

Migrant Remittances in Central America

Dilip Ratha¹⁰⁵

This chapter highlights the importance of international migrant remittances in six Central American countries—Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.¹⁰⁶ Migrant remittances are the largest source of external financing in four out of these six countries. From a financial sector point of view, these large remittance flows raise two sets of issues:¹⁰⁷

- The cost of sending remittances is very high, especially for small transfers undertaken by poor migrants. High remittance fees are a reflection of market failure and inefficiencies in the retail payment system. Remittance costs can be reduced by strengthening the financial infrastructure supporting remittances. But these efforts to reduce costs would also have to be carefully balanced with efforts to fight money laundering and the financing of terrorism.
- The second issue relates to increasing the impact of these remittances on financial development without directly affecting these personal flows. This would require encouraging more

flows through formal channels, and linking remittances to consumer and housing loans and insurance products for remittance recipients. Financial institutions can also use remittances as collateral for raising external bond financing.

The next section describes the size of remittances and their importance in the retail payment systems of each of these six countries. Section III discusses possible measures to reform the retail payment system and reduce high remittance fees. Section IV briefly describes the complementarities between financial institutions and remittances. Section V is devoted to securitization of remittances as a tool for raising private external bond finance. The last section contains a summary of recommendations.

Remittances and Retail Payment Systems

A retail payment transaction may be defined as a transaction originated by or payable to an individual, the counterparty being an individual, a firm, or a government agency. Retail payments may be defined to include frequent, small-value business-to-business payments.¹⁰⁸ Thus, retail payments would include pure transfers such as migrant remittances or transfers from public and private institutions to individual beneficiaries. They would also include small-value payments in exchange for goods and services, for ac-

¹⁰⁵The author works at the World Bank.

¹⁰⁶Migrant remittances are defined as the sum of workers' remittances and compensation of employees—see Ratha (2003).

¹⁰⁷This chapter does not discuss the development impact of remittances in the receiving countries. At the household level, these impacts could be to reduce poverty, act as an insurance against adverse shocks, and increase household spending. At the macroeconomic level, remittances could increase financial deepening and lead to exchange rate appreciation. See Mishra (2005); Yang (2004); Adams (2004); and Edwards and Ureta (2003) for discussion of some of these issues.

¹⁰⁸Bank for International Settlements (1999).

TABLE 5.1
Remittance Flows, 2003

	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama
Remittance receipts (US\$ millions)	321.0	2,122	2,147	867	439	85
As a share of (in percent)						
GDP	1.8	14.7	8.7	12.4	10.0	10.7
Trade deficit	37.0	284	153	224	40	15
Imports of goods and services	3.4	30.4	27.5	21.9	21.0	0.9
FDI	56	2,384	1,851	438	204	11
Official flows ¹	272	1,172	2,440	387	101	266
Outward remittances (US\$ millions)	192	25	82	1	...	53
<i>Memorandum items:</i>						
Per capita GNI (US\$)	4,280	2,200	1,910	970	730	4,250
Number of migrants (in thousands) ²	109	1074	591	354	302	178
As share of own population (in percent)	2.9	17.0	5.2	5.5	6.0	6.2

Sources: IMF, *Global Development Finance* (2005), and *Balance of Payments Statistics Yearbook* (2004).

Note: Remittances defined as the sum of workers' remittances and compensation of employees. FDI = foreign direct investment; GNI = gross national income.

¹Data for Nicaragua are for 2002.

²2001 round of U.S. Census 2000 Supplementary Survey as calculated in Yang (2004).

quisition of assets, or for debt servicing. In more developed countries, migrant remittances would form only a small share of retail payments, which, in turn, are only a tiny fraction of wholesale payments. But in developing countries, especially in Central America, remittances form a significant source of funding in relation to the size of the economy and, therefore, of the retail payment system. Furthermore, any evaluation or reform of the retail payment system from the point of view of facilitating remittances is equally likely to benefit other (not easily quantifiable) components of retail payments as well.

In 2003, officially recorded international remittance receipts by Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama amounted to \$6 billion, or about 7.4 percent of their combined GDP (Table 5.1 and Figure 5.1). Remittance receipts ranged from \$85 million in Panama to over \$2.1 billion each in El Salvador and Guatemala. While larger countries in general received larger amounts of remittance flows, the poorer countries (Nicaragua, Honduras, Guatemala, and El Salvador) received relatively larger amounts than the richer countries (Panama and Costa Rica).¹⁰⁹ In El Salvador, remit-

tance receipts in 2003 were 14.7 percent of GDP, over 30 percent of imports of goods and services, nearly 12 times the size of net official inflows, and nearly 24 times the size of foreign direct investment (FDI). In general, in the poorer Central American countries, remittances are larger than earnings from the single largest export item, and larger than official and private capital flows.¹¹⁰

These data are likely to be underestimated.¹¹¹ Official data do not include remittance flows through informal (unregulated) channels. They do not even fully capture flows through the formal channels. Most countries do not require reporting of "small" remittance transactions.¹¹² Also, remittances paid by post offices, exchange bureaus, and other agents of money transfer companies in Central America are often not reflected in the official statistics. Fi-

and new migration may take place, during a period of economic slowdown in the remittance recipient economy (Ratha, 2003).

¹⁰⁹In contrast, the richer neighbors, Costa Rica and Panama, have significant remittance *outflows* to the region. The exact amount of flows from various source countries is not available as bilateral flow data do not exist for most countries.

