

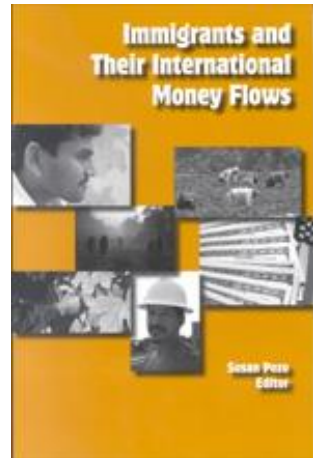
---

Upjohn Institute Press

---

# Remittance Patterns of Latin America Immigrants in the United States

Catalina Amuedo-Dorantes  
*San Diego State University*



Chapter 5 (pp. 73-98) in:

**Immigrants and Their International Money Flows**

Susan Pozo, ed.

Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2007

DOI: 10.17848/9781429492072.ch5

# 5

## **Remittance Patterns of Latin American Immigrants in the United States**

Catalina Amuedo-Dorantes  
*San Diego State University*

Migrant remittances, defined as transfers of funds from migrants in the United States to relatives or friends in their country of origin, have increasingly attracted the attention of policymakers as the large amounts of money involved and the role of remittances in economic development have become more evident. Indeed, at a macroeconomic level, remittances constitute one of the largest and least volatile sources of foreign exchange in many developing economies. The magnitude of these remittance flows is only expected to rise, given the increasing out-migration experienced by many of these regions. As noted by de Vasconcelos (2005) of the Inter-American Development Bank, nowhere is this movement of workers and funds more important than in Latin America and the Caribbean, where domestic incomes and capital flows have been drying up following periods of economic crisis. Remittances from the United States to Latin American and Caribbean nations totaled more than \$40 billion in 2004. This amount exceeded the combined flows of all foreign direct investment (FDI) and net official development assistance (ODA) to the region. De Vasconcelos goes on to note that the volume of remittances received by the Latin American and Caribbean countries is now the highest and fastest growing of any region in the world. Remittances surpass tourism income in each country of that region, account for at least 10 percent of the gross domestic product (GDP) in six countries, and almost always exceed a country's largest export.

Perhaps the most popular task of economists studying the remittance market in recent years has been the measurement of these flows.

In addition, the literature has tried to gain a better understanding of migrants' remitting patterns and the microeconomic impacts of these patterns by examining who is likely to remit, for what purposes, and how remittances are ultimately used by the receiving families. Yet the lack of comparable survey instruments has impeded the completion of interesting cross-country comparisons that would shed some light on the role of socioeconomic, political, and cultural differences in explaining migrants' remittance patterns and how their families and friends ultimately use the funds they send back home.

In this chapter, I use two surveys—the Mexican Migration Project and the Latin American Migration Project—designed to measure migration and migrants' remitting patterns across several countries. The similitude of these two survey instruments allows for a comparative analysis. In particular, it permits us to uncover country-level similarities and differences that are key in devising policies to facilitate these money flows and maximize their potential for improving the livelihood of migrants' families back home.

## DATA

The Mexican Migration Project (MMP93) reports only on Mexico, whereas the Latin American Migration Project (LAMP) reports on Costa Rica, the Dominican Republic, Haiti, Nicaragua, and Peru.<sup>1</sup> The LAMP is a companion project to the MMP93, which was begun in 1982 to study the migration patterns of Mexicans within Mexico as well as Mexicans who have come to the United States. The MMP93 database includes detailed social, demographic, and economic information from approximately 16,000 households in 93 representative communities in 17 of Mexico's 31 states.<sup>2</sup> The MMP93 survey was carried out annually in the winter months of 1982–1983 and 1987–2002.<sup>3</sup> For each household, a complete life history is gathered on the household head, including detailed information on past migration experiences in the United States (number and duration of trips, documentation used, etc.). After gathering information on these households, interviewers travel to the destination areas in the United States to administer identical questionnaires to households from the same communities in Mexico; these im-

migrants have settled in the United States and no longer return home. Altogether, the 5,837 immigrants surveyed in the MMP93 constitute a reasonably representative data set on authorized and unauthorized Mexican immigrants in the United States (Amuedo-Dorantes, Bansak, and Pozo 2005; Massey and Zenteno 2000; Munshi 2003).

The LAMP uses the same methodology as the MMP93 to expand our knowledge of migration in a variety of countries in Latin America and the Caribbean. So far, only one wave of data is available—that wave having been collected between 1999 and 2003, depending on the country under consideration. Because of this, when I explore household remittance-receiving patterns, I work with data from approximately 1,400 households from Costa Rica, a little under 1,000 households from the Dominican Republic, about 300 households from Haiti, almost 1,800 households in Nicaragua, and close to 700 households from Peru. When investigating immigrants' remitting patterns, I rely on data from approximately 192 immigrants from Costa Rica, 166 immigrants from the Dominican Republic, 36 immigrants from Haiti, 161 immigrants from Nicaragua, and 61 immigrants from Peru.

## **MIGRATION AS THE PRECONDITION TO REMITTANCES**

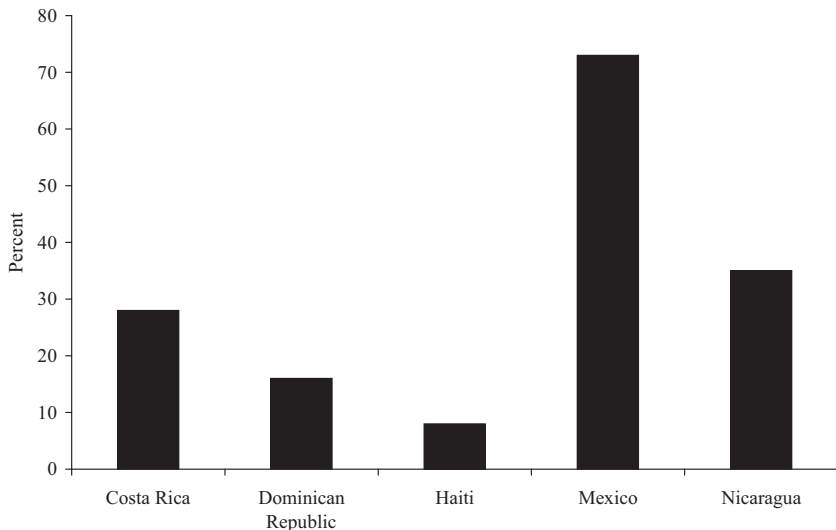
To the extent that remittances are money transfers from emigrants of a country to friends and relatives back in their countries of origin, these flows are conditional on the out-migration patterns of the receiving economies. As such, it is illuminating to ask the following questions about emigrants from each of these countries: What percentage of emigrants from these economies enter illegally into the United States? What percentage rely on smugglers to help them cross the border? How much do migrants pay, on average, for the smugglers' services? Has the cost significantly increased during the past decade? Finally, how many trips do legal and unauthorized migrants in each of these countries make to the United States, on average?

