiple options	20
In light of these insights, a few imperatives emerge	26
How we unlock the benefits of remittance innovation and competition for everyone, everywhere	29
Sources	32
Annex 1: Foreign exchange percentage for 2022 data sample	35
Annex 2: Text descriptions of figures and tables	36

Key insights

This paper examines the latest global remittance trends; describes the advantages of digital remittances and digital enablement of migrant workers, their families, and communities; and offers recommendations for unlocking the benefits of innovation and competition for everyone, everywhere. Below are the key insights from our research and analysis—they are discussed at greater length in the body of the paper.

Remittance inflows are critical—and they have been resilient in challenging times

Remittances proved surprisingly resilient during the pandemic. Though expected to decline in 2020, global remittance inflows actually rose, a remarkable showing in a year characterized by shutdowns and slowdowns. Remittance inflows for 2021 were very strong, reaching \$773 billion globally and \$605 billion for low- and middle-income countries (LMICs). In addition to being a critical lifeline for families, remittances are critical to many countries. In 2021, 30 countries received over 10 percent of their GDP in remittances, and eight countries received over 25 percent of their GDP via these flows.

Digital remittances were key to the resilience of inflows, but we need to enable more of them

Border closures and business lockdowns in the early days of the COVID-19 pandemic made cash-based over-the-counter and informal systems difficult to operate. Mobile-money remittances grew almost 50 percent from 2020 to 2021, but they still account for less than 3 percent of overall remittance flows. Money Transfer Operators (MTOs)—both the established operators with updated digital business models and the new breed of digital-first MTOs—saw digitally initiated remittances more than double during the pandemic, accelerating a trend that was already in play. These newer services offer a variety of advantages for senders and receivers, but still only a third of remittances are initiated digitally, and only one third of those are picked up digitally. Given the cost advantages of digital remittances, our focus needs to be on how to enable more of them.

Costs are still high for the “average” remittance, but are much lower for digital remittances and in cases where a migrant worker can compare multiple options

Policymakers have focused on remittances for years, and these transfers have often been the most-discussed example of the various frictions of cross-border payments. The frictions include lack of transparency, slowness, and relatively high costs due to the complexities of regulatory compliance and, in some cases, a lack of competitors.

As of Q2 2022, World Bank remittance price data show that:

- The average \$200 remittance costs 6.01 percent—this is the headline number policymakers most often mention.
- Cash-funded remittances cost 6.52 percent, and cash has routinely been the highest cost way of funding a remittance.
- The digital remittances index (for remittances digitally initiated in an online or self-assisted way) is 4.80 percent.
- The SmaRT index (a measure of what a savvy consumer with access to sufficiently complete information could pay) is at 3.35 percent—almost at the 3 percent UN Sustainable Development Goal (SDG) 10 target.

These observations are confirmed by VEEI modeling of card-initiated digital remittances over the last two years. In our modeling, we determined costs across several MTOs for 25 key global corridors and compiled three measures: the average cost, lowest cost, and highest cost.

- The average costs for a \$200 remittance across all MTOs and corridors declined from 4.24 to 3.89 percent in 2022, a drop of almost 10 percent—this is roughly analogous to the “digital remittances index” from the World Bank.
- The average of the lowest costs declined from 2.96 to 2.08 percent in 2022, a decline of almost 30 percent—this measure is roughly analogous to the World Bank’s SmaRT index.
- By contrast, the average of the highest costs found in the corridors went up from 6.15 to 7.09 percent in 2022, driven largely by two corridors, where MTOs were offering dramatically different pricing. Migrant workers without the ability to check on multiple options could have paid exceptionally high prices (and some undoubtedly did) during this period.

Overall, while the average price of a remittance in our research was 3.89 percent, we were able to find a sub-3 percent remittance in 20 of our 25 corridors in 2022.

In light of these insights, a few imperatives emerge

Clearly, the ability to send remittances digitally and to easily compare options make a big difference to remittance senders and their families. So, what can the public and private sectors do to bring the power of innovation and competition to more people?

- Traditional remittances must become digital. Cash-initiated remittances are the most expensive way to send a remittance, and it is perhaps worse on the receiving end—many MTOs maintain vast cash out networks in receiving countries, and this adds appreciable costs to remittances today.

- Migrant workers must be able to compare options and send remittances digitally, and their families must be able to then spend the funds digitally at businesses in their communities. None of this can happen without basic digital infrastructure.
- Innovation must be facilitated by more consistently applied compliance rules and by well-developed standards, and consumer choice needs to be promoted by making it easier for remittance providers to bring new innovations to market.

How we unlock the benefits of remittance innovation and competition for everyone, everywhere

We believe these five steps will help unlock the benefits of innovation and competition for more people while also uplifting businesses and communities.

Begin with digital enabling infrastructure, if it does not already exist

The digital receipt and use of remittances will be a non-starter without basic enabling infrastructure. For millions of people, basic infrastructure like electricity will be a barrier to the digitization of remittances, payments, and commerce. Beyond electricity, internet connectivity—and increasingly broadband connectivity—will be crucial.

Focus on digital enablement broadly, keeping both consumers and businesses in mind

While the digital receipt of remittances is critical for further progress on efficiency, we must keep in mind that the larger goal is to digitally enable everyone, everywhere, to fully participate in this new world. Individuals need to be able to receive remittance funds digitally and then to use them digitally, with ubiquity. This requires digitally enabling businesses, especially small businesses, helping them to accept digital payments and to connect them to digital marketplaces. Therefore, consumers and businesses must both be part of the equation in achieving digital ubiquity, and the countries that have driven digital ubiquity most successfully over the last decade have worked to drive adoption on both sides.

Aim for an open, interoperable digital ecosystem built on a foundation of resilience and security

As policymakers strive to promote digital remittances, we believe that they should adopt a principle-led and outcome-based approach, giving payment service providers and payment networks the flexibility to innovate in order to deliver against goals. Interoperability should be favored over uniformity—more paths are better than one. A truly interoperable service should be able to reach as many endpoints as possible: traditional bank accounts, prepaid accounts, or digital wallets.

Streamline the compliance environment to reduce cross-border frictions

While the private sector is innovating, competing, and improving speed and efficiency, policymakers have a key role to play. Remittances and other cross-border payments go through a number of regulatory regimes that currently add frictions. But these frictions can be reduced by streamlining and aligning compliance rules as much as possible. We therefore believe that it is critical for the public sector to address the regulatory, supervisory, and oversight frameworks focus area of the Financial Stability Board (FSB) cross-border roadmap.

Simplify the licensing process to allow innovation and competition to thrive

Policymakers can also help the private sector introduce innovations more quickly and with less burden. Increased consistency of licensing requirements would help remittance service providers enter and operate across multiple markets with less friction. Currently, with vastly different license requirements around the globe that need to be navigated, companies must spend large amounts of time and money to navigate the different policies and requirements, and as Bank for International Settlements (BIS) and World Bank researchers recently noted, this process can take years. Streamlining licensing requirements and processes will help new market entrants bring the benefits of digital remittances to more corridors, and therefore to more people.

Introduction

Remittances¹ have been top of mind for policymakers for years, but two recent developments have made them more topical than ever. First, there has been an increasing policy focus on cross-border payments, and remittances are a key component; the public and private sectors are currently mobilized to examine and address the various frictions of cross-border money movement as part of a multiyear roadmap being managed by the Financial Stability Board (FSB). Second, the COVID-19 pandemic reduced employment in typical remittance-sending countries and also made traditional remittances more difficult to send, since many people in these jurisdictions have spent more than two years living through various levels of stay-at-home orders. Against this backdrop, remittances have been transforming toward digital for a few years—the way commerce has transformed toward e-commerce—and this trend has accelerated during the pandemic, even as overall economic activity and remittance volumes have been suppressed.

The Visa Economic Empowerment Institute (VEEI) assembled a study team to examine how innovation, technology, and the power of global networks are affecting remittance behaviors and costs. The narrative flow of the paper is as follows:

- Remittance inflows are critical—and they have been resilient in challenging times.
- Digital remittances were key to the resilience of inflows, but we need to enable more of them.
- Costs are still high for the “average” remittance, but are much lower for digital remittances and in cases where a migrant worker can compare multiple options.
- In light of these insights, a few imperatives emerge, and they include enabling more digital remittances and streamlining the regulatory and licensing environments.
- We offer five steps for unlocking the benefits of innovation and competition for everyone, everywhere.

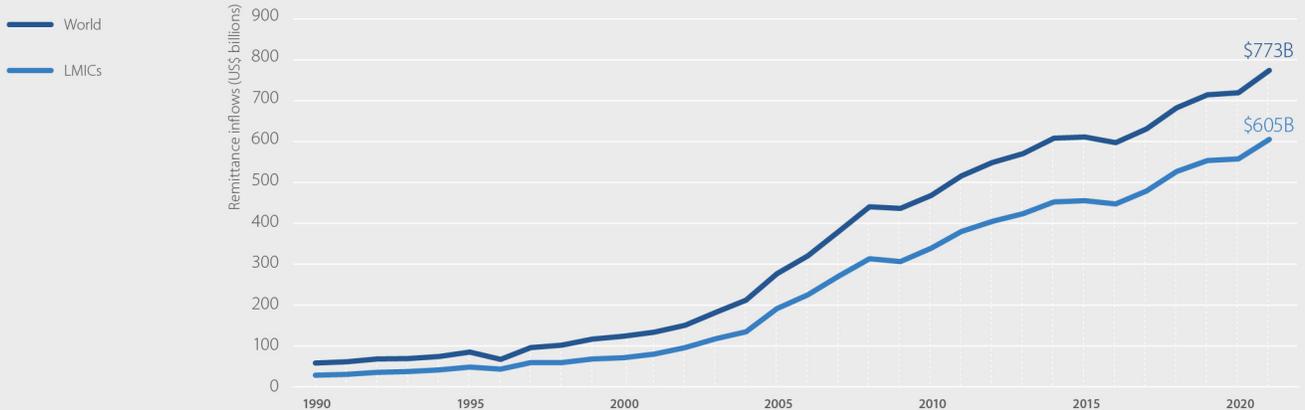
¹ For the purposes of this paper, remittances are defined as cross-border person-to-person payments of relatively low value.