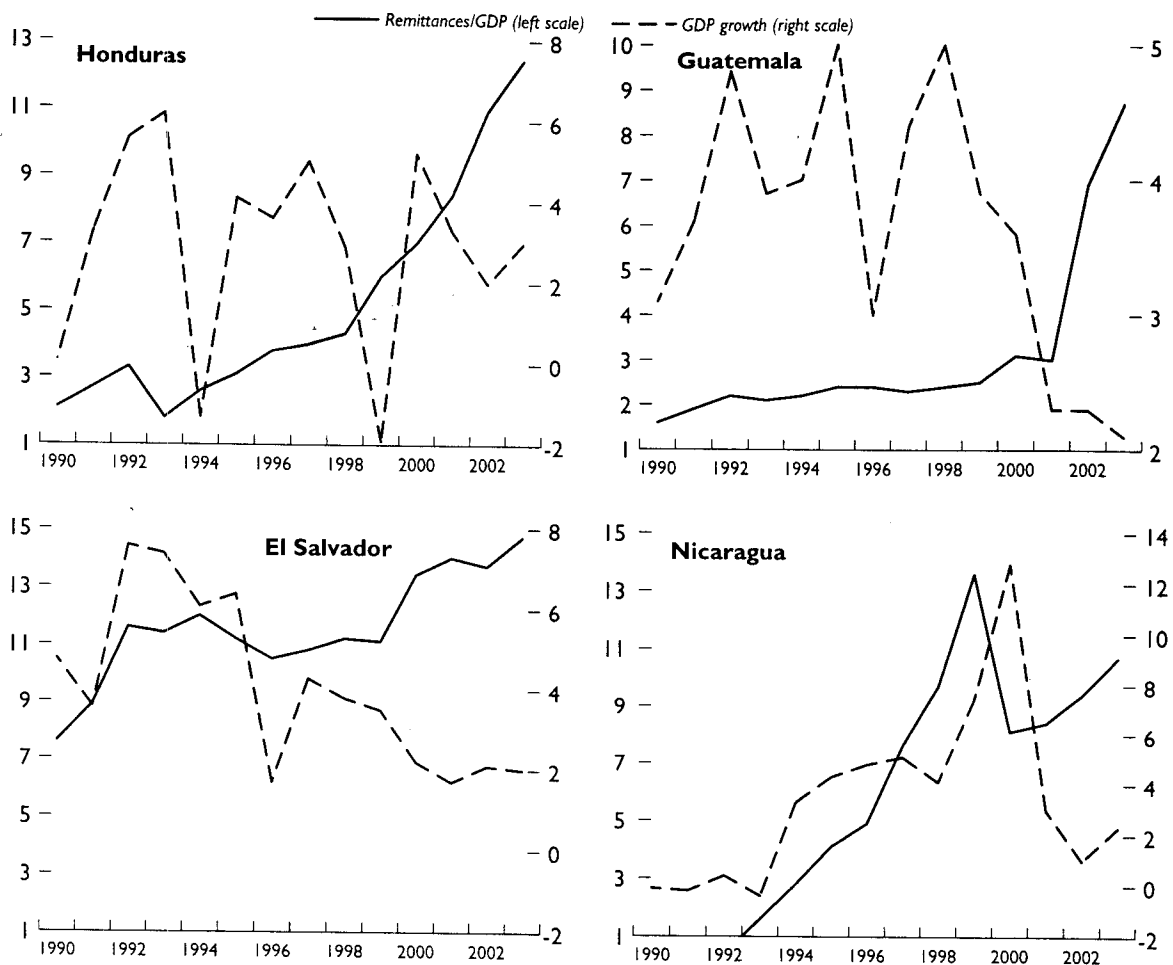
¹¹⁰The 2004 estimates of remittance flows produced by the Multilateral Investment Fund of the Inter-American Development Bank, for example, exceed the figures presented in Table 5.1 by 20 percent in El Salvador, 25 percent in Guatemala, and 31 percent in Honduras.

¹¹²For example, the reporting threshold is \$10,000 in the United States, 12,500 euros in Western Europe, and 3 million yen in Japan. Data on remittances rely on reports from recipient countries.

¹⁰⁹Remittances tended to be more stable than export receipts or private capital flows in El Salvador, Guatemala, Honduras, and Nicaragua (Figure 5.1). The cyclical stability of remittances owes in part to the fact that they are largely altruistic transfers by the existing migrant stock. Indeed, remittances may also behave countercyclically as existing migrants may increase remittances,

MIGRANT REMITTANCES IN CENTRAL AMERICA

Figure 5.1. Cyclical Stability of Remittances, 1990–2003



Sources: IMF, *Global Development Finance* (2005) and *Balance of Payments Statistics Yearbook* (2004).

nally, a large amount of remittances are misclassified under export revenue, tourism receipts, nonresident deposits, or even foreign direct investment (FDI).¹¹³

The United States is by far the largest source of remittances to the Central American countries. The remittance pattern is closely linked with the migration pattern. It is worth noting, however, that the

¹¹³An International Working Group to Improve Remittance Statistics was set up in 2004 at the behest of the G-8, and includes the World Bank, the IMF, the European Central Bank, the Inter-American Development Bank, the Organization for Economic Cooperation and Development (OECD), and the United Nations.

