Economic Analysis of the Honduras Remittances Ecosystem

An Assessment of the Role Remittances have on Financial Inclusion and Development Outcomes
Economic Analysis of the Honduras Remittance Ecosystem

Center for Economics and Market Development, Bureau for Development, Democracy, and Innovation

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

2022

This document was prepared by:

USAID: Massa Dunnville, Nathan Martinez, Camille Parker, Randy Smith, Chris Thurlow, and Weiwei Tasch
CONTENTS

Acknowledgements v
Executive Summary 1
Chapter 1 - Migration and Remittances Context 5
  Key Migration Trends 5
  Drivers of Migration 8
    Intention to Migrate 15
    Characteristics of a Remittance Receiving Household 16
  Role of Remittances - An Overview 16
  Recent Trends 17
    Demographic Characteristics 22
    Remittance Characteristics 23
    Bankarization 23
Chapter 2 - Sending and Receiving Remittances 24
  Sending Remittances 24
  Receiving Remittances 28
  Major Players and Market Structure 30
    Market Structure Overview 30
    Major Players 30
  Transaction and Foreign Exchange Fee Structure 33
    Transaction Fees 34
    Foreign Exchange Estimates 37
    Total Transaction and Foreign Exchange Fees 38
  Regulatory Considerations 39
    Regulatory Considerations: Authorized Entities 40
    Regulatory Considerations: Money Laundering and Financial Crime Controls 40
    Regulatory Considerations: Deposit Authority 41
    Regulatory Considerations: Consumer Protection 41
  Key Dynamics and Trends 42
    Competition 42
    Networks and Alliances 42
    Technology 43
Chapter 3 - Macroeconomic and Microeconomic Impacts 45
  Macroeconomic impacts 45
    Economic Growth 46
    Consumption Smoothing 46
    Fiscal Revenues 48
Figure 1-4: Histogram of Wages for the U.S.-Honduran-Born Population (2019) ........................................ 7
Figure 1-5: Reported Reasons Why Hondurans Migrate (2021) ................................................................. 9
Figure 1-6: Trend of Border Patrol Apprehensions, Single Adults versus Families and Children (2013-2020) .............................................................................................................................................. 12
Figure 1-7: Trend of Unaccompanied Children Apprehended by the Border Patrol (2012-2021) ............. 13
Figure 1-8: Northern Triangle Family Reunification Patterns ..................................................................... 14
Figure 1-9: Worker Remittances to Honduras (USD (nominal), 2000-2020) ............................................. 18
Figure 1-10: Remittance Inflows (2018-2020) and Remittances per Capita ............................................... 18
Figure 1-11: Remittances as Share of Income (Among remittance receiving HHs) (2018-2019) .......... 20
Figure 1-12: Remittance Value by Survey (2018 Constant Dollars) .............................................................. 20
Figure 1-13: Worker Remittances to Honduras by Year and Quarter (2017-2021) ..................................... 22
Figure 2-1: Illustration of Sending Remittances from the Sender’s Perspective ......................................... 25
Figure 2-2: Odds of Sending a Remittance using a Digital Channel ............................................................. 26
Figure 2-3: Sending Agent Type .................................................................................................................... 26
Figure 2-4: Institutions and Payment Instruments for Sending Remittances ............................................. 27
Figure 2-5: Institutions and Payment Instruments for Sending Remittances ............................................. 27
Figure 2-6: Remittance Operators Business Model .................................................................................... 28
Figure 2-7: Remittance Receipt Methods .................................................................................................... 29
Figure 2-8: Remittance Receipt Methods by Age Group ......................................................................... 29
Figure 2-9: Number of Payment Points by Remittance Provider .............................................................. 32
Figure 2-10: Remittance Fees (% of $200) by Payment Instrument (2016-2020) ....................................... 35
Figure 2-11: Cash Transaction Fee, % of $200 Remittance (2018-2020) ................................................... 35
Figure 2-12: Credit/Debit Card Transaction Fee, % of $200 Remittance (2018-2020) ......................... 36
Figure 2-13: Credit/Debit Card Transfer Transaction Fee, % of $200 Remittance (2018-2020) .......... 36
Figure 2-14: Bank Account Transfer Transaction Fee, % of $200 Remittance (2018-2020) ................. 37
Figure 2-15: Foreign Exchange Transaction Margin for $200 (2016-2020) ............................................. 38
Figure 3-1: Remittances before, during, and after natural disasters ......................................................... 47
Figure 3-2: Remittances, FDI, and ODA (1980-2019) ................................................................................ 47
Figure 3-3: Remittance Receipts and Government Expenditures (1980-2019) ......................................... 48
Figure 3-4: Remittances and Consumer Price Inflation (1991-2019) ...................................................... 51
Figure 3-5: Remittance Receipts by Household Income Quintiles ............................................................. 52
Figure 3-6: Remittances as Share of Total Household Income by Quintile ............................................. 54
Figure 3-7: Remittances as Share of Total Household Income by Location and Gender ....................... 54
Figure 3-8: Household Spending Among Remittance Recipients .............................................................. 55
Figure 3-9: Relationship between Remittances and Savings .................................................................. 57
Figure 3-10: Labor Force Participation by Remittance Receipt Status ..................................................... 59
Figure 3-11: Male LFP by Remittance Status ............................................................................................ 59
Figure 3-12: Female LFP by Remittance Status .......................................................................................... 59
Figure 3-13: Hours Worked by Remittance Status .................................................................................... 61
Figure 3-14: Average Monthly Wages by Remittance Status .................................................................... 62
ACKNOWLEDGEMENTS

Although this document was prepared by the U.S. Agency for International Development (USAID) Center for Economics and Market Development, we would not have been able to conduct this study without support from USAID/Honduras and the Transforming Market Systems (TMS) Activity, as well as support from the Inter-American Dialogue and ACDI/VOCA. We would also like to thank the numerous people and institutions who lent their time and expertise to this project.

We would like to thank Rod Thompson, Jorge Reyes, and other members from the Office of Economic Growth at USAID/Honduras for requesting this study, and for authorizing and supporting the survey of remittance recipients in Honduras. We would like to thank Dun Grover, Sergio Rivas, and Erwin Alvarez from ACDI/VOCA for their technical direction and leadership with the USAID/Honduras TMS Survey and their feedback to the report. We would also like to thank TMS for any translations of the final report or its findings into Spanish. We would like to thank Kathryn Klaas from the Inter-American Dialogue for serving as the project lead for the USAID/Honduras TMS Survey, Manuel Orozco from the Inter-American Dialogue for his valuable feedback and technical direction on the report, and Dilip Ratha and Sonia Plaza from the World Bank for providing their insightful comments and suggestions regarding potential recommendations for improving the flow of remittances along the U.S. - Honduras corridor. Also, a special thanks to Rebecca Rouse and Ben Talbot, whose guidance and recommendations were indispensable. Finally, we would like to thank USAID Economist C. Omar Kebbeh for technical feedback on the report.

The authors of this report take full responsibility for all errors and omissions and the authors’ views expressed in this report are not necessarily those of USAID or the United States Government.
EXECUTIVE SUMMARY

Over the past decade, migration from Honduras has risen dramatically. Driven by poor economic conditions, extraordinarily high rates of violent crime, environmental crises, and natural disasters, this migration has fueled a surge in remittances. With remittances comprising 23 percent of GDP in 2020, Honduras is ranked among the top remittance-receiving countries in the world. The pressures to migrate continue to build. In a 2019 survey, one-third of Hondurans overall and 46 percent of Hondurans between the ages of 18 to 29 stated an intention to migrate.1 As such, remittances are likely to play an important role in the Honduran economy for many years to come.

Given remittances’ enormous and growing role in the Honduran economy, this report aims to answer the following questions: first, what is the market landscape for sending and receiving remittances? Second, what are the actual and potential development impacts of remittances at the macroeconomic and microeconomic levels? Finally, what policies and programs might be employed to maximize remittances’ potential benefits while minimizing their downsides? To answer these questions, we have examined a range of primary and secondary data sources, including the National Multipurpose Household Survey (EPHPM), research from the Inter-American Development Bank, data from the World Bank Remittance Prices database, and stakeholder consultations. In addition, our team collaborated with USAID/Honduras and the Transforming Market Systems (TMS) Activity with the support of the Inter-American Dialogue (IAD) and ACDI/VOCA to conduct this study.

Our findings paint a picture of a remittance ecosystem that is highly complex and rapidly evolving. Remittance senders and recipients face decision points at several crucial junctures, including:

- How to send their remittances (cash, debit/credit cards, checks), which sending agents to use (brick-and-mortar, digital);
- Which payment operators to use (money transfer operations, banks);
- How to receive the funds (cash, direct deposit, direct payments to utility bills); and
- How to spend the funds (consumption, savings, investment).

Each decision point offers opportunities to minimize costs, improve efficiency, and, potentially, increase financial inclusion, thereby maximizing remittances’ potential development impact. Usage of emerging technologies such as mobile wallets and digital payments is rapidly growing, further accelerated by the COVID-19 pandemic. However, rates of adoption are highly uneven across genders and age groups and are hindered by Honduras’ low overall levels of bankarization.2 Moreover, Honduras’ restrictive legal and regulatory framework poses significant barriers to innovation and competition.

At the macroeconomic level, we find that the impacts of remittances are mixed. On the one hand, remittances are countercyclical, serving as a source of income smoothing in the face of natural disasters and other shocks. Remittances act as a critical lifeline to vulnerable households and can help to mitigate the poverty impacts of shocks such as hurricanes or the COVID-19 pandemic. Remittances are also more resilient than other sources of external financing, such as ODA and FDI, and have remained surprisingly stable even in the face of global economic downturns, such as the COVID-19 pandemic. However, remittances can also have serious downsides. Some research has suggested that remittances may contribute to “Dutch Disease”, leading to currency appreciation and

---

2 Defined as an individual’s level of access to and use of banking resources
reduced export competitiveness. Although the extent to which this is borne out in Honduras is uncertain, it is unlikely to be severe given the particular characteristics of the monetary regime.³

At the household level, we find that remittances have similarly mixed impacts. Remittances make up a substantial portion of household income – 33.8 percent among those receiving remittances, on average, and up to 54.3 percent among households in the lowest income quintiles. The bulk of this income appears to be spent on consumption, including food and utilities, while very little (just 4.2 percent) is allocated towards savings. Consistent with existing research, we find that remittances do decrease labor force participation, particularly among women. Thus, while remittances may help to smooth household consumption and reduce poverty, they may fail to translate into longer-term growth. This suggests that households in the higher income quintiles should be encouraged to allocate a higher proportion of their remittances to savings or investments to achieve long-term growth.

Taken together, the results point to several potential recommendations for policymakers. These recommendations fall under three categories:

1. Increased financial literacy training at high volume remittance sending locations;
2. Increased financial inclusion for remittance recipients in Honduras; and
3. Improved enabling environment for digital remittances.

**Recommendation 1 - Financial literacy training at high volume remittance locations**

**Rationale:** Money Transfer Operators (MTOs) are the primary channel through which Honduran migrants send remittances because financial institutions require documentation to open an account. These channels often have non-transparent pricing, have almost no opportunity for financial education, and are very frequently predatory in their marketing practices. Increasing financial literacy among migrants will reduce information asymmetries about (1) costs and conditions of remittance services, (2) financial products that match migrant’s needs, (3) training in resource management and planning, (4) and raise awareness of unregulated or predatory remittances practices.⁴

**Opportunities:** Stakeholders, including the USG and multilateral organizations, should promote alliances and initiatives with interagency partners to promote higher rates of bankarization and formal financial inclusion among Honduran migrants. Access to formal financial services allows migrants to have additional services, savings accounts, insurance, potentially loans, that are an ancillary good. Moreover, a remittance sender is 2.2 times more likely to send a remittance using a digital channel if they have a bank account versus cash. There are multiple initiatives that could help to improve financial literacy at high volume remittance locations; examples include:

- Partnerships with agencies like the U.S. Federal Deposit Insurance Corporation (FDIC), which manages the #GetBanked campaign among Hispanic populations in Houston and Atlanta, and to other USG partners already promoting bankarization among Latin American migrants.
- The FDIC’s “Minority Depository Institutions Program,” which manages a $120 million fund for community development financial institutions (CDFIs) for banking promotion to low-income and unbanked communities. Where possible, USAID should seek opportunities to advocate for increased financial inclusion among migrants as part of realizing the Sustainable Development Goals (SDGs 1, 2, 3, 4, 10) within the United States⁵.

³ The crawling peg arrangement allows for gradual and managed depreciation while the Central Bank of Honduras (CBH) maintains flexibility in how it manages the Lempira vis a vis the US Dollar.
⁴ IFAD (September 2015), “The use of remittances and financial inclusion”
⁵ Accessed from: [https://sdgs.un.org/goals](https://sdgs.un.org/goals)
Stakeholders should use tools like the Cooperative Development Program (CDP)\(^6\) to further promote financial inclusion in regional markets, such as providing technical assistance to local credit unions on the marketing, community outreach, financial education approach, and operational and personnel training required to serve remitting migrant populations.

Crowd-in investments by digital remittance providers through innovative partnerships. For example, stakeholders could stand up a remittance facility for the Northern Triangle similar to IFAD’s “Financing Facility for Remittances,” which mobilizes finance to pilot innovative investment mechanisms, pilots new transfer modalities, and supports the use of financially inclusive delivery mechanisms.\(^7\)

**Recommendation 2 - Financial inclusion promotion for remittance recipients**

**Rationale:** Large inflows of remittances to Honduras provide an excellent opportunity for the promotion of financial inclusion among remittance recipients. Since the vast majority of remittances are cashed-out in financial institutions, these venues should serve as a platform for promoting financial literacy and for the cross-marketing of remittances with other banking services. Increasing financial inclusion in this space will (1) expand cash-out points, including agent networks, (2) create lending products for remittance recipients, and (3) develop financial literacy training for remittance recipient services and products that could increase the wealth of remittance recipient households.

**Opportunities:** Expanding remittance-based savings accounts so that recipients can cash-out their remittances using ATMs, and cash-based lending to remittance recipients so that they can use these payments to access credit. Furthermore, expanding the availability and utilization of digital financial services (DFS) for the delivery and receipt of remittances will reduce transaction costs for remitters. There are several initiatives that could help to promote this initiative, including:

- Financial institutions, particularly credit and savings cooperatives, should leverage the country’s growing agent network to expand the availability of cash-out points to reduce the time and cost of cashing out remittances. Another option is to provide remittance delivery services that reduce the time burden on women for collecting remittance payments.
- National credit and savings cooperatives should be supported to develop savings and/or lending products that foster broader economic growth, such as using remittance flows for housing loans or for lending to the agricultural sector. Products could include savings or interest rate subsidies, low or no interest revolving facilities or short tenor microloans.
- Financial literacy training should be embedded in the marketing of new products and services so that remittance recipients understand the benefits of formal financial inclusion and the role their remittances might play in building a stronger financial future for their households. This could include initiatives intended to increase savings and investment\(^8\), although this could result in reduced consumption in the short-term.
- The USG could partner with other donors and with the Government of Honduras to launch a financial sector deepening (FSD) program that fosters broad-based financial inclusion through policy reforms, the piloting of new financial approaches and instruments, and mobilizing investment for innovation.
- Resources from the U.S. Development Finance Corporation (USDFC) could be leveraged to catalyze the expansion of Digital Financial Services (DFS)\(^9\) products and services.

---

\(^6\) USAID, “Cooperative Development Program”

\(^7\) IFAD, “The financing facility for remittances”

\(^8\) Savings generally refers to foregone consumption that can be held in a bank account or cash, while investment refers to any increase in gross capital stock or the purchase of durable goods. This could include investments into equipment, real estate, or residences. Increased savings commonly leads to increased investment.

\(^9\) DFS includes all transactions that specifically exclude the handling of cash.
could use tools like Global Development Alliance (GDA) grants and challenge funds to stimulate innovation and growth within the DFS sector.

- The USG could use its bilateral funding, and partnerships with other donors to leverage multilateral funding, to partner with financial actors and regulators to create financial sector technology innovation hubs and incubators that cultivate transformative solutions, with a focus on digital payment innovation that improves the remittance ecosystem.

**Recommendation 3 - Create an enabling environment for digital remittance and reduce the barriers to use among remittance senders and receivers**

**Rationale:** The lack of regulation to support a digital payments ecosystem is a barrier for remittance flows. Entrepreneurs and institutions do not have regulatory clarity that would allow improvements of digital payments systems. This includes the systems that manage digital payments and enable access to bank accounts, mobile wallets, and personal identification.

**Opportunities:** The USAID/Honduras TMS project has worked with the Fintech Association to dialogue with the Central Bank of Honduras (BCH) and the National Banking and Securities Commission (CNBS) to review new Electronic Service Payment regulations for both financial and non-financial providers. Stakeholders should support the following:

- Partnerships with the Government of Honduras to improve interoperability between banks and digital financial services (DFS) providers. The lack of interoperability between banks and mobile money providers is the biggest issue currently impinging the expanded use of mobile transfers.
- Similarly, the USG should engage the Government of Honduras - particularly with the Financial Innovation Board within the Central Bank - to reduce regulatory barriers to the growth of retail payment infrastructure within the country to increase the venues where digital remittance recipients can spend digital money.
- The USG should advocate for reducing the capital requirements of new FinTECH companies entering the market from 30 million Lempira (approximately $1.2 million) to much less. The current regulations favor further consolidation of financial institutions at the expense of allowing new and innovative, but less capitalized, players from entering the market.
- The USG should advocate that the daily mobile transaction limits should be increased from $1,250/day to much higher to cater to remittance clients and business-to-business (B2B) transactions using remittance money.
- The USG and other stakeholders should work with the Government of Honduras to apply a Risk Based Approach (RBA) to certain financial actors operating in the remittance space. Small, individual remittance payments have a very low probability of raising concerns related to KYC/AML, which means that implementing an RBA to remittance service providers would allow further innovation in the space.

---

Chapter 1 - Migration and Remittances Context

Key Migration Trends

The United States (U.S.) is the primary destination for Honduran migrants due to historical, economic, political, and cultural ties, as well as geographic proximity. This section describes the key migration destinations for Honduran migrants and further characterizes migrant demographics, motivations for migrating, and the financial profile of the Honduran diaspora in the U.S. This background will provide a better understanding of the motivations driving remittance flows, as well as migrants’ access to financial systems and preferences for remittance payment instruments.

In 2020, 78 percent of reported Honduran migrants lived in the U.S. (Figure 1-1). Other common migration destinations include Spain (10 percent), Central America (9 percent), and other countries (2 percent). Although the U.S. is the main destination for Honduran migrants, its share has declined in recent years while the proportion of migrants going to Spain has increased. Since 1990, the share of Hondurans migrating to Central America and other destinations has also declined.

![Figure 1-1: Migration from Honduras by Destination](source: United Nations Population Division, International Migrant Stock (1990 - 2020))

The U.S. Honduran-born population, including both citizens and non-citizens, is dispersed across urban and rural areas throughout the country. According to an analysis of the 2019 American Community Survey (ACS), while many Hondurans live in urban areas, such as the metropolitan areas of Los Angeles and Miami, a large proportion are also located in various rural settings throughout the country (Figure 1-2). Texas, Florida, and California are the most popular states for Honduran migrants. This geographic diversity suggests that the Honduran migrant population in the U.S. has diverse financial profiles, varying access to financial products and services, and potentially different preferences for sending remittances.

Like immigrants to other countries, the share of immigrant populations who have access to bank accounts varies by country of origin. For example, a 2013 survey of New York City immigrants found

---

12 The American Community Survey (ACS) records the U.S. citizenship status of foreign-born respondents by asking respondents if they are citizens of the United States. It does not record the legal status of the respondents.
that 43 percent of Mexican immigrants had bank accounts compared to 65 percent of Ecuadorians and 95 percent of Chinese.\textsuperscript{13} Similarly, a 2019 survey of immigrant populations in the U.S. found that 83 percent of Colombians and 85 percent of Dominicans had a checking or savings account, compared to only 53 of Mexicans and 49 percent of Salvadorans.\textsuperscript{14} Access to banking is also influenced by the documentation status of an immigrant, as undocumented individuals may be wary of opening accounts or they may not have the proper identification to do so.

\textit{Figure 1-2: Honduran-Born Population in the U.S. by County (2019)}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{honduran_born_population_us_county_2019.png}
\caption{Honduran-Born Population in the U.S. by County (2019)}
\end{figure}

\textit{Source: Estimates derived using the 2019 ACS}

A 2020 survey showed that only 43.9 percent of the Honduran-born population living in the U.S. reported owning a bank account (Figure 1-3).\textsuperscript{15} This is 20 percentage points lower than any other country represented in this survey and over 35 percentage points lower than Guatemala or El Salvador. This same survey showed that the Honduran-born population was more likely to own a checking account (42 percent) but less likely to own a savings account (20 percent). These findings suggest that Honduran-born remittance senders are less likely to send remittances using a bank account or a digital payment.

\begin{flushleft}
\textsuperscript{13} New York City Department of Consumer Affairs (2013), “Immigrant Financial Services Study”, New York City Office of Financial Empowerment
\textsuperscript{14} Inter-American Development Bank (2019), “Remittances from the U.S. to Latin America and the Caribbean: Following the Money Journey,”
\end{flushleft}
Assessing the wage profile of the Honduran-born population currently residing in the U.S. also provides some helpful contextual information when considering the economic rationale for migrating. Figure 1-4, histograms overlaid with a kernel density estimate\(^{16}\) show the distribution and annual income disparity between U.S. and non-U.S. citizens who were born in Honduras. Data from the 2019 American Community Survey shows that Honduran-born U.S. citizens have a median annual wage income of $26,912 ($12.90 per hour), compared to $16,986 ($8.14 per hour) for Honduran-born non-citizens.\(^{17}\) This means citizens earn an annual wage that is nearly 1.6 times greater than non-citizens. In a subsequent section, we will compare these annual wage values to wage data from Honduras’ Permanent Multipurpose Household Survey to estimate the evident wage incentives for migrating to the U.S. given limited high-paying employment opportunities in Honduras.