These questions all provide us with valuable information likely to influence remittance payments. For instance, countries with a higher proportion of unauthorized immigrants in the United States may be more likely to receive larger remittance flows. After all, unauthor-

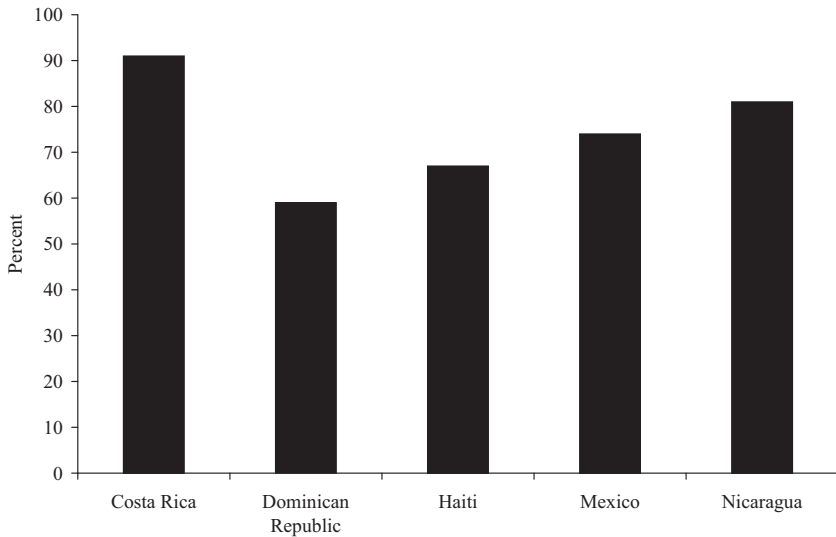
ized immigrants are exposed to higher income risks and, as such, may be more likely to remit money back home as an insurance mechanism in case the migration experience turns out to be unsuccessful (Amuedo-Dorantes and Pozo 2006). Likewise, the broad use of smuggling services is likely to make the migratory experience more expensive. The debt incurred often means that migrants must pay back immediate family and relatives for funding their trip. Alternatively, migrants may have to foot the expenses for additional family members to come (Ilahi and Jafarey 1999). Finally, frequent trips back home may also influence how much money is remitted home on a periodic basis as opposed to being brought back home at the end of the migration experience (Bauer and Sinning 2005).

Figures 5.1–5.3 and Tables 5.1A and 5.1B provide some combined migration statistics for all the countries included in this study as well as separate statistics for each country. Approximately 68 percent of the 6,392 Latin American immigrants in the study, or about 4,350, are unauthorized.<sup>4</sup> Additionally, about 75 percent of illegal border crossers use smuggling services. Figures 5.1 and 5.2 show these same categories broken down by immigrants' country of origin. Mexico is the country

**Figure 5.1 Percentage of Unauthorized Immigrants, by Country**



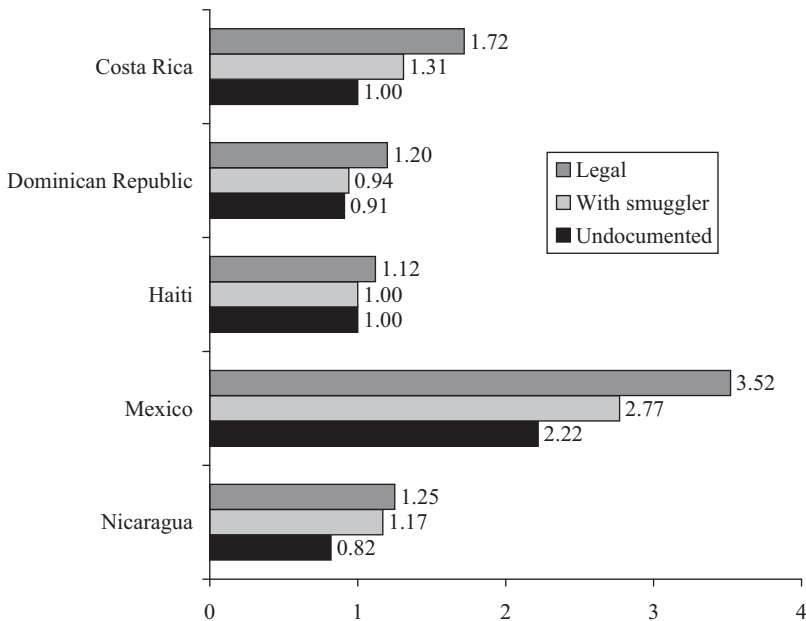
SOURCE: Author's tabulations using the MMP93 and the LAMP.

