

Migrant Money

REFERENCE GUIDE

South-South Learnings on Analysing Remittance Data: Experience Across Central Banks in Latin America and the Caribbean (LAC)



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GLOSSARY

Aggregated data involves volumes and values of transactions aggregated by one or more attributes. For example, if the value of remittances is reported and summarized by the country of origin or the channel (i.e., bank or money transfer operator). This process would provide a central bank with the ability to analyse the data by country or by channel, but not both.

Automated Data Reporting refers to technology-driven solutions involving automatically gathering data from different platforms and integrating such data into the software's system.

Application Programming Interface refers to a set of software code, protocols, and specifications that software developers use to build applications. The API allows information to be accessed, exchanged, and used.

Balance of Payments (BoP) is a statistical statement that systematically summarizes, for a specific time period, the economic transactions of an economy (resident) with the rest of the world (non-resident). The transactions between residents and non-residents consist of the following: (1) those involving goods, services, and income; (2) those involving financial claims and liabilities; and (3) those classified as transfers.

Data design refers to the plan of procedures and collection specifications, including a template designed to keep comprehensive statistics.

Data capture refers to the process of extracting information from paper or electronic documents (reporting templates) and converting it into data for systems.

Data transmission refers to data transfer from one device to another. (see ADR)

Data validation refers to the process of ensuring the accuracy and quality of data.

Data storage refers to using recording media to hold data using computers or other devices.

Data analysis refers to the process of cleaning, organizing, and modelling data to discover useful information.

Direct reporting refers to the practice of obtaining data from a group of transactors directly instead of indirectly from settlement agents. (*International transactions in remittances: A guide for compilers and users*. [Washington, D.C.]: International Monetary Fund, 2009). However, settlement often involves aggregated amounts through the international banking system, net settlements, or third-party providers. The direct reporting collection approach is based on reports of entities directly involved in remittance transactions, and it is a tool to improve the quality of statistics in a cost-effective way.

International Transactions Reporting System is a comprehensive institutional data source used to capture and monitor the balance of payments statistics. An ITRS captures the individual balance of payments transactions passing through the domestic and foreign bank accounts of enterprises, noncash transactions, and stock positions. An ITRS is a transaction-level reporting system that captures each transaction as a single record in the system's database. However, remittance transactions often fall below the reporting threshold value (a value that varies by country) and are often reported in highly aggregated formats. Aggregated statistics are compiled from data submitted by domestic banks to the compilers, which in most cases are

central bank authorities or regulators in each monetary jurisdiction.¹

Money transfer operator is a non-deposit-taking payment service provider where the service involves payment per transfer (or possibly payment for a set or series of transfers) by the sender to the payment service provider (for example, by cash or bank transfer), i.e., as opposed to a situation where the payment service provider debits an account held by the sender at the payment service provider. (From the CPMI-World Bank General Principles for International Remittance Services).

Remittances, as defined by the International Monetary Fund (IMF)'s Balance of Payments and International Investment Position Manual, 6th edition (BPM6), represent "household income from foreign economies arising mainly from people's temporary or permanent move to those economies. Remittances include cash and noncash items that flow through formal channels, such as via electronic wire, or through informal channels, such as money or goods carried across borders. They largely consist of funds and noncash items sent or given by individuals who have migrated to a new economy and become residents there and the net compensation of border, seasonal, or other short-term workers who are employed in an economy in which they are not resident".

Remittance service provider is an entity operating as a business that provides a remittance service for a client in the normal course of its business.

Remittance reporting and analysis system captures and allows the analysis of transaction-level or highly disaggregated data. The collection and analysis of transaction-level data on the remittance market can improve the ability of central banks and policymakers to influence the market through a better understanding of the economic role of remittances and more detailed information on dimensions and drivers of usage and exclusion. This will result in data-informed policies and product development, which is especially important for least developed countries (LDC).

Survey refers to data collected from targeted groups of people about their behaviour or preferences. The compiler of remittance data conduct surveys of either those who send or those who receive remittances, or subgroups of these populations, to measure indicators such as the size of the informal market.

Transaction is defined in the IMF Balance of Payments (BoP) and International Investment Position Manual (BPM6) as "an economic flow that reflects the creation, transformation, exchange, transfer, or extinction of economic value and involves changes in ownership of goods and/or financial assets, the provision of services, or the provision of labour and capital". The main aspect that determines if a transaction is captured in the BoP is the issue of residency. If it is established that the transaction is between a resident and a non-resident, then the transaction is recorded in the BoP.

Transaction data is data expected to be present within the transfer instruction. This information would include the country of origin and destination, entity type (i.e., bank or money transfer operator), the transfer currency and the transfer value.

Transaction-level (granular) data means every transfer has an individual record or entry in a database, the equivalent of a single row in a spreadsheet.

¹ Report on the Survey of Implementation of Methodological Standards for Direct Investment, IMF, OECD, March 2000. https://www.imf.org/external/BOPage/pdf/mar2000.pdf

Use case describes how a central bank that uses technology will accomplish a goal and achieve the outcome. In this reference guide, the use case refers to the use of technology-enabled systems in remittance reporting, monitoring, management, and analysis for informed policymaking by central banks.

ABBREVIATIONS AND DEFINITIONS

- ADR automated data reporting
- AML/CFT anti-money laundering/combating the financing of terrorism
- API application programming interface
- ATM automated teller machine
- **BCCh -** Central Bank of Chile (Banco Central de Chile)
- BCE Central Bank of Ecuador (Banco Central del Ecuador)
- **BCH** Central Bank of Honduras (Banco Central de Honduras)
- **BCN** Central Bank of Nicaragua (Banco Central de Nicaragua)
- BCRD Central Bank of Dominican Republic (Banco Central de la República Dominicana)
- **BCR** Central Bank of El Salvador (Banco Central de Reserva)
- BCP Central Bank of Paraguay (Banco Central del Paraguay)
- BCU Central Bank of Uruguay (Banco Central de Uruguay)
- **BoP** balance of payments
- **CBvS** Central Bank of Suriname (Centrale Bank van Suriname)
- **CBTT -** Central Bank of Trinidad and Tobago
- FDI foreign direct investment
- FIU financial intelligence unit
- FX foreign exchange
- **GDP** gross domestic product
- IMF International Monetary Fund
- ITRS international transaction reporting system
- KII key informant interviews
- LAC Latin America and the Caribbean
- LDCs least developed countries
- LMICs low- and middle-income countries
- MMO mobile money operator
- MTO money transfer operator
- **ODA** official development assistance
- RSP remittance service provider
- **SIB** Superintendence of Banks
- SWIFT Society for Worldwide Interbank Financial Telecommunication

EXECUTIVE SUMMARY

Based on recent consultations with over 70 regulators, central banks acknowledge the technology and business models that need to be considered to better capture remittance data. This is because there is an ever-growing need for detailed insights and automated and data-driven systems. As the remittance ecosystems become increasingly digital, collecting and using data will be critical.

Globally, central banks have designed various methods and tools to understand remittance markets and capture and monitor remittance flows in their countries. Many central banks have invested in an international transactions reporting system (ITRS) to capture cross-border transactions and flows. A traditional ITRS is a data collection system that obtains information from banks at the level of individual transactions to compile Balance of Payments data (BoP). However, as the remittance market evolves, the central banks' systems and sources also evolve. In this sense, some central banks use the ITRS and complement it with direct reporting from money transfer operators, with migrant surveys or other information, such as population, income, migration statistics or econometric models.

Practical guidance on data sourcing, compilation, and systems development is required to achieve accurate remittance data. This reference guide is a knowledge product from the United Nations Capital Development Fund (UNCDF), which intends to look at the data sources in addition to the systems developed and used by nine central banks in Latin America and the Caribbean (LAC) region. The range of experience offers a comprehensive set of experiences and lessons learned for peers globally. This reference guide builds on the <u>Lessons learned in building an International Transaction Reporting System to collect remittance data: Experience across central banks</u> published by UNCDF in 2021.²

Remittances are an important source of private sector income for the LAC region and Central America. In 2022, one in five dollars sent to low- and middle-income countries (LMICs) went to Latin America and the Caribbean. Cross-border remittances to the LAC region have become a significant source of financing, reaching levels comparable to those of foreign direct investment (FDI) and double that of official development assistance (ODA). In half of the countries included in this guide, remittances represent more than 5 percent of the gross domestic product (GDP). In three countries (El Salvador, Honduras, and Nicaragua), remittances represent 15 percent of their GDP.³

Central banks are the official authority for compiling and publishing remittance statistics in the nine countries. The mandate to produce official data on remittances is established at a country level by law. This responsibility generally falls under that country's central bank. Remittance data for BoP statistics are measured by the statistics department specifying the reporting requirements for individuals, companies, and institutions.

The central bank collects and disseminates remittance data in all nine countries. In all cases, this is done as part of the country's BoP statistics compilation.

All central banks reported following the International Monetary Fund (IMF) statistics manuals and guides regarding the methodology, particularly the IMF's BPM6 Manual on recommended data definitions and classifications and the IMF, 2009 International Transactions

² UNCDF has been developing tools and guides that aim to understand better the existing systems and methods for collecting and analysing remittance transactions in BoP statistics. Please find more tools and resources at https://migrantmoney.uncdf.org/

³ Official central bank information (2022) and World Bank/KNOMAD Brief 37 (2022)

in Remittances: Guide for Compilers and Users.

Only four of the nine central banks capture granular/transactional level remittance data. These central banks (Dominican Republic, El Salvador, Honduras, and Suriname) have a high remittance percentage of GDP. The Central Banks of El Salvador, Honduras, and Suriname have engaged in transaction-level reporting systems to ensure the quality and completeness of detailed BoP and remittance data. In contrast, the Central Bank of the Dominican Republic uses information from the Superintendency of Banks' transactions module. Two more central banks (Ecuador and Paraguay) reported that they would be upgrading their systems soon to collect and analyse granular remittance data. Improvements in collecting up-to-date, accurate, and granular data on remittance transactions are fundamental to enable central banks and public authorities to design evidence-based policies and interventions.

Over time, central banks in the LAC region have designed and implemented various sources and data management systems to capture and monitor remittance flows in their countries. While several central banks still use the ITRS through banks as a main source to capture and monitor cross-border transactions and flows, some are complementing it with direct reporting from money transfer operators (MTOs) as another source for compiling cross-border transactions. Additionally, some central banks are using migrant surveys to understand the characteristics of migrant senders' residing abroad and their access to financial services in and outside their countries of origin.