\(^{16}\) Here, the kernel density estimate represents the probability distribution of wage income.

\(^{17}\) Hourly wages are derived using an assumption of 2,087 work hours per year (OPM). This equates to $12.90 per hour ($26,912 / 2,087) for citizens and $8.14 ($16,986 / 2,087) for non-citizens.
An analysis of the United Nations (UN) Global Migration Database shows how the age and gender profile of Honduran migrants has changed over the past 30 years.\(^{18}\) Table 1-1 shows the share of adolescents under 15 and those over 65 has increased since 1990. Although individuals between the ages of 15 and 65 make up the majority of migrants, their share has declined from a high of 79 percent in 2010 to 68 percent in 2019. The gender composition of migrants has remained roughly stable between 1990 and 2019, with males making up a slightly higher proportion of the total migrant stock. In terms of the educational attainment of the Honduran-born population aged 25 years and older, in 2017 approximately 76 percent had a high school diploma, 15 percent had a two-year degree or some college education, and 9 percent had at least a bachelor’s degree.\(^{19}\)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1990</th>
<th>2019</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 15</td>
<td>20%</td>
<td>24%</td>
<td>+4%</td>
</tr>
<tr>
<td>15 - 65</td>
<td>77%</td>
<td>68%</td>
<td>-9%</td>
</tr>
<tr>
<td>Over 65</td>
<td>4%</td>
<td>8%</td>
<td>+4%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>1990</th>
<th>2019</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>49%</td>
<td>48%</td>
<td>-1%</td>
</tr>
<tr>
<td>Male</td>
<td>51%</td>
<td>52%</td>
<td>+1%</td>
</tr>
</tbody>
</table>

Source: UN Global Migration Database (2019)

Based on this information, the demographic profile of Honduran migrants living in the U.S. can be described as young and slightly educated with slightly more men than women. This bears out in other related studies. For instance, the probability of having intentions to migrate for a youth is higher than those over 55.\(^{20}\) The evidence shows that youth (aged 18-30) have a 1.2 times higher likelihood of intending to migrate compared to other adults, particularly when compared with adults over the age of 55.\(^{21}\)

At the same time, it should be noted that the migrant profile for Hondurans residing in the U.S. is different from those who are apprehended by U.S. border agents in terms of gender composition. From January 2013 to June 2020, for example, migrants encountered at the border were 40 percent female and 60 percent male, with an average age of 20 and 22 years respectively.\(^{22}\)

**Drivers of Migration**

The drivers of migration are multiple, complex and interconnected. Negative environmental issues (such as increased duration or frequency of droughts) impact economic drivers in areas where livelihoods depend on agriculture. The same is true for other drivers, such as violence and political


\(^{21}\) According to the results of two surveys (LAPOP, 2018 and FHI 360, 2019) conducted by USAID/Honduras mission Monitoring and Evaluation Support for Collaborative Learning and Adapting (MESCLA) Activity.

\(^{22}\) Data derived from U.S. Customs and Border Protection (CBP) estimates reported under “Southwest Border Land Encounters”
unrest. Therefore, any interpretation of the causes why Hondurans migrate is generally more nuanced than simply assessing the results of an individual survey. Nevertheless, reviewing responses of why Hondurans migrate will shed some light on variations in remittance flows and provide insights as to the role remittances play for Honduran households.

A good place to start is to review findings from the latest USAID/Honduras MESCLA National Victimization Security and Migration Survey (NVSM)\(^{23}\), which, among other questions, asks Hondurans what their motivations are for migrating. In 2021, respondents with an intention to migrate cited economic reasons as the primary driver of migration, followed by violence, environmental issues, and politics, among others (Figure 1-5). The following subsections will provide an in-depth look at many of these drivers.

**Figure 1-5: Reported Reasons Why Hondurans Migrate (2021)**

**Question: "Which of the following factors are important to your decision to migrate?"

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>94%</td>
</tr>
<tr>
<td>Violence</td>
<td>52%</td>
</tr>
<tr>
<td>Political</td>
<td>46%</td>
</tr>
<tr>
<td>Environmental</td>
<td>46%</td>
</tr>
<tr>
<td>Family</td>
<td>31%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Source:** Estimates based on USAID/Honduras MESCLA NVSM (2021). Respondents could select multiple responses.

**Economic Drivers**

Across the Central American region, most migrants cite economic reasons as a key motivator for emigration. Among Honduran migrants specifically, economic reasons are overwhelmingly reported as the primary reason for migrating according to data collected from migrants returned to Honduras by government authorities, such as CENISS (El Centro Nacional de Información del Sector Social).

Honduran migrants seeking service from the REDODEM (Red de Organizaciones Defensoras de Migrantes) network in Mexico in 2019, reported economic motivations for migration (including unemployment, poorly paid employment) in 69 percent of cases.\(^{24}\) Furthermore, respondents to a 2021 survey on intentions to leave Honduras cited economic factors in 94 percent of cases.\(^{25}\)

---

\(^{23}\) USAID/Honduras MESCLA = Monitoring & Evaluation Support for Collaborative Learning and Adapting.


\(^{25}\) Estimates based on USAID MESCLA NVSM (2021)
should also be noted that among those who are willing to migrate without legal papers, food insecurity is one of the main motivating factors. 26

There is a strong economic motivation to migrate to the U.S. because the estimated per capita income of Honduran migrants living in the U.S. is anywhere from 3 to 9 times greater than what they would receive in Honduras.27 A comparison between the U.S. minimum wage28 and the average wage across a select number of Honduran jobs provides an illustrative example of how high these wage differentials might be. According to the National Institute of Statistics of Honduras, in 2019 Hondurans earned an average monthly salary between US$90 and US$698, depending on the profession.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Honduran Monthly Salary (USD)</th>
<th>Multiplier</th>
<th>US Monthly Salary at Minimum Wage (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors and managers</td>
<td>$698</td>
<td>1.66</td>
<td>$1,160</td>
</tr>
<tr>
<td>Scientific and intellectual professionals</td>
<td>$658</td>
<td>1.76</td>
<td>$1,160</td>
</tr>
<tr>
<td>Administrative support personnel</td>
<td>$448</td>
<td>2.59</td>
<td>$1,160</td>
</tr>
<tr>
<td>Mid-level technical professionals</td>
<td>$439</td>
<td>2.64</td>
<td>$1,160</td>
</tr>
<tr>
<td>Operators of machines and facilities operator</td>
<td>$336</td>
<td>3.45</td>
<td>$1,160</td>
</tr>
<tr>
<td>Service and retail workers</td>
<td>$248</td>
<td>4.68</td>
<td>$1,160</td>
</tr>
<tr>
<td>Officers, operators and craftsmen</td>
<td>$231</td>
<td>5.02</td>
<td>$1,160</td>
</tr>
<tr>
<td>Agriculture and associated workers</td>
<td>$90</td>
<td>12.89</td>
<td>$1,160</td>
</tr>
</tbody>
</table>

**Source:** UN Global Migration Database (2019)

The weighted average monthly salary among 8,673 survey participants is $258.29 Assuming a U.S. minimum wage of $7.25 per hour and a 40-hour work week, a Honduran worker, on average, has the potential to earn at least 4.5 times more in the U.S. Among these 8,673 survey respondents, 76 percent (or 6,561) of the survey participants are employed as operators of machines and facilities, service and retail workers, officers, operators, and craftsmen, and agriculture and associated workers. Taking the weighted average of this sub-group, we see they earn a monthly salary of $140. This means they could earn at least 8.3 times more in wage earnings if they were working at the U.S. minimum wage.30

Of course, the cost of living in the U.S. is much higher than that of Honduras, and many of the average wages reported in the table above still fall below the U.S. poverty line. Price level index data from the World Bank published in 2017 found that the cost of living in the U.S. was 2.27 times higher.

---

28 Recall, in Figure 1-4, that the median annual wage of citizens is median annual wage income of $26,912 ($12.90 per hour), compared to $16,986 ($8.14 per hour) for Honduran-born non-citizens. Therefore, a comparison to the U.S. minimum wage can be considered a valid conservative estimate.
29 We use a weighted average for the wages, since a simple average would be biased toward the higher wages: only 7 percent of the survey participants earn a monthly salary that is higher than $500 per month in the 2019 survey.
30 The calculations used to make these comparisons include $7.25 per hour x 160 hours, which equates to $1,160 in gross monthly income.
than Honduras.\footnote{World Bank (2017), “Purchasing power parity and the size of world economies”} As such, while the wage differential for workers in lower-skilled jobs - including agricultural workers, craftsmen, and service workers - remains substantial, the wage differential for higher-skilled professionals disappears once cost of living is taken into account.

Honduran jobs are also frequently low quality, and underemployment is a rising challenge. As of 2020, 71 percent of Hondurans reported that they were underemployed. Most of this underemployment is “invisible”, meaning that workers report making less than the minimum wage.\footnote{National Institute of Statistics of Honduras (2021), 2019 National Multi-Purpose Household Survey} As a result, the large income differences between Honduras and migrant destinations are oftentimes cited as a direct reason to migrate.

At the same time, the people who have the greatest possibilities and means to migrate are those who come from the middle and upper strata of the income distribution. In 2017, this group accounted for over 50 percent of emigrant households.\footnote{Organización Internacional para las Migraciones (2020), “Perfil Migratorio de Honduras 2019”} This is most likely due to the high upfront cost it takes to migrate. Fees for legal migration to the U.S. (including filing fees, the cost of obtaining an attorney, medical and vaccination costs, and petition fees) can cost between $4,000 to $11,000 per person. Irregular migration is similarly costly, with some data suggesting that smugglers charge between $6,000 to $10,000 to transport individuals across the border.\footnote{Myra Wealth, “Financial Planning for the Costs of Immigrating to the U.S.”} \footnote{Jay Root (March 7 2019), “Migration to the U.S. Border Generating Billions for Smugglers”, The Texas Tribune}

**COMMUNITY VIOLENCE**

While economic motivations are the primary driver of migration, other drivers vary depending on the individual and demographic characteristics of migrants. Some research, for example, has found a strong correlation between homicide rates and the number of unaccompanied minors apprehended at the Southwest Border.\footnote{Michael Clemens (2017), “Violence, Development, and Migration Waves: Evidence from Central American Child Migrant Apprehensions”, Center for Global Development Working Paper No. 459} There are also more Hondurans asking for asylum at the southern U.S. border than for any other nationality.\footnote{John Burnett (May 10 2021), “Why people are fleeing Honduras for the US: ‘All that’s left here is misery’”. National Public Radio} In addition, the number of Honduran migrants seeking Temporary Protected Status (TPS), which allows eligible people to live and work in the U.S. while conditions in their home countries make it unsafe for them to return, increased at an annual rate of five percent per year from 2006 to 2016.\footnote{Michel, V. and Walker, I. (2020), “Honduras Jobs Diagnostic”, World Bank Group Job Series No. 17}

Both violent and nonviolent crime is widespread in Honduras. As of 2018, the Honduras murder rate was 38 intentional homicides per 100,000 people according to the UN Office on Drugs and Crime’s International Homicide Statistics database. Although this is well below Honduras’ peak in 2011 of 84 intentional homicides per 100,000, it remains well above comparator and regional averages. Guatemala reports 22.8 intentional homicides per 100,000 people, while the overall average for South America is 22 homicides per 100,000 people.\footnote{World Bank World Development Indicators} Beyond homicide, other forms of crime including robbery, burglary, assault, blackmail, fraud, extortion, and violent threats, are also widespread. As of 2019, approximately 22 percent of Honduran migrants had been a victim of a crime or knew of someone who had been.\footnote{Creative Associates International (2019), “Saliendo Adelante: Why migrants risk it all”}
Municipalities with higher homicide rates have higher irregular migration flows. Additional analysis shows that overall cumulative homicide rates, and the annual change in the homicide rate explain 11 percent of the variance in municipal migration from 2013-2019. In a regression using data from the USAID/Honduras MESCLA NVSM Survey 2021, people who felt unsafe in their community were 64 percent more likely to report an intention to migrate.

**FAMILY MIGRATION AND REUNIFICATION**

The relationship between migration and family dynamics can be viewed through two perspectives. First, migrants frequently travel in family units to the U.S. Second, family reunification can serve as an important driver of migration, particularly for vulnerable groups such as women, unaccompanied children, and undocu...
and 2020, monthly apprehensions of unaccompanied children from Honduras more than doubled from 2,506 in March 2019 to 5,947 in March 2021. Since 2012, there have been periodic spikes in the number of unaccompanied children arriving at the U.S. border from all migrant nationalities (including in 2014, 2016, 2019 and significantly 2021 - see Figure 1-7). Due to the effect of the COVID-19 pandemic, those numbers dropped significantly to a low of 712 in April 2020 then began to increase steadily reaching 4,853 in December 2020. Importantly, many of these unaccompanied children embark on their journeys to reunite with a family member who migrated before them. A recent Inter-American Development Bank (IADB) survey of Central American migrants living in the U.S. found that 50 percent of migrants who entered the country as minors did so to be reunited with a family member.

Existing research has found that family networks may be particularly important drivers of migration for poorer and less skilled migrants, as well as undocumented migrants. Moreover, municipalities with larger shares of households with family members living abroad report higher subsequent apprehension rates at the U.S. border, suggesting that family networks serve as an important driver of an individual’s future intent to migrate. This relationship between family networks abroad and intent to migrate may be especially salient for women. A recent USAID study found that women who receive remittances from family members are nearly twice as likely to report intentions to migrate than their peers who do not receive remittances. Interestingly, this relationship is not statistically significant for men, suggesting that the drivers of migration may vary between demographic groups.

A family network in the U.S. can also provide an important source of financing for migration, as well as a built-in support network for the migrant upon arrival. According to an Inter-American

---

47 Data derived from U.S. Customs and Border Protection (CBP) estimates reported under “Southwest Border Land Encounters”
48 Ibid.
51 USAID/Honduras (September 2021), “Monitoring and Evaluation Report for Collaborative Learning and Adapting (MESCLA) Activity”, page 25
52 USAID/Honduras (October 15 2020), “Relationship between Intentions to Migrate, Corruption, Victimization and Dissatisfaction with Democracy”
Development Bank (IDB) survey of Honduran, Guatemalan and Salvadoran migrants living in U.S. metropolitan areas, 45 percent of interviewees report that a family member paid for the cost of their trip, 40 percent sought financing (also including family-based lending), and only 11 percent used their own savings to finance the trip.53

The same IDB study found that overall, family reunification was cited as the second most important reason for migrating after economic drivers. However, family reunification was generally found to be a less important driver of migration for Honduran migrants than migrants from other Central American countries. Overall, close to one-third (31 percent) of Honduran respondents reported migrating to the U.S. to reunite with their families, compared to 45 percent of Salvadoran respondents and 44 percent of Guatemalan respondents. Among Honduran migrants who reported migrating to the U.S. to reunite with family, 41 percent reported reuniting with their parents, 27 percent reported reuniting with another family member, 22 percent reported reuniting with a sibling, and 7 percent reported reuniting with their partner/spouse as shown in Figure 1-8 below.54

![Figure 1-8: Northern Triangle Family Reunification Patterns](image)

**Source:** Abuelafia et al (2019)

**ENVIRONMENTAL FACTORS AND POLITICAL DRIVERS**

As one of the poorest countries in the Western Hemisphere with a rural population still largely dependent on agriculture, Honduras is extremely vulnerable to the environmental and economic impacts of climate change. In recent years, these climate-related factors have become increasingly important drivers of migration from the country, with an estimated 46 percent of Hondurans citing environmental factors (such as droughts, storms, and hurricanes) as a reason for migrating.55

In recent years, Honduras has experienced several severe natural disasters, including Hurricane Mitch in 1998, a series of droughts between 2016 and 2020, and Hurricanes Eta and Iota in 2020. In addition to significant loss of life, these disasters have had significant impacts on livelihoods and rates of violence in affected communities. For example, severe droughts in 2019 caused over

---


54 Ibid

55 USAID/Honduras MESCLA National Victimization Security and Migration Survey (NVSM).
325,000 households to lose an estimated 80 percent of their total crop production, plunging many households into severe food insecurity.56

Research has found that these natural disasters have a long-term and cumulative impact on the U.S. border apprehension rate.57 For example, in the average Honduran municipality, a ten-percentage point increase in municipal drought, sustained over five years, results in an estimated 90 additional apprehensions in the current year.58 Other research has similarly found that decreases in rainfall levels are associated with increased border apprehensions. Importantly, these rainfall shocks are found to have a larger impact on migration flows in departments where crime and violence is more prevalent, highlighting the deeply intertwined nature of climate change, economic stressors, and violence in driving migration.59

Migration from the Northern Triangle also stems from political conflicts in the 1980s which have contributed to continually high levels of instability, corruption, and public mismanagement. A 2019 report by the Latin America Public Opinion Project (LAPOP) found that one-quarter of Hondurans have been victimized by corruption, including being forced to pay a bribe to a police officer, school official, or other public administration official. Overall, the same survey found that 42 percent of Hondurans believe that all Honduran government officials are corrupt, and 48 percent believe that Honduras is not a legitimate democracy.60 These grievances have fueled mass protests in recent years and an increasingly polarized political environment, further contributing to migration.61

Political analysis within Honduras shows that citizen engagement is a sign of positive rootedness to remain in the country. A person who is not pleased with democracy is 1.4 times more likely to intend to migrate from Honduras than someone who is satisfied with the state of democracy, holding constant base characteristics such as sex, age, income, and education.62

Causes of migration are generally intertwined and do not act in isolation. Political instability may lead to violence, which in turn shapes emigration through direct threats to physical safety and extortion. Safety concerns might be mixed with other issues, such as food insecurity caused by environmental and economic factors that lead to active migrations trends. As such, issues like environmental degradation and drought, violence, and political instability have a compounding effect on the motivation of Honduran migrants to leave Honduras.

INTENTION TO MIGRATE

In the 2021 USAID/Honduras TMS survey, respondents were asked whether they or someone in their household are thinking of living in another country in the next 12 months. Of a total of 1,028 survey participants, 507 (49 percent) said they have no plans, 401 (39 percent) said they were planning to migrate; and 120 (12 percent) either provided no response or did not know. To help identify some key attributes that could influence whether someone plans to migrate, we conducted a logistic regression with the intention to migrate as the binary dependent variable and various independent

56 Moloney, A., (September 2019), “In Honduras, years of drought pressure farmers to leave land”, Reuters
57 As measured by the FAO’s Agricultural Stress Index or ASI.
58 Based on municipality-year panel regression with fixed effects for municipality and year, 2013-first half of 2019. Drought level is based on the FAO’s ASI which shows the annual average percentage of arable land in each municipality that experienced agricultural stress during the maize growing season. Source: USAID Honduras, “Climate Change, Food Security, and Migration”, Drought and Migration, Page 3.
60 Montalvo, D., “Resultados preliminares 2019: Barometro de las Americas en Honduras”, Vanderbilt University
61 Gottesdiener, L. and Jorgic, D., (May 19 2021), “Partisan politics in Honduras fuels exodus, migrants say”, Reuters,
62 USAID Monitoring and Evaluation Support for Collaborative Learning and Adapting (MESCLA) 2020.
variables associated with demographics, employment, household characteristics, and financial metrics.

\[ y_i = \begin{cases} 1 & \text{if someone says they would like to migrate} \\ 0 & \text{if someone says they would not like to migrate} \end{cases} \]

The findings, which are detailed in Appendix 2, demonstrate how several variables have a statistically significant impact on someone’s intention to migrate. For example, someone is less likely to migrate if they are older, and actively contribute to savings and investment accounts. At the same time, someone is more likely to migrate if they have more household members; have higher remittance payment amounts relative to the previous year; have lived in a foreign country; have been negatively impacted by COVID-19; or are unemployed. Interestingly, both personal and household income did not have a statistically significant relationship with the dependent variable.63

Based on these findings, USAID may decrease the likelihood of someone migrating if they are able to increase the savings and investment tendencies of program beneficiaries and if they target beneficiaries based on some of these demographic and unemployment features.

CHARACTERISTICS OF A REMITTANCE RECEIVING HOUSEHOLD

We also assessed survey data from Honduras’ Multidimensional Household Survey so that we could have a better understanding of what features increase the likelihood of a household receiving remittances. This provides a different perspective (an ex-post perspective) on what factors may be contributing to someone’s likelihood to migrate. For this analysis, we used survey data from 2017 to 2019 and conducted a logistic regression with being a remittance recipient household as the binary dependent variable.

\[ y_i = \begin{cases} 1 & \text{if someone says they have received a remittance payment} \\ 0 & \text{if someone says they have not received a remittance payment} \end{cases} \]

Like the USAID/Honduras TMS survey, someone was more likely to receive a remittance if they had more members in their household. A household was also more likely to receive a remittance if they had lower levels of poverty, and the head of household was older, female, and received a salary. At the same time, a household was less likely to receive a remittance if the head of household worked fewer hours. These findings can potentially be used to target USAID beneficiaries, assuming that these conditions are precursors for someone who could potentially migrate. More details about the regression results are provided in Appendix 3.