**Figure 5.2 Percentage of Unauthorized Immigrants Using Smugglers, by Country**

SOURCE: Author's tabulations using the MMP93 and the LAMP.

we are most familiar with in this respect, given the predominance of Mexicans among all other immigrant groups in the United States. The percentage of unauthorized immigrants from Mexico is more than twice as high as the percentage from Nicaragua, the country with the next highest percentage of illegals. This may possibly be explained by the greater distance to be traveled in the case of Costa Rica and Nicaragua, and the hazards of sea travel in the case of Haiti and the Dominican Republic. Additionally, an even higher percentage of unauthorized immigrants rely on the services provided by smugglers in Costa Rica (91 percent) and Nicaragua (81 percent) than do so in Mexico (74 percent). As such, the possibility exists that Costa Ricans and Nicaraguans remit substantial sums of money back home, either to pay back their own travel loans or to finance the comparatively more expensive trips of relatives. The lowest usage of smuggling is found among immigrants from the Dominican Republic. Because only a small number of observations are available for this country, it is difficult to ascertain why such low rates occur here. However, the lower use of smuggling services

**Figure 5.3 Average Number of Border Crossings per Migrant, by Documentation Status and Use of Smuggling Services**



SOURCE: Author's tabulations using the MMP93 and the LAMP.

by Dominicans could be, in part, related to the lower realized success rate of smuggler-aided crossings among Dominicans in the survey compared to the rate for unauthorized Dominicans who choose not to rely on these services.

We also have information on the average number of crossings for legal versus unauthorized immigrants in each of the countries being surveyed (Figure 5.3). As we would expect, legal immigrants make a larger number of U.S. visits—three on average—than do unauthorized immigrants, who average two to almost three.<sup>5</sup> Therefore, we would expect unauthorized immigrants to remit more money to their families than legal immigrants, who can more easily return home and bring money back to their families in person.

Tables 5.1A and 5.1B give the cost in U.S. dollars to unauthorized immigrants of using smuggling services. Unauthorized immigrants are

a group that carries special interest given their potentially higher likelihood of remitting larger proportions of their earnings back home. Only 62 percent of illegal border crossers using smugglers report on the cost incurred from using their services. On average, these unauthorized immigrants report paying \$427 for each crossing. This cost was as low as \$303 during the 1990s and increased to an average of \$633 from 2000 onwards. Table 5.1A also shows how immigrants' use of smuggling services is inversely related to the cost of such services, thus suggesting the existence of a downward sloping demand for smuggling services on the part of unauthorized immigrants. Table 5.1B reveals large variation by country in smuggling costs. Mexican immigrants, at an average cost per trip of about \$370, pay the least for smuggling services, which is to be expected because of the geographic proximity of Mexico to the United States. In contrast, Costa Rica, the most distant country from the United States in the sample under consideration, has the highest average amount paid by its emigrants for smuggling services (about \$2,100). The average price paid by Nicaraguans is approximately \$1,700, whereas Dominicans pay about \$1,000. Given the limited number of observations available for some of these countries, it is difficult to clearly identify trends. However, if we focus on those countries for which there are a larger number of observations—Mexico, Nicaragua, and Costa Rica—it appears as if smuggling costs have been

**Table 5.1A Average Cost of Smuggling Services and Its Relationship to Successful Crossings, All Countries (\$)**

	<i>N</i>	Mean	Std. dev.
Average cost	2,034	426.74	584.62
Average cost by decade of last U.S. visit			
During 1990s	1,273	303.25	408.88
2000 and later	761	633.33	752.45
Average cost by number of successful crossings			
None	11	815.23	1,417.40
One	1,050	462.53	662.59
Two	498	393.57	489.86
Three	266	362.03	423.58

SOURCE: Author's tabulations using the MMP93 and the LAMP.



**Table 5.1B Average Cost of Smuggling Services and Its Relationship to Successful Crossings, by Immigrants' Country of Origin (\$)**

Variable	Costa Rica			Dominican Republic			Haiti			Nicaragua			Mexico		
	<i>N</i>	Mean	Std. dev.	<i>N</i>	Mean	Std. dev.	<i>N</i>	Mean	Std. dev.	<i>N</i>	Mean	Std. dev.	<i>N</i>	Mean	Std. dev.
Average cost	32	2,101.56	1,223.72	13	1,035.58	977.21	2	4,000.00	2,828.43	36	1,670.60	1,298.21	1,961	368.60	445.54
Average cost by decade of last U.S. visit															
During 1990s	11	1,022.73	611.30	7	1,090.29	1,322.55	1	6,000.00	—	27	1,401.54	981.53	1,227	263.50	280.38
2000 and later	21	2,666.67	1,076.49	6	971.75	527.80	1	2,000.00	—	9	2,477.78	1,806.95	724	546.73	592.92
Average cost of smuggling services by number of successful crossings															
None	0	—	—	1	1,130.00	—	0	—	—	0	—	—	10	783.75	1,490.01
One	24	1,981.25	1,172.22	11	962.05	1,065.57	2	4,000.00	2,828.43	29	1,279.02	1,327.38	984	375.38	476.43
Two	6	2,158.33	1,473.32	1	1,750.00	—	—	—	—	7	1,428.57	1,234.52	484	353.92	381.79
Three	1	3,000.00	—	—	—	—	—	—	—	—	—	—	265	352.08	391.97

NOTE: — = not available.

SOURCE: Author's tabulations using the MMP93 and the LAMP.

on the rise since the 1990s. In the cases of Mexico and Costa Rica, these costs have more than doubled. The increasing cost of smuggling services may have heightened the need on the part of immigrants to remit money home, both to pay their debt and to finance the migration of additional household members to the United States. It is interesting to note how the downward-sloping demand for smuggling services on the part of unauthorized immigrants suggested by Table 5.1A is supported by the Mexican data in Table 5.1B. However, in the case of Costa Ricans or Nicaraguans, a larger number of successful illegal border crossings is directly linked to a higher cost for smuggling services. As such, these migrants may be “getting what they paid for.”

## **IMMIGRANTS’ REMITTING PATTERNS: HOW MUCH IS SENT? BY WHOM? FOR WHAT PURPOSES?**

### **How Much?**

Perhaps the most basic yet difficult task of remittance researchers has been to measure these money flows and the percentage of immigrants sending money back home. Table 5.2 provides a comparison of such figures across the countries being examined. More than 5,700 immigrants, or about 89 percent of immigrants in the sample, provide information regarding their remitting practices. Approximately 70 percent of those 5,703 immigrants report that they sent money back home on a monthly basis during their last U.S. trip. This figure is in line with the more than 60 percent of immigrants from Nicaragua, Costa Rica, the Dominican Republic, Mexico, and Haiti that remit money home. In contrast, only 46 percent of the 52 Peruvian immigrants in the sample sent money home to their families on a monthly basis.