Reporting institutions remain focused on traditional financial remittance institutions, i.e., commercial banks and MTOs. None oversees financial technology companies, and only one (El Salvador) captures information from a fintech firm.

Central banks that rely on the traditional ITRS tend to receive highly aggregated remittance data and do not require transaction-level reporting of remittances due to their low individual values. Typically, the total value of remittances per institution is sent to the central bank using a template file. The data is sometimes broken down by one variable, such as the country of origin, channel, or product used for the transfer, but provides few insights compared to transaction-level data.

Regarding disaggregation levels, some central banks are currently updating and improving their data management and systems to collect and analyse sex-disaggregated data. Detailed remittance transaction-level data provides the most detailed analysis possible, enabling data to be filtered, cut, and analysed using attributes such as country of origin, time, currency, location, and sex. This would broaden the scope of current research for in-depth analysis and provide access to data on how men and women remit or receive remittances by channel or product.

Only two of the nine countries in this consultation (the Dominican Republic and El Salvador) directly capture supplemental data disaggregated by sex and analyse this data. Yet, only the Dominican Republic publishes it. The Central Bank of El Salvador will publish sex-disaggregated remittance data in 2023, enabling users to examine the number of remittance senders and recipients by sex.

Additionally, two central banks (Honduras and El Salvador) collect data for sex-disaggregated-specific indicators in surveys to complement the BoP statistics. In the case of El Salvador, the central bank's survey provides information on the Salvadoran migrant population in the United States, informing programmes and policies for migrants and their families in communities of origin. In the case of Honduras, the estimation of the value of informal remittances ("remesas de bolsillo" or pocket remittances) is obtained through the semiannual survey of

family remittances carried out by the central bank at the two major airports in Honduras. The conducted survey also included important demographic, educational, labour and gender details about the Hondurans who send remittances to Honduras and how those funds support their families in the country.

Technology-driven solutions and automatically gathering data from different reporting entities or platforms and integrating such data (automated data reporting, ADR) usage are developing in the LAC region. While several banks still use Excel databases, some leverage technology to capture and analyse remittance transaction-level data. These electronic systems automate and streamline the reporting processes. Web applications developed in-house are the most common method for collecting remittance and BoP data, followed by electronically sending and receiving Excel files. Currently, only the Central Bank of El Salvador uses ADR to collect and manage remittance data. In three central banks (the Dominican Republic, Honduras, and Suriname), the data is transmitted electronically by bulk file uploaded through a secure web portal. The remainder relies on the email submission of spreadsheet templates aggregated and managed manually by staff.

Ensuring data quality and validation is still a data collection challenge for central banks in the LAC region. There are a number of factors at play here, but antiquated manual processes often result in omissions, data quality issues, formatting errors, invalid data, and penalties for the reporting entities.

Most central banks still perceive external data storage as risky. Their main concerns focus on data security and confidentiality. Eight of nine central banks have developed on-site data storage, and one is transferring to cloud storage (Suriname).

Analytics is of vital importance for central banks in the LAC region. All central banks reported using data analytics tools at different levels and with other tools for policy purposes. Central banks use different tools to produce estimates of remittances and analyse them. However, some central banks reported greater effectiveness and more developed analytical capabilities than their peers.

Only some central banks, such as Honduras, El Salvador, the Dominican Republic, Chile, Paraguay, and Nicaragua, publish information on remittance inflows by country of origin.

While there is no one-size-fits-all approach, the learnings from central banks in the LAC region pointed to several essential areas for consideration to achieve a well-functioning remittance data collection framework, such as the following:

- Sound regulation and supervision of remittance players and a regulatory/supervision framework that entitles the central bank to make data information requests.
- Importance of institutional willingness, with the Board of Governors identifying policy needs and applications (top-down approach).
- Ensuring the availability of resources (sufficient financial and human resources) to address those needs.
- Ensuring data quality and attention to double-counting or underreporting.
- Well-maintained relationships with reporting entities. Focus on these areas could help design data collection frameworks, systems, and sources to close remittance data gaps.
- Importance of the conceptual framework, compilation techniques, and good data management.
- Central banks reported exploring low-cost survey methodologies to monitor remittance channels.

- Importance of establishing mechanisms for cooperation to obtain, compare and share complete information about the remittance market.
- Central banks see the advantages of data sharing to improve remittance statistics. However, mirror statistics to cross-validate data are limited.

INTRODUCTION AND BACKGROUND

The increasing importance and impact of remittances on financial stability, financial sector development, and financial inclusion in low- and middle-income countries (LMICs) and least developed countries (LDCs) has raised interest due to a substantial increase in the remittance flows to those countries. For the last two decades, remittances have been the second most important source of foreign finance for these countries, ranking second to Foreign Direct Investment (FDI) inflows.

Where they are recorded in the BoP, formal remittances are a significant and stable source of foreign exchange and increase the recipient country's foreign exchange reserves, facilitate a weakly sustainable current account balance, and serve as a buffer against the current account shocks.⁴ Remittance flows positively impact the BoP when serving as an additional source of income that can be used to finance trade deficits⁵ as they have advantages over other capital inflows, such as financial aid, direct investment, or international loans, because they are not tied to specific investment projects, generate no interest, and do not have to be repaid.⁶ Studies also show that remittance support growth in countries with less developed financial systems by providing an alternative way to finance investments and a means of addressing liquidity constraints.⁷

On the effect of remittances on financial sector development, research shows that remittances are positively and significantly correlated with the ratio of credit and deposits to Gross Domestic Product (GDP). Remittances are thus more likely to promote financial development if these flows are transformed into available loanable funds for the private sector through financial intermediaries.⁸

Furthermore, remittances are likely to improve formal financial access and inclusion when recipients deposit money in the financial sector and benefit from the variety of financial services formal institutions offer.

On the other hand, as the ratio of remittances to GDP rises, households are likely to save unused cash through formal channels. Therefore, when income flows are high enough, remittances increase recipient households' savings at formal banking institutions.⁹

Central banks are the official authority for compiling and publishing official remittance statistics in many countries. The conceptual framework, recommended data definitions and classifications within the macroeconomic statistical framework are comprised in the International Monetary Fund (IMF)'s BPM6 Manual on recommended data definitions and classifications and the IMF, 2009 International Transactions in Remittances: Guide for Compilers and Users.

However, there are still areas for improvement in official data on remittances. Compilation of remittances can be a very difficult task because no single data item in the balance of payments framework comprehensively captures transactions in remittances. Central banks' estimates pay particular attention to remittances transferred through formal channels, and not all remittances

2014

5 Lartey, 2018

6 Kodozi, 2019

7 Giuliano et al., 2009

8 Barajas, A. et al, 2018

9 Inoue and Homori, 2016

⁴ Edwards, 2004; Ratha and Riedberg, 2005; Bugamelli and Paterno, 2009; Hassan and Holmes,

are captured, especially those transferred through new digital and informal channels.

Additionally, cross-border remittances are challenging to measure because the market is fragmented among many remittance service provider types, including banks, credit unions, MTOs, MMOs and fintechs. In some countries, activities related to the foreign exchange market, which include remittance transactions, are subject to registration, control, and licensing by a central bank or the financial supervisor and carry the obligation to report to the authorities in such ways and formats as the authorities may determine. However, the growing diversity of remittance service providers and business models often requires expanding the regulatory perimeter for remittance data collection.

Finally, remittance data are also predominantly reported at highly aggregated levels, which severely limits their use in the development of supportive policy. Aggregate remittance data, although indicating their importance at the macro-level, show less about their importance at the household level, severely limiting their use in the development of supportive policy or migrants' gender-based product or service development by the industry. Compiling and analysing complete, accurate, and granular remittance statistics helps a country better understand its economy—including its economic vulnerabilities and challenges—and formulate more informed policies. Innovative data collection technologies offer opportunities to address existing challenges.

Based on recent consultations with over 70 regulators, central banks acknowledge that the way they think about remittance data is changing because there is an ever-growing need for detailed insights and automated and data-driven systems. As remittance ecosystems become increasingly digital, how data are collected and used will be critical.

Globally, central banks have designed various methods and tools to understand remittance markets and capture and monitor remittance flows in their countries. Many central banks have invested in an international transaction reporting system (ITRS) to capture cross-border transactions and flows. A traditional ITRS is a data collection system that obtains information from banks at the level of individual transactions to compile Balance of Payments data (BoP). However, as the remittance market evolves, the central banks' systems and sources also evolve. In this sense, some central banks use the ITRS and complement it with direct reporting from money transfer operators, with migrant surveys or other information, such as migration statistics.

Practical guidance on data sourcing, compilation, and systems developed is required to achieve the accuracy promised in remittance data. This guide draws from a comprehensive set of experiences and lessons learned from nine central banks in Latin America and the Caribbean (LAC) region collecting and using remittance data for policymaking.

This guide is organized into the following sections:

- 1. Objectives and methodology
- 2. What are remittance services, and why do they matter for Latin America and the Caribbean?
- 3. What are the main observations from the stock-taking of nine central banks' experiences with the rollout of systems that allow the authorities to monitor foreign exchange and cross-border transactions, emphasizing remittances?
- 4. What are the lessons learned from central banks in Latin America and the Caribbean in the development of systems to collect and analyse remittance data?
- 5. Country notes

OBJECTIVES AND METHODOLOGY

In 2022, UNCDF conducted a Key Informant Interview (KII) exercise with key representatives from the BoP departments of nine major central banks across Latin America and the Caribbean to better understand the role, challenges, and requirements for systems and methodologies that capture and analyse remittance data in BoP statistics.

Through the structured interview method, UNCDF collected data using a predetermined set of questions. For each interview, we used the same question set. This approach allowed us to compare transcripts and enabled the interviewees to provide valuable information while constraining the interviewees' ability to alter the focus of the discussion.¹⁰

This report draws from a comprehensive set of regulatory experiences and results from primary and secondary research with nine central banks in Latin America and the Caribbean region. The countries listed in Table 1 were selected according to the following criteria:

- Impact of formal or regulated remittances on the economy (as measured as a percentage of gross domestic product (GDP)
- Applicability of conclusions to least developed countries (LDCs)

Insights gained from the central banks of Brazil, Colombia, and Mexico are included in the 2021 UNCDF paper, <u>Lessons Learned on Building an ITRS to Collect Remittance Data</u>.