ROLE OF REMITTANCES - AN OVERVIEW

Remittances serve as short-term macroeconomic stabilizers during economic downturns, alleviate poverty, and can have positive impacts on income inequality.64 Remittances provide external financial flows and stability during business downturns.65 Remittances also provide valuable

63 A survey respondent’s personal or household income was measured in a series of ranges. For example, someone was asked if they made between 10,000 and 20,000 Lempira. More granular data, such as the exact income level of a household, may have produced different results.


household financial support during short-term economic shocks. This support is particularly important for the Latin American and Caribbean region, where remittances increase by an average of 0.6 percentage points of a country’s GDP after a natural disaster occurs.\textsuperscript{66} The relationship between remittances and poverty reduction is widely recognized, as remittances support higher and smoother levels of consumption than would be possible without them.\textsuperscript{67} In certain Central American countries, including the Dominican Republic, Guatemala, El Salvador and Honduras, remittances have also been shown to reduce income inequality by 5 to 6 percentage points.\textsuperscript{68} At the same time, many researchers have found small and ambiguous effects of both emigration and remittances on real per capita growth. Perhaps more importantly, the net effect of these dual factors has been somewhat negative in the long term as they do not create durable growth. This may be due, in part, to the fact that increased remittances, which reflect increased emigration, results in fewer high-skilled workers, thereby reducing labor supply and innovation for the domestic workforce, which inhibits economic growth. Remittances may also result in remittance recipients substituting remittances income for labor income. This could result in fewer Hondurans joining the domestic labor force, as their reservation wage is higher than any available local wage or choosing to work fewer hours. Remittances are also primarily directed towards consumption of nontradable goods and do not lead to substantial increases in domestic savings and investment. Many economists argue that this negatively impacts the rate of capital accumulation.\textsuperscript{69} There is also evidence that remittances can increase the consumption of nontradable goods, raise their prices, appreciate the real exchange rate, and decrease exports, thus damaging the receiving country’s competitiveness in world markets.\textsuperscript{70}

**RECENT TRENDS**

Remittances to Honduras have increased to unprecedented levels in recent years (Figure 1-9). Since 2000, remittances have increased nearly 13-fold, from US$440 million in 2000 to a projected $5.5 billion in 2020. The annual growth of remittances differs greatly when comparing the period before and after the 2008 global financial crisis. Between 2001 and 2008, remittances increased at an annual average growth rate of 27 percent. This growth slowed markedly in the years following the global financial crisis, declining by 12 percentage points in 2009 and then averaging an annual growth rate of 8 percent between 2010 and 2020. While there were concerns about the sustainability of remittances during the COVID-19 pandemic, remittance inflows increased by 4 percent, from US$5.39 billion in 2019 (21 percent of GDP) to $5.57 billion in 2020 (23 percent of GDP).


\textsuperscript{68} Bersch et al (2021), “Fintech Potential for Remittance Transfers: A Central America Perspective”

\textsuperscript{69} Beaton et al (2017), “Migration and Remittances in Latin America and the Caribbean: Engines of Growth and Macroeconomic Stabilizers?”

\textsuperscript{70} Catalina Amuedo-Dorantes (November 2014), “The good and the bad in remittance flows”, IZA World of Labor,
According to the Central Bank of Honduras (BCH), remittances as a percent of GDP has increased from 18 percent in 2016 to 23 percent in 2020. This makes Honduras one of the top-10 remittance-receiving countries in the world. The chart on the left in 1-10 shows that Honduras’ remittances as a percent of GDP in 2020 is slightly lower than El Salvador (24 percent), yet at least 8 percentage points higher than the remaining comparator countries of Nicaragua (15 percent), Guatemala (15 percent), Dominican Republic, and Paraguay (2 percent). Except for Paraguay, remittances as a share of GDP have increased for all comparator countries during the pandemic. The chart on the right in figure 1-10 shows remittances per capita. In 2020, Honduras had US$ 465 remittances per capita, a figure that is lower than El Salvador ($718), the Dominican Republic ($530), and Guatemala ($465), yet higher than Nicaragua ($201) and Paraguay ($97).
Table: 1-3 provides additional summary statistics - remittance ratios - for remittances and financial flows to Honduras and comparator countries. These figures suggest that while remittances account for a large share of Honduras’ GDP, the ratios do not differ greatly from the benchmark countries used in this study. Between 2016 and 2020, Honduras’ remittances to export ratio was 51 percent, while the remittances to foreign direct investment (FDI) ratio was 393 percent. These figures are higher than the ratios for Paraguay, Nicaragua, and the Dominican Republic, yet lower than El Salvador and Guatemala. The remittances to official development assistance (ODA) ratio is greater than 1400 percent for El Salvador, Guatemala, and Dominican Republic, while this ratio is 898 percent and 617 percent for Honduras and Paraguay, respectively.

Table 1-3: Summary Statistics of Remittances to Honduras and Comparator Countries

<table>
<thead>
<tr>
<th>Table 1-3: Remittance Ratios</th>
<th>HND</th>
<th>SLV</th>
<th>NIC</th>
<th>GTM</th>
<th>DOM</th>
<th>PRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratios</td>
<td></td>
<td></td>
<td></td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Remittances / Exports of Goods and Services*</td>
<td>51%</td>
<td>74%</td>
<td>28%</td>
<td>72%</td>
<td>38%</td>
<td>5%</td>
</tr>
<tr>
<td>Remittances / FDI</td>
<td>393%</td>
<td>985%</td>
<td>180%</td>
<td>837%</td>
<td>227%</td>
<td>132%</td>
</tr>
<tr>
<td>Remittances / ODA</td>
<td>898%</td>
<td>3115%</td>
<td>332%</td>
<td>2341%</td>
<td>4675%</td>
<td>617%</td>
</tr>
<tr>
<td>Difference with Honduras</td>
<td></td>
<td></td>
<td></td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Remittances / Exports of Goods and Services*</td>
<td>-</td>
<td>23%</td>
<td>-23%</td>
<td>21%</td>
<td>-13%</td>
<td>-46%</td>
</tr>
<tr>
<td>Remittances / FDI</td>
<td>-</td>
<td>592%</td>
<td>-213%</td>
<td>444%</td>
<td>-166%</td>
<td>-261%</td>
</tr>
<tr>
<td>Remittances / ODA</td>
<td>-</td>
<td>2217%</td>
<td>-566%</td>
<td>1443%</td>
<td>3777%</td>
<td>-281%</td>
</tr>
</tbody>
</table>

Note: The remittances / Exports ratio represents data from 2016 to 2020. All other figures represent the time period from 2015 to 2019. Blue cells represent ratios higher than Honduras, while gray represents ratios that are lower. Source: World Bank, World Development Indicators.

Another measurement of remittances’ role in the Honduran economy is to assess the share of remittances in relation to total household income. Figure 1-11 provides a visualization of the distribution of remittance-to-income ratio from 2018 to 2019 (among only those households that receive remittances). The distribution is skewed to the right, meaning while many households receive remittance payments that make up 40 percent or less of their monthly household income, there are a significant number of people who have remittance-to-income ratios that are greater than 50 percent. From 2018 to 2019, the average remittance-to-income ratio ranged from 32 percent to 37 percent, while the median value ranged from 21 percent to 27 percent.

71 The following abbreviations denote comparator countries. HND: Honduras, SLV: El Salvador, NIC: Nicaragua, GTM: Guatemala, DOM: Dominican Republic, and PRY: Paraguay.
A final consideration is the actual dollar amount that is reportedly received by remittance recipients. In the Multidimensional Household Survey, the average amount of someone’s last remittance payment was $153 in 2018 and $155 in 2019. These values are significantly lower than the average remittance amount reported in the 2021 USAID/Honduras TMS survey, which was $327. However, the median value is more representative of central tendency given the significantly high individual values reported in all the surveys. In this respect, median remittance payment in the Household Survey was $89 in 2018 and $96 in 2019, compared to $185 in the USAID-TMS/IAD survey (Figure 1-12). The different sample populations used for each of the surveys may be one reason why there are significant differences between the two surveys. Specifically, the Household survey is a nationally representative survey while the USAID-TMS/IAD survey was conducted at various locations, including shops and banks.

Source: Author’s calculations using data from the Honduras Multidimensional Household Survey
Ensuring the steady flow of remittances requires concerted efforts from governments, providers, and other stakeholders. It is important for remittance service providers and authorities to collaborate efforts to mitigate the effects of the crisis and encourage the adoption of digital payments, greater use of regulated channels, and wider availability of cost-efficient services.

Although remittance inflows initially declined at the start of the COVID-19 pandemic, there was a strong rebound in the later parts of 2020 and the first two quarters of 2021. In 2020 Q2, remittance inflows declined by 10 percent relative to the same quarter in 2019. From this point forward, however, the growth in remittances steadily increased. This includes positive projected growth in remittances flows from 2020 Q3 to 2021 Q2 and a projected increase in remittance inflows of 52 percent in 2021 Q2 relative to the same quarter in 2020 (Figure 1-13).

At the start of the pandemic, with imposition of the lockdowns and loss of jobs, the global flow of remittances slowed down. However, throughout the year, several remittance receiving countries have started reporting larger than usual remittance inflows. For example, a Washington Post article noted an improvement in remittances to Mexico, El Salvador, Nicaragua, Honduras and Guatemala. The Atlantic Council estimates that remittances increased by 10 percent between 2019 - 2020 due to the fact that many migrants in the U.S. worked in essential jobs (grocery, retail, agriculture, construction, and food production) and received unemployment benefits that they sent to family members as remittances.

In addition, international money transfer operators (like Western Union and MoneyGram), after reporting declines in earnings at the end of Q1 2020, reported an increase in earnings and a comeback for the international remittances’ markets at the end of Q2, Q3 and anticipated in Q4. Both Western Union and MoneyGram report growth in their digital business compared to traditional (walk-in) business, most likely due to adherence to new COVID-19 mitigation measures.

The declines observed initially following COVID-19 lockdowns, therefore, could be potentially due to the operational difficulties associated with the lockdowns and the temporary income loss for the migrants and are not as long-lasting as was originally feared.

---

73 Data from the Central Bank of Honduras.
77 Western Union, Form 10-K, FYE 2020.
As the situation with COVID-19 progresses, there will be further changes in the remittances market. Some of the changes experienced in the market may be short term and others may result in long-term alterations. For example, immigrants working in service industries - which have been especially hard hit by the pandemic - are projecting a decline in income and therefore remittance flows. Similarly, long term effect may be a larger number of remitters learning and potentially adopting digital payment transfer methods permanently.

**USAID/HONDURAS SURVEY RESULTS**

**DEMOGRAPHIC CHARACTERISTICS**

USAID/Honduras funded a USAID TMS survey with the support of the Inter-American Dialogue in 2021 that sought to highlight the demographic characteristics of remittance recipients in Honduras. The USAID/Honduras TMS survey found that remittance recipients tend to be older - the median remittance recipient age is thirty eight (38) - than the average age of the Honduran population, which is 24.3 years old. Roughly 22 percent of remittance respondents are “housewives”, or non-working women; 17.3 percent are in the sales and trade sector and 14 percent are the “other” category, presumably petty trades. The majority (64 percent of remittance recipients work in one job, while just under one-third (30 percent) do not have a job. For respondents that did work, approximately 40 percent were salaried, and 27 percent were self-employed.

Roughly 40 percent of respondents report a total monthly household income between 10,000 and 20,000 lempiras per month, equivalent to between $408 and $816. An additional 20 percent report a total monthly household income between 20,000 and 30,000 lempiras per month (or $816 and $1,225). Moreover, 39.7 percent of respondents noted that their total salary or income was not

---

78 For a detailed summary of the USAID/Honduras TMS survey results, see the Appendix 1.
80 CIA World Factbook. “Honduras”
enough to pay all of their expenses. An additional 27.5 percent noted that their income was not enough to pay any expenses and 19.6 percent noted that their income was not enough to cover their basic expenses.

**REMITTANCE CHARACTERISTICS**
Respondents noted that brothers (29 percent) and sons (21 percent) - cousins and friends largely account for 14.2 percent of “other” senders. Parents (13.6 percent) and partners (12.9 percent) were also notable remittance senders. Respondents noted receiving remittances for a median period of 4.79 years with 60 percent of respondents receiving remittances once (45.7 percent) to twice (14.2 percent) a year. Interestingly, 62 percent of respondents received their remittances in US dollars, compared to 36 percent receiving their remittances in Honduran Lempiras. Nearly half (49.6 percent) of respondents said they received remittance payments 12 times per year and the weighted average among all respondents was 14.3 times per year.

**BANKARIZATION**
Bankarization rates among recipients are higher than the general population - nearly 73 (25) percent of respondents reported owning a bank account - while the national bankarization rate is 45 percent. Bankarization rates are likely significantly higher among the survey population at least in part because of the sampling strategy, as a significant proportion of survey respondents were interviewed inside banks. Furthermore, 25 percent of respondents reported saving a portion of their income. When those without a bank account were asked why they did not own one, 41.4 percent stated that they did not have enough money, 24.6 percent stated that they did not need an account, and 11.3 percent stated that opening an account was too complicated. Banks appeared to be the preferred cash-out point for respondents, 66.4 percent of respondents collected their cash at banks or financial cooperatives - another 19.3 percent of respondents collected their cash at stores or at retailers and 9.7 percent had their remittance deposited.

USAID-TMS/IAD survey results also noted high cash utilization rates. Roughly 93 percent of respondents stated that they used cash to pay their bills (no indication on cash predominance). Additionally, 28 percent of respondents stated that they used their debit card to pay bills and approximately 20 percent of respondents stated using debit cards and mobile payment options, 28 percent debit and 14 percent web or cellular payment application. Only 24.5 percent of respondents stated that they used their phone for making payments or financial transactions, suggesting low overall rates of digital financial services utilization. Respondents also noted that they prefer to receive remittances in the form of cash; 93.6 percent collect their remittances in cash, 24.3 percent receive payments into bank accounts, and 1 percent receive payments in their mobile wallets. Interestingly, 3.1 percent of respondents said they received their last remittance into their mobile wallet in response to another question. Regardless, respondents clearly indicated that cash is their preferred payment method (55.3 percent) because it was easy and fast, and findings above demonstrating low debit and mobile money usage reinforce the necessity of cash in daily economic life.

---

81 IFC (2020) “Microfinance Yields Better Futures for Honduran Farmers”
Chapter 2 - Sending and Receiving Remittances

Overall, the structure of the Honduran remittance market is characterized by the predominance of cash-based transactions, dominance of a handful of Money Transfer Operators (MTOs) with extensive agent networks across the country, and a growing (but still lagging relative to global trends) market for digital remittances.

Remittance senders residing in the U.S. are predominantly paid in cash or check, largely due to the nature of jobs these migrants hold, which are often low wage, the undocumented status of many migrants (which may preclude them from receiving wages via direct deposit)\(^\text{82}\), as well as low overall levels of financial inclusion among migrant communities.

Once sent, remittances generally travel to Honduras via MTOs, rather than banks. This dominance of remittance companies over banks is driven, in large part, by declining remittance profit margins, which have caused many banks in Honduras to lose interest in the market.\(^\text{83}\) While the landscape of MTOs is increasingly competitive, just a handful of providers dominate the market. These providers have extensive agent networks within Honduras, allowing recipients to collect their money at a range of locations including banks and shops. The majority of recipients elect to collect their payments in cash, which may be due to low levels of financial inclusion and bankarization, the predominance of cash in the Honduran economy more broadly, and socio-cultural factors that lead consumers to prefer cash. Digital remittances are growing in popularity, particularly since the onset of the COVID-19 pandemic. However, the adoption of these technologies has lagged behind more “traditional”, cash-based transactions for a wide range of reasons, including low levels of financial inclusion and digital literacy, and regulations that have created significant barriers to entry for fintech companies.

The transaction fees associated with sending remittance payments in cash are around 1.4 percentage points higher than the fees of sending a remittance payment using a bank account transfer or a digital payment. This means there is a real opportunity to reduce the transaction fees that Hondurans pay when sending remittances.

Sending Remittances

From the perspective of a sender, a remittance transaction occurs over several steps (Figure 2-1). First, the migrant has a source of funds, such as money in a bank account, check cashing, or cash that they would like to send to Honduras. In the second step, the sender then identifies a sending agent to deliver these funds using cash, credit card, check, money order, or a debit instruction sent by phone, email, or via the Internet. The sending agent could be a brick-and-mortar location or a digital platform, including any online service. However, for use in most online platforms cash must be converted into an accepted payment instrument. Examples include depositing cash into a prepaid card or a bank account and cashing a check and depositing the cash into a money transfer operator account.\(^\text{84}\)

\(^{82}\) According to 2014 analysis by Pew Research, approximately 60% of Honduran migrants living in the U.S. are undocumented.


In the third step (from the perspective of the sender), the money is transferred via an acceptable payment operator, such as a money transfer operation (MTO) or online payment system. In the fourth and final step, the sending agent instructs the counterpart in the recipient country to deliver the remittance funds and the payment is delivered. This could be directed to any one of the following:

- pick-up or delivery in cash;
- directly credited to a bank account; or
- payment for services like loan payments or utility bills.

Roughly 75 percent of Central American remittance senders receive their wages by check. The remaining 15 percent receive their wages by direct deposit; while the remaining 10 percent receive their wages by cash. Among those remittance recipients who receive their wages by check and are unbanked, they typically take their check to a check cashing or payday loan center and encounter a 2 - 3 percent transaction fee to cash their check. This check cashing fee is in addition to any transaction fees or foreign exchange fees senders may incur in sending remittances. While not all remittance senders who receive their wages by check are unbanked, check cashing outlets are among the most common types of physical locations used by migrants to send remittances, comprising 43 percent of all remittances originated at a physical location.

---

85 There are also fees associated with banks that should be noted; for example, overdraft, ATM withdrawal, low account balance, or dormant account fees.


A remittance sender is

4.3 times

more likely to use

a digital channel if paid via direct deposit

Source: IADB

According to the IDB, the odds of sending a remittance via a digital channel are 4.3 times higher if the sender is paid via direct deposit relative to cash. A sender is 2.2 times more likely to send a remittance using a digital channel if they have a bank account versus cash. Finally, compared to cash, the odds of sending a remittance are 1.5 times higher if the sender is paid by check. These results demonstrate that migrant salary payment modalities impact their remittance sending preferences. The results also demonstrate one of several potential digital barriers to entry when migrants are paid in cash and cash equivalents.

89% of Central American migrants use small shops or Non-banking Financial Institutions (NBFI)s to send remittances

Source: Author estimates using IADB survey results

Although there are over 50 possible combinations of origination channels (e.g., brick-and-mortar agent, computer, mobile), payment instruments (e.g., cash), and pick-up options, there are only a handful of popular combinations used in 4 sample LAC countries in a 2019 IADB survey. When removing the 2 LAC countries within the IADB survey who have a significant share of remittances that are sent by the Internet (Colombia) and cash delivered via home delivery (Dominican Republic) we are left with 2 sample countries - Mexico and El Salvador - that are more reflective of remittances deliveries to Honduras. Nearly 90 percent of these respondents visited small shops and NBFI to send cash (Figure 2-3). Examples of NBFI include pawn shops, insurance firms, some microloan


89 Other digital barriers could include digital literacy, smartphone ownership, internet access, and lack of appropriate financial tools (such as bank account access)
organizations, and currency exchanges. A vast majority - over 88 percent - is sent via cash and 91 percent is picked up in cash (Figure 2-4).

Figure 2-4: Institutions and Payment Instruments for Sending Remittances

90%
of remittances are sent and received using a cash payment
Source: Authors estimates using IADB survey results

Once cash is presented or a check is cashed, remittances are then typically sent using a third-party system (Figure 3-4). Over 75 percent of these payment services are provided by an Omnichannel or MTO, such as Western Union (WU) or MoneyGram, while the remaining is sent directly by the agent (16 percent), digital only (14 percent), or a bank (2 percent). On average, a little over half of all cash picked up by a Central American remittance recipient is at a bank (51 percent). The remaining cash is received at a chain store (49 percent). This suggests that the 49 percent of individuals who elect to use non-bank pickup points may not have access to convenient bank offices in their communities or do not wish to use banks, perhaps for reasons of convenience or due to the stricter ID requirements imposed at banks.

Figure 2-5: Institutions and Payment Instruments for Sending Remittances

76%
of remittances are processed using an MTO
Source: Authors estimates using IADB survey results

Using the IADB survey we find that, on average, Central American migrants send a little over $200 in remittances per month or $2,400 per year. In comparison, in the USAID-TMS/IAD survey the average amount of the last remittance payment received by a household was $350, while the median amount was $200. A remittance sender from Central America can expect to pay upwards of six percent ($12) on a $200 remittance ($144 per year), including the transaction fee (four percent) and a foreign exchange fee (two percent). If the sender also needs to cash a check, she can expect to pay around nine percent ($18) in fees to get all the money transactions completed. Of course, while nine percent represents the average fee a sender can expect to pay, these fees can vary widely depending on the remittance channel use. Sending remittances via cash or debit/credit card payments are significantly more expensive than using bank account transfers or mobile money. A full exploration of variations in remittance fees across channels is discussed in subsequent sections.
Figure 2-6 depicts the level of fragmented operations within the remittances market with any single key player operating one, two or all four types of remittance origination and payment channels.

*Figure 2-6: Remittance Operators Business Model*

**RECEIVING REMITTANCES**

The majority of remittances are sent to Honduras via an MTO such as Western Union and MoneyGram. This dominance of remittance companies over banks is driven, in large part, by declining remittance profit margins, which have caused many banks in Honduras to lose interest in the market. 90 Once in Honduras, however, remittances sent through MTOs can be collected at a wide range of affiliated payment points, including banks, convenience stores, and ATMs. Despite the variety of payment point options available, the majority of remittances are collected at banks – 67 percent, as shown in Figure 2-7. An additional 20 percent are collected from alternative remittance payment points, such as stores and agents affiliated with the recipient’s MTO. Less than 10 percent of remittances are received via direct deposit into a checking or savings account, and a very small minority (3 percent) are received through a mobile wallet.