Remittance inflows are critical—and they have been resilient in challenging times

From 1990 to 2021, there was a total of \$10.9 trillion in remittances sent globally with an annual average of \$340 billion. Of this, \$7.9 trillion went to low- and middle-income countries (LMICs), for a yearly average of \$245 billion. Remittances remained mostly steady from 1990 to 2000 before increasing at a greater rate in the early 2000s. As migration continued to climb, the remittances also grew.

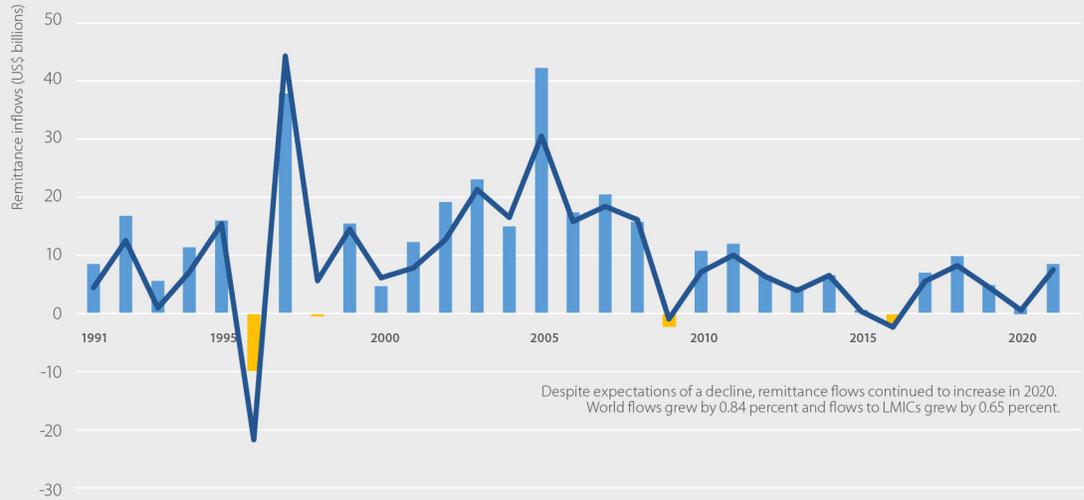
Remittances proved surprisingly resilient during the pandemic. These critical inflows were initially expected to decline appreciably in 2020, but by the end of the year most observers expected that inflows had fallen only slightly. When KNOMAD (a global hub of knowledge and policy expertise on migration and development issues supported by the World Bank) published final data for 2021 in May of 2022, the data for 2020 were also restated, and observers learned that remittances had not fallen at all in the most severe year of the pandemic. In 2020, global remittance inflows rose slightly to \$719 billion, and flows to LMICs rose to nearly \$558 billion—a remarkable showing. Remittance flows for 2021 were very strong, reaching \$773 billion globally, including \$605 billion for LMICs. Further growth of about 4 percent is expected for 2022 (World Bank Group [WBG] & KNOMAD, 2022). The next two figures depict the absolute dollar flows of remittances and the year-over-year (YoY) growth trends from 1990 to 2021, for both the world and LMICs.

Figure 1: Remittance inflows for world and LMICs, 1990-2021



Source: KNOMAD May 2022 data

Figure 2: Year-over-year changes in remittance flows to LMICs (bars) and world (lines), 1991-2021



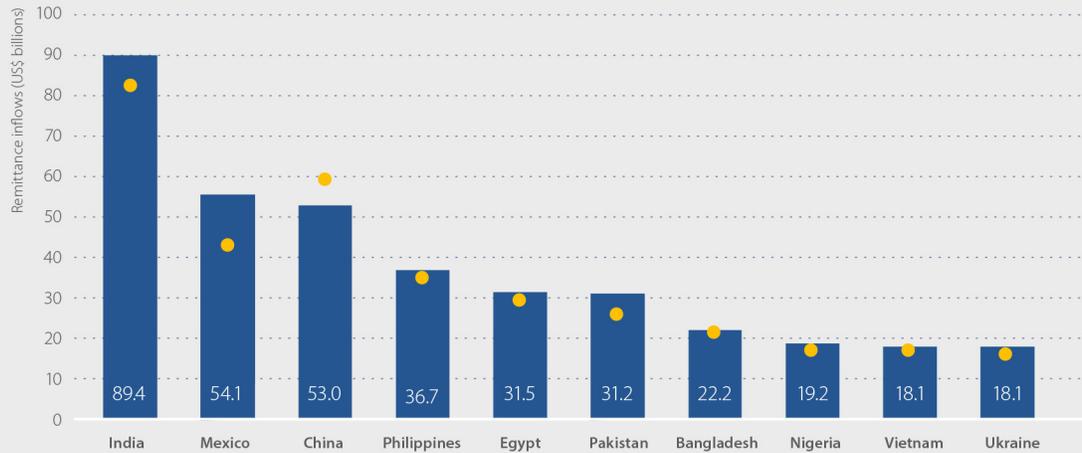
Source: VEEI analysis of KNOMAD May 2022 data

The resilience of remittance flows during the pandemic can be attributed to several factors. The unexpected increase of remittances was partially driven by a surge in COVID-19 cases in LMICs; migrants (often considered essential workers in their host G20 countries) rushed to provide financial support to cushion the impact of the pandemic on their families. This pattern was reinforced by the robust fiscal stimulus implemented by developed countries, which are major migrant host countries. Additionally, more remittances likely shifted from informal channels (which were not as resilient to border closures and travel restrictions) to more formal and digital channels.

Remittances are key to many LMICs

The following figure depicts the LMICs receiving the largest remittance flows in 2021. The gold points show inflows for 2020. The relative positions of these countries have been fairly steady over time; only a couple of positions in the chart would have been different in 2020. Ukraine, a key receiver of remittances, occupied tenth place in 2021. Remittances to the country are expected to rise 22 percent in 2022, so this position should be higher when 2022 inflow data become available (WBG & KNOMAD, 2022).

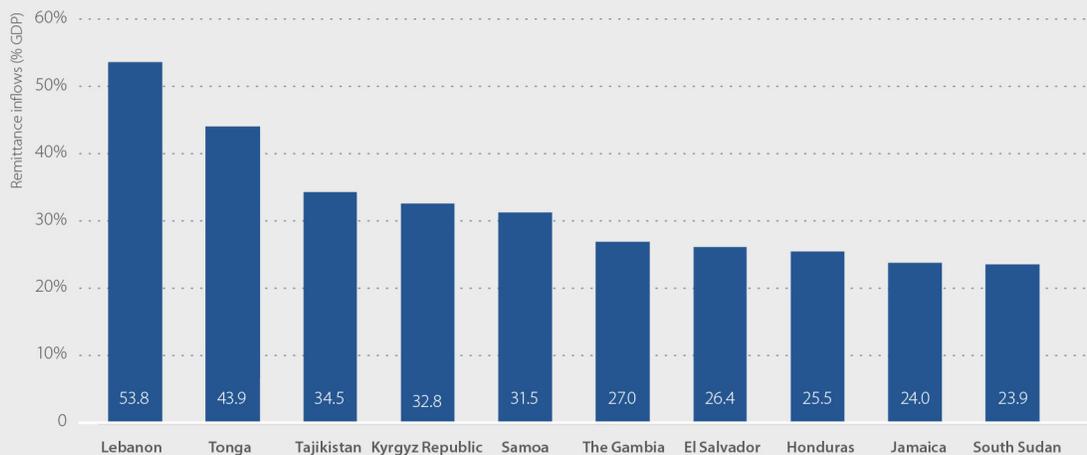
Figure 3: Top 10 remittance receiving LMICs by absolute value (2021 in bars, 2020 in points)



Source: KNOMAD May 2022 data

Perhaps a better way to consider the importance of remittance inflows is to analyze how much of a country's GDP is derived from them. The current global average of remittances as a percentage of a country's GDP is 5.6 percent. In 2021, 30 countries received more than 10 percent of their GDP in remittances, and eight countries received more than 25 percent of their GDP via these flows. The countries most reliant on remittance inflow were Lebanon (53.8 percent of GDP), Tonga (43.9 percent of GDP), and Tajikistan (35.5 percent of GDP). Many LMICs experienced a severe recession following the COVID-19 pandemic, so although inflows were quite resilient, the remittance-to-GDP ratio could be higher in some places than it has been historically.

Figure 4: Top 10 remittance receiving LMICs as a % of GDP, 2021



Source: KNOMAD May 2022 data

Regional developments affected 2021 inflows

Remittance trends in 2021 varied widely across countries and regions. Analysis of KNOMAD data shows that LMICs accounted for just over three-fourths of global remittance inflows in 2021. In this group, South Asia contributed \$157 billion (up 6.8 percent from 2020); East Asia and the Pacific contributed \$136 billion (down 2 percent); Latin America and the Caribbean contributed \$133 billion (up 27 percent); Europe and Central Asia contributed \$74 billion (up 8 percent); and the Middle East and North Africa (MENA) region contributed \$62 billion (up 7.6 percent).