Table 1: Key Informant Interviews (2022)

Country	Agency
Chile	Central Bank of Chile (Banco Central de Chile, BCCh)
Honduras	Central Bank of Honduras (Banco Central de Honduras, BCH)
Dominican Republic	Central Bank of Dominican Republic (Banco Central de la República Dominicana, BCRD)
El Salvador	Central Bank of El Salvador (Banco Central de Reserva, BCR)
Nicaragua	Central Bank of Nicaragua (Banco Central de Nicaragua, BCN)
Paraguay	Central Bank of Paraguay (Banco Central del Paraguay, BCP)
Suriname	Central Bank of Suriname (Centrale Bank van Suriname (CBvS))
Trinidad & Tobago	Central Bank of Trinidad and Tobago (CBTT)
Uruguay	Central Bank of Uruguay (Banco Central de Uruguay, BCU)

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Robust Study Design, St. John, Freya et al. 2014

WHAT ARE REMITTANCE SERVICES, AND WHY DO THEY MATTER FOR LATIN AMERICA AND THE CARIBBEAN?

What are remittances?

As defined by the International Monetary Fund (IMF)'s Balance of Payments and International Investment Position Manual, 6th edition (BPM6), remittances represent "household income from foreign economies arising mainly from people's temporary or permanent move to those economies. Remittances include cash and noncash items that flow through formal channels, such as via electronic wire, or through informal channels, such as money or goods carried across borders. They largely consist of funds and noncash items sent or given by individuals who have migrated to a new economy and become residents there and the net compensation of border, seasonal, or other short-term workers who are employed in an economy in which they are not resident".

Why do remittances matter?

Remittances are a rapidly growing and stable foreign exchange inflow to many countries worldwide. Central banks are increasingly relied upon by policymakers and the private sector to collect and process remittance data that support macro and microeconomic policies and to inform investment and innovation decisions. In particular, accurate data on remittances enables (i) an understanding of household consumption and savings trends, (ii) the identification and investigation of significant changes in international fund flows, (iii) combating terrorist financing and money laundering, (iv) policy and regulatory responses in areas such as financial stability and financial inclusion, and (v) a private sector understanding of market dynamics and operational and strategic decision-making.

Why do remittances matter for Latin America and Caribbean countries?

According to BoP statistics, officially recorded remittance flows to low and middle-income countries (LMICs) were estimated to have reached \$597 billion in 2021, of which about \$130 billion went to the LAC region. Remittances to LMICs in 2022 grew an estimated 5 percent to \$626 billion, according to the latest World Bank Migration and Development Brief. Remittance flows to LAC in 2022 are expected to increase by 9.3 percent, reaching \$142 billion. The strong labour market in the United States had a positive impact on remittance flows during 2022.¹¹

Remittances represent a significant source of foreign exchange for most Latin American and Caribbean countries. In 2021, one in five dollars sent to low and middle-income countries (LMICs) went to Latin America and the Caribbean. Cross-border remittances to LAC have become a significant source of financing, reaching levels comparable to those of foreign direct investment (FDI) and double the Official Development Assistance (ODA) value. In half of the countries included in this note, remittances represent more than 5 percent of the Gross Domestic Product (GDP); in four countries (El Salvador, Haiti, Honduras, and Jamaica), remittances represent at least 20 percent of their GDP.

Remittances are a critical source of funds for much of LAC. This is due to the value of remittances relative to the size of their economies (e.g., Honduras, El Salvador, Jamaica, Haiti, or Guatemala) and/or the high total value of the transfers (e.g., Mexico, Guatemala, Dominican Republic, Colombia, El Salvador, Honduras).

In 2022, Mexico remained the largest remittance recipient with \$60.3 billion, followed by Guatemala with \$18.1 billion, the Dominican Republic with \$9.9 billion, and Colombia with \$9.1. billion, while Honduras and El Salvador received \$7.3 and \$7.6 billion, respectively.

World Bank Migration and Development Brief 37, KNOMAD.

Table 2: Remittances received as a percentage of GDP (%) in LAC countries, 2021-2022e

Country	Mill US\$, 2021	Percentage of GDP (%) 2021	Percentage of GDP (%) 2022e ¹²	
Chile	336	0.1	0.1	
Dominican Republic	10,403	11.0	8.8	
El Salvador	7,517	26.8	23.8	
Honduras	7,422	26.1	27.2	
Nicaragua	2,200	17.0	19.9	
Paraguay	488	1.3	n.a.	
Suriname	180	5.5	7.4	
Trinidad and Tobago	224.2	0.7	n.a.	
Uruguay	120	0.2	n.a.	

Note: e = estimate

Source: compiled by the author based on official central bank information (2021) and World Bank/KNOMAD Brief 37 (2022)

Source: World Bank Migration and Development Brief 37 | KNOMAD and information from central banks

WHAT ARE THE PRIMARY SYSTEMS AND SOURCES OF STATISTICAL INFORMATION ON REMITTANCES? STOCK-TAKING OF CENTRAL BANKS' EXPERIENCES IN LAC

The recommendations on data sources for measuring remittances are provided in the IMF Guide on Remittances, IMF, 2009, International Transactions in Remittances: Guide for Compilers and Users. They are as follows:

- International Transactions Reporting System (ITRS) reported by commercial banks.
- Remittance transfer operators report (direct reports) from money transfer operators (MTOs), mobile money operators, postal networks, and other fintech with money service business licenses or as applicable.
- Surveys (labour market surveys, household surveys, income and expenditure surveys, demographic surveys, specialized surveys with migrants, etc.)
- Indirect data sources or estimation models (demographic models, econometric models, residual models, etc.)

The following section will discuss central banks' frameworks and systems for collecting, reporting, and analysing remittance flows in the LAC region.

Who has the legal mandate to produce data on remittances at a country level?

The mandate to produce official data on remittances is established at a country level by law. This mandate generally falls under that country's central bank. The data on remittances are measured as part of the BoP under the statistics department specifying the reporting requirements for individuals, companies, and institutions. Central banks are expected to cooperate closely with other national institutions responsible for producing official statistics, such as the respective country's national statistics office, the Ministry of Finance, other relevant line ministries, and national stakeholders.

The cross-border remittance market does not have a specific regulatory framework in many countries in the LAC. However, in general, the activity of remittances is an activity framed in the prevention and control of money laundering and financing of terrorism or, in some cases, the activity of remittances is framed in the national payment system framework.

In Chile, except for the BCCh, there are no government or law enforcement organizations that play a specific role in the remittance market. The low incidence of remittances, approximately 0.1 percent of GDP, for this concept could justify the lack of action on this issue. However, there is a Financial Analysis Unit¹³ that regulates formal market entities that operate with capital remittances to-and-from abroad, including family or worker remittances.

Regarding the number of RSPs operating in Chile, it is relatively limited and is in line with the small size of the Chilean market. In 2021, according to the central bank, 64 RSPs operated in Chile. In 2022, 81 RSPs were operating in Chile. These companies are consulted in the annual remittances survey. Furthermore, quarterly, the seven most relevant are consulted.

In other countries, central banks have updated their legal frameworks to mention MTOs explicitly. Establishing a proper legal framework for reporting remittance data is critical for an effective and well-functioning national statistical system, which the central banks of El Salvador, Suriname, Nicaragua, and the Dominican Republic emphasized.

La Unidad de Análisis Financiero (UAF): https://www.uaf.cl/acerca/quehacemos.aspx

In El Salvador, the reform to the Law on Supervision and Regulation of the Financial System (Legislative Decree No. 65, dated 23 July 2015) in article 7 established that legal entities that carry out operations of sending or receiving money, systematically or substantially, by any means, at the national and international levels, are subject to the supervision of the Superintendence of the Financial System.

"Money Transfer Operators and agents must send to the BCR all money sending or receiving operations carried out from or to abroad through the "family remittances module" of the International Transactions System (SITI). Reports will be made daily, with a lag of two business days." – BCR, El Salvador

"In Suriname, in 2005, the central bank amended the Bank Act 1956, so Money Transfer Operators were obliged to report to the Central Bank of Suriname (article 35b)." — CBvS, Suriname

While this is a significant step forward, it is still being determined whether, in a legal sense, existing regulations will be able to encompass new players in the market, such as crypto firms and other fintech. Given the speed of technological innovation and to ensure relevance and flexibility, central banks may wish to word their legal requirements to focus on the nature of the service offered rather than the service provider offering it. An example of more flexible wording would be:

"All legal entities offering services which are, or could be used to, transfer value across international borders is required to report. New requirements for information from the Superintendency of Banks oriented towards risk-based supervision included all regulated remittance service providers, not just banks." — BCRD, Dominican Republic

Key takeaway: A well-developed legal framework gives the central bank a clear mandate to collect, compile, and disseminate complete and accurate data on cross-border payments. However, the pace of innovation provides an ever-growing range of providers that could

transfer money internationally more quickly and cheaply. This includes the novel use of non-traditional services such as e-commerce platforms, which allow migrants to purchase goods and services directly for friends and family in their country of origin without transferring cash to a resident.

As these services gain popularity, the data collected by central banks will become less and less accurate. Central banks can avoid this by creating flexible legal frameworks focused on the nature of the services being provided and embracing the supervision and oversight of new types of institutions.

Box 1: Country Highlight – Uruguay

In Uruguay, providers that carry out money transfers are defined by law as entities subject to the 2004 regulation and supervision of the Superintendency of Financial Services for the prevention of money laundering and financing of terrorism. For those purposes, they are requested to register with the Superintendency of Financial Services. Additionally, the 2008 Payment Systems law establishes that BCU is entitled to keep a record of all entities that provide payment services and request information for statistical purposes.

Which stakeholders are responsible for collecting and publishing remittance data?

The central bank collects and disseminates remittance data in all nine countries. In all cases, this is done as part of their compilation of the country's BoP statistics.

Additionally, all central banks have adopted the methodology of the International Monetary Fund (IMF)'s Balance of Payments Manual, sixth edition (BPM6).