---

Perhaps unsurprisingly, the method used to collect remittances varies by the recipient’s age. As shown in Figure 2-8, recipients aged 18-24 and 25-34 are significantly more likely than older recipients to collect remittances via a mobile wallet and are significantly less likely to collect remittances through more “traditional” means such as banks. These differences are statistically significant at the 1 percent level.

The overwhelming majority (an estimated 94 percent, according to the USAID/Honduras TMS survey) of remittances are collected via cash. Although sending and receiving remittances via cash is, on average, more expensive than sending and receiving them via a checking or savings account, survey results suggest that cost is not the primary deciding factor when selecting how to send and receive remittances. In the USAID/Honduras TMS survey, respondents cited speed, ease, and habits as their primary motivations for using cash over other instruments. Cost was not mentioned in any of the responses. A 2016 CEMLA study similarly found that speed and flexible hours to send and
collect money were the most important factors when deciding how to send and receive remittances, rather than cost.91

Moreover, although collecting remittances in cash can be more costly in monetary terms, electing to have remittances deposited into a bank account has other, non-monetary “costs”. For example, according to the Western Union website, remittance recipients only need to show a form of ID to collect their money in cash. However, in order to switch from cash pickup to a bank deposit, customers must first register their know-your-customer (KYC) details at a Western Union location, then call a customer service line to initiate direct deposit. Once a customer’s details are confirmed, the money will arrive in their bank accounts within 1-2 business days -- a potentially substantial delay, given that 48 percent of remittances are collected the same day they are sent.92, 93

**MAJOR PLAYERS AND MARKET STRUCTURE**

**MARKET STRUCTURE OVERVIEW**

The global remittance market size was valued at $682.60 billion in 2018, up from $633 billion in 2017, and is projected to reach $930.44 billion by 2026, growing at a Compound Annual Growth Rate (CAGR) of 3.9 percent from 2019 to 2026.94 Trends in the volume of cross-border money transfer activity correlate with migration, global economic opportunity, and related employment levels worldwide. Honduras is ranked as the sixth Latin American and Caribbean country in terms of remittance inflows in 2019 valued at $5.4 billion.95

Remittances have massively increased in recent years due to high levels of migration around the world. The UN Sustainable Development Goal (SDG)10 - Reducing inequalities within and among countries96 - aspires to reduce the global transaction fee for sending remittances to below three percent.97 Achieving this goal would save remitters an estimated $20 billion annually. In addition to UN efforts, the burgeoning FinTech and mobile payments technologies sectors are simplifying remittance processes and reducing costs. Additionally, a number of non-bank remittance vendors are employing disruptive approaches that are reducing the costs and increasing the volume of global remittances.

**MAJOR PLAYERS**

Most key players operating in the U.S. - Honduras remittances corridor are U.S. headquartered companies except for Ficohsa Express, which is based in Honduras. Remittance operators are identified along their size, share, and strategies. Key players have adopted various strategies to increase their market penetration and strengthen their position in the industry, such as pursuing product portfolio expansion, mergers and acquisitions, agreements, geographical expansion, and collaborations. The overwhelming majority of business for major players is composed of consumer-to-consumer (C2C) money transfers. Western Union and MoneyGram reported 87 percent and 91 percent of their 2020 businesses being attributed to the C2C channel. Western Union (WU), Ria

---

92 Western Union, “How do I receive money in Honduras?”
95 World Bank; IMF; 2019; Statistica 2021 Estimates.
97 https://www.un.org/en/observances/remittances-day/SDGs
Financial Services and PayPal/Xoom have 48 percent of the market share. Top key players in the Honduran market include the companies listed in Table 2-1.98

Table 2-1: Key Providers in the U.S.-Honduras Remittance Corridor

<table>
<thead>
<tr>
<th>Company</th>
<th>Provider Type</th>
<th>Public or Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Union</td>
<td>Brick and Mortar/Internet &amp; Digital</td>
<td>Public</td>
</tr>
<tr>
<td>MoneyGram</td>
<td>Brick and Mortar/Internet &amp; Digital</td>
<td>Public</td>
</tr>
<tr>
<td>Walmart2World</td>
<td>Brick and Mortar</td>
<td>Public</td>
</tr>
<tr>
<td>Ria (Euronet)</td>
<td>Brick and Mortar</td>
<td>Public</td>
</tr>
<tr>
<td>Viamericas</td>
<td>Brick and Mortar</td>
<td>Public</td>
</tr>
<tr>
<td>Ficohsa Express</td>
<td>Brick and Mortar</td>
<td>Public</td>
</tr>
<tr>
<td>Remitly</td>
<td>Internet &amp; Digital</td>
<td>Private</td>
</tr>
<tr>
<td>Xoom (PayPal)</td>
<td>Internet/Digital</td>
<td>Public</td>
</tr>
<tr>
<td>DolEx Dollar Express</td>
<td>Brick and Mortar/Internet &amp; Digital</td>
<td>Private</td>
</tr>
<tr>
<td>Pangea</td>
<td>Internet/Digital</td>
<td>Private</td>
</tr>
</tbody>
</table>

As previously noted, the majority of remittances received in Honduras are sent and collected through MTOs. In 2010, the Government of Honduras passed legislation granting the National Commission of Banks and Securities (CNBS) the authority to formally supervise money transfer operators. As a result of this legislation, MTOs were required to establish themselves as Sociedades Remesadoras and report regularly to CNBS.99 As of August 2021, there were three Sociedades Remesadoras formally registered in Honduras: CORELSA, Expressnet Remesadora Honduras, and El Hermano Lejado Express.100

Many of the MTOs used in Honduras are not, however, formally registered in the country. Rather, several market leading MTOs such as Moneygram and Western Union work exclusively through contracts with local financial institutions including commercial banks and cooperatives. These agreements can manifest as four potential types of business networks described below101.

1. The unilateral service model, where an RSP provides its service without including any other firm.102 This approach is only feasible when an RSP operates in both the sending and recipient countries.

98 Grandview Research (2021), “Digital remittance market size, share, and trends analysis”
100 CNBS (2021), “Registro Publico de Remesadoras”
102 IBID, 59.
2. The franchised service model is where an RSP has a legal contract with agents that provide remittance services on behalf of that RSP in places like shops, gas stations, post offices, and foreign exchange bureaus.\footnote{IBID, 59.}

3. The negotiated service model is where an RSP partners with specific institutions to create a profitable set of physical locations, such as an agreement between an RSP and specific financial institutions in the recipient country.

4. Finally, the open service model occurs when a sending RSP uses an open network of distributors to disburse cash, usually with no direct relationship between the sending entity and the recipient entity.\footnote{IBID, 59} The open service model requires that “transaction information and funds need to travel together so that financial settlements occur.”\footnote{IBID, 59}

Because of this market structure, it is difficult to estimate the market share of different international MTO providers. As shown in figure 2-9, VIGO (a Western Union provider) is the most prevalent in terms of number of payment points across Honduras, followed by RIA, Viamericas, Uniteller, and Sigue.\footnote{Inter-American Dialogue}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure29.png}
\caption{Number of Payment Points by Remittance Provider}
\end{figure}

Each of these international remittance providers has a network of payment agents within Honduras that can disburse money to recipients, in a setup known as a “negotiated service model”. In this
model, the remittance provider enters into a legal contract with agents who are willing to offer remittance services on the RSP’s behalf. The RSP provides the necessary back-end infrastructure, while the agents give the RSP access to a broad reach of pickup locations across the country. ¹⁰⁷ For example, VIGO, the most widespread remittance provider in terms of number of payment points, has network agreements with 8 Honduran banks, including Banco Popular, Banco Azteca, Banco Atlantida, and Banpays.¹⁰⁸ Partnerships with local commercial banks is the most common modality used in Honduras, although some remittance providers also maintain independent agent networks (known as “franchise” models) through gas stations, liquor stores, post offices, and convenience stores.¹⁰⁹ However, while each remittance provider’s network is diverse, a handful of banks dominate the market. According to a 2014 survey, among remittance recipients who collect their remittances from banks, 61 percent collect from either Banco Azteca, Banco Atlantida, or Banco Occidente.¹¹⁰

The use of digital financial instruments, while limited, has increased in recent years. Tigo Money, which was licensed as Honduras’ first mobile money company in 2019 (under the name DINELSA), and Tengo, which was created in 2013, are collaborating with banks and MTOs to allow recipients to receive remittances as mobile money in electronic wallets. According to the Central Bank of Honduras, 17.6 percent of Tigo Money transactions and 8.8 percent of Tengo transactions in 2019 were to receive remittances. However, both of these providers account for only an estimated 1 percent of total remittances entering the country, suggesting that traditional banks and MTOs continue to dominate the remittance market.¹¹¹

**TRANSACTION AND FOREIGN EXCHANGE FEE STRUCTURE**

MTOs make their money in two distinct areas: charging transaction fees and foreign exchange spreads (the difference between the sell and buy price in local currency). Banks use the Society for Worldwide Interbank Telecommunication (SWIFT) code, or a Bank Identifier Code (BIC), for international transfers between accounts at different banks. Each SWIFT transaction has a service utilization fee that is based on the transfer amount. In addition to SWIFT fees, banks typically charge foreign exchange fees for remittance transactions. Transaction and foreign exchange fees are contained in the World Bank’s Remittance Fee database.¹¹² There are three things to keep in mind when inferring fee information from this database.

1. First, the data represents information taken at a specific point in time and does not track daily pricing movements or trends.
2. Second, the reported foreign exchange fees vary greatly between countries. This is most likely due to the exchange rate policies for each country.
3. Third, the number of remittance sending firms reported for each country varies, meaning the sample size for the reported fees vary by country. For example, the comparator countries have 2 to 3 times as many reporting firms for cash payment instruments as Honduras does.

¹⁰⁸ Vigo by Western Union, “La red de Vigo”
¹¹² The fee data is collected intermittently by researchers who pose as customers and contact remittance sending firms within each corridor (e.g. U.S. - Honduras). The data is collected on the same day to control for exchange rate fluctuations and changes to fee structures. For more information, see World Bank, Remittance Prices.
TRANSACTION FEES

We observed three main payment instruments that have remittance transaction fee data for Honduras and the comparator countries - cash, credit/debit cards, and bank account transfers. For many of these payment instruments, Honduras does not appear to have mean or median transaction fees that differ greatly from the comparators with reporting information. For example, Table 2-2 shows that the 2020 mean and median transaction fees for cash and bank account transfers are competitive with the benchmark countries. However, the 2020 transaction fees for using a debit or credit card payment instrument are higher than all comparators except Nicaragua.

Table 2-2: Remittance Transaction Fees by Country and Payment Instrument (2020)

<table>
<thead>
<tr>
<th>Country</th>
<th>Cash</th>
<th>Bank Account Transfer</th>
<th>Debit/Credit Card</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>median</td>
<td>mean</td>
</tr>
<tr>
<td>DOM</td>
<td>4.10%</td>
<td>4.50%</td>
<td>5.30%</td>
</tr>
<tr>
<td>GTM</td>
<td>3.70%</td>
<td>4.00%</td>
<td>2.00%</td>
</tr>
<tr>
<td>HND</td>
<td>4.10%</td>
<td>4.00%</td>
<td>2.40%</td>
</tr>
<tr>
<td>NIC</td>
<td>4.10%</td>
<td>4.30%</td>
<td>3.00%</td>
</tr>
<tr>
<td>SLV</td>
<td>3.90%</td>
<td>4.00%</td>
<td>2.50%</td>
</tr>
</tbody>
</table>

Source: World Bank Remittance Fee Database (2021)

We also looked at that change in remittance transaction fees over time to determine if there have been any major changes. Figure 2-10 provides a bar plot for the years 2016 through 2020 and table of the transaction fees for sending a $200 remittance from the U.S. to Honduras. The graph is disaggregated by payment instrument with the corresponding error bars representing where 95 percent of observations fall. Some key observations are:

- At an average transaction fee of 4.4 percent ($8.8), sending $200 using a debit / credit card is the most expensive.
- Cash has the next highest transaction fee of 4.2 percent ($8.4),
- The other two groups with a significant number of observations (n > 19) are: bank account transfers and “bank account transfer, cash” with average transaction fees of 3.5 percent and 2.9 percent, respectively.
- Both debit / credit cards and the cash payment instruments have not experienced large declines in remittance fees, while remittances sent using bank account transfers have declined from over 4 percent in 2016 to under 3 percent in 2020.

In 2020, the total number of remittances along the U.S. - Honduras corridor was $5.73 billion. If there was a one percentage point reduction in the total remittance costs for sending money to Honduras (a rough estimate of the difference between sending money via a cash payment instrument versus sending money via a bank account transfer), this would represent $57.3 million in reduced costs or additional cash for either remittance senders or recipients.

113 The other payment instruments with transaction fee data were “Bank account transfer, Cash” and “Bank account transfer, Debit/credit card.”
114 It is important to note that $200 is a benchmark originally introduced in 1997 to reflect the average amount remitted by migrants at the time. Today, migrants typically send much higher amounts. However, it was not possible to weight the transaction fees by the volume or amount distributed by payment instrument due to a lack of data.
Figure 2-10: Remittance Fees (% of $200) by Payment Instrument (2016-2020)

Source: World Bank Remittance Fee Database (2021)

Figure 2-11 shows the boxplot for transaction fees across all payment instruments for sending $200 in remittances from the U.S. to the recipient country between 2017 to 2020.115 During this period, it cost an average of 3.8 percent (US$ 7.60) to send $200 in remittances in the U.S.-Honduras corridor using the reported payment instruments. This average is similar to the transaction fees for comparator countries. Similarly, the median transaction fee for sending $200 was 4 percent (US$ 8.00), which is the same as all of the comparator countries except Guatemala (3.5 percent or $7). The minimum transaction fee for sending $200 to Honduras is 0 percent – most likely a reporting error – while the maximum value is 6.5 percent. These values are similar to what is reported for the comparator countries. Perhaps more importantly, it shows the dispersion of data points (i.e., the middle 50 percent) is similar to comparators, meaning most people are offered competitive relative pricing. When only looking at data for 2020, we see that Honduras has similar mean and median transaction fees relative to the benchmark countries.

115 Figure 2-11 shows the boxplot of transaction fees for Honduras and its comparators. Data within the box represents data between the intervals of the 25th and 75th percentile with the vertical line representing the median value. The whiskers represent data at the 10th and 90th percentile.
Figure 2-12 shows the transaction fees for sending $200 in remittances using a cash payment instrument from the U.S. to the recipient country between 2017 to 2020. During this period, it cost an average of 4.2 percent (US$ 8.40) to send $200 in cash to Honduras. Aside from Guatemala, which has a transaction fee of 3.9 percent, the average transaction fee for Honduras is similar to the comparator countries. Similarly, the median transaction fee for sending $200 was 4 percent (US$ 8.00), which is the same as all of the comparator countries. The minimum transaction fee for sending $200 using a cash payment instrument is 2.5 percent while the maximum is 5 percent. These values are similar to what is reported for the comparator countries between 2017 and 2020, as well as when we just look at data for just 2020.

Figure 2-13 shows the transaction fees for sending $200 in remittances using a credit / debit card payment instrument from the U.S. to the recipient country between 2017 to 2020. During this period, it cost an average of 4.4 percent (US$ 8.80) to send $200 in remittances to Honduras using a debit / credit card. This is the second-lowest rate behind Guatemala. The median transaction fee for sending $200 was 4 percent (US$ 8.00), which is similar to or less than 3 out of 4 comparators. In 2020, the average debit / credit card transaction fee for sending $200 of remittances from the U.S. to Honduras was 4.6 percent, which was only behind Nicaragua (5 percent) in terms of the highest fee for this payment instrument. The median value for sending a $200 remittance via a debit / credit card was 4.5 percent - tied with the Dominican Republic and El Salvador and behind Nicaragua (6.5 percent).
Figure 2-14 shows the transaction fees for sending $200 in remittances using a bank account transfer from the U.S. to the recipient country between 2017 to 2020. During this period, it cost an average of 3.5 percent (US$ 7) to send $200 in remittances to Honduras using the bank account transfer - around the middle relative to the comparator countries. However, the median transaction fee for sending $200 was 4 percent (US$ 8), which is higher than all of the comparator countries except Nicaragua (4 percent). The minimum transaction fee for sending $200 using a cash payment instrument is 0 percent while the maximum is 5.5 percent. Although the relative mean and median transaction fee values are high over the 2018 to 2020 period, it should be noted that Honduras’ transaction fees for bank account transfers fell in line with comparators in 2020 (see Table 2-2).

**FOREIGN EXCHANGE ESTIMATES**

Between 2016 and 2020, Honduras had 251 foreign exchange transaction fees reported in the World Bank’s Remittance Fee database. The mean and median values reported under the “foreign exchange rate” all converge around the number 24 – the nominal exchange rate for one U.S. dollar (24 lempira = 1 U.S. dollar). These values are relatively consistent throughout 4 years of reported data. However, the foreign exchange margin, the percentage difference between the foreign currency exchange rate applied to the transaction and the interbank exchange rate, has a mean value of 0.03 percent and a median value of -0.4 percent (Figure 2-15).

The International Monetary Fund (IMF) refers to the foreign rate margin as the “Achilles’ heel” of the remittances industry. This is because there are many exchange rate margins that are zero (23 percent) or negative (3.7 percent). However, the negative foreign exchange margin does not indicate that the sender receives a discount, nor does it indicate that remittance service providers incur an additional charge. Similarly, a foreign exchange margin of zero does not indicate there is no foreign exchange transaction fee.

One possible explanation for the negative values is the potential difference between the rate charged by the remittance service provider when setting the price and the actual exchange rate used to calculate the margin (e.g., closing, average, etc.). Although these data points are collected on the same day, there could be differences related to the timing of each. Two other potential explanations include inaccurate reporting or nonresponse from the provider. There are several reasons why there could be a nonresponse. For instance, the provider may be able to report the final price if it does not have a direct relationship with the agent responsible for payment. The provider may also be unresponsive as they benefit from not disclosing the true costs.

---

116 Figure 2-12 shows the boxplot of transaction fees for Honduras and its comparators. Data within the box represents data between the intervals of the 25th and 75th percentile with the vertical line representing the median value. The whiskers represent data at the 10th and 90th percentile.


From 2017 to 2020, in Honduras there were a total of:

- 142 negative forex margin observations (31.3 percent of total);
- 56 zero observations (12.4 percent of the total); and
- 255 positive observations (56.3 percent of the total).

Over this same period, the countries with the next highest number of negative forex margins were Bangladesh (420), Philippines (371), and India (276). Therefore, we can see the proportion of negative margins is much greater than in other countries.

Although we took several approaches for determining what could be driving the negative foreign exchange margins, ultimately, we were unable to ascertain why Honduras reported a high proportion of negative forex margins.

**TOTAL TRANSACTION AND FOREIGN EXCHANGE FEES**

To understand the full potential of reducing remittance transaction fees along the U.S. to Honduras corridor, it is helpful to compare the relative total fees for some of the comparator countries. As previously mentioned, the total reported cost of sending a remittance is the transaction fee plus the forex exchange margin. Unfortunately, however, Honduras’ reported total cost in the World Bank’s Remittances Fee database includes observations with a negative forex margin. Given the low likelihood that the remittance sender or recipient is getting a forex margin discount, this means that the total fees for the U.S. – Honduras remittance corridor are likely higher than what is being reported. At the same time, the recipient may not be converting the remittance into lempira until after the transfer has occurred, meaning the foreign exchange happens as a separate transaction.
In the absence of any additional information, we use a range of values to show what additional cost the foreign exchange margin could impose on senders and recipients of remittances on the U.S. – Honduras corridor.  

- For the low value, we use the median value (0.48 percent) of all positive foreign exchange values for Honduras between 2017 and 2020.
- For the medium value, we use the median value of all foreign exchange values (1.45 percent) from the U.S. to Guatemala between 2017 and 2020.
- For the maximum value, we use the median value of all foreign exchange values (1.87 percent) from the U.S. to the Dominican Republic between 2017 and 2020.

Table 2-3 shows a potential range of total costs for sending remittances from the U.S. to Honduras. Under the most conservative assumptions, total remittance fees are similar to Guatemala. Using the median foreign exchange fee from Guatemala, we see that the total cost for sending a remittance is over one percentage higher for individuals sending a remittance from the U.S. to Honduras than from the U.S. to Guatemala.

Table 2-3: Median Total Costs for Sending Remittances from the U.S. (2017Q1-2022Q1)

<table>
<thead>
<tr>
<th>Country</th>
<th>minimum</th>
<th>medium</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOM</td>
<td>5.80</td>
<td>5.80</td>
<td>5.80</td>
</tr>
<tr>
<td>GTM</td>
<td>4.40</td>
<td>4.40</td>
<td>4.40</td>
</tr>
<tr>
<td>HND</td>
<td>4.44</td>
<td>5.45</td>
<td>5.87</td>
</tr>
</tbody>
</table>

Source: Authors estimates using the World Bank Fee Remittances Database (2021)

**Regulatory Considerations**

A significant trend impacting the money transfer industry is increasing regulation, such as anti-money laundering, anti-terrorist financing, consumer protection, consumer privacy, data protection, and information security. Regulations require money transfer providers, banks and other financial institutions to develop systems to prevent, detect, monitor and report certain transactions. Such regulations increase the costs to provide money transfer services and can make it more difficult or less desirable for consumers and businesses to use money transfer services, either of which could have an adverse effect on money transfer providers’ revenues and operating income.