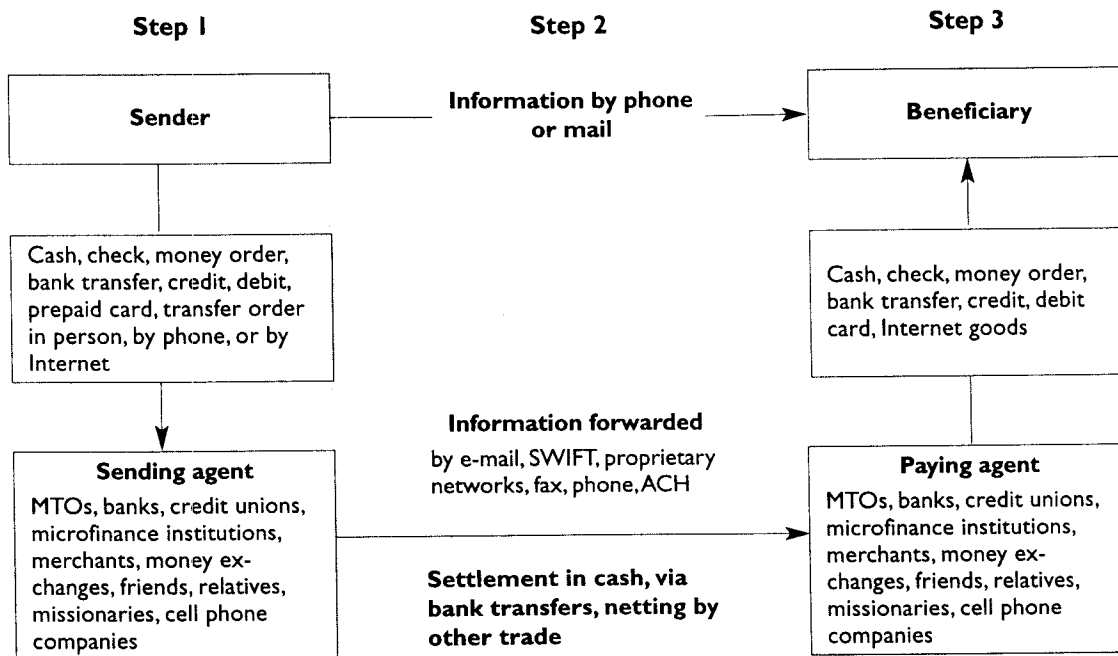
Central American countries also have significant intraregional migration and remittance flows. Nicaragua, for example, has nearly half as many migrants in Costa Rica as it has in the United States; it also has a significant number of migrants in Canada, El Salvador, and Guatemala. Honduras has a sizable migrant stock in Mexico, besides the United States. Costa Rican migrants have a significant presence in El Salvador and Honduras, besides the United States and Canada. The sizable intraregional remittance flows are a factor worth including in discussions about regional retail payment systems.

Formal remittances to these Central American countries are largely originated by money transfer

Box 5.1. Remittance Transaction Structure

A typical remittance transaction takes place in three steps: (1) initiation of remittances by a migrant sender using a sending agent, (2) exchange of information and settlement of funds, and (3) delivery of remittances to the beneficiary. In step 1, the migrant sender pays the principal amount of remittance to the sending agent using cash, check, money order, credit card, debit card, or a debit instruction sent through e-mail, telephone, or Internet banking. In step 2, the sending agency—a money transfer operator (MTO), bank or other financial institution, money changer, or

merchant (e.g., gas station, grocery store) then instructs its agent in the recipient country to deliver the remittance to the beneficiary. In step 3, the paying agent makes the payment to the beneficiary. In most cases, there is no real-time fund transfer; instead, the balance owed by the sending agent to the paying agent is settled periodically according to a mutually agreed schedule. The settlement is mostly carried out using commercial banks through the national clearing and settlement systems. Informal remittances are sometimes settled through goods trade.



operators (MTOs) and banks in the source countries, and are channeled using mostly private proprietary payment systems and distributed through banks and agents of the MTOs (Box 5.1). Most remittances from the United States to these countries are in the form of electronic transfers, but some are in the form of money orders and drafts, especially in Honduras.¹¹⁴ Nicaraguan migrants seem to rely heavily on the MTOs, which often have partnerships with local bank and postal networks. Honduras and Nicaragua also have partnerships between their post offices to provide remittance services. In

El Salvador and Guatemala, banks are the dominant remittance service provider. Except for a small presence in Guatemala, credit unions and microfinance institutions do not play any significant role in distributing remittances.

A significant part of flows also goes through informal channels, especially traveling friends and relatives.¹¹⁵ The choice of the channel is affected by,

¹¹⁴For instance, the results of the 2004 survey on *State-By-State Data on Remittances Sent by Migrants in United States to Latin America*, conducted by the Multilateral Investment Fund of the Inter-American Development Bank, indicate that approximately 12 percent of remittances are sent through people traveling or by mail (available via the Internet: <http://www.iadb.org/ext/remittances>).

¹¹⁴De Luna-Martínez (2005).

among other things, remittance costs, trust in the intermediary, and convenience factors such as location, hours of operation, language, and identification requirements. Among these factors, high remittance costs stand out as the most important factor affecting the channel, the instrument (check, money order, electronic wire, prepaid card, debit card, and hand carry), the frequency, and possibly the amount of remittance flows.

Remittance Costs

The fee structure for sending cross-border remittances is rarely transparent. Remittance fees, typically paid by senders to the remittance agent at the time of sending, range from a fixed \$3–\$5 per transaction to as high as 20 percent in the case of some MTOs. The average remittance fee (excluding foreign exchange commission), according to some reports, is around 4–6 percent in Honduras, 5–7 percent in El Salvador, 6–8 percent in Guatemala, and 6–9 percent in Nicaragua for money transfers of less than \$300, which is the average amount that migrants send home every month. In the case of Western Union and MoneyGram, the fee for sending \$300 from New York to any of these Central American countries was 9.7 percent and 8.3 percent, respectively, in 2005 (Figure 5.2). All remittance agencies charge an additional foreign exchange commission when the remittance is delivered in local currency. In El Salvador, Nicaragua, and Panama, major remittance agencies deliver remittances in U.S. dollars. On top of the remittance fee and foreign exchange commission, remittance agents (especially banks) often take advantage of the “float” by delaying remittance delivery and investing the funds in the overnight money market.

Remittance costs are significantly higher for smaller remittance transactions used by poorer migrants. In the case of Western Union and MoneyGram, for example, sending \$100 costs 15 percent; however, sending \$500 costs 8.6 percent and 8 percent, respectively. The remittance cost structure, thus, represents a greater burden for small transactions. It is very likely that remittance flows would increase, especially through formal recorded channels, if remittance costs were lowered.