"The Central Bank of Honduras is responsible for compiling and disseminating quarterly and annual balance of payment statistics." – BCH, Honduras

"The compilation of the External Sector statistics in Suriname is the responsibility of the Central Bank of Suriname (CBvS), and it is based on a wide range of data sources. Those data sources are accessed by regulations directly issued by the Bank or by establishing inter-institutional agreements, in cases where its legal authority does not allow direct access." – CBvS, Suriname

"On the legal framework for remittance data collection, the Central Bank of Paraguay (BCP) is established by Law No. 489/95 as the competent authority for licensing for remittances reporting entities: banks, finance companies, and exchange bureau. The law establishes the obligations of public and private entities to cooperate with the BCP to prepare and publish remittance statistics. Also, the Banking Superintendent regulates banks and finance companies, and it is housed within and under the direction of the Central Bank of Paraguay, which facilitates the request for information from the supervised entities." – BCP, Paraguay

In the Dominican Republic, the BCRD and the Superintendency of Banks coordinate the provision of information from financial intermediaries to avoid duplication.

Key takeaway: In all the countries interviewed, central banks as regulators are responsible for collecting, analysing, and sharing data on remittances. However, with the rising recognition of the importance of remittances globally and the fact that the highly aggregated data often collected by central banks cannot support the required policy use cases in other countries, other regulators are starting to develop their own reporting and analysis systems in partnership with central banks, a notable example being AUSTRAC, Australia's Anti-Money Laundering/Combating the Financing of Terrorism (AML/CTF) regulator, the institution responsible for preventing and detecting financial crime.

What is the level of aggregation and granularity? And why is it important for remittances?

Remittance data can be reported in the following forms:

Aggregated data is where volumes and values of transactions are aggregated by one or more attributes. For example, where the value of remittances is reported and summarized by the country of origin or by the channel (i.e., MTO). This would provide a central bank with the ability to analyse the data either by country or by channel (but not both).

Transaction-level data (granular data) can be thought of as every transfer having its own individual record or entry in a database, the equivalent of a single row in an Excel document. Because transaction-level data collects data at the most granular level, it allows any combination of data attributes, such as channel or product, currency, country of origin, sex of

the recipient and location, to be combined in any number of ways.

This provides significant benefits in terms of the flexibility of the data and allows for exploratory and proactive exploration of the data for novel insights rather than being limited to reactive analysis using a limited set of predefined variables. This flexibility allows the data to be used in myriad ways to generate insights to inform both financial and non-financial policy and regulation, as well as provide valuable insights to allow a central bank to provide insights to service providers to encourage and support investment and the design of more appropriate remittance products.

The table below compares the relative pros and cons of aggregated and transaction-level data. As we would not recommend capturing totally aggregated data in any market where remittances play a significant role in the economy, in this table, aggregated data refers to data aggregated by single or multiple attributes besides value. For more information, please refer to the UNCDF paper, *The Case for the Collection and Analysis of Transaction-Level, Supply-Side Data on Remittances*.

	Aggregated Data	Transaction-level Data
Insight generation	 Can help answer specific questions about single aspects of remittances Rarely provide insights detailed enough to inform policy, product development or investment 	 Allows the most detailed analysis of the data possible Allows data to be analysed by any combination of attributes such as country of origin, time, currency, location, and sex
Quality	 Manual processes involved in aggregation often lead to the introduction of errors in the data Aggregation makes detecting data errors difficult, if not impossible 	 Enables the implementation of validation and quality control procedures, ensuring data quality to the point of submission Enables individual records to be rejected or queried whilst allowing clean data entry for analysis
Ease of reporting	 Most central banks and most reporting entities are familiar and comfortable with this process Preparing and submitting aggregated data can take a significant amount of effort on the part of the reporting entity and can be a significant burden 	 Requires more data to be submitted Removes the requirement for the data to be processed in any way Can require central banks and reporting entities to invest in updating their systems (especially for institutions with heavily siloed or legacy systems)
Flexibility	 Difficult to vary data requirements as it requires changing data reporting templates, which may require updating legal directives Limited flexibility in analysis 	 Extremely flexible in terms of the possible combinations of data attributes for the analysis and the level of detail for the analysis Allows users to proactively explore the data to find novel insights outside of predefined use cases and requirements Allows analysis by different audiences to meet a diverse range of needs and use cases

LAC countries exploit a mixture of systems to capture remittance data (see the next section and Table 3). Four of the 10 central banks in economies where remittances that count for a high percentage of GDP (Dominican Republic, El Salvador, Honduras, and Suriname) have either invested in transaction-level reporting systems (El Salvador, Suriname) or are using information from transactional reporting systems from other authorities (Dominican Republic). Two more central banks (Ecuador and Paraguay) mentioned that they would be upgrading their systems to be able to collect and analyse granular remittance data.

Transaction-level reporting systems are the gold standard for remittance data reporting. These systems capture data at a transactional level, implying that every transfer has its own record in the database. These records contain information about the value and the channel used to make the transfer. They could also collect critical data such as the country of origin and the location and sex of the recipient. This level of detail in the data allows valuable insights to be mined to inform proactive, gender-smart policymaking that can help countries to lower barriers to access for remittance products, inform policies aimed at increasing formality in the remittance market, and inform gender-smart policy and investment.

"Remittance microdata are used to understand macroeconomic phenomena and inform the design of public policies, particularly monetary policy."

– BCRD, Dominican Republic

"In 2010, BCRD realized there was an inefficiency in the measurement of remittances due to under-reporting of remittances by banks that gets worse due to the information reported being aggregated. Then the International Department of the central bank decided to use the online system of the Banking Superintendency (a division of the central bank), which captures each transaction to increase the efficiency of remittance data collection." – BCRD, Dominican Republic

In other cases, information is reported bundled together in a highly aggregated way. That is the case for Ecuador, Nicaragua, Paraguay, Trinidad and Tobago, and Uruguay. In Uruguay, remittance data collection sources are aggregated information from the payment systems department and reports from MTOs. This bundling of transactions dramatically reduces the insights generated from the remittance data for policymaking and to support investment by the private sector.

Capturing granular data is not yet common,¹⁴ and the fact that 20 percent of the interviewed central banks had made this investment reflects the value they see in using data to drive better policy and investment decisions.

What data sources and systems are used for compiling data on remittances?

ITRS is a data collection system used by BoP compilation by central banks that obtains data from banks and enterprises at the level of individual transactions. BoP compilers often perceived the ITRS as an important and efficient source of information. However, by design, an ITRS can cover only transactions reported by participating institutions through which funds are transferred using international settlement systems. That means that MTOs and other non-bank financial companies engaged in cross-border transfers of funds are not covered by an ITRS. Additionally, in some cases, ITRS register only net amounts instead of gross flows required for the compilation of BoP. This is the case for remittance transactions.

Specifically, on granular data, only 37 percent of the 70 central banks consulted by UNCDF reported receiving transactional-level data.

Some countries in the LAC region compile remittances with direct data-based transactions through ITRS. Brazil and Colombia use ITRS to capture remittance data based on foreign exchange (FX) contracts. Although there is an absence of reporting thresholds, ITRS includes information on transaction value in local and foreign value from FX contracts settlements, main currency, foreign currency, and value in US\$.

That is also the case for Honduras and Suriname:

"In Honduras, for measuring family remittances in the Balance of Payments, various sources of information are used, the most relevant being that from the BCH foreign exchange accounting that records the purchase and sale of foreign currency in the financial system, complemented with estimates of remittances that enter through courier channels, pocket remittances, ¹⁵ and remittances in kind, at the end of the year and in the summer." – BCH, Honduras.

"ITRS started as a system for the compilation of External Sector Statistics, but now is also used by other departments in the Central Bank of Suriname, for example, the Financial Market Department." – CBvS, Suriname.

Some countries in the LAC region compile remittances with direct data-based transactions through ITRS, direct reports from MTOs and other administrative data. ITRS only collects data from formally regulated banks, so in countries with a diverse range of channels for transferring money internationally—such as through mobile money, online fintech platforms, or cryptocurrency-supported transfers—this leaves an incomplete picture of the remittances landscape. This is why several countries (including Dominican Republic, El Salvador, and Suriname) supplement the data from their ITRS with data reported directly from non-bank remittance service providers (RSPs) to provide complete coverage.

The ITRS of El Salvador has a module for global international transactions and another exclusively for remittances that are sent through MTOs. On the other hand, in the other module, banks or other financial entities record remittances transferred from a bank account abroad to a local account. The second module is considered an ITRS because it encompasses all transactions, where, for remittances, it records the disbursements that the MTO makes to its local payer, as this comprises international transactions.

El Salvador also requests reports from telephone companies that receive payments from abroad for purchases made by non-residents of balance credited to mobile phone airtime. Other countries in the LAC region combine direct measures with migrant surveys. Not all remittances come in through formal channels regulated and supervised by the central bank. In addition to the systems described above that collect data on formal remittances, the value of informal remittances in Honduras, El Salvador, and Nicaragua (where a substantial amount of remittances enter the country in cash) is estimated based on surveys. Payments and migration data are also sometimes used to inform estimates of informal remittances.

Pocket remittance (*remesas de bolsillos*) is a common practice among migrants in some corridors and, in particular, in Central American countries where they ask a friend or relative who will visit their country of origin to deliver the money by hand to the family member.

Table 3: Data collection systems and sources for the compilation of remittance statistics

Country	Data collection systems and sources	Level of granularity
Chile	Annual survey; Data by origin/destination country; Quarterly consultation with the main seven MTOs	Aggregated
Dominican Republic	Online Reporting System from the Superintendency of Banks (SIB)	Transaction-level
Ecuador	Quarterly survey to couriers, banks, the Superintendency, and other relevant institutions related to the remittance activity	Aggregated
El Salvador	ITRS (Sistema de Transacciones Internacionales, SITI), Remittances module	Transaction-level
Honduras	ITRS based on foreign exchange (FX) contracts and survey	Transaction-level
Nicaragua	Reports from RSPs	Aggregated
Paraguay	Reports from commercial banks, MTOs, and the exchange bureau	Aggregated
Suriname	ITRS and reports from MTOs	Transaction-level
Trinidad & Tobago	Reports from MTOs	Aggregated
Uruguay	Payment systems information and reports from MTOs	Aggregated

Source: Compiled by the author based on information provided by central banks

Key takeaway: When a remittance data collection framework is initially designed, countries make critical choices by considering the country's circumstances, the operating environment, and available resources. These circumstances change over time, triggering the need to reassess and reform the system periodically. The remittance data collection system should, therefore, not be seen as static but should be reevaluated from time to time to determine if it is in line with the latest developments. For example, digital data collection technologies are continuously evolving, which creates opportunities to transform the process of collection, validation, storage, and analysis of remittance transaction data.