Additionally, a service provider’s ability to enter into or maintain exclusive arrangements with agents is being challenged by both regulators and agents. For instance, Walmart executed an agreement that would enable Western Union, Ria and MoneyGram to conduct services through the U.S. Walmart locations, thereby multiplying the scale of customer reach by exponentially increasing agent access locations. Further, increased competition from, and increased market acceptance of, electronic, mobile, and internet-based money transfer services as well as digital currencies is a trend that accelerated during 2020, as consumers responded to the COVID-19 pandemic by sending money increasingly through digital channels.

---

119 Specifically, we took the cost of the transaction fee plus the respective minimum, medium, and maximum foreign exchange values in instances where the foreign exchange margin was zero or negative for remittances sent from the U.S. to Honduras.
Generally speaking, regulations around remittances can be classified into four categories: Authorized Entities; Money Laundering and Financial Crime Controls (FTAC); Deposit Authority; and Consumer Protection.

REGULATORY CONSIDERATIONS: AUTHORIZED ENTITIES
In 2010, the Government of Honduras passed legislation requiring that MTOs establish themselves as Sociedades Remesadoras and report regularly to CNBS.120 As of August 2021, there were three Sociedades Remesadoras formally registered in Honduras: CORELSA, Expressnet Remesadora Honduras, and El Hermano Lejado Express.121 Many of the international MTOs most commonly used in Honduras (such as Western Union or MoneyGram) are not, however, formally registered in the country. Rather, most international MTOs such as Moneygram and Western Union work through contracts with local financial institutions such as commercial banks.122

REGULATORY CONSIDERATIONS: MONEY LAUNDERING AND FINANCIAL CRIME CONTROLS
Within the U.S., the Bank Secrecy Act (BSA) is the primary anti-money laundering (AML) law. The law requires financial institutions - including both banks and money transfer operations - to maintain financial records and conduct customer identification procedures for transactions of more than $3,000. MTOs must also file suspicious activity reports (SARs) for transactions of more than $2,000 for which the remittance provider “knows, suspects, or has reason to suspect involves funds from illegal activity”.123 The U.S. Department of the Treasury’s Financial Crimes Enforcement Network (FinCEN) is the primary agency responsible for implementing these regulations. Since 1999, FinCEN is the regulatory body that oversees Money Service Businesses (MSBs)124, of which MTOs and Check Cashing firms fall under. FinCEN works primarily through state examinations of MTOs because of differences in federal versus state regulations for the sector. FinCEN utilizes a risk-based framework for AML/CFT oversight, working closely with state regulators to flag risky transactions and providers at the transaction level, as opposed to a rules-based enforcement approach.

In 2019, the Federal Reserve announced a new interbank service called FedNowSM that will launch in 2023. FedNowSM will expand the Fedwire Funds Service, a real-time gross settlement system for payments, to implement the ISO 20022- a single standardization format used for the exchange of payment information, making interoperability much easier. The Federal Reserve plans to adopt the existing ISO 20022 payment format in the near future, which would make it much easier and likely instantaneous after the launch of FedNow for financial institutions and non-bank financial institutions to send money from the United States to accounts outside of the country. In Honduras, the Law of the National Commission of Banks and Insurance (CNBS) provides the Commission with the regulatory authority to supervise financial institutions. Until 2008, MTOs were not considered to be financial institutions, however, a new law passed in 2010 required MTOs to register with CNBS. Honduras’ AML laws require financial institutions to establish formal AML policies and procedures, including appointing a Compliance Officer and Compliance Committee, implementing KYC policies and procedures, and filing suspicious transaction reports (STRs) to the Unidad de Información Financiera (UIF), Honduras’ financial intelligence unit.

---

121 CNBS (2021), “Registro Publico de Remesadoras”
124 Money Order providers; Issuers of Traveler’s Checks; Money Transmitters; Check Cashing; Currency Exchange providers; Currency Dealing providers; and Prepaid Access providers.
125 More details here: https://www.frbservices.org/financial-services/wires
REGULATORY CONSIDERATIONS: DEPOSIT AUTHORITY

Generally speaking, migrants residing in the U.S. need to present the following documents in order to open a U.S. bank account: a government-issued ID (such as a driver’s license or passport), proof of address, and proof of identification (which can include a social security number or the taxpayer’s personal identification number). While many banks require a social security number to open a bank account, thereby excluding migrants who are undocumented, some banks do allow individuals to open accounts without one. Many banks also allow undocumented immigrants to use an Individual Taxpayer Identification Number (ITIN) in lieu of a social security number. The Internal Revenue Service (IRS) gives ITINs to foreign nationals who work and pay taxes in the United States. In Honduras, AML regulations stipulate a range of requirements for customer identification to allow customers to open bank accounts, including providing identification, information about one’s civil status, nationality, profession, and address, and references from existing clients at the bank. While the AML regulation does not explicitly state that customers must be in person to open a bank account, authorities have historically interpreted a customer’s physical presence as necessary. As such, it is generally not possible for Honduran migrants to open bank accounts within Honduras while they are residing in the U.S. Sending and transfer limits vary by location and provider. Many Honduran banks have limits of $1,500 per transaction and vary in their daily transaction limits from $3,000 to $10,000 per day. On the MTO side, transfer limits are extremely varied, but will not override bank regulations.

REGULATORY CONSIDERATIONS: CONSUMER PROTECTION

With regards to consumer protection, remittances sent from the U.S. are regulated by the Consumer Financial Protection Bureau (CFPB), which establishes remittance regulations and monitors those rules under the Remittance Transfer Rule. According to federal law, remittance companies regulated by the CFPB are those that provide 100 or more remittance transfers per year valued at more than $15 for C2C transfers. According to the CFPB, federal law requires that remittance providers must disclose the following information before a remittance transaction:

1. Exchange rates, fee and tax reporting for the remittance amount;
2. When the remittance will be available for pick-up at its destination;
3. The right to cancel a transfer before ultimate delivery;
4. Procedures should an error occur; and
5. How consumers can submit complaints.

Electronic Fund Transfers are regulated by the Electronic Fund Transfer Act (EFTA), which establishes the regulations for operators of electronic remittance transfers. The 2011 Dodd-Frank Wall Street Consumer Protection Act moved oversight of electronic remittances from the Federal Reserve to the Consumer Financial Protection Bureau (CFPB) under “Regulation E.” Regulation E was updated in 2020, defining remittance transfer providers to be those that send more than 500 remittances per year. Additionally, the 2020 rule change allows insured remittance providers to set their own exchange rate in a local currency if they make less than 1,000 transfers per year.

---

126 Bolanos, R (March 2021), “How to open a bank account for undocumented immigrants in the United States”, Documented
128 CompareRemit (2019), “Regulations in the US that govern the remittance industry”;
129 Consumer Financial Protection Bureau, “Remittance transfer rule factsheet”
130 Consumer Financial Protection Bureau, “Electronic Fund Transfers”
131 A Rule by the Consumer Financial Protection Bureau, Remittance Transfers Under the Electronic Fund Transfer Act (Regulation E), 06/05/2020
The remittance industry is ripe for fraud, corruption, and illegal practices due to information asymmetries and opaque cross-border money transfer policies. Informal and illegal remittance providers have long exploited remitters desperate to send money to their family and friends back home. Money Transfer Operators face considerable regulatory controls and downward pricing competition for the services they provide. As a result, the MTO space is highly consolidated - Western Union has more than double the market share of its nearest competitor.

In recent years, however, increased competition and heavy pressure from the G20 and the UN to reduce fees has resulted in significant declines in remittance fees. New players entering the market are now using fees as a key differentiator to attract customers. In response to these cost pressures, major MTOs such as Western Union have been forced to increasingly rely on foreign exchange fees to compensate for lost revenue. As a result, MTOs prefer working in remittance corridors with high transaction volumes and volatile currencies with more advantageous forex spreads. Increased competition and price pressures have also forced MTOs to differentiate themselves from competitors by offering new services to increase customer loyalty, including payroll services, virtual bank accounts, and prepaid debit cards.

On the other hand, banks that operate as remittance service providers (RSPs) have not been incentivized to keep their fees lower because they are charged standard inter-bank transfer and foreign exchange fees they pass down to remittance customers for each transaction. Moreover, remittances are not a core service for banks, and, as such, are not generally prioritized. As a result, the cost of sending remittances via banks remains stubbornly high.

From the perspective of remittance senders and recipients, this high level of competition in the remittance market is likely to continue to put downward pressure on prices, while also creating opportunities for new and innovative service offerings. This level of innovation and competition, however, is unlikely to be as prevalent within the banking sector, suggesting that the cost of sending remittances via this channel is likely to remain higher vis-a-vis other channels.

**Networks and Alliances**

RSPs include: MTOs, banks, and financial technology firms (FINTECHs) - have four types of business networks described below.

1. The unilateral service model, where an RSP provides its service without including any other firm. This approach is only feasible when an RSP operates in both the sending and recipient countries.
2. The franchised service model is where an RSP has a legal contract with agents that provide remittance services on behalf of that RSP in places like shops, gas stations, post offices, and foreign exchange bureaus.

132 Romaldini, M, “How Is the International Money Transfer Market Evolving”, Toptal
133 For example, the anonymity associated with remittance services means that money launderers can use third parties (sometimes known as “money mules”) to send or receive money via remittance services in order to protect the identity of the launderers.
135 IBID, 59.
136 IBID, 59.
3. The negotiated service model is where an RSP partners with specific institutions to create a profitable set of physical locations, such as an agreement between an RSP and specific financial institutions in the recipient country.

4. Finally, the open service model occurs when a sending RSP uses an open network of distributors to disburse cash, usually with no direct relationship between the sending entity and the recipient entity\textsuperscript{137}. The open service model requires that “transaction information and funds need to travel together so that financial settlements occur\textsuperscript{138}”.

MTOs often have open service model relationships with financial institutions because these banks and credit units have access to the country’s national payment system and physical locations for withdrawing cash.

**Technology**

In recent years, Honduras has made significant strides in improving financial inclusion and adopting digital payments, both of which have the potential to reduce remittance costs in the future. The Government of Honduras launched a National Financial Inclusion Strategy (ENIF) in 2015, which ran from 2016 to 2020. Among other goals, the ENIF aimed to increase the number of people using the banking system to make utility payments or send remittances. During that time, bankarization in Honduras increased from 31 percent in 2014 to 45 percent in 2017, placing Honduras above Guatemala and El Salvador (with bankarization rates in 2017 of 44 percent and 30 percent, respectively)\textsuperscript{139, 140}. The use of accounts for receiving salaries also increased substantially, from 5.8 percent in 2014 to 10 percent in 2017, largely driven by businesses using this channel to pay their employees. Beyond increased bankarization, the ENIF also aimed to provide consumers with more localized access to cash through an expansion in the number of local bank agents. Through government-funded incentive programs, the national agent network in Honduras grew from 640 registered agents in 2014 to over 2,300 in 2017. This large agent network is a necessary precursor to expanded use of digital financial services within communities.

The use of digital payments and mobile money has also increased rapidly in Honduras. Payments made or sent digitally in Honduras grew from 21.9 percent in 2014 to 37.2 percent in 2017, and payment of services and public accounts increased from 0.7 percent in 2014 to 2.7 percent in 2017\textsuperscript{141, 142}. Digital mobile wallets also grew from 3.41 percent in 2014 to 6.20 percent in 2017. However, significant gender disparities remain, with male ushership increasing by 147 percent and women’s ushership only increasing by 7.5 percent. Usher for Tigo Money, a mobile money brand, increased from 1 million users in 2015 to 1.5 million in 2017. Finally, sending and receiving domestic remittances (remittances sent from one part of Honduras to another in Lempiras) increased by 65 percent for sending and 55 percent for receiving between 2014 and 2017.\textsuperscript{143}

\textsuperscript{137} IBID, 59
\textsuperscript{138} IBID, 59
\textsuperscript{139} “Bankarization” is defined here as the percentage of adults aged 15+ who have a bank account
\textsuperscript{140} Findex Global Financial Inclusion Database
\textsuperscript{141} Alliance for Financial Inclusion, “Honduras: Competitiveness’ Chain Reaction for Financial Inclusion.”
\textsuperscript{142} “Digital payments” is defined by the Global Findex as “The percentage of respondents who report using mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or report using the internet to pay bills or to buy something online, in the past 12 months. It also includes respondents who report paying bills, sending or receiving remittances, receiving payments for agricultural products, receiving government transfers, receiving wages, or receiving a public sector pension directly from or into a financial institution account or through a mobile money account in the past 12 months”
\textsuperscript{143} IBID, 93
The onset of the COVID-19 pandemic accelerated many of these trends. Honduras distributed electronic cash vouchers to over 70,000 households using mobile phones as part of their COVID-19 response plan, a move that likely helped to further increase the number of mobile money users.\textsuperscript{144} While data on changes in remittance sending patterns is unavailable, key informant interviews also suggest that sending and receiving remittances digitally may have increased substantially due to the pandemic. However, despite these advances, significant barriers remain. Honduras has a restrictive legal and regulatory framework that imposes barriers to innovation and competition in the financial sector. Moreover, while the rates of bankarization and mobile money usage have increased overall, there are significant gender gaps in usage rates that point to the need for more targeted campaigns to increase the financial inclusion of women.

According to the IMF, only 14 percent of all remittances sent in Latin America and the Caribbean (LAC) are sent through mobile channels.\textsuperscript{145} In Honduras, the share of remittances sent by digital mobile channels is negligible, namely 10 percent according to the USAID/Honduras TMS survey conducted in Honduras. Also, because of a limited number of actors operating in the sector at present, the costs of sending digital remittances to Honduras is reportedly higher than sending through an MTO.


\textsuperscript{145} Filho (2021), “No Easy Solution: A Smorgasbord of Factors Drive Remittance Costs”
Chapter 3 - MACROECONOMIC AND MICROECONOMIC IMPACTS

MACROECONOMIC IMPACTS SUMMARY

The existing literature on the macroeconomic impacts of remittances is ambiguous. While remittances have some clear benefits to an economy, such as reduced poverty, increased consumption smoothing, and increased fiscal revenues, these benefits may be offset by significant drawbacks, such as increased inflation, currency appreciation, reduced competitiveness, and heightened inequality. In the case of Honduras, remittances do appear to function in a countercyclical fashion, helping to smooth consumption and lessen the impacts of shocks. There is also little evidence that Honduras is experiencing currency appreciation and increased inflation. In the long-term, however, remittances may dampen overall economic growth by reducing the labor pool and, potentially, reducing competitiveness. These results are summarized in Table 3-1 below.

Table 3-1: Summary of the Macroeconomic Impacts of Remittances

<table>
<thead>
<tr>
<th>Issue</th>
<th>Relationship to Remittances</th>
<th>Evidence</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Growth</td>
<td>Mixed</td>
<td>Moderate</td>
<td>Remittances have a positive impact on economic growth by reducing household poverty, smoothing consumption/increasing resilience to shocks, and providing financial resources for increased investments in human capital, savings, and entrepreneurship. However, remittances can have a negative impact on growth by reducing the available labor pool and potentially reducing competitiveness. As such, the net impact of remittances on growth is uncertain.</td>
</tr>
<tr>
<td>Consumption Smoothing</td>
<td>Positive</td>
<td>Strong</td>
<td>Remittance flows are significantly less volatile and more resilient than other external financing and have been shown to increase in response to shocks such as natural disasters.</td>
</tr>
<tr>
<td>Fiscal Revenues</td>
<td>Positive</td>
<td>Moderate</td>
<td>Remittances are correlated with a significant increase in both the level and stability of the government revenue ratio in countries that have adopted a VAT (which includes Honduras).</td>
</tr>
<tr>
<td>Financial Sector Stability</td>
<td>Positive</td>
<td>Strong</td>
<td>Research finds strong positive relationships between remittances and aggregate levels of deposits and credit intermediated with the local banking sector, and increased credit quality.</td>
</tr>
<tr>
<td>Exchange Rates and Competitiveness</td>
<td>Negative</td>
<td>Weak</td>
<td>Economic theory suggests that remittances should lead to real exchange rate appreciation, leading to higher domestic prices and reduced export competitiveness (“Dutch Disease”). While a handful of studies have found evidence of this phenomenon, several others have found very small and/or statistically insignificant results.</td>
</tr>
<tr>
<td>Inflation</td>
<td>Positive</td>
<td>Weak</td>
<td>Economic theory suggests that remittances should also lead to increased inflation, and this phenomenon is generally confirmed in the literature. However, macroeconomic data from Honduras shows no evidence of a relationship between remittances and inflation.</td>
</tr>
<tr>
<td>Poverty</td>
<td>Negative</td>
<td>Moderate</td>
<td>Existing research has found a statistically significant relationship between increased remittance flows and reduced levels of household poverty in the recipient country.</td>
</tr>
<tr>
<td>Inequality</td>
<td>Mixed</td>
<td>Weak</td>
<td>The relationship between remittances and inequality is more uncertain and largely depends on where recipients fall in a country’s income distribution. Although remittances do appear to reduce poverty (which might decrease inequality), higher income households in Honduras are more likely to be receiving remittances than lower income households.</td>
</tr>
</tbody>
</table>
ECONOMIC GROWTH

Economic theory suggests that emigration and the receipt of remittances are likely to have opposite effects on economic growth in the recipient country. On one hand, emigration is likely to have a negative impact on economic growth through reducing the country’s available labor pool, lowering the number of skilled workers in the country through “brain drain”, and allowing recipients of remittances to substitute labor income with remittance income, further reducing labor supply. On the other hand, remittances could have a positive impact on economic growth by reducing household poverty, smoothing consumption, and providing financial resources for increased investment, saving, and educational attainment. These contradictory impacts are further complicated by the methodological challenges in estimating this relationship. While many existing studies focus on the effects of remittances on economic growth, most fail to control for migration and do not explicitly examine their interrelated effects on an economy.

Due to these potentially contradictory effects and methodological challenges, the empirical evidence on the impact of remittances on economic growth is mixed. A recent meta-analysis published in 2020 found that among 95 studies on the subject, 40 percent report a positive effect of remittances on growth, 40 percent report no effect, and 20 percent report a negative effect. The authors conclude that the mean effect of remittances on economic growth is positive, but extremely small and subject to regional variability. An IMF study focused specifically on Latin America and the Caribbean found that outward migration has a negative impact on economic growth, while remittances have a positive (although not always statistically significant) effect on growth. Taken together, the results suggest that remittances have a small and ambiguous impact on growth. Ultimately, the nature of remittances and how they are spent may explain why they fail to produce a noticeable effect on economic growth in the long-term. As Barajas et al note, “Part of the reasons why remittances have not spurred economic growth is that they are generally not intended to serve as investments but rather as social insurance to help family members finance the purchase of life’s necessities. Remittances lift people out of poverty, but they do not typically turn their recipients into entrepreneurs.”

CONSUMPTION SMOOTHING

Perhaps the most widely cited benefit of remittances is their ability to smooth consumption in the receiving country. Indeed, existing empirical evidence has found that remittances tend to be countercyclical, increasing in response to economic shocks, such as natural disasters. Figure 3-1 provides some evidence for this relationship. Remittance receipts (as a proportion of GDP) are shown the year before, during, and after three major natural disasters in Honduras: Hurricanes Mitch, Gamma, and Eta. In all three cases, remittances increased in the year of the disaster and remained high in the following year. Importantly, Hurricane Eta occurred in the same year as the COVID-19 pandemic, which many researchers believed would have a negative impact on global remittance flows. However, remittances proved to be significantly more resilient than anticipated,

---

146 Several studies have found a positive relationship between remittance receipt and increased educational attainment of children. See for example, Yang (2008) “International migration, remittances, and household investment: Evidence from Philippine migrants’ exchange rate shocks.”
150 See, for example, Bettin and Zazzaro (2017), “The impact of natural disasters on remittances to low and middle-income countries”, The Journal of Development Studies, Volume S4 Issue 3
with total flows to Latin America and the Caribbean increasing by 6.5 percent in 2020 despite severe economic contractions across the globe.\footnote{Bahar (2021), “Remittances: One more thing that economists failed at predicting in 2021”, Brookings}

\textit{Figure 3-1: Remittances before, during, and after natural disasters}

As Honduras’ recent experience with the COVID-19 pandemic illustrates, remittance flows are significantly more resilient and less volatile than other sources of external financing. Figure 3-2 shows remittance, ODA, and FDI flows to Honduras as a percentage of GDP between 1980 and 2019. While ODA and FDI flows have been highly volatile, with sharp spikes and decreases year-on-year, remittances have increased fairly consistently throughout the time period, with the exception of a major drop in 2008 due to the financial crisis.

\textit{Figure 3-2: Remittances, FDI, and ODA (1980-2019)}
**Fiscal Revenues**

Beyond their impacts on consumption smoothing, remittances may also foster additional macroeconomic stability through the stabilization of fiscal accounts. Although remittances are not taxed directly, increased spending as a result of receiving remittances contributes to a larger base for indirect taxation. Moreover, insofar as remittances might support short-term economic growth, they may also spur increases in fiscal revenue. This increase in fiscal revenue can, in turn, enhance a country’s ability to engage in countercyclical fiscal policies. One study, for example, has found that remittances significantly increase both the level and stability of the government revenue ratio in remittance receiving countries that have adopted a VAT (which include Honduras).\(^{152}\) Other studies have found that remittances are positively associated with the overall tax ratio.\(^{153}\) Because of their revenue supporting role, remittances may also support increased public debt sustainability.\(^{154}\) Empirical evidence from a recent IMF report finds that remittances to Central America are correlated with higher government expenditures and no changes in fiscal balances, suggesting that the revenues generated by remittances help foster additional fiscal space for government spending.\(^{155}\) Figure 3-3 shows the relationship between remittances and general government expenditures in Honduras specifically. While many factors contribute to increased government spending, the data does show that government spending remained roughly constant between 1980 and 1997, before steadily increasing (concurrent with a rapid increase in remittance receipts) starting in 1998.