Table 5.2 also lists the average dollar amounts remitted home by immigrants from these Latin American and Caribbean nations. These average \$300 a month, or 40 percent of immigrants’ income. Money transfers are smallest among immigrants from the Dominican Republic (\$179 a month) and largest among immigrants from Costa Rica (\$493). In line with this, Dominicans remit approximately 16 percent of their monthly earnings, whereas Costa Ricans remit about 55 percent. How-

**Table 5.2 Remittance Patterns for Surveyed Latin American Countries**

	Share of migrants remitting	Average amount remitted (\$)	As a share of income
All countries			
Mean	0.71	301.68	0.40
Std. dev.	0.46	418.48	0.98
<i>N</i>	5,703	4,034	3,270
Costa Rica			
Mean	0.69	492.91	0.55
Std. dev.	0.46	865.46	1.00
<i>N</i>	167	115	78
Dominican Republic			
Mean	0.67	179.18	0.16
Std. dev.	0.47	195.31	0.21
<i>N</i>	154	103	84
Haiti			
Mean	0.74	284.56	0.13
Std. dev.	0.45	251.78	0.06
<i>N</i>	19	14	7
Nicaragua			
Mean	0.61	223.18	0.22
Std. dev.	0.49	255.03	0.35
<i>N</i>	132	80	61
Peru			
Mean	0.46	376.55	0.16
Std. dev.	0.50	371.75	0.14
<i>N</i>	52	24	12
Mexico			
Mean	0.71	300.43	0.41
Std. dev.	0.45	403.35	1.00
<i>N</i>	5,179	3,698	3,028

SOURCE: Author's tabulations using the MMP93 and the LAMP.

ever, there is not always a direct relationship between the dollar amount remitted and the percentage of monthly earnings remitted home. For instance, while the average dollar amount remitted by Peruvians is above the mean for the group of countries being examined, the percentage of income remitted by Peruvians is far below—they remit only 16 percent of their monthly earnings, compared to 41 percent for the other nationalities in the sample.

### **By Whom?**

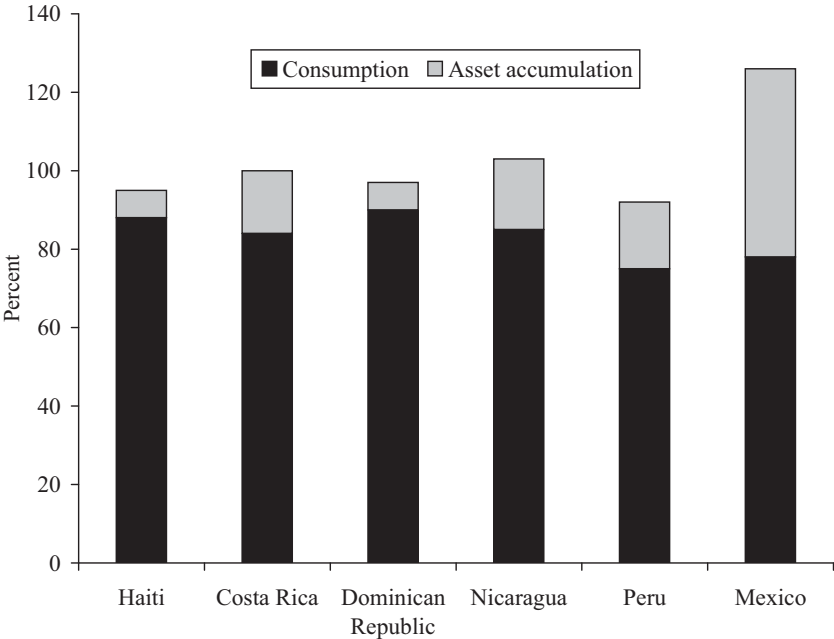
In addition to measuring remittance transfers, the literature has long examined immigrants' remitting motives. Overall, a variety of reasons for sending money back home has been identified, including altruism, exchange, investment, and coinsurance. The altruism motive suggests that remittance payments made by migrants to their families increase with the needs of household members back home (Becker 1974). The exchange motive, or at least the most predominant one, comes from existing evidence of immigrants repaying family members and friends back home for financing their trip (Cox 1987). Another motive, investment, occurs when immigrants remit money back home to purchase assets with the intent of earning an economic return. And Lucas and Stark (1985) call attention to yet another motive for sending money back home—coinsurance, by which both immigrants and family members or friends provide monetary and in-kind transfers to insure each other against economic shocks.

### **For What Purposes?**

The MMP93 and LAMP ask remitters their purpose in sending money back home. Remitters are allowed to choose up to five motives for transferring money home. For practical purposes, these motives can be grouped into either "consumption" or "asset accumulation/investment," depending on whether remittances are sent by immigrants to cover the consumption needs of family and friends back home or to be invested in productive activities. Whether a particular expenditure category should constitute consumption or asset accumulation is debatable, particularly when it comes to assets such as housing. However, for the purposes of this study, I group the following motives under the category of asset ac-

accumulation: construction or repair of house, purchase of a house or lot, purchase of tools, purchase of livestock, purchase of agricultural inputs, start-up or expansion of a business, educational expenses, health expenses, and savings. In contrast, consumption comprises the following expenditures: food and maintenance, purchase of a vehicle, purchase of consumer goods, financing a special event, recreation/entertainment expenses, and debt payments. Figure 5.4 addresses migrants' remitting motives. Because migrants can indicate up to five motives for remitting money back home, the percentages of migrants sending money for consumption and asset accumulation purposes do not add up to 100. According to Figure 5.4, consumption is the overwhelming purpose behind immigrants' remitting practices, yet a nontrivial portion of remitters specify asset accumulation as a reason for sending money home.

**Figure 5.4 Percentage of Immigrants That Remit for Consumption and Asset Accumulation**



NOTE: Percentages do not add up to 100 because more than one purpose may be reported.