The LAC region is making great strides in developing systems to collect detailed, disaggregated, timely, complete, and accurate data on remittances, particularly in countries where remittances play a significant role in the economy. Central banks that have already implemented systems to capture transaction-level data have a wealth of experience and insights into the process of establishing these systems, which they are now using to inform policy and investment.

Which institutions provide data?

In LAC, the remittance market is serviced by commercial banks, MTOs, foreign exchange houses, and post offices, as well as a wide variety of commercial entities acting as agents and sub-agents.

Regarding remittance data collection, most central banks still focus on traditional remittance service providers—mainly banks and non-bank MTOs. Only one central bank collects data from cryptocurrency and fintech firms more broadly.

Fintechs are newly incorporated companies (start-ups) or established financial institutions that use technology-enabled innovation to provide financial services. Fintech activities are digital payments services (including remittances), lending, insurance, and investment.

"In September 2021, El Salvador became the first nation to make bitcoin legal tender. Furthermore, the Government launched a digital wallet for remittances. This raises new challenges to capture remittance information from crypto firms for the central bank."

– BCR, El Salvador

Data from the BCR indicate that between September 2021 and April 2022, \$96.3 million was entered through cryptocurrency digital wallets. This represents 2 percent of remittances that have entered El in eight months since the introduction of the Bitcoin law.

Despite rapid innovation and technology that is fostering financial inclusion, only a few central banks have defined the main activities they intend to collect information from under the broad concept of "fintech" or "digital innovations".

"Payments, financial services, and remittances are the areas with the most significant fintech participation. In LACs, fintech companies' presence is limited; however, it is generally recognized that they are expanding. Regarding the new players, Telcos and BigTechs have an important role in how fintech is developing in Latin America and the Caribbean but not as providers of digital remittance services." – BCH, Honduras

Key takeaway: In LAC, central banks' remittance data collection is mainly focused on banks and, to a lesser extent, on money transfer operators. Central banks participating in this consultation continue to enhance the collection and quality of data, leading to improvements in remittance statistics. However, there is a lack of granularity in the current statistical framework as major data collection exercises; most central banks still focus on traditional remittance service providers—mainly banks and non-bank MTOs and many group non-bank RSPs together.

What data are reported?

Transaction data—data that could be expected to be present within the transfer instruction. This includes country of origin and destination, entity type (i.e., bank or MTO), and the currency of transfer or value of the transfer, among others.

As in the previous section, the central banks in the Dominican Republic, El Salvador, Honduras, and Suriname all collect transaction-level data on remittances. There is some variation between central banks in what is collected.

"This daily transaction data represents a big step forward for the central bank in our ability to monitor the remittance market." – CBvS, Suriname

As we covered in the previous sections, an ITRS is a data collection system that obtains data from banks and enterprises at the level of individual transactions. Central banks could receive two types of basic input from commercial banks: bank client forms (completed by bank clients or by bank officers based on information provided by clients), or bank reports, completed by commercial banks. By design, an ITRS can cover only transactions reported by participating institutions through which funds are transferred using international settlement systems through banks' correspondent accounts. In many cases, the monthly reports from commercial banks contain only net amounts instead of gross flows.

Ideally, the client forms for ordering payments should include fields related to BoP reporting. ¹⁶ In some countries, the beneficiary must also include the following information on the remittance in filling out the form: Name and official identification of beneficiary (ID or tax number, address, etc.), description or reason for remittance, the amount received, and other data, such as the amount in US\$ and exchange rate applied.

In Suriname, the ITRS classifies remittance transactions by codes, identification numbers, the name of the receiver/sender, the transferred amount, the currency of origin, and the exchange rate. For MTOs, the CBvS also requires in their reports the name of the receiver/sender, the address, identification number, the amount in original currency (US\$ and euro), the city, the purpose of transfer, the AML report (for suspicious transactions), and the commission fee.

Table 4: Remittance's data reporting requirements – CBvS, Suriname

Date
Name of Headquarters/Branch
Address of Headquarters/Branch
Name client
First name client
Identification number client
Name of the counterpart
First name of the counterpart
Amount
Transaction cost
Country of origin
Reference Number
Tax
Correspondent Bank
Purpose of transfer
Transaction code (ITRS code)
IT-Forms
AML notification
Provider
Other

^{*}Amount in original currency (US\$/euro)

¹⁶ IMF International Transaction in Remittances: Guide for compilers and users, October 2009 https://www.imf.org/external/np/sta/bop/remitt.htm

As well as standard AML/CFT information, this data was collected from banks and MTOs who recorded remittance data daily and reported it weekly to the central bank. This rich data set allows these central banks to conduct a deep and detailed data analysis.

In El Salvador, all transactions, regardless of value, are sent to the ITRS. In the case of remittances of less than \$5,000, basic fields such as value, municipality of payment, the municipality where the recipient lives, country of origin, currency in which the operation originated, date, and the RSP must be filled. Remittance transactions greater than or equal to US\$5,000 must have an electronic form that must be completed by the payer or beneficiaries, in which they will declare the concept of their operation. It also

Box 2: Country Highlight – Honduras

In Honduras, the central bank receives daily information on the flows of the foreign exchange (FX) balance. Commercial banks and one exchange house are the exchange agents who send daily reports to the central bank. Transaction-level data is transmitted daily with a lag of one day. The system, which has been updated twice, was developed internally within the central bank.

includes information about the customer's address, phone number, identification number, and automatically generated electronic code. El Salvador also requests the detail of operations that have instructions to be paid into local resident accounts (for more details, see Table 5).

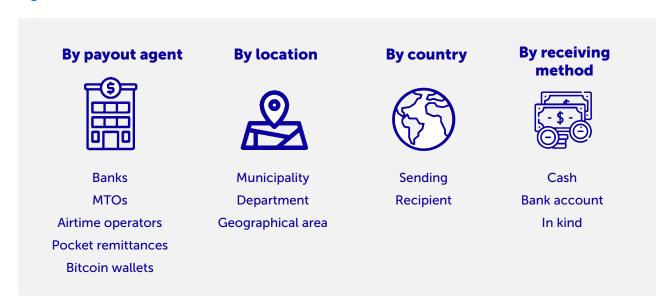
Table 5: Information required for sending or receiving operations under US\$5,000.00.

Incoming						
Variable	Description					
a) Date	Payment date of the transaction.					
b) MTO or bank abroad	Name of the company sending the remittance from abroad into the country.					
c) Bank that channels the funds	The agent is the one who reports to the BCR. Each intermediary will have their own code, which must be included in the data they provide.					
d) MTO or local agent	The agent is the one who reports to the BCR. Each intermediary will have their own code, which must be included in the data they provide.					
e) Currency in which the transaction was made	This refers to the currency in which the transfer was sent, not the payment currency.					
f) Exchange rate	This refers to the exchange rate of the currency in which the transaction was carried out and the payment currency (US\$). The exchange rate should not be reported if the transaction originated in US\$.					

Incoming	
Variable	Description
g) Amount in US\$	Value of the transaction of family remittances.
h) Country of origin	The country where the family remittance sender is located.
i) Municipality of destination	The municipality where the beneficiary of the remittance lives.
j) Department of destination	The department where the beneficiary of the remittance lives.
k) Municipality of payment	The municipality where the remittance payment point is located.
l) Payment department	The department where the remittance payment point is located.
m) Credit to account	This only applies to income, identifying remittances received in a deposit account.
n) Channel	This is the method via which remittances are transferred from abroad. There will be a small list of variables to choose from.
o) Amount in foreign currency	Amount in the currency in which the transaction originated. This only applies to currencies other than US\$.

To summarize, in El Salvador, the remittances are classified by agent, location (department and municipality since 2017), country, and receiving method (cash, account or in-kind).

Figure 1: Remittances classification: BCR, El Salvador



"In the Dominican Republic, the template has been updated and modified several times according to the central bank's needs. Right now, BCRD is in the process of updating it to be able to capture the use of those remittances and the delivery method to receive remittances. In the Dominican Republic, the two main remittance service providers offer the cost-free service to receive money via the door-to-door delivery method."

— BCRD, Dominican Republic

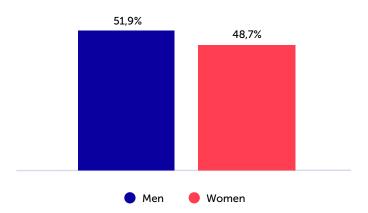
Other countries rely on traditional ITRS, tend to receive highly aggregated remittance data, and do not require transaction-level reporting of remittances due to their low individual value. Typically, the total value of remittances per institution is sent to the central bank using a template file. The data is sometimes broken down by one variable (often the country of origin, channel, or product used for the transfer) but provides very few insights compared to transaction-level data.

Sex-disaggregated data

Only one of the nine central banks, Banco Central de la República Dominicana, reported capturing sex-disaggregated data. Given the highly gendered nature of remittances on both the sending and receiving end, the absence of sex-disaggregated data prevents central banks from gaining significant insights that could inform better policy and investment in remittance services. The central bank of Paraguay is considering using the sex-disaggregated information captured by the Superintendency.

El Salvador will publish sex-disaggregated remittance data in 2023, and it will be possible to establish the number of senders and receivers of remittances by gender.

Figure 2. Dominican Republic: Sex disaggregated remittances received, December 2022, % total



Source: BCRD

In Honduras and El Salvador, the survey conducted by the BCH and BCR documents important data—not only demographic, educational, and labour-related, but also sex-disaggregated information about the Hondurans and Salvadorians who send remittances to their countries of origin.

Central banks in the LAC region should prioritize capturing and analysing sex-disaggregated data to inform decision-making.

compliance burden on reporting entities and increasing data quality. Data management is a critical piece of deployment of the systems, which leads to the generation of high-quality,

Key takeaway: Aggregated reporting is fine for BoP purposes but will not produce the insights required to inform policy and investment to address challenges around remittances, such as how to increase them, how to formalize them, and how to remove barriers to access for groups with lower levels of access to formal financial services, such as women.