![Figure 3-3: Remittance Receipts and Government Expenditures (1980-2019)](source: World Bank World Development Indicators)

**Financial Sector Stability**

The existing evidence base suggests that remittances have a positive impact on financial sector development. The robust growth of remittances in Latin America and the Caribbean over the past 20 years has occurred in parallel with significant financial deepening, and existing empirical research has found a strong relationship between these two factors. One study from 2014 found a strong positive relationship between remittance receipts and aggregate levels of deposits and credit.

---

intermediated by the local banking sector.\textsuperscript{156} Other studies have found evidence of a positive relationship between remittances and credit quality. For example, a 2014 study found that remittances were negatively associated with non-performing loans (NPLs) in developing countries because of their income stabilization effects.\textsuperscript{157} A more recent 2017 analysis similarly found that increased remittances in Central America were associated with lower rates of NPLs.\textsuperscript{158}

While remittances may increase a country’s overall level of financial development, there is also some evidence to suggest that remittances and financial development may be substitutes for one another. In other words, in economies with poorly developed financial sectors, remittances can serve as an important source of financing for poor households. However, when the economy’s financial sector is more developed, these credit constraints are removed, and remittances can be channeled to less productive means.\textsuperscript{159, 160} In this respect, the ability of remittances to drive economic growth may decrease as a country’s financial sector develops. Some studies, however, have found the opposite relationship, and instead provide evidence that remittances and financial sector development serve as complementary factors to enhance overall economic growth. In this view, remittances can be deposited into banks, bringing a larger share of the population into contact with financial services such as credit and savings products.\textsuperscript{161} This increased financial deepening can thus strengthen the potential impact of remittances on growth, rather than weaken it. In the case of Honduras, the financial sector was one of the country’s fastest growing sectors in 2021.\textsuperscript{162} This financial sector growth is likely to have an impact on remittances. However, the directionality of this impact remains to be seen.

\textbf{Exchange Rates and Competitiveness}

Although remittances might boost economic development and reduce poverty through the above channels, there is some evidence to suggest that these benefits might be counteracted by risks to competitiveness. Remittance inflows increase household consumption, putting pressure on non-tradable prices and interest rates. This, in turn, can lead to real exchange rate appreciation, leading to higher domestic prices and reduced export competitiveness in a phenomenon known as “Dutch Disease”. The existing literature on this relationship shows mixed results.

While most studies have found that remittances tend to appreciate the real exchange rate, some have found only small or nonexistent relationships. A 2004 study of 13 Latin American and Caribbean countries found that a doubling in workers’ remittances results in REER appreciation of 22 percent.\textsuperscript{163} On the other hand, a 2006 study found no impact of remittances on exchange rates in Honduras specifically.\textsuperscript{164} A more recent 2017 IMF study found that remittances had a small but

\textsuperscript{159} Giuliano and Ruiz-Arranz (2009), “Remittances, financial development, and economic growth”, Journal of Development Economics 90, 144-152
\textsuperscript{162} USAID (2021), “Honduras Inclusive Growth Diagnostic”
\textsuperscript{163} Amuedo-Dorantes & Pozo (2004), “Worker’s remittances and the real exchange rate: A paradox of gifts”, World Development 32, No.8
\textsuperscript{164} Izquierdo & Montiel (2006), “Remittances and Real Effective Exchange Rates in Six Central American Countries”, Inter-American Development Bank
statistically significant effect on the exchange rate in Central American economies, where a one percentage point increase in the remittance-to-GDP ratio is correlated with a 6 percent appreciation of the real effective exchange rate (REER).\footnote{Beaton \textit{et al} (2017), “Migration and Remittances in Latin America and the Caribbean: Engines of Growth and Macroeconomic Stabilizers?”, IMF Working Paper}

These ambiguous results may be due in part to variability in different countries’ exchange rate regimes, as well as other mitigating factors. For example, Barajas \textit{et al} (2010) found that the risks of Dutch Disease due to remittance inflows were reduced, if not reversed, by a range of factors including a country’s degree of openness, factor mobility between domestic sectors, the countercyclicality of remittances, the share of consumption in tradable goods, and the sensitivity of the country’s risk premium to remittance flows.\footnote{Barajas \textit{et al} (2009), “Do workers’ remittances promote economic growth?”, IMF Working Paper no. 153}

**INFLATION**

Beyond their possible impact on exchange rates, economic theory also suggests that remittances could have an inflationary effect due to consumption-induced excess demand. The extent of this inflationary effect would depend on the economies’ current level of output weighed against the level of aggregate demand. Another important consideration is the exchange rate regime, with inflation effects in fixed-rate regimes likely to be particularly pronounced due to the absence of a shock absorber that can adjust the relative prices between tradables and non tradables more quickly.\footnote{Beaton \textit{et al} (2017), “Migration and Remittances in Latin America and the Caribbean: Engines of Growth and Macroeconomic Stabilizers?”, IMF Working Paper} These theoretical priors are largely confirmed in the literature. Ball \textit{et al} (2012) find that remittances have an inflationary impact in small open economies, with fixed exchange rate regimes largely driving those linkages.\footnote{Ball \textit{et al} (2012), “Remittances, inflation, and exchange rate regimes in small open economies” MPRA Paper No. 39852} Others have also found a positive and significant relationship between remittances and inflation for emerging market economies.\footnote{Narayan \textit{et al} (2011), “Do remittances induce inflation? Fresh evidence from developing countries”, Southern Economic Journal 77 (4): 914-933} \footnote{Caceres and Saca (2006), “What do remittances do? Analyzing the private remittance transmission mechanism in El Salvador”, IMF Working Paper 06/250, International Monetary Fund}

As discussed above, Honduras has a crawling peg exchange rate regime, wherein a fixed exchange rate is allowed to fluctuate within a small band. The research findings summarized above would thus suggest that Honduras would be particularly susceptible to the inflationary effects of remittances. However, available data shows no evidence of a strong relationship between these two factors. While remittance receipts in Honduras have grown rapidly in recent years, consumer price inflation has remained relatively stable and within the Central Bank of Honduras’ target range of 4 percent (plus or minus 1 percent), as shown in figure 3-4.
POVERTY AND INEQUALITY

Because remittances often make up a significant proportion of recipient household’s income, and incomes earned abroad are significantly higher than those earned in-country, existing research has generally found that remittances tend to reduce poverty. A 2008 World Bank study of Latin American countries found that a 2.5 percentage point increase in the remittances to GDP ratio was associated with a 0.5 percentage point decrease in poverty. More recent research has estimated even larger effects, with a 10 percent increase in migration to the U.S. correlating with an 8.6 percent reduction in the proportion of the population living below $1.90 per day.

The relationship between remittances and inequality is more uncertain and largely appears to depend on which part of the income distribution migrants come from. Econometric analysis of remittances in Mexico has found that remittances may be pro-poor, which could translate into lowered inequality overall. A Propensity Score Matching analysis finds that inequality in Mexico would be higher in the absence of remittances, even when taking into account the increased likelihood that remittance recipients won’t participate in the labor market. However, in the case of Honduras, a higher proportion of households in richer income quintiles receive remittances compared to poorer income quintiles. This trend has remained generally constant even as overall levels of migration have increased, as shown in figure 3-5. The reasons for this pattern are unclear - on one hand, remittances may have a strong poverty-reducing effect in Honduras, thus causing recipient households to shift into higher income quintiles. On the other hand, migration from Honduras to the U.S. is prohibitively expensive for many Honduran households (see Chapter 1). As such, remittances may be more common among richer households simply because these households are the only ones that can afford to send family members overseas. As such, rather than being “pro-poor”, remittances may in fact be increasing income inequality, as households in higher income

---

174 Ibid
quintiles are more likely to be able to afford the cost of sending a family member to the U.S., and therefore receive remittances.

**Figure 3-5: Remittance Receipts by Household Income Quintiles**

<table>
<thead>
<tr>
<th>Household Income Quintile</th>
<th>% of Households 2002</th>
<th>% of Households 2012</th>
<th>% of Households 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3%</td>
<td>8%</td>
<td>14%</td>
</tr>
<tr>
<td>2</td>
<td>8%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>15%</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>4</td>
<td>15%</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>5</td>
<td>10%</td>
<td>10%</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Source: 2019 National Multipurpose Household Survey*

**MICROECONOMIC IMPACTS**

There has been a wealth of literature on the microeconomic impacts of remittances. Yet much like the literature on the macroeconomic impacts of remittances, the evidence on microeconomic impacts is mixed. On the one hand, remittances appear to play a critical role in stabilizing household consumption, improving resilience against shocks, reducing poverty, and potentially increasing expenditures on health and education. On the other hand, remittances may reduce labor force participation, particularly for women, and fail to increase savings.

In order to assess these impacts at the household level in Honduras, we use data from the National Multipurpose Household Survey, an annual, nationally representative survey of households that covers topics related to employment, income, and poverty. The 2019 dataset (the most recent dataset available to our team) contains responses from 24,094 individuals (15,123 of whom are working age) across 5,767 households. Among these households, 843 (or 14.6 percent) reported receiving remittances in the last month, with an average monthly remittance income of 3,956 lempiras (or US $161) and a median value of US $96.175,176

The data from Honduras suggests that while remittances play a critical role in stabilizing and smoothing household consumption expenditure, they have a less clear impact on overall levels of household saving and investment. Moreover, consistent with existing literature, remittances do appear to be associated with reduced labor force participation but are not associated with reduced number of hours worked. This further supports the conclusion of section 5.1 that while remittances may help to smooth consumption and reduce poverty, they may fail to translate to longer-term economic growth.

---

175 Exchange rate in 2019 (vs. USD) is 24.59.
176 It is important to note that the household survey only asks respondents if they received remittances in the past month, not if they have ever received remittances. Given that the survey results from the USAID/Honduras TMS study show that many households only receive remittances once or twice a year, this suggests that the household survey data may underestimate the proportion of households receiving remittances.
### Table 3-2: Summary of Microeconomic Impacts of Remittances

<table>
<thead>
<tr>
<th>Issue</th>
<th>Relationship</th>
<th>Evidence</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Expenditures</td>
<td>Positive</td>
<td>Strong</td>
<td>Evidence suggests that remittances act as a form of insurance at the household level, smoothing income in response to shocks. There is also some evidence to suggest that remittances are associated with reduced debt.</td>
</tr>
<tr>
<td>Household Savings</td>
<td>Mixed</td>
<td>Moderate</td>
<td>Some research has suggested that because the large majority of remittances received are spent on household consumption (including food, paying off debts, and utilities), little, if any, is reserved for saving. However, a handful of studies have found a positive relationship between remittances and increased levels of household saving.</td>
</tr>
<tr>
<td>Health and Education Expenditures</td>
<td>Positive</td>
<td>Weak</td>
<td>Existing literature has found that remittances have a positive impact on both education and healthcare expenditures. However, due to the absence of a counterfactual, this relationship cannot be ascertained in Honduras.</td>
</tr>
<tr>
<td>Labor Force Participation</td>
<td>Negative</td>
<td>Strong</td>
<td>Empirical evidence has found that remittances have a negative impact on labor force participation rates. Propensity Score Matching (PSM) of Honduras household survey data confirms this relationship and finds a strong relationship between increased remittance levels and reduced likelihood of the recipient participating in the labor force. This relationship is especially strong for female remittance recipients.</td>
</tr>
</tbody>
</table>

### HOUSEHOLD EXPENDITURES

Remittances make up a significant proportion of total household income. According to the 2019 Household survey data, remittances comprise, on average, 33.8 percent of total monthly household income. However, this proportion is higher for households in lower income quintiles, as well as households in rural areas and female-headed households, as shown in figures 3-6 and 3-7 below.

There is a robust body of empirical evidence to suggest that remittances play an important role in stabilizing household consumption. As previously discussed, remittances are generally countercyclical and tend to increase in response to economic shocks such as natural disasters. At the microeconomic level, research has demonstrated that poor households use remittances as one of several strategies to mitigate risk and cope with shocks in the absence of formal credit and insurance mechanisms. One study, for example, finds that Mexican households that receive remittances are less likely to increase their debts as a result of health emergencies (e.g., a family member being hospitalized) than households that do not receive remittances. This is consistent with data from the 2019 National Multipurpose Household Survey, which finds that approximately 19 percent of Honduran households report using some of their remittances to pay off debts. These results suggest that remittances act as a form of insurance at the household level, smoothing income in response to idiosyncratic shocks.

---


178 Ambrosius and Cueceucha (2013), “Are remittances a substitute for credit? Carrying the financial burden of health shocks in national and transnational households”, World Development (46),
Using the USAID/Honduras TMS survey to analyze the overall expenditure patterns of remittance-receiving households, we find that households allocate just over one-half (56 percent) of their income to necessities, including food and utilities. An additional 11 percent of household expenditure is allocated towards savings and investment (4.2 percent and 6.7 percent respectively). Education and medical expenditures comprise 7.4 percent and 6.4 percent of total household expenditure, respectively. Finally, debts comprise a very high proportion of total household expenditures, at 9.4 percent.
However, these household expenditures reported above are not evenly distributed among survey respondents. While spending on food and utilities is universal (996 respondents reported on monthly spending of $173.76, on average, on food, and 834 respondents reported on monthly spending of $65.38, on average, on utilities), only a small portion of the respondents reported spending on savings or investment.

In total, 235 survey respondents (less than 23 percent of total respondents) reported monthly savings of $85.87, on average, and only 71 (less than 7 percent of total respondents) respondents reported investment of $452, on average. Inequity in spending structure also presents in education and medical expenditure spending, to a lesser extent. In total, 414 respondents reported on monthly spending on education ($85.17 on average), and 384 respondents reported on monthly spending on medical expenses ($79.47 on average).

### Table 3-3: Household Expenditures by Category

<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th>Number of Respondents</th>
<th>Mean (Lempira)</th>
<th>Mean (US$)</th>
<th>Total Expenditure by Types (US$)</th>
<th>Weight</th>
<th>Weighted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>996</td>
<td>4,231</td>
<td>$173.76</td>
<td>$173,062.67</td>
<td>36.2%</td>
<td>$168.68</td>
</tr>
<tr>
<td>Utilities</td>
<td>834</td>
<td>1,592</td>
<td>$65.38</td>
<td>$54,526.82</td>
<td>11.4%</td>
<td>$53.15</td>
</tr>
<tr>
<td>Debts</td>
<td>263</td>
<td>4,157</td>
<td>$170.72</td>
<td>$44,899.01</td>
<td>9.4%</td>
<td>$43.76</td>
</tr>
<tr>
<td>Education</td>
<td>414</td>
<td>2,074</td>
<td>$85.17</td>
<td>$35,262.26</td>
<td>7.4%</td>
<td>$34.37</td>
</tr>
<tr>
<td>Investment</td>
<td>71</td>
<td>11,008</td>
<td>$452.07</td>
<td>$32,097.25</td>
<td>6.7%</td>
<td>$31.28</td>
</tr>
</tbody>
</table>

Source: USAID/Honduras TMS Survey (2021)
<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Total</th>
<th>Costs</th>
<th>Percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Expenses</td>
<td>384</td>
<td>1,935</td>
<td>$79.47</td>
<td>6.4%</td>
<td>$29.74</td>
</tr>
<tr>
<td>Transportation</td>
<td>435</td>
<td>1,631</td>
<td>$66.98</td>
<td>6.1%</td>
<td>$28.40</td>
</tr>
<tr>
<td>Rent</td>
<td>202</td>
<td>2,914</td>
<td>$119.67</td>
<td>5.1%</td>
<td>$23.56</td>
</tr>
<tr>
<td>Save</td>
<td>235</td>
<td>2,091</td>
<td>$85.87</td>
<td>4.2%</td>
<td>$19.67</td>
</tr>
<tr>
<td>Mortgage</td>
<td>45</td>
<td>6,763</td>
<td>$277.74</td>
<td>2.6%</td>
<td>$12.18</td>
</tr>
<tr>
<td>Clothes</td>
<td>231</td>
<td>1,062</td>
<td>$43.61</td>
<td>2.1%</td>
<td>$9.82</td>
</tr>
<tr>
<td>Outing</td>
<td>136</td>
<td>1,123</td>
<td>$46.12</td>
<td>1.3%</td>
<td>$6.11</td>
</tr>
<tr>
<td>Cleaning/Gardening</td>
<td>43</td>
<td>1,583</td>
<td>$65.01</td>
<td>0.6%</td>
<td>$2.72</td>
</tr>
<tr>
<td>Others</td>
<td>16</td>
<td>4,059</td>
<td>$166.69</td>
<td>0.6%</td>
<td>$2.60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1026</td>
<td>12,374</td>
<td>$466.04</td>
<td>100.0%</td>
<td>$466.04</td>
</tr>
</tbody>
</table>

*Source:* USAID/Honduras TMS Survey (2021)

**Household Savings**

The evidence is mixed on whether a positive relationship exists between remittances and household savings. Some research has suggested that because the large majority of remittances received are spent on household consumption, little, if any, is reserved for saving or investment, thereby lessening remittances’ potential for spurring longer-term economic growth. However, several studies have found a positive relationship between remittances and increased levels of household saving. Studies on households in Asia and the Baltics, for example, have found a strong positive correlation between remittance inflows and private household savings, even after controlling for socioeconomic and geographic factors.\(^\text{179}\)\(^\text{180}\)

The relationship between remittances and household savings may be unclear due to the nature of their impact on income. Research has found that remittances are typically pooled with other sources of household income, such as wages, pensions, and other forms of social support.\(^\text{181}\) In this respect, households do not distinguish between remittances and other forms of income. As such, while remittances do increase a household’s total income, potentially increasing their capacity to save, a positive relationship between remittances and saving is not a given. If remittances are financing basic needs that would otherwise be unmet due to insufficient income from other sources, then they are unlikely to also be used for savings. However, if remittances are increasing household income beyond the amount required for basic needs, then they may be saved much like any other form of surplus income. Put another way, remittances *proportionally* alter household spending.

\(^{181}\) Orozco and Yansura (February 2015), “Remittances and financial inclusion: Opportunities for Central America”, Inter-American Dialogue
patterns, but do not necessarily alter their underlying spending behavior.\textsuperscript{182, 183} This is supported by evidence from the USAID/Honduras TMS survey, which finds that the amount a remittance-receiving household saves is positively correlated with the amount they receive in remittances (Figure 3-9).

\textit{Figure 3-9: Relationship between Remittances and Savings}

\begin{center}
\includegraphics[width=\textwidth]{Annual_Savings.png}
\end{center}

\textit{Source: USAID/Honduras TMS Survey}

However, as figure 3-8 illustrated, a small proportion of household income (just 4.2 percent) is allocated towards savings. As such, while remittances might increase household savings, the total effect is likely to be relatively small.

In order to examine the factors that might contribute to an increased propensity to save at the household level, we use multivariate regression analysis, where making a deposit into a savings account is defined as a binary dependent variable. This analysis finds that increased education, age, number of hours worked, and monthly household income are all positively correlated with the likelihood of making a deposit into a savings account. Interestingly, we also find that people who previously lived outside of Honduras (i.e., returned migrants) are 55 percentage points more likely to make deposits into savings accounts than those who have never lived outside of Honduras, suggesting that migration may have long-term welfare benefits, even for those who have since returned. Finally, we find that households that suffered financial losses due to COVID-19 are 31 percentage points less likely to make deposits into a savings account. For a full summary of results, see Appendix 4.


HEALTH AND EDUCATION EXPENDITURES

The existing literature suggests that remittances have a positive impact on both education and healthcare expenditures. On education, a 2020 meta-analysis of 73 studies on the topic concluded that remittances in Latin America increase household expenditure on education by 53 percent, on average, even when controlling for reverse causality and other potential sources of endogeneity.\textsuperscript{184} Similarly, several studies have found that remittances are positively correlated with increased healthcare expenditures, although this effect is generally less pronounced than education.\textsuperscript{185}

Returning to the USAID/Honduras TMS survey, we use multivariate regression analysis to analyze the factors that contribute to increased health and education spending among remittance-receiving households. We find that age and education level are positively correlated with increased expenditure on both health and education, while overall household income is positively correlated with increased education expenditures, but not health expenditures. Somewhat surprisingly, we also find that households that suffered economic losses due to environmental catastrophes are significantly more likely to spend more on education and health. For a full summary of results, see Appendix 4.

LABOR FORCE PARTICIPATION, INCOME, AND HOURS WORKED

LABOR FORCE PARTICIPATION

Although remittances are widely believed to reduce labor force participation, existing research has found that the impact of remittances on labor force participation varies widely depending on the recipient’s location, gender, and age. Research on Mexican households, for example, has found that remittances reduce male participation in formal sector work, but increase their participation in informal sector work. By contrast, remittances appear to reduce female labor force participation across both formal and informal sectors.\textsuperscript{186} A multi-country study by the International Labor Organization (ILO) similarly finds that while remittances decrease labor force participation overall, the effect is more pronounced for women than men.\textsuperscript{187}

To investigate the relationship between remittances and labor force participation in Honduras specifically, we use 2019 data from the National Multipurpose Household Survey. Among the 15,123 working age (aged 15-64) respondents in the survey, 62.5 percent are employed, 4.1 percent are unemployed, and 33.4 percent are not participating in the labor force. These rates of labor force participation do appear to differ by remittance-receiving status, as shown in Figure 3-14. Among the 2,249 individuals residing in households that do receive remittances, 57.3 percent are employed, 4.5 percent are unemployed, and 38.2 percent are not participating in the labor force. Among the 12,874 individuals residing in households that do not receive remittances, 63.4 percent are employed, 4.0 percent are unemployed, and 32.6 percent are not participating in the labor force. This difference in employment rates by household remittance status is statistically significant at the 1 percent level.