- In South Asia, India received the greatest value of remittance inflows in 2021, for a total of \$82.7 billion (up 8 percent from 2020). In Bangladesh, remittances also showed growth, increasing by 2.2 percent in 2021. By contrast, there was a 10 percent decline in remittances flows to Pakistan in 2021. The economic turmoil in Sri Lanka also led to a considerable reduction in remittance inflows, which decreased by 22.7 percent between 2020 and 2021.
- In East Asia and the Pacific, remittance inflows grew 2.5 percent by the end of 2021, following a 2.4 percent decline in 2020. Defying earlier predictions of lessening flows due to the pandemic, remittances to the Philippines increased by 4.3 percent in 2021. A key factor for this resilience was the growth of inflows from the United States. This positive growth helped to offset declines in remittances from the Middle East and Europe, which fell by 10.6 percent and 10.8 percent, respectively, in 2020. The decline from remittances in the Middle East reflects the absence of formal safety nets available to migrant workers in the face of the pandemic and the large repatriation of overseas Filipino workers. In contrast with the Philippines, Indonesia's overall remittances fell by 17.3 percent in 2020 and 1.3 percent in 2021 due to the country's dependency on inflows from Saudi Arabia and Malaysia.
- In Latin America and the Caribbean (LAC), Mexico received the greatest value of remittance inflows, a total of \$54.1 billion—up by a staggering 25.3 percent from 2020, largely due to the continuing number of migrants moving to the United States. In Mexico, El Salvador, Guatemala, Honduras, and Jamaica, 95 percent of remittances come from migrants working in the United States. The economic situation in Spain also has a direct impact on the remittance flows to the LAC region, as the country hosts one-tenth of all migrants from this area. Spain's poor economic situation in 2020 had an especially negative impact on Bolivia, Peru, and Colombia, which all saw decreased inflows that year. However, the subsequent economic growth in Spain led to sizeable increases in the remittance flows to Bolivia (24 percent), Peru (22 percent), and Colombia (24 percent) in 2021.
- Although the region was strongly affected by COVID-19, Europe and Central Asia saw inflows increase by 8 percent in 2021, for a total of \$74 billion. Ukraine, the largest recipient of remittances in the region, saw an 11.6 percent increase in 2021. In Central Asia, Uzbekistan saw a decline of 7.1 percent in 2020 and an increase of 12.1 percent in 2021. The most remittance-dependent country in the region at present is the Kyrgyz Republic. Remittance inflows amounted to 31.3 percent of GDP in 2020 and 32.8 percent of GDP in 2021. More than 80 percent of remittances sent to the Kyrgyz Republic come from Russia. Near-term projections for remittances to the region are highly uncertain, owing to the war in Ukraine and the effectiveness of the sanctions on outbound payments from Russia. However, as stated above, remittance inflows to Ukraine are expected to increase by 22 percent in 2022 (WBG & KNOMAD, 2022).

- The LMICs of the Middle East and North Africa accrued remittances totaling \$61 billion during 2021, with growth registering a strong 7.6 percent. The Arab Republic of Egypt was the largest recipient of remittances in the region (representing 51 percent of the total in 2021), garnering \$32 billion—an increase of 6.4 percent from 2020. Morocco saw a significant increase, nearly 40 percent, in 2021. In Sub-Saharan Africa, remittance inflows to Nigeria declined 27 percent in 2020 and showed a recovery increase of 12 percent in 2021. Remittance growth was also reported in Mozambique (67 percent), Kenya (20 percent), and Ghana (5 percent).

Digital remittances were key to the resilience of inflows, but we need to enable more of them

The resilience in the formal recorded remittance flows may be attributed to several factors. One was the desire on the part of cross-border workers to help their families by reducing their own consumption, drawing on their accumulated savings, or in some cases repatriating their wealth as their host countries, such as Saudi Arabia and the United Arab Emirates, reduced the number of migrants. As traditional sources of work in sectors disrupted by the pandemic disappeared and incomes declined, migrants found alternative means of funding these crucial remittances. This prevented many low-income households in LMICs—including rural, women-led, and refugee households—from falling into poverty.

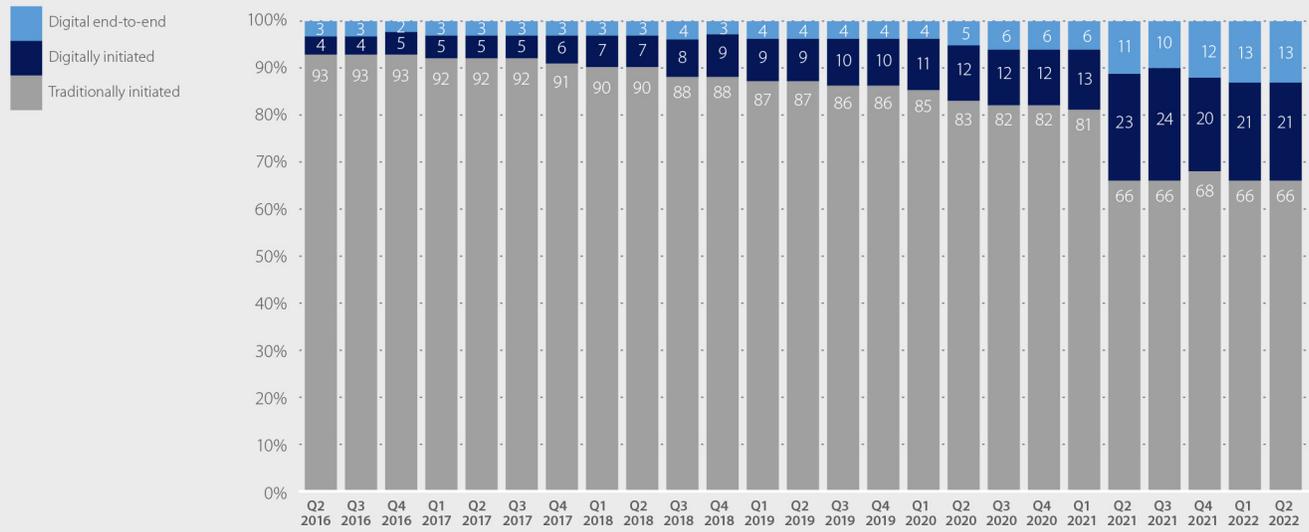
Also, countercyclical fiscal policies have sustained incomes and livelihoods, especially in the United States and Europe. These two regions are among the largest originators of the remittances. Thus, in 2020, remittance outflows from the United States, Switzerland, and Germany were \$68 billion, \$28 billion, and \$22 billion, respectively, accounting for 22 percent of global remittances. Saudi Arabia (\$43 billion) and the United Arab Emirates (\$34 billion) were also major remittance countries undertaking stimulative measures. Such countercyclical policies softened employment and income declines among migrant and foreign-born populations. One relevant example in this sense is the CARES Act, implemented in the United States, hosting the largest migrant stock worldwide and recording the largest remittance outflows in 2020 (WBG & KNOMAD, 2021).

The actions of public-sector and international bodies have significantly contributed to the continuity of remittance flows. Often working in consultation with the private sector, governments and regulators took measures to create a more enabling environment to keep remittances flowing and to promote the uptake of digital channels. As a first step, many governments declared remittance service providers (RSPs)—the businesses that provide remittance services to senders and recipients—to be essential. International organizations, for their part, used their convening powers to bring together different industry stakeholders, framing their efforts within the commitments to existing global development goals on remittances. These goals include the UN (2015) Sustainable Development Goal (SDG) targets to reduce remittance costs to 3 percent by 2030 and to mobilize additional financial resources for LMICs from different sources, including remittances; as well as Objective 20 of UN Women's (2022) Global Compact for Safe, Orderly and Regular Migration (GCM) to “promote faster, safer and cheaper transfer of remittances and foster financial inclusion of migrants.”

There was an unprecedented switch to regulated and digital channels for remittances as the pandemic changed consumer behavior and business models. Border closures and business lockdowns in the early days of the crisis caused cash-based over-the-counter and informal systems to struggle to operate. Under such conditions, the cost, convenience, and security attractions of digitally enabled remittances became apparent, and the demonstrated use of these channels increased. This, in turn, facilitated the development of linkages with other digital financial services, building longer term financial resilience for remittance users. Some observers believe crypto remittances hold much promise, but as Manuel Orozco noted this spring, crypto accounted for less than 1 percent of remittances to Latin America in 2021, and there are a variety of barriers to migrant workers obtaining and using crypto (Orozco et al., 2022). Migrant workers in the US have an income four times below that of the average crypto user, for instance. Crypto notwithstanding, there is an increase in number of cross-border transactions for mobile-based payment channels. According to the GSM Association, \$15.9 billion in remittances were processed through mobile money in 2021, representing strong yearly growth of 48 percent (Awanis et al., 2022). But mobile money remittances still make up less than 3 percent of overall remittance flows. Migrant workers around the globe are also shifting toward digital remittance services because they help reduce the money transfer time and remittance costs. Moreover, digital remittance services offer high privacy and protection for consumers' money. The surge in formal transfers is validated, among other evidence, by the rising volume of transactions through digital money transfer operators (MTOs) (Balch, 2020). However, digitally initiated remittances still represent just one third of all remittances.

The next figure depicts a six-year quarterly view of remittance initiation trends derived from a DevTech/VEEI analysis of the data in the World Bank's (2022) Remittance Prices Worldwide database, which includes information on a few hundred global corridors. More than 100,000 records were analyzed and categorized. Remittances not initiated through payment cards (debit or credit) or mobile money payment instruments were treated as traditionally initiated. It is possible this methodology misses some online remittances, but the other payment methods have long been used in physical locations, so the team chose to use a conservative view. Of the remittances initiated with payment cards or mobile money, a further distinction was made in how the remittance was picked up. If a remittance was digitally initiated but picked up in some traditional way such as cash, it is considered "digitally initiated" in the figure. If a remittance was digitally initiated and transmitted to a card, mobile money account, or bank account, it was considered "digital end-to-end."