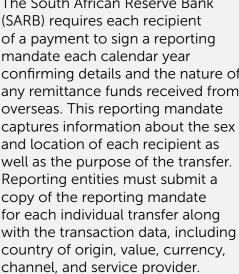
Remittance data must be reported at a granular level, preferably at the transaction level, to generate valuable insights. The highest level of value is unlocked when transaction data (any data you would expect to be contained within the payment instruction) is combined with supplemental data (such as sex, the purpose of transfer, and the recipient's location). The value of this kind of data is explored in the UNCDF paper, The case for the collection and analysis of transaction-level, supply-side data on remittances.

UNCDF also introduces a remittance reporting

and analysis system model that will allow transaction-level data on remittances to be collected and analysed whilst also decreasing the

Box 3: Country Highlight - South Africa

The South African Reserve Bank (SARB) requires each recipient of a payment to sign a reporting mandate each calendar vear confirming details and the nature of any remittance funds received from overseas. This reporting mandate captures information about the sex and location of each recipient as well as the purpose of the transfer. Reporting entities must submit a copy of the reporting mandate for each individual transfer along with the transaction data, including country of origin, value, currency,



reliable, and statistically sound data for central banks to drive policy development.

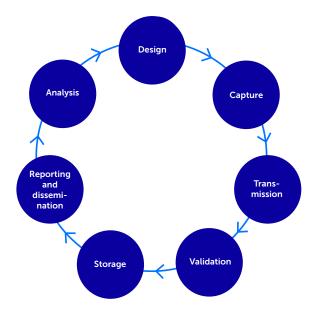
The system model describes data management, but it does not go into detail as to how these are implemented. For more detailed information, please see UNCDF's guide to <u>designing and implementing a remittance reporting and analysis system (RRAS)</u>. The guide aims to provide central banks and financial regulators, especially those in environments with limited financial and human resources, the path and tools to explore and define the following:

- Use cases and insights most supportive of their needs, most appropriate to their market/ economy, and most achievable in their operating environment
- Available resources
- Scope of the reporting and analysis system
- Feasibility and value of a system for reporting disaggregated data
- Key system-design considerations

How is remittance data managed?

Data management is the effective process of collecting, delivering, organizing, validating, storing, protecting, and processing data.

Figure 3. Remittance Data management



The majority of central banks interviewed had developed data reporting and handling systems in-house to automate, to some extent, the process of reporting and managing remittance data.

Data collection and reporting

Only one (BCR, El Salvador) of the nine central banks interviewed implemented Automated Data Reporting (ADR) (see box 4 and figure 4).

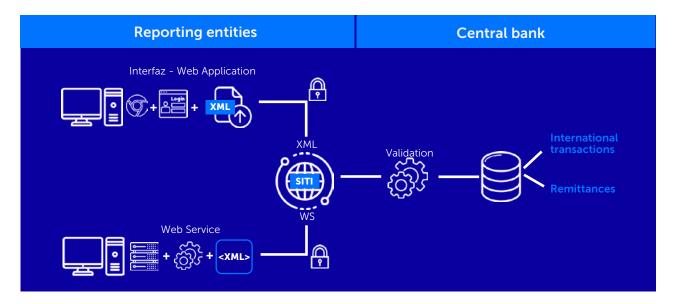
Box 4: Country Highlight – El Salvador

"In El Salvador, the central bank system has two mechanisms to upload information: (1) A web application in which a browser is used, where the reporting entity logs in (username/password) and loads the file in XML format; and (2) a web service where a remittance agent machine communicates with the BCR machine, (machine-to-machine). In the latter case, the remittance agent must carry out an order establishing the specified time the information will be sent, for example, every day at 4:00 a.m."

- BCR

In three central banks (Dominican Republic, Honduras, and Suriname), the data is transmitted electronically by bulk file upload through a secure web portal. The remainder relied on the email submission of spreadsheet templates aggregated and managed manually by staff.

Figure 4: Automated Remittances Data Reporting (Banco Central de Reserva, BCR)



In the Dominican Republic, the International Department of the central bank uses the online system of the Banking Superintendency, which captures transactional data.

In Honduras, reporting entities must authenticate as authorized users to enter the system. The system uses double-factor security, meaning the user must have login credentials and a token device with a certificate issued by BCH. The reporting entity must insert a token to enter the system.

"In Honduras, the reporting entities can upload the data in real time. Some banks are already doing it in real-time, and others in batches. At 11:00 a.m., the central bank already knows the data of the remittances that entered the country the previous day." – BCH, Honduras

Since 2020 in Suriname, the MTOs have submitted transaction-level data through a web portal. Before this, data was submitted using spreadsheets and email.

"The ITRS, in its current form, was implemented in 2011. Before that, reports were submitted by email, and paper forms were sent by mail. In the meantime, the system has undergone adjustments at various times to improve its validity. As for the MTOs' reports, they were sent by email in an Excel format and had, since 2020, been submitted through a web application by the MTOs themselves." – CBvS, Suriname

In Trinidad and Tobago, currently, remittance data are collected via email and saved in Excel files.

The central bank of Trinidad and Tobago collects, compiles, and analyses a wide range of economic data from primary and secondary sources. The economic data is housed in an electronic database, which uses the Forecasting Analysis and Modeling Environment (FAME) platform. The FAME database tool is mainly used for the production of statistical tables and covers a wide range of data, including monetary and financial statistics, payment statistics, or real sector statistics (e.g., prices, production, or employment). The external sector unit is now working toward migration of the BoP and remittance data to the database tool.

In Paraguay, the reporting entities (banks, finance companies, and exchange houses) send a

weekly report in Excel format by email. The central bank validates the information, aggregates it, and publishes the remittances received by the country of origin monthly.

"There is a project to use the information from the Superintendency transactions module. The BoP department is in the process of exploring how to use the data from that module." – BCP, Paraguay

In Nicaragua, the central bank provides spreadsheet templates that require aggregate data to be completed. These are completed and emailed to the central bank. The data is then aggregated manually.

In Uruguay, the Central Bank of Uruguay and the commercial banks are connected to the Society for Worldwide Interbank Financial Telecommunication (SWIFT). The Payments Systems department collects monthly aggregated information from the six MTOs and shares it for the BoP compilation, mainly the number of operations, amount, and country.

In Ecuador, the Central Bank of Ecuador (CBE) collects information on workers' remittances from a quarterly survey to couriers, banks, the Superintendency, and other relevant institutions related to the remittance activity.

"Given the importance of remittances to the economy and according to the planning established for the following year, BCE will enter a comprehensive review in terms of its design, production, and new collection scheme." – BCE, Ecuador

Key takeaway: More general use of application programming interfaces (APIs) can allow central banks to put the data buried within their legacy systems to work without having to design costly custom workflows.

Data validation

Data validation consists of techniques to ensure that the data provided is accurate and free of errors. Ensuring data quality and validation is a data collection challenge for central bankers in the LAC region. While there are many causes of this challenge, the limitations of old legacy manual systems result in omissions, data quality issues, formatting errors, invalid data and penalties to the reporting entities.

"In Dominican Republic, the Superintendency applies a penalty payment adjustment to providers who do not satisfactorily report data on quality measures, so reporting entities have a close relation with, and often consult with, the BCRD to avoid penalties." – BCRD, Dominican Republic

"It is essential that the quality of the data is good so that we can process and have time to analyse it correctly. If we get files and they fill them manually, it is possible that there are remittance values where they shouldn't and must be discarded." — BCP, Paraguay

"A close relationship with data providers is maintained for validation purposes, interpretation of the ITRS guidelines, and additional clarifications. They are contacted as often as the processing requires. Periodically assessments are applied."

— CBvS, Suriname

Central Bank of Chile also agreed that ongoing communication on the part of the central bank with the reporting entities could play an important role in remittance data collection and accuracy.

Key takeaway: More general use of technology and, in particular, data validation automation can allow central banks to obtain high-quality data, save time, cut costs, and improve efficiency. In cross-border remittance data collection, data validation automation has a clear use case to optimize remittance data validation, strengthen the data collection, reducing errors that lead to friction with reporting entities in their relationship with the central bank.

Data storage

Eight of nine central banks have developed on-site data storage, and one is in the process of transferring to cloud storage (Suriname). Most central banks still perceive external data storage as risky. Their main concerns are around the security and confidentiality of data.

Key takeaway: In the short term, central banks can generate savings by optimizing infrastructure—for example, by moving noncritical historical data to lower-cost storage and placing non-critical data on less expensive storage.

Data analysis

All respondents mentioned using data analytics tools at different levels and with other tools for policy purposes.

"The central bank of El Salvador has broken and analysed the data into three remittances categories, geographic (by department), by channel, and by the method of disbursement of funds." – BCR, El Salvador

The geographical breakdown of El Salvador includes the country of origin, as well as a part of the United States where the remittance originates. From the information, the total number of operations is known, and an average remittance per operation is reported with a geographical breakdown.

Since 2020, the BCRD's International Department has published monthly information and quarterly reports analysing the remittances received by country of origin, province, provider, currency, and the sex of the recipient.

"Analysing the remittances transactions received in September 2022, according to the sex of the recipient, men predominate with 53 percent, while women represent the remaining 47 percent of remittance recipients through formal channels. However, there has been a change in the trend, and since 2019, Dominican men receive more remittances than women." – BCRD, Dominican Republic

In Suriname, the central bank's analysis of real-time data resulted in spotting that COVID-19 accelerated the transition from cash to digital for remittances terminating in Suriname.

However, the central banks concurred that it is hard to sort through significant amounts of data, especially if they don't have the human resources, adequate tools, or time.

"In Trinidad and Tobago, no business intelligence or data visualization components are used. The trends in the data are analysed, but it's a very small component of the Balance of Payments." — CBTT, Trinidad and Tobago

Key takeaway: Data analysis is a core practice of policy development and supervision. Besides data management, new and high-performing analysis tools are necessary for statistical data analysis. Choosing the right analytics tool is important to consider the organization's policy use case needs, understand the types of data needed to analyse, consider the human resources data analysis capabilities, and consider price and licensing.

Data-Sharing

Only some central banks (such as Honduras, El Salvador, Dominican Republic, Chile, Paraguay, and Nicaragua) publish information on remittance inflows by country of origin.