\textsuperscript{184} Askarov and Doucouliagos (2020), “A meta-analysis of the effects of remittances on household education expenditure”, World Development 129
\textsuperscript{187} Chami et al (2018), “Are remittances good for labor markets in LICs, MICs, and fragile states?”, ILO Research Department Working Paper No. 30
Overall, women in Honduras have very low levels of labor force participation. As such, remittances initially appear to have a more muted impact on women’s labor force participation relative to men’s, as shown in Figures 3-11 and 3-12. The employment rate of men residing in remittance-receiving households is 6.8 percentage points lower than that of men residing in households that do not receive remittances. By comparison, the employment rate of women residing in remittance-receiving households is just 1.9 percentage points lower than that of women residing in households that do not receive remittances.

This descriptive analysis, however, does not account for potentially endogenous differences between remittance receiving and non-remittance receiving households. In other words, households that receive remittances may differ in important ways from households that do not receive remittances, and these differences might contribute to the observed variation in labor force participation. To account for these differences, we use Propensity Score Matching (PSM) techniques to match individuals in remittance receiving and non-remittance receiving households on shared characteristics, including location, number of individuals residing in the household, number of
children/elders residing in the household, age and level of education of the respondent, and total household income.\textsuperscript{188}

Using this strategy, we find that receiving remittances reduces an individual’s likelihood of being employed by 8.7 percentage points on average\textsuperscript{189} (statistically significant at the 1 percent level). Restricting the sample to just men, we find that receiving remittances reduces an individual’s likelihood of being employed by 5.5 percentage points on average (statistically significant at the 1 percent level). Among women, we find that receiving remittances reduces an individual’s likelihood of being employed by 8.3 percentage points (statistically significant at the 5 percent level). Thus, while basic descriptive statistics suggest that remittances have a minimal impact on women’s already-low levels of labor force participation, these statistics obscure substantial underlying differences in the characteristics of women who do and do not receive remittances. When these differences are controlled for, we find that remittances actually have a pronounced and significant effect on women’s employment, and a less pronounced (albeit still visible) effect on men’s employment. For a full summary of results, see Appendix 5.

\textbf{HOURS WORKED}

The existing literature on the impacts of remittances on the number of hours worked is mixed, and tends to vary depending on the recipient’s gender, location, and sector. For example, a study on households in Mexico found that remittances were associated with a 15 percent reduction in the number of hours worked in the formal sector, but a 14 percent increase in the number of hours worked in the informal sector.\textsuperscript{190} Other research in Haiti has found that remittances reduce the number of hours worked by both men and women, but that this effect is significantly more pronounced for men.\textsuperscript{191} Finally, some studies have found that while remittances have an impact on the extensive margin (labor participation), they have little to no effect on the intensive margin (working hours of employees).\textsuperscript{192}

Within Honduras, men do work significantly more hours per week on average than women, at 51.5 hours compared to 40.9 hours. As shown in Figure 3-17, men residing in remittance-receiving households do work slightly fewer hours compared to men residing in non-remittance-receiving households, at 49.4 hours per week compared to 51.8 hours per week (statistically significant at the 1 percent level). Women, by contrast, appear to work slightly more hours per week when they reside in remittance-receiving households. However, this difference is not statistically significant.

\begin{footnotesize}
\begin{enumerate}
\item The full list of covariates the individuals are matched on are age, urban/rural location, gender, level of education, department, total number of people residing in the household, total number of children in the household, and total number of elderly people in the household. \textsuperscript{188}
\item Results reported are the average treatment effect on the treated (ATET)\textsuperscript{189}
\item Amuedo-Dorantes, C. and Pozo, S (2006), “Migration, remittances, and male and female employment patterns”\textsuperscript{190}
\end{enumerate}
\end{footnotesize}
Returning to our Propensity Score Matching model, we find that residing in a remittance-receiving household does not appear to have a statistically significant impact on the number of hours worked per week on average, or among men or women specifically. Thus, while remittances do appear to have some impact on the decision to participate in the labor force, they do not appear to have a substantial impact on the extent to which a person works once they have decided to enter the labor force. For a full summary of results, see Appendix 5.

**INCOME**

A substantial body of literature suggests that remittances reduce labor force participation, in part, by increasing recipients’ reservation wages, or the lowest wage an individual is willing to accept for a job. As a result, one might expect that individuals who receive remittances and choose to work would also receive, on average, higher wages due to their increased reservation wage.

In Honduras, individuals who receive remittances do, on average, appear to receive slightly higher wages from their primary occupation, at 6,919 lempiras per week (US $281) among recipients compared to 6,396 lempiras per week (US $260) among non-recipients. This difference is weakly significant at the 10 percent level. The difference in monthly income is starker, however, when disaggregated by gender. Men residing in households that receive remittances earn 944 lempiras (US $37) more per month than men residing in households that do not receive remittances. However, there is little difference in the average monthly wages received by women in remittance-receiving and non-remittance-receiving households.

---

However, returning to our Propensity Score Matching model, we find no statistically significant difference in average income earned from one’s primary occupation between remittance recipients and non-remittance recipients. We also fail to find any statistically significant difference in average income earned when the analysis is disaggregated by gender. As such, while descriptive statistics appear to suggest that there is some difference in wages received by those who do and do not receive remittances, these differences disappear when other factors that affect wages, such as location and level of education, are controlled for. For a full summary of results, see Appendix 5.
Chapter 4  - RECOMMENDATIONS & PROGRAMMING

RECOMMENDATION 1 - FINANCIAL LITERACY TRAINING AT HIGH VOLUME REMITTANCE LOCATIONS

Rationale: MTOs are the primary channel through which Honduran migrants send remittances because financial institutions require documentation to open an account. These channels often have non-transparent pricing, have almost no opportunity for financial education, and are very frequently predatory in their marketing practices. Increasing financial literacy among migrants will reduce information asymmetries about (1) costs and conditions of remittance services, (2) financial products that match migrant’s needs, (3) training in resource management and planning, (4) and raise awareness of unregulated or predatory remittances practices.\(^{194}\)

Opportunities: Stakeholders, including the USG and multilateral organizations, should promote alliances and initiatives with interagency partners to promote higher rates of bankarization and formal financial inclusion among Honduran migrants. There are multiple initiatives that could help to improve financial literacy at high volume remittance locations, including:

- Partnerships with agencies like the U.S. Federal Deposit Insurance Corporation (FDIC), who is managing the #GetBanked campaign among Hispanic populations in Houston and Atlanta, and to other USG partners already promoting bankarization among Latin American migrants.
- The FDIC’s “Minority Depository Institutions Program,” which manages a $120 million fund for community development financial institutions (CDFIs) for banking promotion to low-income and unbanked communities.
- Stakeholders should use tools like the Cooperative Development Program (CDP)\(^ {195}\) to further promote financial inclusion in regional markets, such as providing technical assistance to local credit unions on the marketing, community outreach, financial education approach, and operational and personnel training required to serve remitting migrant populations.
- Crowd-in investments by digital remittance providers through innovative partnerships. For example, stakeholders could stand up a remittance facility for the Northern Triangle similar to IFAD’s “Financing Facility for Remittances,” which mobilizes finance to pilot innovative investment mechanisms for larger diaspora-based programs, pilots new transfer modalities, and supports the use of financially inclusive delivery mechanisms.\(^ {196}\)

RECOMMENDATION 2 - FINANCIAL INCLUSION PROMOTION FOR REMITTANCE RECIPIENTS IN HONDURAS

Rationale: Large inflows of remittances to Honduras provide an excellent opportunity for the promotion of financial inclusion among remittance recipients. Since the vast majority of remittances are cashed-out in financial institutions, these venues should serve as a platform for promoting financial literacy and for the cross-selling of remittances with other banking services. Increasing financial inclusion in this space will (1) expand cash-out points, including agent networks, (2) create lending products for remittance recipients, and (3) develop financial literacy training for remittance recipient services and products that could increase the wealth of remittance recipient households.

Opportunities: Expanding remittance-based savings accounts so that recipients can cash-out their remittances using ATMs, and cash-based lending to remittance recipients so that they can use these payments to access credit. Furthermore, expanding the availability and utilization of digital financial

\(^ {194}\) IFAD (September 2015), “The use of remittances and financial inclusion”
\(^ {195}\) USAID, “Cooperative Development Program”
\(^ {196}\) IFAD, “The financing facility for remittances”
services (DFS) for the delivery and receipt of remittances will reduce transaction costs for remitters. There are several initiatives that could help to promote this initiative, including:

- Financial institutions, particularly credit and savings cooperatives, should leverage the country’s growing agent network to expand the availability of cash-out points across the country to reduce the time and cost associated with cashing out remittances. Another option is to provide remittance delivery services that reduce the time burden on women associated with collecting remittance payments.
- National credit and savings cooperatives should be supported to develop savings and/or lending products that foster broader economic growth, such as using remittance flows for housing loans or using remittance savings for lending to the agricultural sector. Specific products could include savings or interest rate subsidies, low or no interest revolving facilities or short tenor microloans.
- In addition, financial literacy training should be embedded in the marketing of new products and services so that remittance recipients understand the benefits of formal financial inclusion and the role their remittances might play in building a stronger financial future for recipient households. This could include initiatives intended to increase savings and investment, although this could result in reduced consumption in the short-term.
- The USG should partner with other donors and with the Government of Honduras to launch a financial sector deepening (FSD) program that fosters broad-based financial inclusion through policy reforms, the piloting of new financial approaches and instruments, and mobilizing investment for innovation.
- Resources from the US Development Finance Corporation (USDFC) should be leveraged to catalyze the expansion of DFS products and services, using tools like Global Development Alliance (GDA) grants and challenge funds to stimulate innovation and growth.
- The USG should use bilateral and multilateral funding, and partner with financial actors and regulators, to create financial sector tech innovation hubs and incubators that cultivate transformative solutions,197 with a focus on digital payment innovation that improves the remittance ecosystem.

RECOMMENDATION 3 - CREATE AN ENABLING ENVIRONMENT FOR DIGITAL REMITTANCE AND REDUCE THE BARRIERS TO USE AMONG REMITTANCE SENDERS AND RECEIVERS

Rationale: The lack of regulation to support a digital payments ecosystem is a barrier for remittance flows. Entrepreneurs and institutions do not have regulatory clarity that would allow improvements of digital payments systems. This includes the systems that manage digital payments, enable access to bank accounts, mobile wallets, and personal identification.

Opportunities: The USAID/Honduras Transforming Market Systems (TMS) project has worked with the Fintech Association to dialogue with the Central Bank of Honduras (BCH) and the National Banking and Securities Commission (CNBS) to review new Electronic Service Payment regulations for both financial and non-financial providers. Stakeholders should support the following:

- Partnerships with the Government of Honduras to improve interoperability between banks and digital financial services (DFS) providers in Honduras. The lack of interoperability between banks and mobile money providers is the biggest issue impinging the expanded use of mobile transfers at the moment.198

---

Similarly, the USG should engage the Government of Honduras - particularly with the Financial Innovation Board within the Central Bank - to reduce regulatory barriers to the growth of retail payment infrastructure within the country to increase the venues where digital remittance recipients can spend digital money.

The USG should advocate for reducing the capital requirements of new FinTECH companies entering the market from 30 million Lempira (approximately $1.2 million) to much less. The current regulations favor further consolidation of financial institutions at the expense of allowing new and innovative, but less capitalized, players from entering the market.

The USG should advocate that the daily mobile transaction limits should be increased from $1,250/day to much higher to cater to remittance clients and business-to-business (B2B) transactions using remittance money.

The USG and other stakeholders should work with the Government of Honduras to apply a Risk Based Approach (RBA) to certain financial actors operating in the remittance space. Small, individual remittance payments have a very low probability of raising concerns related to KYC/AML, which means that implementing an RBA to remittance service providers would allow further innovation in the space.

**ADDRESSING THE UNDERLYING CAUSES OF MIGRATION**

Honduras must address the underlying reasons for emigration to the U.S. before it can reduce the population’s reliance on remittances. USAID’s 2021 Inclusive Growth Diagnostic\(^\text{199}\) (IGD) outlines that the binding constraints for growth - a key driver of emigration from Honduras - are: 1) Poor human capital, caused by inadequate education; 2) High administrative costs caused by a poor regulatory environment; 3) High rates of crime and insecurity in the country. The Government of Honduras must address these constraints if it wants to reduce household reliance on remittances. The recommendations from the Honduras IGD were to:

1. Conduct a political economy analysis to identify solutions for addressing the three barriers to inclusive growth (called the “syndrome” in the document);
2. Improve engagement, coordination, and policy development between the Government of Honduras, the private sector, academia, and civil society;
3. Embrace digitalization and improved utilization of e-platforms to reduce inconsistencies, streamline services and increase transparency;
4. Support the Government of Honduras in developing a new education policy and vocational training law;
5. Support increased transparency of government processes and transactions

While many of these recommendations are outside the scope of this assessment, the recommendation to expand the utilization of digital services is not. Expanding the number of government services provided online, increasing the number of payment operating systems around the country, and ensuring interoperability between financial institutions and digital financial services providers is critical to broadening the use of remittances for household consumption spending. As noted previously, efforts should also be made to improve private sector engagement with players in the remittance sector (including digital financial services providers) to develop new platforms and approaches for sending remittances in Honduras.

Furthermore, it should be noted that the Transition Government has put in place Public-Private Committees to address many of the constraints outlined in the IGD. These Committees are focusing...\(^{199}\) USAID (June 2021), “Honduras Inclusive Growth Diagnostic”
on reducing corruption primarily, promoting simplification (including taxes), and education (including reform to the vocational system).

**STRATEGIES FOR ADDRESSING REGIONAL MIGRATION**

Proposals to manage migration flows and address their structural and climate drivers should be implemented in tandem. Potential migration management solutions could include the creation of legal, cheaper and safer migration pathways than migrating irregularly. For example, The H-2B program has been supported by the Department of Homeland Security (DHS), the Department of Labor, and USAID as one method for expanding opportunities for temporary legal work in the United States, while helping to mitigate irregular migration. Policies for managing regional outflows could be paired with policies on gender and seek to protect women’s rights due to the conditions under which they migrate.

Long-term strategies to tackle development challenges must be multi-dimensional and focus on human capital. Governments, civil society, the private sector, and regional elites share the responsibility for addressing these root causes. Thus, a regionally integrated approach is required because challenges such as security and climate change adaptation are deeply intertwined.

Furthermore, investment in human capital is key to addressing the informal conditions in which migration occurs. There are opportunities for leveraging remittances towards higher formal saving ratios in the region and mobilizing capital into investments. Because women are the primary remittance recipients, financial inclusion opportunities targeting women offer important benefits for economic growth.

---

WORKS CITED

Chapter 1:


Chapter 2:


Consumer Financial Protection Bureau, “Remittance transfer rule factsheet”,


https://www.grandviewresearch.com/industry-analysis/digital-remittance-market


Chapter 3:


Chapter 4:


Grell, S, (July 2007), “Deepening outreach through credit unions: A review of the WOCCU Ecuador rural savings and credit with education (CREER) program”, World Council of Credit Unions


USAID (2020), "Barreras Regulatorias En La Industria De Techno-Finanzas en Honduras"


APPENDIX

APPENDIX 1: REMITTANCE SURVEY SUMMARY RESULTS

Overview

Between September 19th and October 25th, 2021, USAID/Honduras and the Transforming Market Systems (TMS) Activity with the support of the Inter-American Dialogue (IAD) and ACDI/VOCA, implemented a survey in Honduras among remittance recipients. The survey, which consisted of 84 questions, was designed to assess the demographics, financial knowledge, employment and business ownership, and consumption and savings habits of remittance recipients in Honduras. Respondents were interviewed in banks, cooperatives, parks, neighborhoods, and malls across 9 departments: Atlantida, Comayagua, Copan, Cortes, Francisco Morazan, El Paraiso, Intibuca, Olancho, and Yoro. In total, the survey received responses from 1,028 individuals. Among those respondents, the majority (61 percent) were female, and the median age was 38 years. The sections below will provide a summary of the survey results by subject area.

Demographics

While interviews were conducted in 9 departments across Honduras, the largest proportion were conducted in El Paraiso (26.2 percent of surveys), followed by Cortes (25.1 percent of surveys), and Yoro (14.2 percent of surveys). Over one-quarter (26.6 percent) of surveys were conducted in Honduras’ capital, Tegucigalpa, while 11.9 percent were conducted in San Pedro Sula. Approximately 36.7 percent of surveys took place inside a bank, while 11.9 percent took place inside a cooperative. 8.2 percent took place in a park, 12.7 percent took place in a housing complex, 18.2 percent took place in a shop or shopping center, and 12.3 percent took place in a different location.

The average age of respondents was 40 years, and the median age was 38 years. Over one-half of respondents (61 percent, or 629 individuals) were female, and 39 percent were male. Approximately 15.5 percent of respondents had completed university, while an additional 11.4 percent of respondents had attended some university but had not completed it. 14.9 percent of respondents completed “educacion diversificada”, which refers to an elective two or three years of education after secondary school in a technical field. Close to one-quarter (23.7 percent) of respondents completed secondary school, and an additional 23 percent completed primary. Finally, 11.6 percent of respondents did not complete primary school. The average household size of respondents in the sample was 4.1 people, and the median household size was 4.0 people. Of these household members, an average of 1.3 were children under the age of 8.

Roughly 39.8 percent of respondents report a total monthly household income between 10,000 and 20,000 lempiras per month, equivalent to between $408 and $816. An additional 19.6 percent report a total monthly household income between 20,000 and 30,000 lempiras per month (or $816 and $1,225), and 27.5 percent report a monthly household income of 0. Just 7.8 percent of respondents reported a household income between 30,000 and 40,000 lempiras per month, and 3.3 percent reported a monthly household income above 40,000 lempiras per month. 2 percent of respondents chose to not answer. More than half of respondents (55.4 percent) reported an individual monthly income of 0, while close to one-third (32.1 percent) reported an individual income between 10,000 and 20,000 lempiras per month. Just 6.7 percent of respondents reported an individual income between 20,000 and 30,000 lempiras per month, and less than 6 percent of respondents reported an individual income higher than 30,000 lempiras per month.
Close to one-quarter of respondents (22.3 percent) reported that their income was not sufficient to cover all of their expenses. An additional 36.7 percent reported that their income was only sufficient to cover basic living expenses, 20.4 percent reported that their income was sufficient to cover basic expenses and other expenses, and 18.6 percent reported that their income was enough to cover all expenses and save. A small minority of respondents (2 percent) reported that their income was not enough to cover any expenses.

Approximately 12.8 percent of respondents reported that they had previously lived outside of Honduras, while roughly 40.5 percent reported that they or another household member intended to migrate in the next 12 months. Among those who reported that they or someone in their household intended to migrate, “better job opportunities” was the most commonly selected reason (71.9 percent of respondents), followed by better income (67.6 percent of respondents), to reunite with family (34.8 percent of respondents), the security situation in Honduras (34.2 percent of respondents), to support family in Honduras (31.6 percent of respondents), and opportunities to study (19.4% of respondents). Less than 5 percent of respondents selected climate, poor harvest, or other reasons for migrating. These results are summarized in Table A-1.

Table A-1: Intention to Migrate Reasons

<table>
<thead>
<tr>
<th>Intention to migrate (reason)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better income</td>
<td>67.60%</td>
</tr>
<tr>
<td>Job opportunities</td>
<td>71.80%</td>
</tr>
<tr>
<td>The security situation in Honduras</td>
<td>34.20%</td>
</tr>
<tr>
<td>Opportunities to study</td>
<td>19.40%</td>
</tr>
<tr>
<td>To reunite with my family</td>
<td>34.80%</td>
</tr>
<tr>
<td>To support my family in Honduras</td>
<td>31.60%</td>
</tr>
<tr>
<td>Climate (e.g. drought, rains, etc.)</td>
<td>4.70%</td>
</tr>
<tr>
<td>Difficulties with the harvest</td>
<td>2.70%</td>
</tr>
<tr>
<td>Other</td>
<td>4.20%</td>
</tr>
</tbody>
</table>

More than half of the respondents (58.5 percent) reported that their household had suffered financial losses or damages due to COVID-19, while just under one-third (31.2 percent) reported that their household had suffered financial losses or damages due to environmental disasters (such as storms, hurricanes, or droughts).

Employment and Business Ownership

The most common occupation among survey respondents was “housewife”, at 21.8 percent of respondents (223 individuals), followed by “sales/trade”, at 17.3 percent of respondents (177 individuals). Other commonly reported occupations included “other” (13.9 percent), “professional services” (7.9 percent), and education (7.8 percent). The majority of respondents (63.7 percent, or 655 individuals) report holding one job, while just under one-third (30 percent, or 309 individuals) do not have a job. Just 64 respondents (6.2 percent) report holding two or more jobs. Just over one-half (57.4 percent, or 590 individuals) reported working 36 hours or more per week, while 19.5 percent (201 individuals) reported working less than 36 hours per week. Slightly more than one-half of
survey respondents (52.6 percent, or 541 individuals) reported that they were full-time students. Approximately 19.9 percent of respondents reported that they were unpaid workers, while 12.4 percent reported that they were “own-account”, or self-employed, workers. A minority of respondents (10.6 percent, or 106 individuals) reported that they were salaried employees.

In terms of business ownership, close to one-third of respondents (32.4 percent, or 334 individuals) reported that they owned a business. Among these business owners, 53.4 percent (180 individuals) reported that they are breaking even, while 32.3 percent (108 individuals) reported making a profit. Just 10.2 percent reported losing money on their business (34 individuals), and an additional 1.2 percent (12 individuals) reported that they didn’t know whether their business was profitable or not.