Figure 5: Digital remittance trends over 25 quarters, 2016-2022



Source: VEEI/Devtech Systems analysis of WBG Remittance Prices Worldwide Quarterly data

The figure shows a marked shift toward digital initiation overall (which includes both blue categories), and a very important shift in digital end-to-end remittances. The figure further shows this shift accelerated greatly in early 2021. However, many observers noted the change in early 2020 as lockdowns proceeded, so it was likely taking place for some corridors earlier and became widespread in the sampled corridors a few quarters later. Since mid-2018, digitally initiated remittances have tripled, rising from 10 percent of remittances to 34 percent. Digital end-to-end remittances more than quadrupled during this period (from 3 to 13 percent), but much of this progress was quite recent: Fully digital remittances more than doubled, growing from 6 to 13 percent between Q1 of 2021 and Q1 of 2022. We will discuss the importance of these end-to-end digital remittances later in this paper.

Still, the majority of remittances involves cash being used at RSPs, where migrant workers can rely on the mediating support of agents. Thus, during COVID-19 related lockdowns, resilient remittance flows also depended on the accessibility of RSPs that were declared “essential” services (Remittance Community Task Force, 2020).

Costs are still high for the “average” remittance, but are much lower for digital remittances and in cases where a migrant worker can compare multiple options

In 2015, the UN Sustainable Development Goals (SDGs), seeking to reduce inequality among countries, set forth a 3 percent remittance cost target (for a \$200 remittance) to be achieved by 2030. More recently, remittances have become an important part of the cross-border payments roadmap being managed by the FSB (2020) with significant support from the Committee on Payments and Market Infrastructures (CPMI), International Monetary Fund (IMF), WBG, and others. In October of 2021, the FSB reaffirmed the remittance cost target of 3 percent, and new targets for speed, access, and transparency were added.

Some key players in cross-border payments and remittances

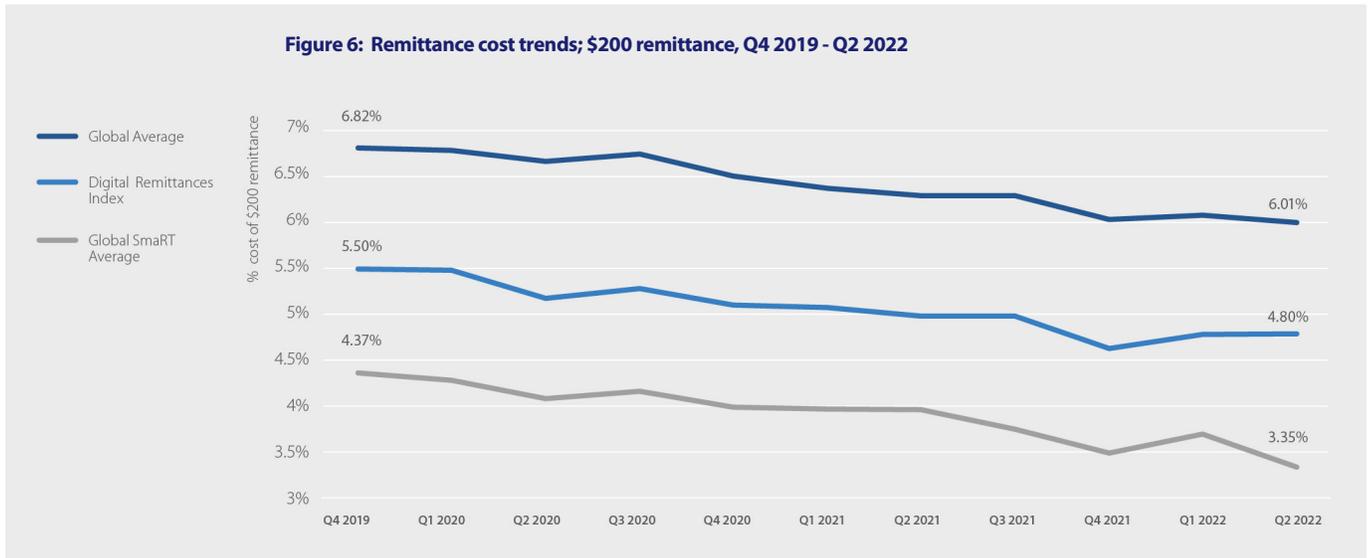
- FSB:** Entity that promotes international financial stability by coordinating financial authorities and international standard-setting bodies; responsible for the cross-border roadmap.
- CPMI:** Committee of nearly 30 central banks / jurisdictions that coordinates international efforts on payments policy and standards; a major player in the cross-border roadmap.
- World Bank:** An international financial institution that provides assistance to the governments of LMICs for the purpose of pursuing capital projects; the World Bank is the major source of data on remittance prices and (through KNOMAD) on remittance flow trends.
- KNOMAD:** The Global Knowledge Partnership on Migration and Development is a brain trust for the global migration community. It is an open, inclusive, multidisciplinary knowledge partnership that draws on experts to create and synthesize knowledge for use by policymakers in sending, receiving, and transit countries. The secretariat is housed in the World Bank.
- IMF:** An international organization of almost 200 countries that works to foster global monetary cooperation, secure financial stability, and reduce poverty around the world.

Cost measurements include transfer charges and foreign exchange margins

When the UN (or another organization) sets a cost target of 3 percent, the total consumer cost of the remittance is envisioned. The cost of remittances is calculated as the simple average total cost for sending \$200 or \$500 (and their equivalents) through RSPs, as captured by the World Bank (2022) Remittance Prices Worldwide database. The total cost charged by a provider includes the remittance transfer fee and, importantly, the foreign exchange rate applied by the RSP. The World Bank tracks costs in a variety of ways.

World Bank quarterly reports and data show positive cost trends

Although these figures have not fallen as much as the public and private sectors would like, there have been beneficial cost trends even over the last few years, and some of these results are attributable to the rise of digital remittances. The figure below depicts trends over the past 11 quarters for three key measures of remittance costs.



Source: WBG Remittance Prices Worldwide Quarterly reports

The trends across three key measures (despite a slight uptick in early 2022) are all good:

- At the time the FSB roadmap stages were kicking off in late 2019, the average cost of sending a \$200 remittance was 6.82 percent; this has fallen to 6.01 percent, a decline of more than 10 percent over the 11 quarters.
- A relatively new measure (the digital remittances index) was introduced to track the cost of remittances that are digitally initiated in an online or self-assisted way. Costs for this index fell from 5.5 to 4.8 over 11 quarters, about a 12 percent decline.
- The Global SmaRT Average reflects what a savvy consumer could pay to transfer remittances in each corridor. The three lowest costs for each corridor in the World Bank's quarterly sample are averaged to produce the number. It is clear that access to information really helps obtain a lower cost. Over the past 11 quarters, costs have dropped from 4.37 percent to 3.35 percent for this index, a decline of around 23 percent.

An analysis of the past 11 Remittance Prices Worldwide quarterly reports reveals a couple of other key trends. Cash and bank accounts are almost always the highest cost methods for sending a remittance. Mobile money and payment cards are the lowest cost ways of sending remittances, and mobile money is often the very lowest cost. In 10 of the last 11 quarterly reports, mobile money was found to be the least expensive means of sending remittances, with cards dipping below mobile money in the first quarter of 2021. With these trends in mind, VEEI wanted to take a deeper dive into (1) card-initiated remittances (which are likely to take advantage of newer money movement innovations) and (2) the value of being able to shop around for the best price.

VEEI cost modeling confirms the value of digital remittances and the ability to compare options

In concert with other MTO innovations, digital remittances can offer faster and more efficient transfers because they take advantage of new money movement networks, avoiding correspondent banking movement in many instances. Correspondent banking has been critical to global money movement for decades, but this money movement method inherently involves more touches by more players, which will always increase costs. In fact, simply maintaining the “nostro and vostro” accounts needed to move money through the correspondent system can be quite costly for the banks involved. Correspondent banking is also facing a variety of challenges, notably a broad-based retreat in the number of its cross-border relationships (Rice et al., 2020). As we noted in *The rise of digital remittances*, several newer global money movement capabilities have been developed and rolled out in recent years (Harper, 2021). These models typically involve a central network that is “always on” and that avoids multiple hand-offs. These services are faster, often completing cross-border transactions in minutes, and they provide greater visibility and certainty for both the sender and the receiver. In these newer money movement methods, a network solves for the complexity of interacting with multiple payment systems, settlement, and foreign exchange. (See Box 1 for a real-world example of one of these next-generation networks, which is powering millions of digital remittances today.)

We used publicly available tools to model costs

To further evaluate digital remittance cost trends, we examined digital remittance costs in 28 corridors in February 2021. The study team was particularly interested in the costs of digital remittances powered by the new global money movement networks, and debit and/or credit cards are used to initiate more of these transfers. In other words, debit card- and credit card-initiated remittances were used as a proxy for digital remittances using the new global networks. The corridors were chosen to represent a good number of the top receiving countries—both the ones that receive the most in value and the ones that receive a high percentage of their GDP in remittances. We repeated the exercise in February 2022.