Conservative estimates based on market analysis suggest that the true cost of transactions—labor, technology, setting up networks, and rent—add up to only about \$5 (or less) per transaction, signifi-

cantly below the fees charged to customers.¹¹⁶ The marginal cost of effecting transfers using sophisticated payment system infrastructure can be very low. The FedACH International service, offered by the Federal Reserve Banks to process cross-border transactions, for example, charges only 67 cents per remittance transaction, irrespective of the principal amount.¹¹⁷ However, this service may enjoy cost advantages in terms of volume and infrastructure.

Further analysis is necessary to determine various components of remittance costs. Recent research points to absence of competition in this market as a major contributor to high transaction costs. Remittance costs are low, and have fallen in recent years, in corridors (the United States–Mexico corridor, for example) where competition has increased.¹¹⁸ Entry of new remittance service providers, however, has been sluggish in most corridors. High fixed costs required to build extensive agent networks is a major entry barrier.

Improving transparency in remittance transactions would raise consumer awareness, reduce unfair remittance practices, and may have a significant effect on costs. The World Bank and the BIS Committee on Payment and Settlement Systems have set up a task force, with IMF participation, to develop voluntary principles for remittance service providers, regulators, and supervisors for improving transparency in the market. It is also possible that simply publicizing information on costs, as Mexican authorities do through the consumer protection agency (Procuraduría Federal del Consumidor, PROFECO) initiative, will contribute to strengthening competition.¹¹⁹

Other measures to reduce remittance costs include introducing new remittance instruments that take advantage of new technology, especially Internet-based technology. Card-based instruments, such as stored value cards (similar to phone cards), credit cards, and debit cards, are frequently used for sending remittances to urban locations that have access to card processing machines.¹²⁰ These instruments,

¹¹⁶Ratha and Riedberg (2005).

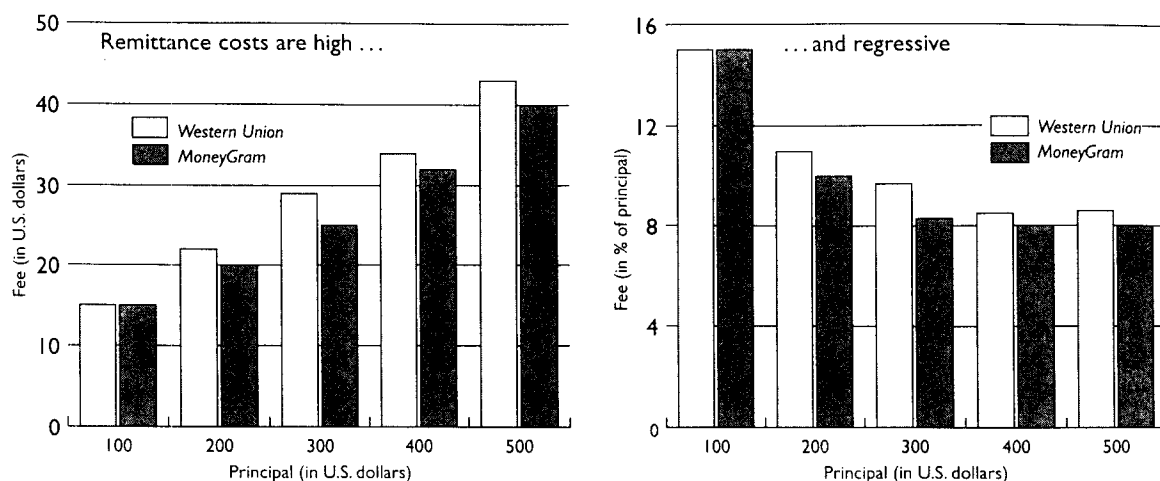
¹¹⁷FedACH International services are currently available to Canada, Mexico, Austria, Germany, the Netherlands, Switzerland, and the United Kingdom.

¹¹⁸Hernandez-Coss (2005).

¹¹⁹The International Remittance Protection Act proposed by Senator Paul Sarbanes of Maryland in September 2004 marks an effort to improve disclosure of fees and exchange rate commissions in remittance transactions.

¹²⁰Cellular phone-based technologies, such as the Smart Padala system in the Philippines, are not yet popular in the region, but it is a matter of time before such instruments become

Figure 5.2. Remittance Costs, April 2005



Sources: www.westernunion.com and www.moneygram.com.

Note: Fees shown are for remittances from New York to Central America. The same fee structure applies to all six Central American countries.

however, represent a challenge from an anti-money-laundering/combating the financing of terrorism standpoint to properly identify the customer behind a transaction.

Regulatory and policy decisions also affect the level of transaction costs. Since the terrorist attacks of September 11, 2001, authorities in many countries have adopted more stringent regulations and stepped up enforcement of existing rules governing the transfer of foreign exchange. In particular, the introduction of the Patriot Act in the United States in late 2001 tightened know-your-client requirements for fund transfers.¹²¹ In addition, financial institutions are also required to comply with the AML/CFT recommendations of the Financial Action Task Force (FATF), which are transposed in national regulations, as well as with the Office of For-

eign Assets Control (OFAC) sanctions list.¹²² An increasing number of countries are requiring MTOs to register and report transactions on a regular basis. These regulatory requirements have raised the cost of fund transfers to the remittance service providers who tend to pass on the cost increase to customers.

The regulatory regime governing remittances has to strike a balance between curbing money laundering, terrorist financing, and general financial abuse, and facilitating the flow of funds through formal channels. While, for instance, documentation requirements can add to the cost of remittances and restrict access to formal channels, they are necessary to prevent the abuse of remittance services for money laundering or terrorist financing purposes. Strengthening the formal remittance infrastructure by offering the advantages of low cost, flexible hours, expanded reach, and language, and increasing efforts to identify and regulate the unregulated sector, would be effective ways to facilitate remittance flows while preserving their integrity.