SOURCE: Author's tabulations using the MMP93 and the LAMP.

Consumption appears to be a more pressing remittance motive for immigrants coming from the Dominican Republic, Haiti, Peru, Nicaragua, and Costa Rica than it does for those from Mexico: only a small fraction of immigrants from those economies (never more than 18 percent of remitters) indicate sending money back home for asset accumulation purposes.

Several empirical studies have noted that remittances differ according to immigrants' age, family responsibilities back home, earnings, and whether they have temporary or permanent status (de la Garza and Lowell 2002; Taylor 1999). In addition to these characteristics, Tables 5.3 through 5.6 examine the variability of immigrants' remitting patterns and purposes according to whether or not the immigrants were authorized upon entry, their educational attainment, decade of visit, and area of residence while in the United States. Several findings are worth discussing. The data in Table 5.3 confirm what was hypothesized earlier in the chapter: that a higher percentage of unauthorized immigrants (75 percent) remit money back home than legal migrants do (64 percent). Yet the data in Table 5.4 indicate that there is not much difference in the percentage of earnings that these two groups of immigrants remit home.

Likewise, less educated immigrants appear more likely to remit than their more educated counterparts (59 percent compared to 50 percent in Table 5.3). There are no statistically significant differences among countries in how likely less educated immigrants are to remit relative to more educated immigrants. Nor do less educated immigrants seem to send a significantly higher proportion of their incomes home than more educated immigrants (20 versus 17 percent, Table 5.4).

Other interesting results refer to remittance trends. According to the data in Table 5.3, a higher percentage of Latin American immigrants have transferred money to their families during the present decade than in the 1990s. This is the case for Costa Ricans, Dominicans, Nicaraguans, Peruvians, and Mexicans; the exception is Haitians. However, the limited number of observations for Haiti casts doubt on any conclusions. Furthermore, Table 5.4 indicates that, as a percentage of migrants' monthly earnings, remittance transfers have also been on the rise among Dominicans and Peruvians during the current decade.

A final aspect revealed by Tables 5.3 and 5.4 involves changes in remitting patterns according to whether immigrants resided in a large

**Table 5.3 Percentage of Migrants Remitting, by Documentation Status, Education, Decade, and City Dweller**

Variable	All countries		Costa Rica		Dominican Republic		Haiti		Nicaragua		Peru <sup>a</sup>		Mexico	
	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.
By documentation status														
Legal	0.64	—	0.66	—	0.68	—	0.69	—	0.57	—	0.44	—	0.66	—
Unauthorized	0.75	-8.36***	0.80	-1.76*	0.57	0.75	1.00	-2.61**	0.80	-2.22**	1.00	-7.90***	0.75	-7.34***
By educational attainment														
Up to 15 years	0.59	—	0.60	—	0.69	—	0.75	—	0.56	—	0.56	—	0.58	—
16+ years	0.50	2.37**	0.33	1.48	0.73	-0.35	0.50	0.48	0.53	0.29	0.37	1.29	0.50	1.44
By decade of visit														
During 1990s	0.67	—	0.45	—	0.58	—	0.92	—	0.56	—	0.22	—	0.68	—
2000 and later	0.79	-9.79***	0.81	-4.76***	0.83	-3.39***	0.33	2.63**	0.67	-1.28	0.64	-3.42***	0.79	-8.92***
By area where they stayed in the U.S.														
Not a large city	0.73	—	0.68	—	0.54	—	0.70	—	0.56	—	—	—	0.75	—
Large city	0.67	5.42***	0.78	-0.86	0.73	-2.28**	0.78	-0.37	0.73	-1.82*	—	—	0.66	6.56***

NOTE: — = not available. \*significant at the 0.10 level (two-tailed test); \*\*significant at the 0.05 level (two-tailed test); \*\*\*significant at the 0.01 level (two-tailed test). The hypothesis being tested is  $H_0: \text{diff} = 0$ .

<sup>a</sup> Information on migrant residency while in the United States is not available in the Peruvian survey.

SOURCE: Author's tabulations using the MMP93 and the LAMP.

**Table 5.4 Percentage of Income Remitted Home, by Documentation Status, Education, Decade, and City Dweller**

Variable	All countries		Costa Rica		Dominican Republic		Haiti <sup>a</sup>		Nicaragua		Peru <sup>b</sup>		Mexico	
	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.
By documentation status														
Legal	0.39	—	0.41	—	0.16	—	—	—	0.21	—	0.15	—	0.42	—
Unauthorized	0.41	-0.44	0.96	-1.34	0.17	-0.12	—	—	0.31	-0.65	0.22	—	0.41	0.40
By educational attainment														
Up to 15 years	0.20	—	0.14	—	0.13	—	—	—	0.10	—	0.19	—	0.23	—
16+ years	0.17	0.87	0.09	0.82	0.11	0.39	—	—	0.24	-1.41	0.06	1.75	0.18	1.07
By decade of visit														
During 1990s	0.30	—	0.28	—	0.09	—	—	—	0.14	—	0.03	—	0.31	—
2000 and later	0.28	0.83	0.46	-1.06	0.18	-2.02**	—	—	0.16	-0.36	0.13	-1.97*	0.28	1.34
By area where they stayed in the U.S.														
Not a large city	0.44	—	0.61	—	0.22	—	0.19	—	0.25	—	—	—	0.44	—
Large city	0.34	2.91***	0.22	1.28	0.14	1.29	0.11	1.75	0.17	0.83	—	—	0.36	2.34**

NOTE: — = not available. \*significant at the 0.10 level (two-tailed test); \*\*significant at the 0.05 level (two-tailed test); \*\*\*significant at the 0.01 level (two-tailed test). The hypothesis being tested is  $H_a: \text{diff} \neq 0$ .

<sup>a</sup>The limited number of observations for Haiti impedes a meaningful testing of statistically significant differences in most cases.

<sup>b</sup>Information on migrant residency while in the United States is not available in the Peruvian survey.