A very positive aspect of digital remittances is that consumers can shop around if they have digital tools. Of the five MTOs we looked into, four allowed modeling of a remittance via their website or app. A user is able to select a corridor, payment method, and pickup method and see the costs, broken into transfer fees and foreign exchange margins. We used this modeling capability to examine costs for \$200 and \$500 remittances (or the sending country’s equivalent) for the corridors in February 2021 and 2022. This analysis obviously is not comprehensive—we wanted to examine the impact on costs of digital remittances using the newer global networks. Data were gathered for a couple of established MTOs that offer a digital remittance product and for a few of the new digital-first MTOs. Due to some remote browsing restrictions imposed by one country in our 2021 sample, we have 25 corridors in the two-year data collection. The full matrix of corridors and costs is included in the following table. The table depicts the average costs for all MTOs in the corridors, the lowest costs, and the highest costs. These costs are inclusive of fees and foreign exchange costs. See Annex 1 for more detail on the FX portion of the 2022 average costs depicted in the table.

BOX 1:
 Visa Direct and
 global money
 movement

Visa Direct is a payments network partnering up with financial institutions, fintechs, processors, remitters, governments, and merchants to offer real-time* person-to-person (P2P), business-to-small business (B2b), business-to-consumer (B2C), and government-to-consumer (G2C) payments and funds disbursements. Visa Direct can reach 7 billion cards, accounts, and digital wallets across 190 countries to help our clients transform global money movement.

Visa Direct reaches endpoints by providing access to 16 card-based networks, 65 domestic ACH schemes, 11 RTP schemes, 5 payment gateways, and access to one of the world’s largest cross border ACH networks.

* Actual funds availability depends on receiving financial institution and region.

Visa Direct Network for Cross Border

Visa Direct is a leading global network to help transform global money movement



Visa Direct already partners with the top 5 remittances businesses, with some of them reporting the following trends during their 2Q 2022 earnings calls:

- MoneyGram reported 36 percent year-over-year growth in digital transactions, with 44 percent of all money transfer transactions being digital in Q2.
- Remitly, a digital-first MTO, reported a 43 percent rise in active customers and a 90 percent increase in engagement via mobile device.
- Intermex reported a 106.6 percent increase in digital transactions from the previous quarter.

Table 1: VEEI / DevTech corridor analysis of \$200 and \$500 remittances, 2021-2022

CORRIDOR	\$200 REMITTANCES						\$500 REMITTANCES					
	AVERAGE CUSTOMER COST %		LOWEST CUSTOMER COST %		HIGHEST CUSTOMER COST %		AVERAGE CUSTOMER COST %		LOWEST CUSTOMER COST %		HIGHEST CUSTOMER COST %	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Australia-Vietnam	3.09	3.39	1.95	1.45	6.04	5.27	2.19	2.68	1.26	0.94	4.97	4.49
Canada-Vietnam	4.29	4.34	2.00	2.21	7.45	7.56	3.72	4.03	2.00	1.75	7.27	7.65
France-Algeria	10.94	4.98	10.94	2.49	10.94	9.95	8.97	3.47	8.97	1.17	8.97	8.05
Germany-Vietnam	4.44	3.81	2.48	0.71	10.63	10.33	3.24	2.82	1.66	0.71	9.25	8.40
Greece-Albania	2.72	2.05	0.65	0.64	3.40	2.40	1.88	1.09	0.50	0.50	2.34	1.41
Italy-Albania	2.56	2.52	0.65	0.64	3.49	4.84	1.81	1.78	0.50	0.50	2.69	3.53
Italy-Nigeria	2.70	1.20	2.46	0.00	3.17	2.66	2.43	0.71	2.38	0.00	2.46	1.55
Kuwait-India	1.96	1.74	1.73	1.74	2.19	1.74	0.98	0.77	0.76	0.77	1.21	0.77
New Zealand-Samoa	8.15	5.75	8.15	4.44	8.15	7.28	6.87	5.08	6.87	3.66	6.87	6.54
Russia-Kyrgyzstan	0.52	3.05	0.03	3.05	1.96	3.05	0.51	3.16	0.02	3.16	1.96	3.16
Russia-Moldova	1.82	2.78	0.03	2.74	7.20	2.90	1.81	2.08	0.02	1.77	7.20	3.01
Russia-Tajikistan	5.99	2.90	5.99	2.90	5.99	2.90	5.99	3.01	5.99	3.01	5.99	3.01
UAE-Egypt	3.70	4.34	2.54	3.74	5.94	5.71	3.94	4.71	3.48	4.51	4.77	4.85
UAE-India	2.37	3.33	0.37	2.54	4.49	5.07	3.24	3.82	2.51	3.52	4.01	4.59
UAE-Pakistan	3.41	3.46	2.54	2.64	4.97	5.25	3.83	3.92	3.48	3.62	4.35	4.68
UAE-Philippines	3.04	3.20	2.21	2.17	4.66	5.20	3.47	3.66	3.14	3.15	4.08	4.64
UK-Kenya	4.62	3.54	2.89	1.57	9.92	9.62	3.97	3.27	2.10	1.37	9.13	8.86
UK-Nigeria	1.79	1.68	1.13	0.00	2.13	4.98	1.67	0.95	0.75	0.00	2.13	3.08
USA-Dominican Republic	7.06	7.94	4.29	4.04	9.06	18.70	6.29	6.88	2.87	2.01	8.88	15.30
USA-El Salvador	4.70	4.31	2.91	0.99	6.10	8.26	3.01	2.81	1.19	0.40	4.40	4.85
USA-Guatemala	4.43	3.78	2.13	0.29	9.97	8.79	3.56	2.87	1.49	0.29	8.44	7.12
USA-Haiti	5.27	6.11	4.90	4.47	5.66	10.97	3.22	4.06	2.15	2.15	4.06	8.55
USA-Honduras	5.33	5.19	3.93	1.72	6.59	9.15	3.63	3.72	2.24	1.13	4.82	5.75
USA-Jamaica	6.42	7.54	4.46	2.57	7.85	17.22	6.16	5.87	3.57	2.74	8.38	12.81
USA-Mexico	4.60	4.30	2.62	2.17	5.84	7.53	3.67	2.71	1.56	0.29	5.31	5.53
AVERAGES	4.24	3.89	2.96	2.08	6.15	7.09	3.60	3.20	2.46	1.72	5.36	5.69
CORRIDORS UNDER 3%	8	7	18	20	3	5						

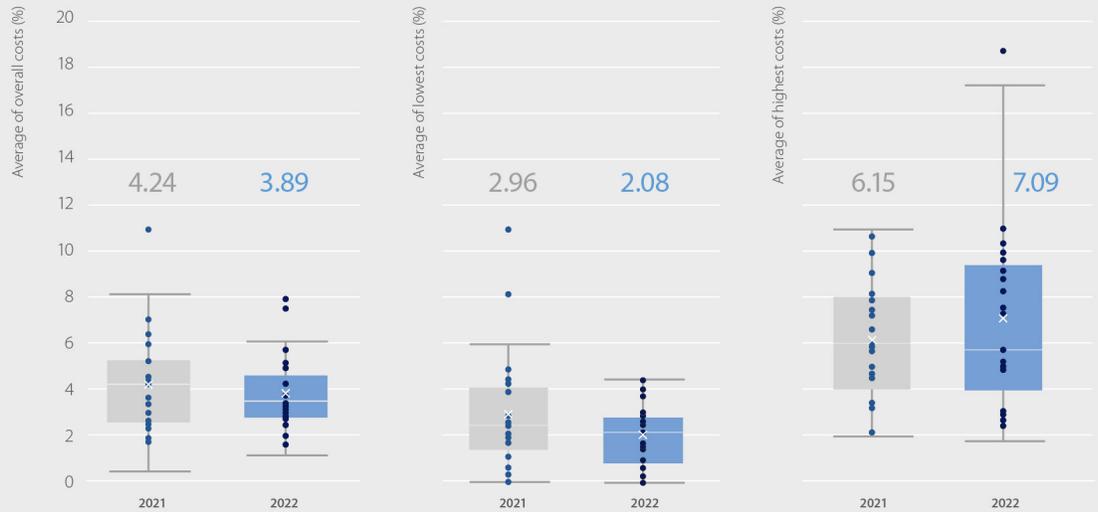
Source: VEEI / DevTech Systems analysis

Although the average costs across all MTOs and corridors were over the 3 percent target, a consumer able to shop around would have been able to send a remittance at below a 3 percent cost in 20 of the 25 corridors (80 percent of them) in 2022—an improvement over 2021.

The average costs declined, but the real story is the power of shopping for the best option

As detailed in the following box plots, costs declined from 2021 to 2022 for two measures, and they increased for one.

Figure 7: Averages of overall costs, lowest costs, and highest costs for sending a \$200 remittance, 2021-2022



Source: VEEI / DevTech Systems analysis

The average costs across all MTOs and corridors declined from 4.24 to 3.89 percent in 2022, a decline of almost 10 percent. Looking at the second pair of box plots offers a more compelling insight. Here, we show the lowest cost offered by any of the MTOs for the corridors. The average of the lowest costs declined from 2.96 to 2.08 percent in 2022, a decline of almost 30 percent. Highlighting the benefits of being able to shop around, the average of the highest costs found in the corridors actually went up from 6.15 to 7.09 percent. This was driven largely by two corridors: the US to the Dominican Republic (where the lowest cost was 4.04 percent and highest was 18.70 percent) and the US to Jamaica (where the lowest cost was 2.57 percent, but the highest was 17.22 percent). MTOs were offering dramatically different pricing for some corridors when we looked at costs in early 2022—migrant workers without the ability to check on multiple options could have paid very high prices during this period (and some undoubtedly did).