Central banks see the advantages of data sharing to improve remittance statistics. However, mirror statistics to cross-validate data are limited. Central banks mentioned how mirroring statistics could help validate data. However, there is a lack of bilateral comparisons of basic measures (flows and values) of remittance flows.

WHAT ARE THE LESSONS LEARNED FROM CENTRAL BANKS IN LATIN AMERICA AND THE CARIBBEAN IN THE DEVELOPMENT OF SYSTEMS TO COLLECT AND ANALYSE REMITTANCE DATA?

The previous section summarized the main observations from the analysis about the data management of capturing, transmitting, storing and analysing remittance data. This section introduces lessons from the central banks more generally distilled from the experience of central banks developing systems to collect and analyse remittance data in the LAC region. This section on the lessons learned focuses on identifying success but also challenges:

The most important lesson learned, as mentioned by the central banks in the LAC region, was the importance of a well-developed legal framework to support data collection. Central banks in the LAC region have been broadening institutional coverage through reporting and refining statistical data frameworks to improve the quality of remittances. The LAC region is seeing rapid innovation, and technology has enabled higher levels of financial inclusion. Nevertheless, only a few central banks have started planning to define the activities they intend to collect information from under the broad concept of "fintech" or "digital innovations".

Central banks also mentioned that license or registration requirements for money transmitter businesses do not necessarily ensure or safeguard the quality of compiled remittances' statistical data. The development of a reporting system reflects considerable effort aimed at the coverage of remittance market transactions that present significant gaps.

Central banks stated that successful implementation of a transaction-level reporting system relies on institutional willingness, identifying the policy needs and use from the Board of Governors, and ensuring the availability of resources to address those needs. In implementing granular remittance reporting systems, the consulted central banks in Latin America and the Caribbean were driven by two different use cases: (1) increasing the operational efficiency of the balance of payments statistics and (2) improving the timeliness and quality of data coverage to facilitate effective policy development. The legacy BoP systems in central banks depend heavily on human interactions that not only increase the turnaround time but also increase the risks or errors. Furthermore, time and quality are at a premium and make a huge difference to policymaking in central banks, where remittances are one of the largest contributors to the country's Gross Domestic Product (GDP). Central banks, then, have decided to look at and implement cost-effective systems to improve operational efficiency.

Central banks mentioned that low resources (human and financial) are a limitation for remittance data collection and analysis. More than half of respondents say a lack of resources hampers their efforts. The balance of payments teams are small. Central banks with a dedicated team report a median size of eight staff members, of which one or two might work on remittances. Remittances are rarely a primary focus for BoP teams, and the data require different systems and skill sets to collect and analyse effectively. The analysis is also essential but requires adequate time and resources, tools, and capacities in terms of human skills. Real-time data analysis at one of the central banks revealed that COVID-19 accelerated the transition from cash to digitally mediated remittances. All the respondents mentioned using data analytics for policy purposes.

Ensuring data quality is the greatest challenge to central banks in the process of remittance data collection. All central banks mentioned that ensuring data quality and validation is still the most significant challenge to central bankers in the process of data collection. Central banks that rely on heavily aggregated data reporting templates report concerns about data completeness and quality. When data is aggregated, it can be nearly impossible to

identify missing or inaccurate data in the reporting. This issue can be addressed through the implementation of transaction-level reporting systems.

Central banks raise concern and attention to double counting or underreporting. When combining data from several compilation systems and estimates, there is a risk of double counting. This is less of an issue for central banks who have invested in transaction-level reporting systems, as duplications in the data can be identified much more easily to provide a single source of truth.

Central banks also mentioned the importance of maintaining links and coordinating permanently with reporting entities and market participants, allowing them to obtain adequate knowledge of its activities, build close relationships and ensure ongoing communication with reporting entities and other key stakeholders. Central banks in the LAC region mentioned that it is critical to partner with other public-sector stakeholders (e.g., other departments at the central bank or other authorities) and reporting entities to facilitate access to accurate data.

Central banks mentioned the importance of writing and sharing consultation documents about how to use the application and web services, upload files, confirm successful uploads and identify and fix errors.

Central banks mentioned exploring lower-cost survey methodologies to monitor remittance channels. Surveys are an essential part (perhaps the most essential part) of understanding migrant remittance behaviours in the LAC region. Due to their high cost, central banks are exploring less expensive methodologies that are easier to execute at scale (e.g., in Honduras, phone or online surveys).

Central banks also highlight the importance of establishing mechanisms for cooperation to obtain, compare and share complete information about the remittance market but still limited to other central banks' departments and relevant authorities. Central banks in the LAC region see benefits from collaborating among different departments and sharing systems to collect remittance data. Remittance statistics are economic indicators for central banks and monetary authorities in the LAC region. In all countries of the LAC region included in this report, the central banks' external sector department is responsible for compiling remittance statistics as part of the compilation of external sector statistics, i.e., the BoP. Although the external sector department in the central bank is responsible, it depends on a network of connections with several departments, such as those for payment systems or supervision, and other statistics, such as financial integrity and financial inclusion statistics.

Central banks see the advantages of data sharing to improve remittance statistics. However, mirror statistics to cross-validate data are limited. Central banks mentioned how mirroring statistics could help validate data. However, there is a lack of bilateral comparisons of basic measures (flows and values) of remittance flows.

COUNTRY NOTES¹⁷

Remittance flows to LAC are projected to rise by 9.3 percent in 2022 to reach \$142 billion, compared to \$131 billion in 2020. Overall, labour market performance has been relatively strong in the United States, and it is the dominant factor supporting inflows to the region.

Central America

El Salvador is the fifth remittance recipient economy in the LAC region and the second in Central America after Guatemala. The Central Reserve Bank (BCR) indicated that, in 2021, Salvadorans received \$7.5 billion in remittances, representing a growth of 26.8 percent compared to 2020, which also constitutes a "record income according to the historical statistics of this variable". In 2002, El Salvador received \$7.7 billion.

In 2022, remittances were expected to reach \$7.6 billion, equivalent to 23.8 percent of GDP. The United States is the primary destination for Salvadorian migrants. In 2021, there were an estimated 1.4 million people born in El Salvador living in the United States, according to the American Community Survey (ACS).¹⁸

In El Salvador, the primary sources for data on remittance flows are the balance of international transaction records and the estimation of cash remittances from surveys in the United States, the leading destination for Salvadorian migrants.

In El Salvador, family remittances are an essential engine for the economy. According to the 2022 BCR survey, four out of five Salvadorans in the United States send remittances to support relatives and friends in El Salvador. As such, there is great relevance in knowing the characteristics of the diaspora and accurately estimating the value and nature of informal flows.

"Given the importance of remittances in the economy, it was proposed to develop a survey with the following objectives: Know the demographic and economic characteristics of the Salvadoran population residing in the United States. Obtain the percentage of cash remittances sent by Salvadorans residing abroad."

– BCR, El Salvador

The central bank of El Salvador (Banco Central de Reserva, BCR) expanded the scope of the reporting system used by commercial banks to feed data into the ITRS to allow reporting of transaction-level remittance payments.

Honduras is the sixth remittance recipient economy in the LAC region and the third in Central America. The central bank of Honduras (BCH) indicated that, in 2021, Honduras received \$7.4 billion in remittances, representing a growth of 28.9 percent compared to 2020. In 2022, remittances were expected to reach \$8.6 billion. Relative to GDP, Honduras is one of the world's largest recipients of remittance flows, which average 27.2 percent of GDP in 2022, with the United States being the primary destination for Honduran migrants, followed by Spain. In 2021, there were an estimated 767.5 thousand people born in Honduras living in the United States. ¹⁹ Of the remittances, more than 90 percent come from Honduran immigrants in the United States, 1.7 percent came from Spain, 1.1 percent from Canada, 1.1 percent from

¹⁷ Remittance data and percentage of GDP, 2022e from World Bank KNOMAD, Migration and Development Brief 37, November 2022

¹⁸ United States Census Bureau: https://data.census.gov

¹⁹ American Community Survey of the US Census

Panama, and the remaining 3 percent from other countries.²⁰

In Honduras, the primary system to capture and measure remittances is the *Balanza Cambiaria* "Balcam", a system that accounts for inflows and outflows of foreign currency, with an additional estimation of the value of the informal remittances obtained through demand surveys at two of the main airports. Balcam includes the transactional data reported by the banking system to the Exchange Operations Department within the Central Bank of Honduras (Banco Central de Honduras, BCH), registered in the exchange records. The estimation of the value of the informal remittances ("remesas de bolsillo" or pocket remittances) is obtained through the semiannual survey of family remittances carried out by the central bank at the two major airports in Honduras. The conducted survey also included important demographic, educational, labour and gender details about the Hondurans who send remittances to Honduras and how those funds support their families in the country.

In August 2021, the central bank of Honduras undertook for the first time a pilot in agreement with the Ministry of Foreign Affairs and Internal Cooperation (SRECI) to use the call centre of the SRECI for attention to Hondurans abroad to conduct telephone surveys. These telephone survey consultations complemented the ones applied in the two major airports of the country.

"In Honduras, most services account components are compiled using an International Transactions Reporting System (ITRS), based on foreign exchange (FX) contracts. The BCH also undertakes a semiannual survey of family remittances to complement the information from the ITRS, thus compiling information regarding the sending of remittances and data demographics of Honduran emigrants." – BCH, Honduras

Nicaragua is the fourth remittance recipient economy in Central America. In 2021, Nicaragua received \$2.2 billion in remittances, 16 percent more than in 2020, and represented 17 percent of the GDP, according to official figures from BCN. In 2022, remittances were expected to reach \$3.2 billion, equivalent to 19.9 percent of the GDP. The United States is the primary destination for Nicaraguan migrants. In 2021, there were an estimated 244,000 people born in Nicaragua living in the United States. The main remittances corridors by flow are the United States (representing more than three-quarters of the flows), followed by Costa Rica, Spain, Panama, and Canada.

In Nicaragua, the External Sector Statistics team within the Economic Division of the Central Bank of Nicaragua (Banco Central de Nicaragua, BCN) is responsible for the compilation of remittance statistics. Primary sources of remittance data are reports from the remittance service providers and annual surveys.