Financial Access

Most survey respondents had a bank or cooperative account (73 percent or 750 individuals) while less than a quarter reported not having a bank account (24 percent or 254 individuals) and a negligible 2.3 percent did not respond. Of those who reported having a bank account, a vast majority (93.6 percent of 732 people) said they owned a local savings account, while a much smaller number of respondents said they had a local checking account (3.7 percent of 29 people) or a foreign saving or checking account (2.6 percent of 20 people).

Conversely, respondents who reported not having a bank account mostly stated not having enough money to warrant a bank account as the primary reason (41.5 percent or 131 respondents), followed by not having the need for an account as the next most cited reason (24.7 percent or 78 respondents). Roughly one third of respondents with no bank accounts cited other reasons such as: finding the process of opening an account too complicated (11.4 percent or 36 individuals), lack of banks (5.1 percent of 16 people), lack of trust in financial organizations (4.1 percent of 13 people), having a bad banking experience (2.8 percent of 6 people), or believing that banks are too expensive (2.5 percent of 8 people).

Over half of respondents reported generally being in the habit of saving (55.7 percent of 573 people) while a smaller group did not (42 percent of 432 people) and a mere 23 respondents did not answer. Furthermore, survey participants were asked how they typically paid bills and the majority reported cash (61.1 percent of 553 people) followed by using a debit card method (18.4 percent of 288 people) while the minority quoted a combination of alternate methods such as Web of Cell App, Mobile wallet, Webpage, checks, and other (20 percent or 320 participants).

When asked what type(s) of savings and investments vehicles were used (respondents could select more than one option), over 60 percent (60.4 percent or 625 respondents) responded as having a savings account deposit; a smaller population (17.4 percent or 180 respondents or) kept what is left in cash; a smaller number invested in property (16.3 percent or 169 respondents) or business (15.7 percent or 162 respondents) while the remainder identified a combination of smaller investment options summarized in Table A-2.
### Table A-2: Savings and Investment Types or Purposes

<table>
<thead>
<tr>
<th>Type of Savings or Investment</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings account deposit</td>
<td>625</td>
<td>60.4%</td>
</tr>
<tr>
<td>Keep what is left in cash</td>
<td>180</td>
<td>17.4%</td>
</tr>
<tr>
<td>Property investment</td>
<td>169</td>
<td>16.3%</td>
</tr>
<tr>
<td>Business investment</td>
<td>162</td>
<td>15.7%</td>
</tr>
<tr>
<td>Does not respond</td>
<td>119</td>
<td>11.5%</td>
</tr>
<tr>
<td>Life insurance</td>
<td>53</td>
<td>5.1%</td>
</tr>
<tr>
<td>Does not know</td>
<td>51</td>
<td>4.9%</td>
</tr>
<tr>
<td>Bonus</td>
<td>special payment</td>
<td>49</td>
</tr>
<tr>
<td>Other</td>
<td>49</td>
<td>4.7%</td>
</tr>
<tr>
<td>Retirement fund</td>
<td>32</td>
<td>3.1%</td>
</tr>
<tr>
<td>Purchase goods</td>
<td>19</td>
<td>1.8%</td>
</tr>
<tr>
<td>Purchase cattle</td>
<td>12</td>
<td>1.2%</td>
</tr>
<tr>
<td>Communication or family savings fund</td>
<td>11</td>
<td>1.1%</td>
</tr>
<tr>
<td>Term certificate</td>
<td>7</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

### Remittance Payments

When asked if they knew about specific services for receiving remittances (survey participants could chose more than 1 response), 963 (93 percent) respondents said they knew about receiving payments in cash, compared to 250 (24 percent) respondents who were familiar with bank or savings account deposits, 105 (10 percent) who were familiar with deposits by mobile wallet, and a remaining 4 (.3 percent) who selected “other.”

Out of 759 survey respondents who provided feedback on receiving remittances by cash, 75 percent (569) said it was their preferred method while 25 percent (190) said it was not their preferred method or they do not like it. Of 284 survey participants who responded when asked how they learned to receive remittances by cash, 71 percent (203) said they were self-taught, and 29 percent (81) said they were taught by another.

Out of 170 survey respondents who provided feedback on receiving remittances by bank or savings account, 59 percent (101) said it was their preferred method while 41 percent (69) said it was not their preferred method or they do not like it. Of 48 survey participants who responded when asked how they learned to receive remittances by bank or savings account, 67 percent (32) said they were self-taught, and 33 percent (16) said they were taught by another.
Out of 38 survey respondents who provided feedback on receiving remittances by mobile wallet, 58 percent (22) said it was their preferred method while 42 percent (16) said it was not their preferred method or they do not like it. Of 50 survey participants who responded when asked how they learned to receive remittances mobile wallet, 72 percent (36) said they were self-taught, and 28 percent (14) said they were taught by another.

Survey respondents were asked two questions about the people sending the remittance. When asked who sends them the remittance, a little over 50 percent (519) said it was a brother or son; 14.3 percent (147) said “other”; 13.6 percent (140) said parents; and 13 percent (133) said a partner. When asked if the respondent and the sender discussed his/her preferences for receiving remittance payments, it was split almost evenly with 50.2 percent (516) saying no and 19.8 percent (512) saying yes.

On average, survey respondents had been receiving remittances for 58.5 months or 4.9 years. This compares to a median time of 36 months or 3 years. When asked how many times they receive a remittance payment, nearly half (49.6 percent) said they received payments monthly or 12 times per year. When using the weighted average of those providing a response, remittance recipients receive an average of 14.3 payments per year.

In terms of the value of the most recent remittance payment, respondents reported an average value of $280 and a median value of $200. Over 40 percent of respondents (40 percent) said this was near the same value that was received in 2020, while 27 percent (276) said it was less, 18 percent said it was more, and 15 percent (154) did not respond or did not know.

When asked what method they used to receive their last remittance (Table A-3), 66 percent (683) said they collected the payment at a bank or cooperative, compared to 19 percent (199) said they collected it at store or remittance service provider; 10 percent (100) who said the payment was deposited in a bank or cooperative; and 3 percent (32) who said they received the payment via a mobile wallet.

Table A-3: Reported Household Expenses

<table>
<thead>
<tr>
<th>Payment Location</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect at Bank / Coop</td>
<td>683</td>
<td>66%</td>
</tr>
<tr>
<td>Collect at Store / RSO</td>
<td>199</td>
<td>19%</td>
</tr>
<tr>
<td>Deposit: Bank / Coop</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>Mobile Wallet</td>
<td>32</td>
<td>3%</td>
</tr>
<tr>
<td>No response</td>
<td>8</td>
<td>1%</td>
</tr>
<tr>
<td>In-person</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Do not know</td>
<td>1</td>
<td>0%</td>
</tr>
</tbody>
</table>

Household Expenditures

Out of 1,028 respondents, 577 (56 percent) reported that a relative abroad had not sent the respondent any goods or products. For those who did receive a good or product, 49 percent
received clothing, 22 percent received some type of technology, and 13 percent received household equipment. All other goods or products that were sent fell within the medicines, vehicles, and “other” categories. Out of 1,028 respondents, 686 (66 percent) reported that someone abroad did not directly pay for any services or bills. For those who did receive payment for a service or bill, 23 percent reported a mobile phone payment and 7 percent reported utilities payment. Less than 6.6 percent of respondents said they received payments for the following services or bills: health (6.5 percent), debt (6 percent), education (4 percent), other (3 percent), and mortgage (1 percent).

Table A-4 provides a summary of the household expenses and payments that were reported by the survey respondents (survey participants could choose more than one response). The most highly reported expense was food (97 percent), followed by utilities (81 percent), fuel/transport (42 percent), and education (40 percent). Other notable expenses include the following: health (37 percent), debts (25 percent), savings (23 percent), clothes (22 percent), and rent (20 percent).

Table A-4: Reported Household Expenses

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>1001</td>
<td>97%</td>
</tr>
<tr>
<td>Utilities</td>
<td>837</td>
<td>81%</td>
</tr>
<tr>
<td>Fuel/transport</td>
<td>437</td>
<td>42%</td>
</tr>
<tr>
<td>Education</td>
<td>418</td>
<td>40%</td>
</tr>
<tr>
<td>Health</td>
<td>386</td>
<td>37%</td>
</tr>
<tr>
<td>Debts</td>
<td>263</td>
<td>25%</td>
</tr>
<tr>
<td>Saving</td>
<td>236</td>
<td>23%</td>
</tr>
<tr>
<td>Clothes</td>
<td>232</td>
<td>22%</td>
</tr>
<tr>
<td>Rental</td>
<td>202</td>
<td>20%</td>
</tr>
<tr>
<td>Social</td>
<td>136</td>
<td>13%</td>
</tr>
<tr>
<td>Investment</td>
<td>71</td>
<td>7%</td>
</tr>
<tr>
<td>Mortgage</td>
<td>45</td>
<td>4%</td>
</tr>
<tr>
<td>House</td>
<td>43</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table A-5 provides the reported median (middle) and mean (average) monthly household expenses by expenditure type. Although mortgage and investment payments account for the highest monthly median and mean household expenditures, only 4 percent and 7 percent report having these expenses (Table A-3). The median monthly expenditure for food expenses is 4,000 lempiras, which is similar to the mean reported monthly expense of 4,228 lempira. The median expense for debt is 3,000 lempiras, which is significantly lower than the mean reported expenditure of 4,157 lempira. All remaining expenditure amounts by item are provided in Table A-4.
<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Median</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage</td>
<td>5,650</td>
<td>6,764</td>
</tr>
<tr>
<td>Food</td>
<td>4,000</td>
<td>4,228</td>
</tr>
<tr>
<td>Investment</td>
<td>4,000</td>
<td>11,009</td>
</tr>
<tr>
<td>Debt</td>
<td>3,000</td>
<td>4,157</td>
</tr>
<tr>
<td>Other</td>
<td>2,800</td>
<td>4,056</td>
</tr>
<tr>
<td>Rental</td>
<td>2,500</td>
<td>2,915</td>
</tr>
<tr>
<td>Education</td>
<td>1,500</td>
<td>2,074</td>
</tr>
<tr>
<td>Health</td>
<td>1,500</td>
<td>1,936</td>
</tr>
<tr>
<td>Utilities</td>
<td>1,500</td>
<td>1,593</td>
</tr>
<tr>
<td>Cleaning &amp; Gardening</td>
<td>1,200</td>
<td>1,584</td>
</tr>
<tr>
<td>Fuel Transport</td>
<td>1,200</td>
<td>1,632</td>
</tr>
<tr>
<td>Social</td>
<td>1,000</td>
<td>1,124</td>
</tr>
<tr>
<td>Saving</td>
<td>1,000</td>
<td>2,091</td>
</tr>
<tr>
<td>Clothes</td>
<td>800</td>
<td>1,062</td>
</tr>
</tbody>
</table>
APPENDIX 2: LOGISTIC REGRESSION - INTENTION TO MIGRATE

Logit Regression Results

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model:</td>
<td>Logit</td>
<td>Df Residuals:</td>
<td>899</td>
</tr>
<tr>
<td>Method:</td>
<td>MLE</td>
<td>Df Model:</td>
<td>8</td>
</tr>
<tr>
<td>Date:</td>
<td>Fri, 21 Jan 2022</td>
<td>Pseudo R-sq.:</td>
<td>0.08667</td>
</tr>
<tr>
<td>Time:</td>
<td>12:16:35</td>
<td>Log-Likelihood:</td>
<td>-569.17</td>
</tr>
<tr>
<td>converged:</td>
<td>True</td>
<td>LL-Null:</td>
<td>-623.18</td>
</tr>
<tr>
<td>Covariance Type:</td>
<td>nonrobust</td>
<td>LLR p-value:</td>
<td>9.716e-20</td>
</tr>
</tbody>
</table>

|              | coef | std err | z   | P>|z| | [0.025 | 0.975 |
|----------------|------|---------|-----|-----|-------|-------|
| age            | -0.0177 | 0.004 | -4.176 | 0.000 | -0.026 | -0.009 |
| compare_2020   | -0.1578 | 0.074 | -2.142 | 0.032 | -0.302 | -0.013 |
| exp_saving     | -0.7936 | 0.173 | -4.593 | 0.000 | -1.132 | -0.455 |
| exp_investment  | -0.6939 | 0.293 | -2.454 | 0.014 | -1.248 | -0.140 |
| hh_members     | 0.1275 | 0.037 | 3.482 | 0.001 | 0.058 | 0.200 |
| living_foreign | 0.9999 | 0.220 | 4.554 | 0.000 | 0.570 | 1.430 |
| affect_covid   | 0.7010 | 0.146 | 4.795 | 0.000 | 0.414 | 0.988 |
| city           | -0.0191 | 0.013 | -1.505 | 0.132 | -0.044 | 0.006 |
| unemployed     | 0.7461 | 0.311 | 2.397 | 0.017 | 0.136 | 1.356 |

=================================================================================================
### APPENDIX 3: LOGISTIC REGRESSION - REMITTANCE RECEIVING HOUSEHOLDS

<table>
<thead>
<tr>
<th>Dep. Variable</th>
<th>Made deposits to a savings account (1 = Yes)</th>
<th>Savings (Lempiras)</th>
<th>Investment (Lempiras)</th>
<th>Education (Lempiras)</th>
<th>Medical Expenses (Lempiras)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.012</td>
<td>-3.012</td>
<td>-367.014 *</td>
<td>25.462 ***</td>
<td>24.232 ***</td>
</tr>
<tr>
<td></td>
<td>(0.005)**</td>
<td>(14.491)</td>
<td>(211.166)</td>
<td>(8.831)</td>
<td>(6.612)</td>
</tr>
<tr>
<td>Number of Jobs</td>
<td>0.106</td>
<td>-127.433</td>
<td>-4212.796</td>
<td>46.95422</td>
<td>-48.883</td>
</tr>
<tr>
<td></td>
<td>(0.182)</td>
<td>(439.260)</td>
<td>(5543.563)</td>
<td>(239.481)</td>
<td>(243.199)</td>
</tr>
<tr>
<td>Number of Hours Worked Last Week (0=Did not work, 1=less than 36 hr, 2=more than 36 hr)</td>
<td>0.324</td>
<td>154.450</td>
<td>-1849.822</td>
<td>-212.982</td>
<td>-89.429</td>
</tr>
<tr>
<td></td>
<td>(0.111)***</td>
<td>(285.612)</td>
<td>(4799.647)</td>
<td>(152.413)</td>
<td>(138.020)</td>
</tr>
<tr>
<td>Employment Situation (1=employed, 0=unemployed)</td>
<td>0.078</td>
<td>-688.240 *</td>
<td>-589.1327</td>
<td>327.909 **</td>
<td>12.509</td>
</tr>
<tr>
<td></td>
<td>(0.114)</td>
<td>(355.097)</td>
<td>(5627.029)</td>
<td>(128.946)</td>
<td>(203.559)</td>
</tr>
<tr>
<td>Respondent or his/her Household own a business (1=No, 2=Yes)</td>
<td>-0.010</td>
<td>376.924</td>
<td>-2674.376</td>
<td>482.599 **</td>
<td>630.761 *** (184.306)</td>
</tr>
<tr>
<td></td>
<td>(0.150)</td>
<td>(395.732)</td>
<td>(6211.338)</td>
<td>(199.030)</td>
<td>(181.122)</td>
</tr>
<tr>
<td>Household suffered financial losses or damages due to COVID-9 (1=No, 2=Yes)</td>
<td>-0.313</td>
<td>867.683 **</td>
<td>3666.209</td>
<td>237.191</td>
<td>42.209</td>
</tr>
<tr>
<td></td>
<td>(0.147)**</td>
<td>(381.581)</td>
<td>(7056.974)</td>
<td>(194.022)</td>
<td>(181.122)</td>
</tr>
<tr>
<td>Monthly household income</td>
<td>-0.009</td>
<td>2.485</td>
<td>135.393</td>
<td>11.890 *</td>
<td>0.0639</td>
</tr>
<tr>
<td></td>
<td>(0.005)*</td>
<td>(16.426)</td>
<td>(174.177)</td>
<td>(7.186)</td>
<td>(8.154)</td>
</tr>
</tbody>
</table>

### APPENDIX 4: MULTIVARIATE REGRESSION - PROPENSITY TO SAVE

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(1) Made deposits to a savings account (1 = Yes)</th>
<th>(2) Savings (Lempiras)</th>
<th>(3) Investment (Lempiras)</th>
<th>(4) Education (Lempiras)</th>
<th>(5) Medical Expenses (Lempiras)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.012</td>
<td>-3.012</td>
<td>-367.014 *</td>
<td>25.462 ***</td>
<td>24.232 ***</td>
</tr>
<tr>
<td></td>
<td>(0.005)**</td>
<td>(14.491)</td>
<td>(211.166)</td>
<td>(8.831)</td>
<td>(6.612)</td>
</tr>
<tr>
<td>Number of Jobs</td>
<td>0.106</td>
<td>-127.433</td>
<td>-4212.796</td>
<td>46.95422</td>
<td>-48.883</td>
</tr>
<tr>
<td></td>
<td>(0.182)</td>
<td>(439.260)</td>
<td>(5543.563)</td>
<td>(239.481)</td>
<td>(243.199)</td>
</tr>
<tr>
<td>Number of Hours Worked Last Week (0=Did not work, 1=less than 36 hr, 2=more than 36 hr)</td>
<td>0.324</td>
<td>154.450</td>
<td>-1849.822</td>
<td>-212.982</td>
<td>-89.429</td>
</tr>
<tr>
<td></td>
<td>(0.111)***</td>
<td>(285.612)</td>
<td>(4799.647)</td>
<td>(152.413)</td>
<td>(138.020)</td>
</tr>
<tr>
<td>Employment Situation (1=employed, 0=unemployed)</td>
<td>0.078</td>
<td>-688.240 *</td>
<td>-589.1327</td>
<td>327.909 **</td>
<td>12.509</td>
</tr>
<tr>
<td></td>
<td>(0.114)</td>
<td>(355.097)</td>
<td>(5627.029)</td>
<td>(128.946)</td>
<td>(203.559)</td>
</tr>
<tr>
<td>Respondent or his/her Household own a business (1=No, 2=Yes)</td>
<td>-0.010</td>
<td>376.924</td>
<td>-2674.376</td>
<td>482.599 **</td>
<td>630.761 *** (184.306)</td>
</tr>
<tr>
<td></td>
<td>(0.150)</td>
<td>(395.732)</td>
<td>(6211.338)</td>
<td>(199.030)</td>
<td>(181.122)</td>
</tr>
<tr>
<td>Household suffered financial losses or damages due to COVID-9 (1=No, 2=Yes)</td>
<td>-0.313</td>
<td>867.683 **</td>
<td>3666.209</td>
<td>237.191</td>
<td>42.209</td>
</tr>
<tr>
<td></td>
<td>(0.147)**</td>
<td>(381.581)</td>
<td>(7056.974)</td>
<td>(194.022)</td>
<td>(181.122)</td>
</tr>
<tr>
<td>Monthly household income</td>
<td>-0.009</td>
<td>2.485</td>
<td>135.393</td>
<td>11.890 *</td>
<td>0.0639</td>
</tr>
<tr>
<td></td>
<td>(0.005)*</td>
<td>(16.426)</td>
<td>(174.177)</td>
<td>(7.186)</td>
<td>(8.154)</td>
</tr>
</tbody>
</table>
### APPENDIX 5: PROPENSITY SCORE MATCHING - LABOR FORCE PARTICIPATION

Variables matched on: Age, urban/rural location, department, gender, level of education, total number of people living in household, total number of children in household, and total number of elders in the household.

All coefficients are showing the Average Treatment Effect on the Treated (ATET).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Coef.</th>
<th>SE</th>
<th>z</th>
<th>P &gt;</th>
<th>z</th>
<th>95% confidence interval</th>
<th># of Observations</th>
<th>Matches Requested</th>
<th>Min. number of matches</th>
<th>Max. number of matches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment - All</td>
<td>-0.09</td>
<td>0.02</td>
<td>3.88</td>
<td>0.00</td>
<td>-0.13</td>
<td>-0.04</td>
<td>4,567</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Employment - Women Only</td>
<td>-0.08</td>
<td>0.04</td>
<td>1.85</td>
<td>0.06</td>
<td>-0.17</td>
<td>0.00</td>
<td>1,446</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Employment - Men Only</td>
<td>-0.05</td>
<td>0.02</td>
<td>2.62</td>
<td>0.01</td>
<td>-0.10</td>
<td>-0.01</td>
<td>3,121</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total Hours</td>
<td>-2.61</td>
<td>1.57</td>
<td>-5.69</td>
<td>0.47</td>
<td>0.47</td>
<td>3,850</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 90 percent level, **significant at 95 percent level, ***significant at 99 percent level
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>2.82</th>
<th>0.70</th>
<th>0.49</th>
<th>-3.56</th>
<th>7.48</th>
<th>898</th>
<th>1</th>
<th></th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours Worked -</td>
<td>All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Women Only</td>
<td>1.96</td>
<td>2.82</td>
<td>0.70</td>
<td>0.49</td>
<td>-3.56</td>
<td>7.48</td>
<td>898</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Men Only</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Wage Income -</td>
<td>All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Women Only</td>
<td>-14.70</td>
<td>5.38</td>
<td>0.01</td>
<td>0.99</td>
<td>60</td>
<td>2132.20</td>
<td>3548</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Men Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>273.41</td>
<td>65</td>
<td>0.50</td>
<td>0.62</td>
<td>0</td>
<td>1354.62</td>
<td>844</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Wage Income -</td>
<td>Women Only</td>
<td>273.41</td>
<td>65</td>
<td>0.50</td>
<td>0.62</td>
<td>0</td>
<td>1354.62</td>
<td>844</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Men Only</td>
<td>648.01</td>
<td>7.95</td>
<td>0.39</td>
<td>0.70</td>
<td>51</td>
<td>3897.53</td>
<td>2704</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>