SOURCE: Author's tabulations using the MMP93 and the LAMP.



city while in the United States. Immigrants were more likely to remit (73 percent versus 67 percent, Table 5.3) and to remit a larger fraction of their monthly incomes (44 percent versus 34 percent, Table 5.4) if they resided in smaller cities or rural areas. When distinguishing by immigrants' country of origin, the same pattern is observed, partially as a result of the Mexican data being representative, to a large extent, of agricultural migrant workers. However, the percentage of migrants likely to remit in every country but Mexico (save Peru, where data are unavailable) is larger among those who last resided in a large U.S. city. This pattern may simply be indicative of the location preferences of some of these countries' emigrants: Dominicans may concentrate in New York City, for example.

Whereas Tables 5.3 and 5.4 cover the percentage of remitters and the magnitude of their remittance transfers by status, education, decade, and rurality, Tables 5.5 and 5.6 display how the same characteristics affect the purpose of funds remitted by immigrants. Perhaps the most noticeable result from Table 5.5 is that remitting for consumption purposes is not only more prominent among less educated immigrants than among more educated ones (43 versus 35 percent) but, in addition, it has become the predominant remitting motive among immigrants over the present decade (62 percent) as compared to the 1990s (43 percent). This overall trend holds true among immigrants from Costa Rica, the Dominican Republic, Peru, and Mexico, but not among those from Haiti and Nicaragua. Correspondingly, the data in Table 5.6 reveal how asset accumulation has lost importance over time in the overall sample. As a whole, asset accumulation appears to be a more prominent motive among legal immigrants than among unauthorized ones. Likewise, less educated Costa Ricans and Peruvians seem to cite asset accumulation as a reason for remitting money home on more occasions than their more educated counterparts. Finally, investment is more commonly a purpose for transferring funds by immigrants residing in large U.S. cities during their last trip, as is borne out by Costa Ricans and Mexicans.

In the following section, I take a look at households' reporting of these money inflows. I pay particular attention to the significance of remittances in the family budget as well as to how households make use of these money transfers.

**Table 5.5 Percentage of Migrants Declaring Consumption as the Purpose for Remitting Money Home, by Documentation Status, Education, Decade, and City Dweller**

Variable	All countries		Costa Rica		Dominican Republic		Haiti		Nicaragua		Peru <sup>a</sup>		Mexico	
	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.
By documentation status														
Legal	0.78	—	0.84	—	0.89	—	0.82	—	0.84	—	0.73	—	0.77	—
Unauthorized	0.79	-0.78	0.86	-0.23	1.00	-3.33***	1.00	-1.49	0.88	-0.32	1.00	-2.81***	0.79	-1.49
By educational attainment														
Up to 15 years	0.43	—	0.39	—	0.57	—	0.35	—	0.42	—	0.32	—	0.42	—
16+ years	0.35	2.20**	0.33	0.32	0.64	-0.54	0.20	0.66	0.41	0.16	0.30	0.16	0.32	2.28***
By decade of visit														
During 1990s	0.43	—	0.20	—	0.34	—	0.12	—	0.27	—	0.06	—	0.46	—
2000 and later	0.62	-14.27***	0.65	-7.86***	0.72	-5.44***	0.09	0.37	0.06	-2.88***	0.48	-4.68***	0.63	-11.81***
By area where they stayed in the U.S.														
Not a large city	0.79	—	0.89	—	1.00	—	0.71	—	0.83	—	—	—	0.78	—
Large city	0.79	-0.02	0.50	4.00***	0.87	1.95**	1.00	-1.55	0.89	-0.69	—	—	0.79	-0.27

NOTE: — = not available. \*significant at the 0.10 level (two-tailed test); \*\*significant at the 0.05 level (two-tailed test); \*\*\*significant at the 0.01 level (two-tailed test). The hypothesis being tested is  $H_0: \text{diff} = 0$ .

<sup>a</sup> Information on migrant residency while in the United States is not available in the Peruvian survey.

SOURCE: Author's tabulations using the MMP93 and the LAMP.

**Table 5.6 Percentage of Migrants Declaring Asset Accumulation as the Purpose for Remitting Money Home, by Documentation Status, Education, Decade, and City Dweller**

Variable	All countries		Costa Rica		Dominican Republic		Haiti		Nicaragua		Peru <sup>a</sup>		Mexico	
	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.	%	<i>t</i> -stat.
By documentation status														
Legal	0.47	—	0.17	—	0.07	—	0.09	—	0.19	—	0.18	—	0.49	—
Unauthorized	0.43	2.12	0.11	0.91	0.00	2.73***	0.00	1.00	0.13	0.63	0.00	2.16**	0.48	0.94
By educational attainment														
Up to 15 years	0.19	—	0.15	—	0.09	—	0.09	—	0.11	—	0.11	—	0.23	—
16+ years	0.13	2.40**	0.00	3.23***	0.00	2.54***	0.00	1.45	0.05	1.02	0.05	0.76	0.21	0.63
By decade of visit														
During 1990s	0.29	—	0.05	—	0.03	—	0.01	—	0.06	—	0.02	—	0.33	—
2000 and later	0.24	4.44***	0.11	-1.66*	0.04	-0.16	0.00	1.00	0.04	-0.36	0.06	-0.85	0.27	4.29***
By area where they stayed in the U.S.														
Not a large city	0.43	—	0.11	—	0.00	—	0.14	—	0.15	—	—	—	0.45	—
Large city	0.50	-4.62***	0.50	-4.00***	0.09	-1.60	0.00	1.00	0.22	-0.79	—	—	0.53	-4.58***

NOTE: — = not available. \*significant at the 0.10 level (two-tailed test); \*\*significant at the 0.05 level (two-tailed test); \*\*\*significant at the 0.01 level (two-tailed test). The hypothesis being tested is  $H_0: \text{diff} = 0$ .

<sup>a</sup> Information on migrant residency while in the United States is not available in the Peruvian survey.

SOURCE: Author's tabulations using the MMP93 and the LAMP.