Harmonizing electronic fund transfer systems could reduce the cost of remittances. Currently, major transfer agents use their own (costly) propri-

available. These systems combine the advantages of phone banking with the unique ID and security features of cellular technology. See Ratha and Riedberg (2005); and Department for International Development (2005).

¹²¹Section 326 of the Patriot Act requires banks to verify the identity of customers. The law does not bar non-U.S. citizens from opening bank accounts in the United States. A non-U.S. customer who does not already have a social security number could use a government-issued identity document (e.g., the national passport) to open a non-interest-bearing checking account, and apply for an income taxpayer identification number (ITIN) to open an interest-bearing savings account.

¹²²The FATF has issued special AML/CFT recommendations for registering/licensing remittance service providers. See IMF (2005).

etary systems for effecting cross-border remittances. Also, domestic payment systems have evolved independently, although efforts are under way for their harmonization.

Even with the prevailing cost structure, there may be scope to reduce average remittance costs by “bundling,” that is, by enabling senders to remit more money but less frequently, perhaps by improving access to savings accounts or credit. Banks and other financial institutions could play a role in facilitating this. In addition, improving migrant workers’ access to banking in the remittance-source countries could reduce transactions costs as well as encourage financial deepening in the countries receiving remittances.

Remittances and Financial Institutions

Financial institutions, including smaller ones such as credit unions and microfinance institutions (MFIs), can play a major role in delivering low-cost and convenient remittance services.¹²³ If remittances are channeled through financial institutions, they might encourage more savings and also enable better matching of savings and investment in the economy.¹²⁴ Among the products that financial institutions are starting to offer to families receiving remittances are consumer loans, mortgages, and life insurance. Banks from countries in the region have been active in this market for some time, including through branch networks in sender countries. Larger international banks have more recently shown some interest in tapping this market.¹²⁵

Credit unions in El Salvador, Guatemala, Honduras, Nicaragua, Mexico, and Jamaica that are members of the World Council of Credit Unions (WOCCU) encouraged WOCCU to establish the International Remittance Network (IRnet) in July 1999, to facilitate remittance flows from the United States to Latin America. This initiative has success-

fully lowered remittance costs by raising customer awareness of remittance fees and by generating, to some extent, competition in the remittance market. The remittance fee through IRnet is a flat \$10 for sending up to \$1,000, much lower than the fees charged by major MTOs (see Figure 5.2). Besides fee income, these institutions are interested in using remittances for relationship building with existing and new customers. It is reported that 14–28 percent of nonmembers who came to WOCCU-affiliated credit unions to transfer funds eventually opened an account, and 37 percent of credit union members saved some part of their remittance receipts.¹²⁶

Financial institutions are exploring new products such as car and housing loans to remittance recipients. The idea of using remittance receipts as a way to evaluate credit history for lending to microenterprises is also being explored. Some institutions are also exploring ways to target remittances to specific uses such as paying school fees or medical bills. Others are exploring insurance products, for example, to ensure a stable flow of income to the remittance beneficiary in the event that the sender suffers an income shock.

In entering the remittance market, smaller non-bank financial institutions such as the MFIs have often entered into corresponding banking relationships with local commercial banks and with international remittance providers (such as the IRnet or the major MTOs).¹²⁷ Such tie-ups may be a reason behind high remittance fees charged by some MFIs in Central America, although their services may still be considered convenient by customers.¹²⁸

Securitization of Remittances

Taking advantage of the large size and stability of remittance flows, financial institutions in El Salvador followed the example of Mexican banks and raised \$650 million from the international capital markets between 1998 and 2004 by securitizing future flows of remittances and, more recently, other

¹²³Microfinance can be particularly important for channeling remittances to rural areas, where nearly 40 percent of recipients reportedly live—see Yang (2004) based on the 2002 round of the Encuesta de Hogares Propósitos Múltiples.

¹²⁴A bank account offers security and convenience for saving. Thus, a remittance recipient with a bank account is more likely to save a part of the remittance income than an unbanked person.

¹²⁵For instance, in 2004, Banco Bilbao Vizcaya Argentaria (BBVA) of Spain reached an agreement to acquire Laredo National Bancshares of the United States with a view to tapping the Hispanic market in the Texas-Mexico border area.

¹²⁶Grace (2005) based on data from the FEDECACES in El Salvador and the FENACOAC in Guatemala.

¹²⁷In Guatemala, Bancafe, Banrural, and FENACOAC have partnerships with MoneyGram, Western Union, and Vigo, respectively. In El Salvador, FEDECACES has partnered with Vigo, and Procredit with Western Union, and several others with MiPueblo (see Orozco, 2004).

¹²⁸See Orozco and Hamilton (2005); Isern, Deshpande, and van Doorn (2005); and Sander (2004).

TABLE 5.2
Securitization of Future Remittances in El Salvador

Year	Issuer	Amount (in millions of U.S. dollars)	Flow Type	Transaction Rating	Sovereign Rating
1998	Banco Cuscatlán	50	Remittances	BBB	BB
1999	Banco Cuscatlán	25	Remittances	BBB	BB+
2002	Banco Cuscatlán	100	DPR	AAA	BB+
2002	Banco Agrícola	100	DPR	AAA	BB+
2002	Banco Agrícola	40	DPR	AAA	BB+
2003	Banco Cuscatlán	125	DPR	AAA	BB+
2003	Banco Agrícola	60	DPR	AAA	BB+
2004	Banco Salvadoreño	25	DPR	BBB	BB+
2004	Banco Salvadoreño	75	DPR	BBB	BB+
2004	Banco Cuscatlán	50	DPR	BBB	BB+
Total		650			

Sources: Ketkar and Ratha (2004); Fitch Ratings; and Standard & Poor's.

diversified payment rights (DPRs), such as export revenue and FDI (Table 5.2).