Furthermore, since 2013, the BCN has published a report on family remittances,²¹ which are an essential source of foreign exchange earnings, particularly for Nicaraguan households. The report is produced with the information provided by MTOs and commercial banks. The report includes analysis based on different criteria: by providers (banks, MTOs, and estimation of "pocket remittances"), geographical (country of origin and destination by department), the number of transactions, and average remittances sent.

Guatemala is the second remittance recipient economy in the LAC region and the first in Central America. In 2022, remittances were expected to reach \$18.1 billion, equivalent to 19.8 percent of the GDP.

^{20 &}lt;u>www.bch.hn/estadisticos/EME/Resultados%20Encuesta%20Semestral%20de%20Remesas%20Familiare/Resultado%20de%20Encuesta%20Semestral%20de%20Remesas%20Familiares%20enero_2021.pdf</u>

²¹ Informe de remesas: https://www.bcn.gob.ni/publicaciones/informe_remesas (only in Spanish)

In Guatemala, the Central Bank of Guatemala (Banco de Guatemala)'s Economic Statistics Department compiles information on foreign exchange inflows and outflows and summarizes it in the foreign exchange statistics.

The Caribbean

Dominican Republic is the third remittance recipient economy in the LAC region and the first in the Caribbean. In 2021, Dominican Republic received \$10.4 billion in remittances, 27 percent more than in 2020, and represented 11 percent of the GDP, according to official figures from BCRD. In 2022, remittances reached \$9.9 billion, equivalent to 8.8 percent of the GDP. The United States of America is the main origin of the remittances received (83.9 percent of the total), followed by Spain (7 percent of the total). Other important countries in terms of the origin of remittances are Haiti and Italy, with 1.3 percent and 1 percent of the flows received, respectively. The rest of the receipt of remittances is divided between countries such as Switzerland, Canada, and Panama, among others.

In the Dominican Republic, the International Department of the central bank (Banco Central de la República Dominicana, BCRD) is responsible for compiling remittance statistics.

On the supply side, financial institutions and remittance service providers send reports to the central bank and the Superintendence of Banks (SIB), through which information is obtained on existing payment channels (branches, ATMs, bank sub-agents), remittances and electronic transactions.

Since 2010, the BCRD's International Department has estimated cross-border remittance transactions based on the data reported to the Superintendency of Banks by commercial banks and six exchange and remittance operators (agentes de remesas y cambio). These RSPs record remittance data daily and report it weekly.

"The BCRD's International Department estimates the cross-border remittance transactions based on the data reported by financial institutions and MTOs through the Banking Superintendency's Online System, in place since 2007. It took two years to migrate to use the Superintendency's system." – BCRD, Dominican Republic

"The remittance records of financial institutions capture only the formal portion of the actual remittance flows. Hence, BCRD complements these official figures by estimating pocket remittances through surveys." – BCRD, Dominican Republic

In **Trinidad and Tobago**, remittances received from abroad for the period January to June 2022 measured \$96.6 million. Remittances sent abroad totalled \$25.7 million.

In Trinidad and Tobago, the central bank obtains the information required for remittances mainly through reports received from two MTOs.

In **Haiti**, remittance data are sent to the International Economy Division (IED) of the International Affairs Department at the Bank of the Republic of Haiti (BRH) by the Supervision of Banks and Financial Institutions Department. They are based on the aggregated reports from eight MTOs.

South America

Chile is a net sender country of remittances. According to figures from the central bank, remittances sent in 2021 set a record, reaching US\$2,894 million, that is, US\$912 million more than in 2020, with an increase of 46 percent. These remittance flows were sent mostly by Colombian citizens, with 27 percent of the total; Peruvians, with 21 percent of the total. Haitians, with 12 percent of the total.

On the other hand, remittances received in 2021 reached \$336 million, equivalent to 0.1 percent of the GDP, representing a decrease of 7 percent. The main remittances corridors by flow are the United States (42 percent of the total), followed by Peru (9 percent of the total), and Spain (8 percent of the total).

Central Bank of Chile (Banco Central de Chile, BCC) obtains the information required for remittances mainly through the reports received from the money transfer companies on the templates specially designed for statistical purposes. BCC conducts an annual survey of all the money transfer companies registered with the Financial Analysis Unit. The sample in 2021 covered 64 companies and, in 2022, will cover 81 RSPs. Quarterly, the seven main ones are consulted.

Due to the difficulty of differentiating remittance operations from other BoP operations, since 2007, the central bank has carried out a voluntary survey of the seven remittance companies registered with the Financial Intelligence Unit (FIU) as money remittance companies in Chile. The survey collects data on the values, average amounts, and countries of origin and destination of remittance flows.

In **Guyana**, the central bank of Guyana collects remittance data mainly from commercial banks, money transfer companies, and the exchange bureau.

In **Paraguay**, according to data from the Central Bank of Paraguay (BCP), at the end of 2021, remittances totalled \$488 million, that is, 1.21 percent of the GDP.

In Paraguay, the primary sources for compiling data on the remittance flows are reports from commercial banks and the exchange bureau.

Concerning **Uruguay**, according to the BCU, half a million Uruguayans live abroad, which represents 15 percent of the population. Most of them reside in Argentina, the United States, Brazil, and Spain. However, the flow of remittances is not very important for the economic activity of the country—representing only 0.2 percent of the GDP in 2021.

In Uruguay, remittance data collection sources are aggregated information from the Payment Systems department and reports from MTOs.

"In Uruguay, remittances are not a very important source of funding. Net inbound remittances represent approximately 0.2 percent of the GDP. The primary source for compiling the remittance flows is the monthly information compiled by the Payment Systems department from six Money Transfer Operators." – BCU, Uruguay

In **Suriname**, according to data from the Central Bank of Suriname (CBvS), at the end of 2021, remittances totalled \$180 million.²²

The compilation of remittances in the BoP in Suriname is the responsibility of the CBvS, and it is based on a wide range of data sources. Data sources are composed of reports obtained from the International Transactions Reporting System (ITRS), which in the case of Suriname, does include the transactions carried out through the domestic financial system. Remittances received through the authorized Money Transfer Offices are also captured in weekly reports submitted to the CBvS.

"In Suriname, the ITRS in its current form was implemented in 2011. Before that, paperform reports were submitted by email. In the meantime, the system has undergone adjustments at various times to improve its validity. As for the Money Transfer Operator's reports, these were previously sent by email in an Excel format. Since 2020, they have been submitted through a web portal (application) by the MTOs themselves." — CBvS, Suriname

²² CBvS collects and disseminates personal transfer data and not remittance data. See: https://www.cbvs.sr/en/statistics/macroeconomic-statistics/macro-economic-tables/360-external-links/external-sectors-statistics-according-bpm6/1865-balance-of-payments.

Table 5: Summary of Data collection systems and sources for the compilation of remittance statistics in the LAC region

Country	Remittance flows (\$ billion, 2021)	% GDP, 2021	% growth, 2021	Remittance flows (\$ billion, 2022e)	% GDP, 2022e	Core remittance data sources and compilation practice	Level of granularity	Sex- disaggregated data
Brazil	3.8	0.2	n.a.	n.a.	0.1	ITRS based	Transaction- level	No
Chile	0.34	0.1	n.a.	n.a.	0.1	Reports from MTOs	Aggregated	No
Colombia	8.6	3.0		9.1	3.0	ITRS based	Transaction- level	Yes
Dominican Republic	10.4	11.0	27	9.9	8.89.	Online Reporting System from the Superintendency of Banks (SIB)	Transaction- level	Yes
Ecuador	4.2	4.0	31	4.5	4.0	Quarterly report from couriers, banks, the Superintendency, and other relevant institutions related to the remittance activity	Aggregated	No
El Salvador	7.5	27	27	7.7	23.8	ITRS-based remittance module	Transaction- level	In 2023
Guatemala	15.3	19.0	35	18.1	19.8			
Guyana	0.6	6.8		n.a.	n.a.			No
Haiti	4.0	20.0		4.5	22.5	Payment systems information and reports from MTOs	Aggregated	No
Honduras	7.4	26.1	28.9	8.7	27.2	ITRS-based + migrants survey		Yes

Country	Remittance flows (\$ billion, 2021)	% GDP, 2021	% growth, 2021	Remittance flows (\$ billion, 2022e)	% GDP, 2022e	Core remittance data sources and compilation practice	Level of granularity	Sex- disaggregated data
Jamaica	3.6	25.3			21.2			No
Mexico	51.5	4.0	27.0	60.3	4.2	Family Remittances System (SRemFam)	Transaction- level	No
Nicaragua	2.2	17	16	3.2	19.9	Reports from RSPs	Aggregated	No
Paraguay	0.5	1.5			1.5	Reports from commercial banks, MTOs, and exchange bureau	Aggregated	No
Suriname	180 million ²³	5.5			7.4	ITRS + direct reporting from MTOs	Transaction- level	
Trinidad & Tobago	0.2	0.7	n.a.	96.6 million (Jan-Jun 2022e)	n.a.	Reports from MTOs	Aggregated	No
Uruguay	0.12	0.2	n.a.		n.a.	Payment systems information and reports from MTOs	Aggregated	No

Source: Compiled by the author based on information shared by central banks and the World Bank KNOMAD database

Only have personal transfer data



MIGRANT MONEY

The United Nations Capital Development Fund

The United Nations Capital Development Fund (UNCDF) is the United Nations' flagship catalytic financing entity for the world's 46 Least Developed Countries (LDCs). With its unique capital mandate and focus on the LDCs, UNCDF works to invest and catalyse capital to support these countries in achieving the sustainable growth and inclusiveness envisioned by the 2030 Agenda for Sustainable Development and the Doha Programme of Action for the least developed countries, 2022–2031.

UNCDF builds partnerships with other UN organizations, as well as private and public sector actors, to achieve greater impact in development; specifically by unlocking additional resources and strengthening financing mechanisms and systems contributing to transformation pathways, focusing on such development themes as green economy, digitalization, urbanization, inclusive economies, gender equality and women's economic empowerment.

A hybrid development finance institution and development agency, UNCDF uses a combination of capital instruments (deployment, financial ϑ business advisory and catalysation) and development instruments (technical assistance, capacity development, policy advice, advocacy, thought leadership, and market analysis and scoping) which are applied across five priority areas (inclusive digital economies, local transformative finance, women's economic empowerment, climate, energy ϑ biodiversity finance, and sustainable food systems finance).