In light of these insights, a few imperatives emerge

Traditional remittances must become digital to continue lowering costs

Cash is already known as the most costly way to initiate a remittance. Another huge cost barrier is that digital remittances are still typically received in cash. According to our conversations with MTOs (and numerous public statements by the firms), the majority of digitally initiated remittances are still ultimately picked up in cash. In Figure 5 we showed that 34 percent of remittances were digitally initiated in Q2 of 2022, but only a third of those were digital end-to-end. To make further progress on costs, we need the number of digitally initiated remittances to grow much higher, and we need the proportion of digitally “picked up” remittances to grow as well. Aside from the many advantages of digital pickup (which include physical safety for women, who still receive the majority of remittances), there is a notable cost issue for remittances that become “physical” at the end of the process by being cashed out.

Traditional MTOs maintain vast networks for this cash-out capability, and digital-first MTOs have likewise engaged numerous third parties to facilitate transfers on the receiving end as conversion to cash. There are usually some banks and many retail partners set up to facilitate these cash pickups, and these arrangements are quite expensive. Based on discussions with MTOs, we believe these arrangements add 100-300 basis points of expense to remittances picked up in cash. These costs are assumed in the business model of many of the new remittance providers, and they do not take into account the time and effort the remittance receiver must spend on the cash collection. Our evaluation of digital remittance costs revealed that there was usually no difference in the “cost to remittance sender,” according to the disbursement (pickup) method; these costs are often built into the overall pricing. Because of the high costs associated with cash disbursement, and because the majority of remittances are still picked up in cash, it stands to reason that further reductions in overall remittance costs will require digital receipt, and this requires the digital enablement of people in the receiving countries.

Migrant workers must be able to compare options and send remittances digitally, and their families must be able to then spend the funds digitally at businesses in their communities

We have already seen the power of digital in delivering better transparency of options and lower costs. But what types of efforts are needed to enable receiving families to actually use funds digitally? A recent example is worth highlighting. Mobile money, as mentioned before, is a traditionally low-cost way of sending funds digitally. But mobile money is not accepted at many merchant and e-commerce locations, so mobile money users would need to cash out to make purchases in their everyday lives. The private sector is innovating and forging key partnerships to resolve these challenges, however. As an example, in June 2022 Safaricom and Visa introduced a new virtual card, called M-PESA GlobalPay, that enables more than 30 million customers in Kenya to shop using their mobile money account at more than 100 million merchants across 200 countries through Visa’s global network. This capability will open e-commerce opportunities for M-PESA customers and make it easier for Kenyans traveling abroad. More detail is provided in Box 2. This is the type of partnership that will enable remittances to stay digital from end-to-end, providing many advantages, including lower costs.

The costs associated with cash pickup are unlikely to disappear until a strong majority of remittances are digital end-to-end. Partnerships like this—repeated many times—should be encouraged.

Innovation must be facilitated by more consistently applied compliance rules and by well-developed standards, and competition needs to be promoted by making it easier for remittance providers to bring new innovations to market

Regulatory complexities remain a challenge in cross-border payments generally, and for remittances specifically. The MTOs we have spoken with have mentioned that know your customer (KYC) requirements, suspicious activity report (SAR) thresholds, office of foreign asset control (OFAC) screening, and anti-money laundering (AML) requirements are topics worthy of policymaker attention. And it appears this attention is being given. In the FSB's 2020 cross-border payments roadmap, Focus Area B is devoted to "coordinating on regulatory, supervisory, and oversight frameworks." There are currently five workstreams in this focus area, covering initiatives such as aligning regulatory frameworks for cross-border payments, applying AML and counterterrorism financing rules consistently, and fostering KYC and identity sharing. It is critical that the public sector make progress in these areas, and on standards.

Standards are perhaps the unsung heroes in the history of payments. Global standards form the backbone of the global payment system, enabling ubiquity by creating a common set of protocols and specifications that payment service providers can adopt anywhere in the world while still preserving the ability to foster innovation. Further, global standards enable closed-loop payment systems to become open-loop systems and remove significant technical barriers, making it easier for new providers of payment services to connect to the broader payment system. But standards need to be able to support rapid change, allowing innovation to happen within the standards rather than outside of them.

Another key area requiring public-sector coordination is the licensing of new products and services. If policymakers desire to have more players and competition in remittance corridors, then streamlining licensing will be a key way to achieve that goal. A June joint paper from the BIS and World Bank highlighted several licensing-related issues and noted:

Licensing processes in both send and receive countries can take between 90 days to two years to obtain authorisation to commence operations. Documentation requirements can discourage new entrants from submitting applications to authorities. Limited competition can result in higher remittance costs and poor quality of service. In some markets, it can also push consumers to use unregulated channels, undermining the integrity of the system (Ardic et al., 2022).

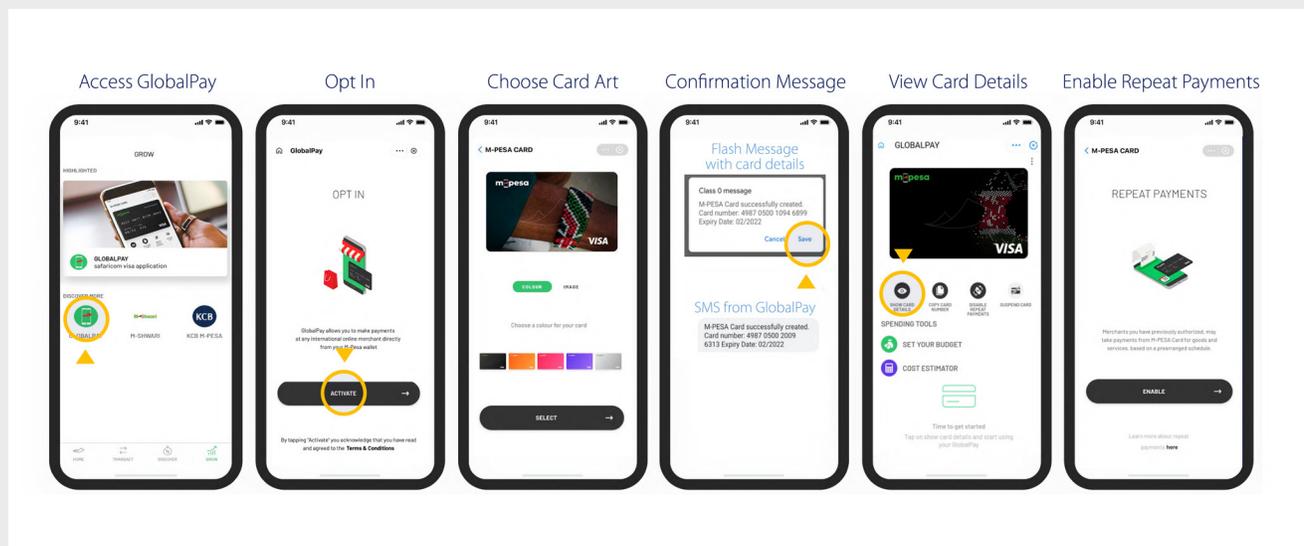
Making licensing easier will allow more options to come to market faster, and we have already seen how costs are lower when there are multiple options for a corridor, and when people know about the options.

BOX 2:

M-PESA GlobalPay Visa Virtual Card

Why Safaricom and Visa partnered

Enabling Global Payments: The partnership will enable M-PESA customers to make payments for subscriptions, shopping, e-learning, and entertainment from Visa Merchants in over 200 countries. The partnership will provide access to cards for more than 30 million M-PESA customers in Kenya, making access to cards easy for a lot of consumers who are not able to access traditional bank issued debit and credit cards. M-PESA users can enable the GlobalPay Visa virtual card directly from the M-PESA wallet app. Users click “activate” and then select their desired design for the virtual card.



Other key benefits of M-PESA GlobalPay

Safe and secure payment for consumers, with increased security using a combination of Dynamic CWV and M-PESA PIN for all transactions. The consumer has also been empowered to disable or suspend the cards.

Convenience and transparency: Additional tools like the cost estimator and budget control have been included to provide the consumer with transparent cost and spend control.

How we unlock the benefits of remittance innovation and competition for everyone, everywhere

To continue the encouraging path that digital remittances are on, policymakers must focus on removing more barriers. When it comes to enhancing payment systems and developing new cross-border capabilities, the private sector is making significant progress on fast and efficient global money movement. Based on our research and analysis, the VEEI study team believes that public-sector resources would be best allocated to the digital enablement of people and to further enabling the private sector to innovate. These five steps are a good place for policymakers to start:

Begin with digital enabling infrastructure, if it does not already exist

For millions of people, basic infrastructure like electricity will be a barrier to the digitization of remittances, payments, and commerce. Beyond electricity, internet connectivity—and increasingly broadband connectivity—will be crucial. And given that mobile phone adoption outstrips computer penetration in many parts of the world, mobile broadband is perhaps the best answer for connectivity moving forward. Countries with policymakers who prioritize digital infrastructure will have an advantage in this new era. Aside from making digital remittances possible, these capabilities enable e-commerce and digital marketplaces for small businesses, and they enable telework for many types of employees, which has proven important during the pandemic.

Focus on digital enablement broadly, keeping both consumers and businesses in mind

Although the digital receipt of remittances is critical for further progress on costs, we must keep in mind that the larger goal is to digitally enable everyone, everywhere, to fully and meaningfully participate in an increasingly digital world. Individuals need to be able to receive remittance funds digitally and then to use them digitally, with ubiquity. This requires digitally enabling businesses, especially small businesses, helping them accept digital payments and to connect them to digital marketplaces. Consumers and businesses must both be part of the equation in achieving digital ubiquity, and the countries that have driven digital ubiquity most successfully over the last decade have worked to drive adoption on both sides. Digital ID will play a key role in digital enablement and will likewise require a dual focus: Adoption by people on one side, and public institutions and businesses on the other, are key to overall adoption. Digital skills, for both consumers and small businesses, will need to be part of this focus.