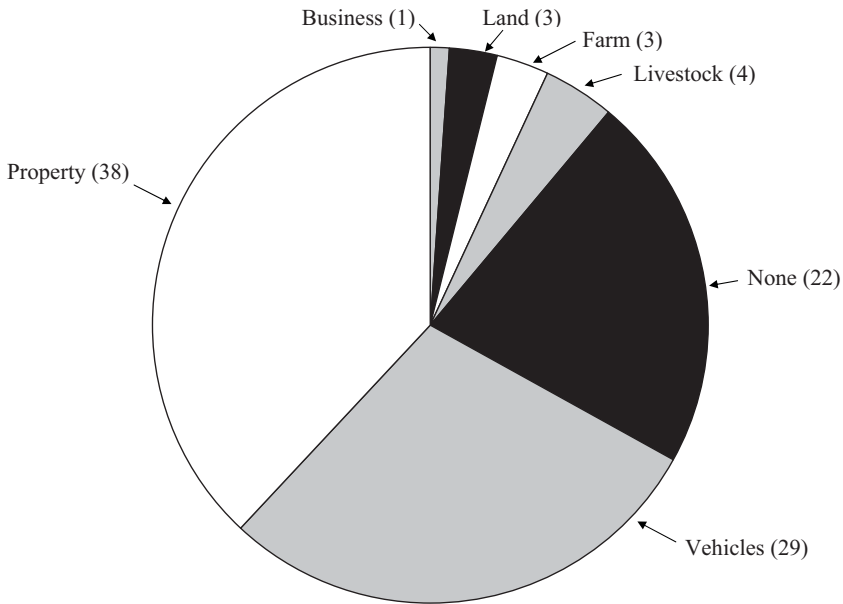
## HOUSEHOLD REMITTANCE RECEIPT AND ACTUAL USAGE

In addition to measuring remittance transfers and examining the motives behind immigrants' remitting patterns, the literature has long discussed how these money flows are used by migrants' families back home. This is of interest because immigrants' purposes for transferring money may not always coincide with the reported use of funds by the receiving families. In this regard, the MMP93 and LAMP ask households whether they receive any money transfers from abroad and whether these transfers represent a small, medium, or large portion of family income. Additionally, households are questioned about whether they use the reported funds for consumption or for asset accumulation purposes. Summary data of these findings are displayed in Figure 5.5 and Table 5.7.

Approximately 2 percent of the 21,263 households interviewed by the MMP93 and LAMP report receiving remittance transfers from abroad.<sup>6</sup> Table 5.7 displays slightly larger percentages of remittance-receiving households in Haiti (8 percent), the Dominican Republic (5 percent), and Costa Rica and Peru (both 3 percent) than in Nicaragua and Mexico (2 percent). Overall, 47 percent of the households reporting on the magnitude of remittance income declare that these funds constitute a large portion of household income (not shown). Separately, the various countries report similar percentages. The exception is Haitian households, most of whom declare these funds to be of medium size. Thus, dependence on remittance income may be a reality for some families in these Latin American and Caribbean nations.

Does the ultimate usage of remittance income by families coincide with the purpose for which immigrants transfer funds home? Figure 5.5 and the bottom category of Table 5.7 address the question of what remittances are used for. Thirty-eight percent of remittance-receiving households say they use remittance income for purchasing or adding to existing property (Figure 5.5). This percentage mirrors the 38 percent of immigrants declaring property investment as one of the motives for sending money back to their native country.<sup>7</sup> A comparable figure on the percentage of immigrants sending money back for consumption is, unfortunately, not available since households are only asked about the use of remittance income to purchase specific items, and only one

**Figure 5.5 Types of Investment by Remittance-Receiving Households (%)**



NOTE: Only 78 percent of households reported using remittances to purchase assets. The remaining 22 percent (“None”) use remittances for consumption purposes.  
 SOURCE: Author’s tabulations using the MMP93 and the LAMP.

of those items falls within the consumption category—vehicles, at 29 percent (Figure 5.5).

Large percentages of remittance-receiving households (Table 5.7) declare using this income for asset accumulation purposes in Haiti (83 percent), Costa Rica (49 percent), the Dominican Republic (41 percent), and Mexico (39 percent). Yet only in the case of Mexico is the percentage of receiving households declaring that they use remittances for asset accumulation approached by the percentage of immigrants declaring asset accumulation as one of the motives for sending money home, as shown in Figure 5.4. In the other cases, households appear to be using remittances to invest significantly more than is expected of them by their remitting family members. Only 16 percent of Costa Rican emigrants, 7 percent of Dominicans, and 7 percent of Haitians said they

**Table 5.7 Proportion of Household Income Made Up by Remittances, and What Remittances Are Used For**

Variable	Costa Rica		Dominican Republic		Haiti		Nicaragua		Peru		Mexico	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
% remittance-receiving households	39	0.03	51	0.05	30	0.08	40	0.02	19	0.03	264	0.02
% of households declaring remittances to be a small, medium, or large part of their income												
Small	36	0.28	51	0.27	30	0.13	39	0.28	19	0.26	264	0.40
Medium	36	0.19	51	0.22	30	0.60	39	0.21	19	0.16	264	0.13
Large	36	0.53	51	0.51	30	0.27	39	0.51	19	0.58	264	0.47
% of households declaring that they use remittances to finance consumption or asset accumulation												
Consumption (vehicles) <sup>a</sup>	39	0.26	51	0.33	30	0.53	40	0.15	19	0.26	264	0.28
Asset accumulation	39	0.49	51	0.41	30	0.83	40	0.13	19	0.32	264	0.39
Housing investments	39	0.41	51	0.37	30	0.80	40	0.13	19	0.32	264	0.37
Business	39	0.00	51	0.12	30	0.00	40	0.00	19	0.00	264	0.00
Land	39	0.10	51	0.00	30	0.00	40	0.03	19	0.00	264	0.04
Farm	39	0.13	51	0.02	30	0.00	40	0.03	19	0.00	264	0.03
Livestock	39	0.05	51	0.02	30	0.03	40	0.03	19	0.00	264	0.05

<sup>a</sup>The only specific form of consumption the survey asks about is the purchase of vehicles.