Securitization of future remittances (as well as tourism receipts and export receipts) can enable developing country borrowers (typically, financial institutions) to access international capital markets during hard times. By mitigating currency convertibility risk, a key component of sovereign risk, the securitization of future remittances allows securities to be better rated than the sovereign. These securities are typically structured to obtain an investment grade rating. In the case of El Salvador, for example, the remittance-backed securities were rated investment grade, two to four notches above the subinvestment grade sovereign rating. Investment grade rating makes these transactions attractive to a wider range of “buy-and-hold” investors (e.g., insurance companies that face limitations on buying subinvestment grade securities). As a result, the issuer can access international capital markets at a lower interest rate and longer maturity.

Perhaps the most important incentive for governments to promote this asset class lies in the externalities associated with it. Securitized transactions, as opposed to unsecuritized ones, involve a much closer scrutiny of the legal and institutional environment—the existence as well as the implementation of laws relating to property rights and bankruptcy procedures. A remittance securitization transaction backed by the government can also help usher in reforms of the legal and institutional environment.

Remittance securitization typically involves the borrowing entity such as a bank pledging its future

remittance receivables to an offshore special purpose vehicle (SPV) that issues the debt (for an example, see Box 5.2). Designated correspondent banks are directed to channel all remittance flows of the borrowing bank directly to an offshore collection account managed by a trustee. The collection agent makes principal and interest payments to the investors and sends excess collections to the borrowing bank. Since remittances do not enter the issuer's home country, the rating agencies believe that the structure mitigates the usual sovereign transfer and convertibility risks. Such transactions also often resort to excess coverage to mitigate the risk of volatility and seasonality in remittances.

The first major securitization deal involving international migrant remittances occurred in 1994 in Mexico. Since then, the volume of remittance securitization has grown rapidly. Using this instrument, Mexico, Turkey, and El Salvador raised about \$2.3 billion during 1994–2000. As electronic transfers became more prevalent and made it easier to track complex transactions, remittance securitization gave way to securitization of DPRs including mainly migrant remittances, but also payments related to exports and FDI. Between 2000 and 2004, a total of \$10.4 billion was raised through securitization of DPRs by Brazil (\$5.3 billion),¹²⁹ Turkey (\$4.1 billion), El Salvador, Kazakhstan, Mexico, and Peru (although remittances remain dominant).

¹²⁹These bonds resulted in a spread saving of over 700 basis points compared with Brazil's sovereign spread.

Box 5.2. Banco do Brasil's Nikkei Remittance Trust Securitization¹

Amount: \$250 million.
Collateral: U.S. dollar- or Japanese yen-denominated worker remittances.
Transaction rating: BBB+ versus Banco do Brasil's and Republic of Brazil's foreign currency rating of BB-Stable.

This deal involved Banco do Brasil (BdB) selling its future remittance receivables from Brazilian workers in Japan directly or indirectly to a Cayman Island-based offshore special purpose vehicle (SPV) named Nikkei Remittance Rights Finance Company (see the figure). A New York city-based SPV issued and sold the debt instrument to investors, receiving \$250 million. BdB Japan was directed to transfer remittances directly to the collection account managed by the New York-based trust. The collection agent was to make principal and interest payments to the investors. Excess collections were to be directed to the originator BdB via the SPV.

Since remittances did not enter Brazil, the rating agencies believed that the structure mitigated the usual sovereign transfer and convertibility risks. The structure also mitigated the bankruptcy risk because the SPV had no other creditors, and risk of bankruptcy was minimal given the government-owned BdB's dominant position in Brazil. Furthermore, legal opinion held that creditors would continue to have access to the pledged security (i.e., remittances) even if BdB were to file for bankruptcy.

A number of residual risks remained that were difficult to structure away. These included performance risk—the ability and willingness of BdB to garner remittances and deliver them to the collection account managed by the New York-based trustee; product risk—the ability and willingness of Japan to generate remittances; and diversion risk—the possibility of BdB

selling the remittance rights to another party. The performance risk is generally captured in the issuer's local currency rating. For entities such as banks, Fitch uses the going concern and Standard & Poor's (S&P) the "survival" assessment of the originating entity in rating an asset-backed transaction higher than the issuer's local currency rating. This was the case for the BdB's Nikkei Remittance Trust transaction, which was rated BBB+ versus BdB's BB+ local rating. In reaching this decision, S&P took into account BdB's position as the largest financial institution in Brazil (with a 2,900-strong branch network) that makes it a natural conduit for funds transfers, the long-established presence of BdB in Japan since 1972, and the importance of worker remittances in generating foreign exchange for the Brazilian government. The product risk from volatility and seasonal fluctuations in remittances was mitigated via over-collateralization or excess coverage, with a debt service coverage ratio of 7.64.² Another element of product risk was partially mitigated by recognizing Japan's need for workers to supplement the native workforce, and the availability of Brazilians of Japanese descent to fill this demand. S&P, however, recognized as constraints on the rating the possibilities of Japan obtaining workers from countries other than Brazil and BdB selling remittance rights to another party. It expressly identified the latter as an event of default, triggering early amortization.

Some elements of sovereign risk cannot be totally eliminated. For example, the Central Bank of Brazil can compel BdB to pay remittances directly to the central bank instead of the trust. A degree of protection against this risk is provided by the fact that BdB is majority owned by the government of Brazil. In other instances, remittance securitized transactions have made designated correspondent banks sign a

²While excess coverage helps to mitigate elements of product risk, it also reduces the total amount of funds that can be raised with future flow receivables.

¹This box draws on Ketkar and Ratha (2004).