Aim for an open, interoperable digital ecosystem built on resilience and security

As policymakers strive to promote digital remittances (and digital payments), we believe that they should adopt a principles-led and outcome-based approach, giving payment service providers and payment networks the flexibility to innovate in order to deliver against goals. Interoperability should be favored over uniformity—more paths are better than one. Given the favorable cost trajectories of digital remittances originated using mobile money and debit/credit instruments, which have been obtained by innovative MTOs working with new global network capabilities, we do not believe that the public sector needs to build new global infrastructure that could stifle competition. Open competition combined with the use of open and global technical standards drives payment innovation. A truly interoperable service should be able to reach as many end points as possible: traditional bank accounts, prepaid accounts, and digital wallets. Building consumer trust in the digital economy requires developing systems, products, and services that are secure—that protect consumers’ data, money, and identity. Only with those safeguards can consumers and businesses interact with confidence. Adopting digital security systems enables real-time vetting of fraudulent transfers, with tokens and artificial intelligence increasing the security of remittances. Alleviating fraud risk requires significant investment in areas such as authentication methods, behavioral biometrics, and aggregation tracking.

Streamline the compliance environment to reduce cross-border frictions

While the private sector is innovating, competing, and improving speed and efficiency, policymakers have a key role to play. Remittances and other cross-border payments go through a number of regulatory regimes that currently add frictions. But these frictions can be reduced by streamlining and aligning compliance rules as much as possible. This includes the development of a consistent AML compliance framework that would improve the efficiency and transparency of cross-border solutions offered by the private sector. We therefore believe that it is critical for the public sector to address the “regulatory, supervisory, and oversight frameworks” focus area of the FSB (2020) cross-border roadmap. Though global coordination will no doubt be challenging, we believe progress in this focus area would offer the greatest return on the time invested.

Simplify the licensing process to allow innovation and competition to thrive

Policymakers can also help the private sector introduce innovations more quickly and with less burden. The “passporting of licenses,” a suggestion from the World Economic Forum in its June 2020 paper on cross-border payments, was not directly mentioned in the FSB’s cross-border roadmap. Even increased consistency of licensing requirements would help remittance service providers to enter and operate across multiple markets with less friction. We believe that the private sector should prioritize creating products that offer better customer experiences and enable more efficient transfers of money. But the public sector can help by reducing the barriers to market entry. Currently, with vastly different license requirements around the globe that need to be navigated, companies must spend large amounts of time and money to navigate the different policies and requirements, and as BIS and World Bank researchers recently noted, this process can take years (Ardic et al., 2022). Streamlining licensing requirements and processes will help new market entrants bring the benefits of digital remittances to more corridors, and therefore to more people.

At the Visa Economic Empowerment Institute, we will continue to explore and analyze developments in global money movement and remittances. We hope this paper’s insights and recommendations are useful to policymakers and private sector partners, and we welcome continued engagement with all stakeholders on how digital innovation can be a flywheel for upward mobility in the global economy.

Sources

- Ardic, O., Bajjal, H., Baudino, P., Boakye-Adjei, N. Y., Fishman, J., & Maikai, R. A. (2022, June). *The journey so far: making cross-border remittances work for financial inclusion* (FSI Insights on policy implementation No. 43). World Bank Group & Bank for International Settlements. <https://www.bis.org/fsi/publ/insights43.pdf>
- Awanis, A., Lowe, C., Andersson-Manjang, S. K., & Lindsey, D. (2022). *State of the Industry Report on Mobile Money*. GSM Association. https://www.gsma.com/sotir/wp-content/uploads/2022/03/GSMA_State_of_the_Industry_2022_English.pdf
- Balch, O. (2020, May 10). *Are digital payments COVID winners?* Raconteur. <https://www.raconteur.net/finance/payments/digital-payments-covid-19/>
- Committee on Payment and Settlement Systems, & World Bank. (2007, January). *General principles for international remittance services*. <http://www.bis.org/cpmi/publ/d76.pdf>
- Financial Stability Board. (2020, October). *Enhancing Cross-border Payments – Stage 3 roadmap*. <https://www.fsb.org/2020/10/enhancing-cross-border-payments-stage-3-roadmap/>
- (2021, October 13). *Targets for Addressing the Four Challenges of Cross-Border Payments*. <https://www.fsb.org/wp-content/uploads/P131021-2.pdf>
- (2022, July 6). *Developing the Implementation Approach for the Cross-Border Payments Targets*. <https://www.fsb.org/wp-content/uploads/P060722.pdf>
- Harper, C. (2021). *The rise of digital remittances: How innovation is improving global money movement*. Visa Economic Empowerment Institute. <https://usa.visa.com/content/dam/VCOM/global/ms/documents/veei-the-rise-of-digital-remittances.pdf>
- KNOMAD. (2022). *Remittances Data* [Data set]. <https://www.knomad.org/data/remittances>
- Migration Data Portal. (2021, February 5). *International migrant shocks*. <https://www.migrationdataportal.org/themes/international-migrant-stocks#key-trends-2000-2020>
- Orozco, M., Yansura, J., Porras, L., Bosworth, J., & Schmitz, K. (2022, May 3). *Will Cryptoassets Disrupt Remittances in Latin America? The Dialogue*. <https://www.thedialogue.org/analysis/will-cryptoassets-disrupt-remittances-in-latin-america/>
- Remittance Community Task Force. (2020, November). *Remittances in crisis: Response, Recovery, Resilience*. https://143163-1013359-1-raikfcquaxqncofqfm.stackpathdns.com/wp-content/uploads/2020/12/Blueprint-for-Action_FINAL.pdf

Rice, T., von Peter, G., & Boar, C. (2020, March). *On the global retreat of correspondent banks*. BIS Quarterly Review.

https://www.bis.org/publ/qtrpdf/r_qt2003g.htm

United Nations. (2015, September). *Sustainable Development Goal 10: Reduced Inequalities*.

<https://www.un.org/sustainabledevelopment/inequality/>

UN Women. (2022). *GCM Objective 20: Promote faster, safer and cheaper transfer of remittances and foster financial inclusion of migrants*.

<https://ppguide.unwomen.org/objective/20>

World Bank. (2022, July 13). *Remittance Prices Worldwide* [Data set].

<https://remittanceprices.worldbank.org/>

World Bank Group (WBG). (2020, December). *Remittance Prices Worldwide Quarterly*. Issue 36.

https://remittanceprices.worldbank.org/sites/default/files/rpw_main_report_and_annex_q42020.pdf

World Bank Group (WBG) & KNOMAD. (2020, April). *COVID-19 Crisis Through a Migration Lens* (Migration and Development Brief No. 32).

<https://openknowledge.worldbank.org/bitstream/handle/10986/33634/COVID-19-Crisis-Through-a-Migration-Lens.pdf?sequence=5&isAllowed=y>

— (2021, November). *Recovery: COVID-19 Crisis Through a Migration Lens* (Migration and Development Brief No. 35).

https://www.knomad.org/sites/default/files/2021-11/Migration_Brief%2035_1.pdf

— (2022, May). *A war in a pandemic: Implications of the Ukraine crisis and COVID-19 on global governance of migration and remittance flows* (Migration and Development Brief No. 36).

https://www.knomad.org/sites/default/files/2022-05/Migration%20and%20Development%20Brief%2036_May%202022_0.pdf

World Economic Forum (WEF). (2020, June). *Connecting Digital Economies: Policy Recommendations for Cross-Border Payments*.

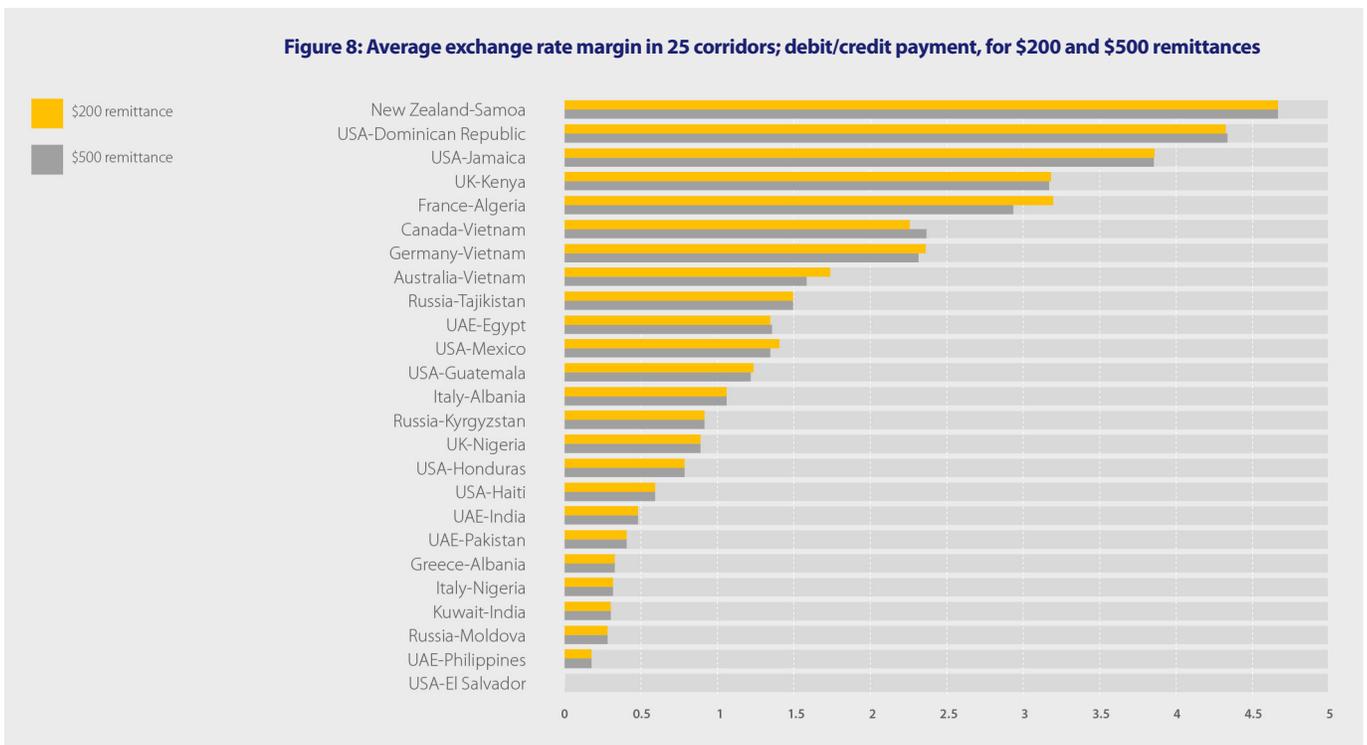
<https://www.weforum.org/reports/connecting-digital-economies-policy-recommendations-for-cross-border-payments>

Annex 1: Foreign exchange percentage for 2022 data sample

When a cost target of 3 percent is mentioned, the total consumer cost of the remittance is envisioned. The cost of remittances is calculated as the simple average total cost for sending \$200 or \$500 (and their equivalents) through remittance service providers, as captured by the World Bank Remittances Prices Worldwide database. The total cost charged by a provider includes the remittance transfer fee and, importantly, the foreign exchange rate applied by the remittance service provider.

Table 1 depicts the full matrix of corridors and costs for 2021 and 2022 data collection. The table depicts the average of costs for all MTOs in the corridors, the lowest costs, and highest costs. These costs are inclusive of fees and foreign exchange costs.

Figure 8 below offers more detail on foreign exchange margins for the 2022 average cost columns of the table. For example, if a given remittance corridor had an average cost of five percent, and the average FX fee below is 3 percent, then the remaining 2 percent was the remittance transfer fee.



Source: VEEI / DevTech Systems analysis

Annex 2: Text descriptions of figures and tables

Figure 1: Remittance inflows for world and LMICs, 1990-2021

This line plot tracks the value of remittance inflows between 1990 and 2021, with one line representing world inflows and another representing inflows to LMICs. In 1990, both values stood well below \$100 billion, growing slowly but steadily through 2000—aside from a minor downturn in 1996. From 2000 through 2021, the rate of growth increased significantly. By 2021, inflows to LMICs surpassed \$600 billion and world inflows reached nearly \$800 billion. The only downturns during this period took place in 2009 and 2016, with inflows increasing only slightly between 2019 and 2020 and taking off again in 2021.

Figure 2: Year-over-year changes in remittance flows to LMICs (bars) and globally (lines), 1991-2021

This plot tracks the year-over-year percentage change in remittance inflows to LMICs (represented as bars) and globally (represented as lines). During most years, remittance inflows increased—typically between 5 and 20 percent. The two largest increases took place in 1997 and 2005. In 1997, inflows in both corridors increased by approximately 40 percent, with global inflows slightly outpacing LMICs. In 2005, global inflows increased by approximately 30 percent, while inflows to LMICs increased by approximately 40 percent. In 1996, 2009, and 2016, inflows in both corridors decreased, with the sharpest downturns taking place in 1996. In 1998, inflows to LMICs decreased slightly, while global inflows continued to increase.

Figure 3: Top 10 remittance receiving LMICs by raw value (2021 in bars, 2020 in points)

This plot displays the top 10 remittance receiving LMICs by raw value of inflows during the years 2021 (represented as bars) and 2020 (represented as points). The countries are ordered by 2021 value. The top recipient was India, which received over \$75 billion in remittances during 2021. The next two countries—Mexico and China—each received approximately \$50 billion. The following three countries—Philippines, Egypt, and Pakistan—each received between \$25 and \$50 billion. The following country—Bangladesh—received just shy of \$25 billion and the final three—Nigeria, Vietnam, and Ukraine—each received close to \$20 billion. The rankings were similar in 2020, with China taking the number two spot over Mexico.

Figure 4: Top 10 remittance receiving LMICs as a % of GDP, 2021

This bar plot displays the top 10 remittance-receiving LMICs by percent of GDP in 2021. The top recipient was Lebanon, with remittances making up over 50 percent of its GDP. Tonga holds the number two spot, with remittances making up over 40 percent of its GDP. The following three countries—Tajikistan, Kyrgyz Republic, and Samoa—receive between 30 and 40 percent of their GDP in remittances. The next three—The Gambia, El Salvador, and Honduras—each receive between 20 and 30 percent of their GDP in remittances. The final two are Jamaica and South Sudan, with remittances making up approximately 20 percent of their GDP.

Figure 5: Digital remittance trends over 25 quarters, 2016-2022

This stacked bar plot displays the percentage of world remittance payments falling into one of three categories—traditionally initiated, digitally initiated, and digital end-to-end—between Q2 2016 and Q2 2022, by quarter. In Q2 2016, traditionally initiated remittances made up 93 percent of the total, while digitally initiated and digital end-to-end remittances made up 4 and 3 percent, respectively. Traditional remittances continued to make up at least 90 percent of the total until Q3 2018, when they dipped down to 88 percent. At this time, digitally initiated remittances made up 8 percent of the total and digital end-to-end remittances made up 4 percent. Traditional remittances continued to hover above 80 percent until Q2 2021, when they dropped significantly to 66 percent. By this time, digitally initiated remittances had climbed to 23 percent and digital end-to-end remittances to 11 percent. As of Q2 2022, traditional remittances still make up 66 percent of the total, while digital end-to-end payments increased slightly to 13 percent and digitally initiated payments dipped to 21 percent.

Figure 6: Remittance cost trends; \$200 remittance, Q4 2019 – Q2 2022

This line plot displays the average cost of sending a remittance payment between Q4 2019 and Q2 2022 using three metrics—the global average, digital remittances index, and global SmaRT average. The global SmaRT average reflects what savvy consumers with access to sufficiently complete information could pay, constructed by taking the average of the three lowest costs in each corridor. Throughout the period, the global average remained highest, followed by the digital remittances index, and lastly, the SmaRT average. In Q4 2019, the global average stood just shy of 7 percent, falling down to 6 percent by Q2 2022. The digital remittances index stood at 5.5 percent in Q4 2019, falling almost a full percentage point by Q4 2021 and increasing slightly in the first two quarters of 2022. The SmaRT index stood just shy of 4.5 percent in Q4 2019, falling below 3.5 percent by Q2 2022.

Table 1: VEEI/DevTech corridor analysis of \$200 and \$500 remittances, 2021-2022

This table displays the average, lowest, and highest costs—in percent—of sending \$200 and \$500 remittances in 25 corridors during 2021 and 2022. Averaged out across all 25 corridors, the average, lowest, and highest costs of sending \$200 during 2021 were 4.24 percent, 2.96 percent, and 6.15 percent, respectively. In 2022, the average and lowest costs dipped to 3.89 and 2.08 percent, while the highest cost rose to 7.09 percent. Generally, the cost of sending \$500 is lower. In 2021, the average, lowest, and highest costs were 3.6, 2.46, and 5.36 percent, respectively. In 2022, the average and lowest costs dipped to 3.2 and 1.72 percent, while the highest cost rose to 5.69 percent. The table also displays the number of corridors in which the cost of sending a \$200 remittance payment is below 3 percent. In 2021, only eight of the 25 corridors saw average costs of less than 3 percent, down to seven in 2022. However, 18 of the 25 corridors saw lowest costs of less than 3 percent in 2021, increasing to 20 corridors in 2022.

Figure 7: Averages of overall costs, lowest costs, and highest costs for sending a \$200 remittance

This figure contains three box and whisker plots. The first plot displays the distribution of the average cost—in percent—of sending a \$200 remittance payment across 25 corridors during 2021 and 2022. The second displays the distribution of the lowest cost of sending \$200, while the third displays the distribution of the highest cost. Each plot also displays the mean costs for 2021 and 2022. The means for average, lowest, and highest costs during 2021 were 4.24 percent, 2.96 percent, and 6.15 percent, respectively. In 2022, the average and lowest costs dipped to 3.89 and 2.08 percent, while the highest cost rose to 7.09 percent.

Figure 8: Average exchange rate margin in 25 corridors; debit/credit payment, for \$200 and \$500 remittances

This bar plot displays the average cost of foreign exchange (FX)—in percent—of sending \$200 and \$500 remittances in 25 corridors during 2022. The corridor with the highest FX average is New Zealand-Samoa, with a cost of nearly 5 percent for both payment values. The corridors with the second and third highest FX averages are USA-Dominican Republic and USA-Jamaica, respectively. By contrast, the corridor with the lowest FX average is USA-El Salvador, with no cost whatsoever. The corridors with the second and third lowest FX averages are UAE-Philippines and Russia-Moldova, respectively, each with a cost of less than 0.5 percent.

About Visa Inc.

Visa Inc. (NYSE:V) is the world's leader in digital payments. Our mission is to connect the world through the most innovative, reliable, and secure payment network—enabling individuals, businesses, and economies to thrive. Our advanced global processing network, VisaNet, provides secure and reliable payments around the world, and is capable of handling more than 65,000 transaction messages a second. The company's relentless focus on innovation is a catalyst for the rapid growth of digital commerce on any device for everyone, everywhere. As the world moves from analog to digital, Visa is applying our brand, products, people, network, and scale to reshape the future of commerce.

For more information, visit About Visa, visa.com/blog and @VisaNews.



Visa Economic Empowerment Institute