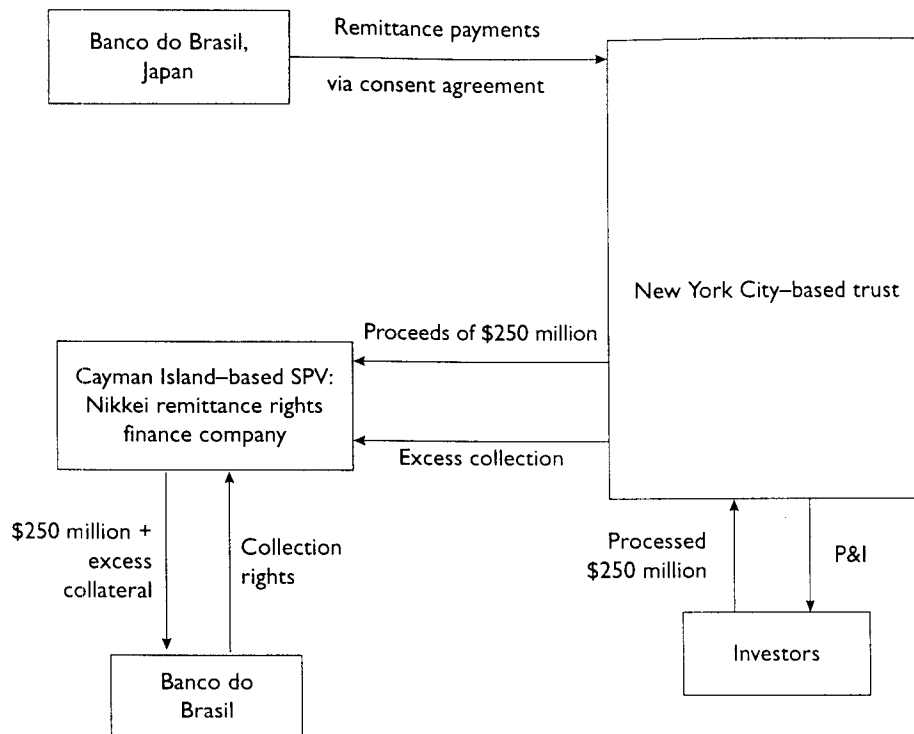
As experience with this instrument broadens and investors become more comfortable with its characteristics, it is possible that it could be used by a wider range of countries (including poor countries) and for a broader range of external flows (remittances, tourism receipts, commodity earnings). Financial institutions in the Central American countries that receive significant amounts of remittances can potentially raise financing from international capital markets using the future remittance-backed securitization structure. However, to the extent remittances

finance consumption and imports, they will not be available as collateral.

One of the main problems with future flow securitization is that it increases the level of inflexible debt of the issuer, usually private financial institutions.¹³⁰ Although the current level of debt pledged to future flows is not alarming, such debt reduces the flexibility and ability to service other nonpreferred debt. Securitization of future remittances (and other

¹³⁰See IMF (2003); and Chalk (2002).

Structure of Banco do Brasil's Remittance Securitization



Source: Standard & Poor's.

Notice and Acknowledgement, binding under the U.S. law (or the law of a highly rated country), that they will make payments to the offshore trust. That would make the sovereign reluctant to take the drastic step of requiring payments into the central bank. Cur-

rency devaluation is yet another element of sovereign risk that cannot be totally eliminated even in structured transactions. For instance, currency devaluation may impact the size and timing of remittances, particularly through formal channels.

future flows) can potentially conflict with the negative pledge provision included in the World Bank loan and guarantee agreements. While this clause does not prevent a borrower from pledging assets to other lenders, it prohibits establishing a priority for other lenders over the World Bank.¹³¹

¹³¹The IMF does not have any formal negative pledge provision, but it could take into account collateralized future receipt agreements in making financing decisions under Article V. See IMF (2003), p. 14.

Several policy hurdles need to be surmounted before securitization deals can proceed. High fixed costs of legal, investment banking, and credit rating services as well as long lead times can pose difficulties for developing countries with few large entities and high borrowing needs. A master trust arrangement can permit issuers to structure a large deal but tap the market in several tranches. Pooling receivables of several branches (or even several borrowers) could also help to increase the deal size to justify large fixed costs. Absence of an appropriate legal in-

frastructure is yet another constraint on issuance. Overcoming this constraint need not call for a grand overhaul of the entire legal system—a more focused approach that concentrates on bankruptcy law may suffice, by making sure that pledged assets remain pledged in the event of default.¹³²

Conclusions

Migrant remittances are the largest source of external financing and a large source of funding in relation to the size of the Central American economy. Remittances are, therefore, a significant part of the retail payment system covering small-value transfers or transactions where one of the counterparty is an individual.

From a financial sector point of view, large remittance flows raise two sets of issues: how to reduce cross-border remittance costs, and how to leverage remittances for improving financial deepening in the recipient countries. A related and somewhat under-researched issue is the use of remittances as collateral for raising external financing.

Measures to reduce remittance costs and strengthen the financial infrastructure include encouraging competition among remittance service providers, harmonizing regulation, introducing electronic remittance instruments, harmonizing payment systems, and extending banking access of remittance recipients at home and migrants overseas.

Improving data on remittances, especially bilateral flows and corridor-specific data, would help to encourage competition in the larger corridors. Officially recorded remittance data are believed to significantly underestimate the true size of remittance flows. An international working group comprising the World Bank, the IMF, the European Central Bank, the Inter-American Development Bank, the OECD, and the United Nations, is currently looking into improving data on remittances. Another task force jointly set up by the World Bank and the CPSS, in which the IMF is also participating, is currently developing voluntary principles for remittance service providers and regulators to improve transparency in the remittance market.

¹³²Tran and Roldos (2003) outline a broader set of policy actions and reforms for securitization. Although these recommendations are for securitization of existing (and local currency) assets such as mortgage loans, they also apply for securitization of future flow (and hard currency) assets.

Many of these efforts to facilitate cross-border remittances would require bilateral cooperation between the Central American countries and the U.S. government, since the United States is the most important source of remittance flows to Central America. These efforts would also require regional cooperation as intraregional remittance flows are sizable.

Efforts to reduce costs have to be carefully balanced with efforts to fight money laundering and the financing of terrorism. While, for instance, documentation requirements can add to the cost of remittances and restrict access to formal channels, they are necessary to prevent the abuse of remittance services for money laundering or terrorist financing purposes. Strengthening the formal remittance infrastructure by offering the advantages of low cost, flexible hours, expanded reach, and knowledge of foreign languages, and increasing efforts to identify and regulate the unregulated sector, would be effective ways to facilitate remittance flows while preserving their integrity.

Banks and smaller financial institutions, such as credit unions and microfinance institutions, can play a role in delivering low-cost and convenient remittance services. Remittances, in turn, may bring new customers and business, such as consumer loans, mortgages, and life insurance, to these institutions. Banks in Central American countries have been active in this market for some time, including through branch networks in sender countries. Larger international banks have more recently shown interest in tapping this market.

There is potential for mobilizing financing from international bond markets by securitizing future remittance flows in Central America, especially during times of low liquidity and heightened perception of country risk. Future flow securitization, however, increases the level of inflexible debt of the issuer (usually, financial institutions). This activity may also be constrained because remittances tend to feed directly into consumption and imports and thus do not constitute increased financial savings.

References

- Adams, Richard, 2004, "Remittances and Poverty in Guatemala," World Bank Policy Research Working Paper No. 3418 (Washington: World Bank).
- Bank for International Settlements, 1999, *Retail Payments in Selected Countries: A Comparative Study*, CPSS Publications No. 33, October (Basel).

- , 2003, *Policy Issues for Central Banks in Retail Payments* (CPSS publication No. 52, March).
- , 2006, *Report on General Guidance for National Payment System Development*.
- Chalk, Nigel, 2002, "The Potential Role for Securitizing Public Sector Revenue Flows: An Application to the Philippines," IMF Working Paper 02/106 (Washington: International Monetary Fund).
- De Luna-Martinez, Jose, 2005, "Workers' Remittances to Developing Countries: A Survey with Central Banks on Selected Public Policy Issues," World Bank Policy Research Working Paper 3638 (Washington: World Bank).
- Department for International Development, 2005, *Sending Money Home? A Survey of Remittance Products and Services in the United Kingdom* (London).
- Edwards, Alejandra Cox, and Manuelita Ureta, 2003, "International Migration, Remittances, and Schooling: Evidence from El Salvador," *Journal of Development Economics*, Vol. 72 (December), pp. 429–61.
- Grace, David, 2005, "Exploring the Credit Union Experience with Remittances in the Latin American Market," in *Remittances: Development Impact and Future Prospects*, ed. By Samuel Munzele Maimbo and Dilip Ratha (Washington: World Bank).
- Hernandez-Coss, Raul, 2005, *The US-Mexico Remittance Corridor: Lessons on Shifting from Informal to Formal Transfer Systems*, World Bank Working Paper No. 47 (Washington).
- International Monetary Fund, 2003, *Assessing Public Sector Borrowing Collateralized on Future Flow Receivables* (Washington). Available via the Internet: <http://www.imf.org/external/np/fad/2003/061103.htm>.
- , 2005, *Approaches to a Regulatory Framework for Formal and Informal Remittance Systems: Experiences, and Lessons* (Washington). Available via the Internet: <http://www.imf.org/external/np/pp/eng/2005/021705.htm>.
- Isern, Jennifer, Rani Deshpande, and Judith van Doorn, 2005, "Crafting a Money Transfers Strategy: Guidance for Pro-Poor Financial Services Providers," CGAP Occasional Paper No. 10 (Washington: Consultative Group to Assist the Poor).
- Ketkar, Suhas, and Dilip Ratha, 2001, "Securitization of Future Flow Receivables: A Useful Tool for Developing Countries," *Finance & Development*, Vol. 38 (March), pp. 46–49.
- , 2004, "Recent Advances in Future-Flow Securitization," paper presented at the Annual Finance & Accounting International Conference on "Managing Securitization for Lebanon and the MENA Region," Lebanese American University, School of Business, Beirut, December.
- Mishra, Prachi, 2005, "Macroeconomic Impact of Remittances in the Caribbean" (unpublished; Washington: International Monetary Fund).
- Orozco, Manuel, 2004, "The Remittance Marketplace: Prices, Policy and Financial Institutions," Pew Hispanic Center Report (Washington: Pew Hispanic Center).
- , and Eve Hamilton, 2005, "Remittances and MFI Intermediation: Issues and Lessons," Research Clearinghouse, The Center for Financial Services Innovation.
- Ratha, Dilip, 2003, "Workers' Remittances: An Important and Stable Source of External Development Finance," Chapter 7 in *Global Development Finance 2003: Striving for Stability in Development Finance* (Washington: World Bank).
- , and Jan Riedberg, 2005, "On Reducing Remittance Costs" (Washington: World Bank).
- Sander, Cerstin, 2004, "Capturing a Market Share? Migrant Remittance and Money Transfers as a Microfinance Service in Sub-Saharan Africa," *Small Enterprise Development*, Vol. 15 (March), pp. 20–34.
- Tran, Hung Q., and Jorge Roldos, 2003, "Asian Bond Markets: The Role of Securitization and Credit Guarantees," paper presented at the 2nd Annual Conference of PECC Finance Forum on Issues and Challenges for Regional Financial Cooperation in the Asia-Pacific, Hua Hin, Thailand, July.
- Yang, Dean, 2004, "Salvadorans Overseas: The Foundation of a Pro-Poor Growth Strategy" (unpublished; Ann Arbor, Michigan: Gerald R. Ford School of Public Policy, University of Michigan). Available via the Internet: <http://www-personal.umich.edu/Ndeanyang/nonacad/yang-salvadoransoverseas.pdf>.