SOURCE: Author's tabulations using the MMP93 and the LAMP.

sent money home for asset accumulation purposes. This pattern is also observed among Peruvian households: 32 percent of remittance-receiving households in Peru use the remittances to purchase assets, whereas only 17 percent of Peruvian remitters report sending money home for asset accumulation purposes. In fact, only in Mexico and Nicaragua do households engage in less asset accumulation than is expected from remitters. In particular, 39 and 13 percent of Mexican and Nicaraguan remittance-receiving households report using remittance income to purchase assets, whereas 48 percent and 18 percent of Mexican and Nicaraguan remitters indicate investment as one of the purposes for transferring money home.

It is interesting to see how these funds are invested by country. In Costa Rica, as in most countries, remittance income is most often used to purchase housing investments (41 percent of remittance-receiving households indicate this usage). Thirteen and 10 percent of remittance-receiving Costa Rican households indicate farms and land, respectively, as secondary assets acquired with remittance income. In the Dominican Republic, the primary use of remittance income is also for housing stock acquisition (37 percent); however, for Dominicans business investments are the second use for the transferred funds (12 percent of households). In summary, the report from families does not support the notion that remittances do not serve investment purposes. Rather, it shows that a substantial percentage of households use the received money flows for asset accumulation purposes.

## CONCLUSION

This study explores the similarities and differences in migration and remitting patterns of Latin Americans in the United States using data from two comparable survey instruments, the Mexican Migration Project (MMP93) and the Latin American Migration Project (LAMP).

The data reveal that 68 percent of Latin American immigrants in the sample—coming from Costa Rica, the Dominican Republic, Haiti, Nicaragua, Peru, and Mexico—are unauthorized. About 75 percent of these unauthorized immigrants rely on smuggling services to cross the border, paying \$427 on average. While immigrants' reliance on smug-

glers and the money paid for such services vary across countries (depending, in part, on the country's proximity to the United States), smuggling costs have generally been on the rise for the past two decades. As such, it is not surprising to find that immigrants who use cheaper smuggling services cross the U.S. border more often than their counterparts who pay higher prices. Yet in some instances, such as with Costa Ricans and Nicaraguans, higher smuggling costs seem to be justified by a higher ratio of successful illegal border crossings.

About 70 percent of immigrants report that they remitted money back home on a monthly basis during their last U.S. trip. On average, migrants remitted \$300 a month, or 40 percent of their earnings. These figures vary significantly across countries, with Dominicans sending an average of \$179 a month, or 16 percent of their earnings, and Costa Ricans sending as much as \$493 a month, or 55 percent of their earnings. When we examine immigrants' remitting motives, the data show that consumption is the most important motive for sending money home in the case of 79 percent of remitters. Consumption as the reason for remittance takes on greater importance for less educated immigrants or those who came to the United States in 2000 or later. However, a considerable proportion of immigrants (45 percent) report asset accumulation as one of their motives for transferring money to their families. Among Dominican, Haitian, Nicaraguan, and Costa Rican remitters, however, the importance of asset accumulation is significantly smaller, never surpassing 18 percent.

Examining households' remittance-receiving patterns and their usage of these money transfers, we see that about 45 percent of the 439 remittance-receiving households in the survey (2 percent of all households in the survey) report using these money transfers to purchase assets. As such, households appear to be investing remittances at a higher rate than is expected of them by their remitting family members. Most of the flows used for asset accumulation go toward acquiring property. Secondly, 10 and 13 percent of remittance-receiving households in Costa Rica invest in land and farming, and 12 percent of such households in the Dominican Republic invest in business. In most instances, remittances constitute a significant portion of household income, meaning that these families rely to some extent on these flows.

The analysis reveals the different migration and remitting practices of Latin American emigrants as well as the diverse uses of remittance



income by households, depending on the country. Given the mobility of workers and capital flows in Latin America and the Caribbean, it is important to gain a better understanding of these country-level differences and exploit them in the design of policies that maximize the economic potential of money flows in improving the livelihood of their recipients back home.

## Notes

1. The Mexican Migration Project (MMP93) and the Latin American Migration Project (LAMP) are collaborative research projects based at Princeton University and the University of Guadalajara, supported by the National Institute of Child Health and Human Development (NICHD), Rockville, MD. The Web sites for MMP93 and LAMP can be found at <http://mmp.opr.princeton.edu> and <http://lamp.opr.princeton.edu>.  
The LAMP has also conducted research in Puerto Rico, Guatemala, and Paraguay. However, Guatemala and Paraguay were not included here because either the data sets were too small or (in the case of Paraguay) a modified version of the survey was used. Puerto Rico was omitted because of its link to the United States (whereby its migrants are all legal).
2. The MMP93 sample covers communities in the states of Aguascalientes, Baja California Norte, Chihuahua, Colima, Durango, Guanajuato, Guerrero, Hidalgo, Jalisco, Michoacán, Nayarit, Nuevo León, Oaxaca, Puebla, San Luis Potosí, Sinaloa, and Zacatecas.
3. The MMP93 interviews were conducted in communities of various size, ethnic composition, and economic development in typical source regions for U.S.-bound migrants. The sample has expanded over time to incorporate communities in newer sending states.
4. This figure of 6,392 includes the 5,837 immigrants from the MMP93 study, mentioned above, plus 555 immigrants from the LAMP.
5. These averages are for all countries in the study and are not represented in Figure 5.3.
6. This percentage, undoubtedly driven by the prominence of Mexican data in our joint sample, is close to the 5 percent of Mexican households who report receiving remittance transfers from abroad in the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH). The ENIGH is a representative Mexican household survey of income and expenditures carried out by the INEGI—the Instituto Nacional de Estadística, Geografía, e Informática, or the Mexican National Institute of Statistics, Geography and Information (Amuedo-Dorantes and Pozo 2005).
7. The 38 percent figure represents the aggregation of the country-level averages shown in Figure 5.4.

## References

- Amuedo-Dorantes, Catalina, Cynthia Bansak, and Susan Pozo. 2005. "On the Remitting Pattern of Immigrants: Evidence from Mexican Survey Data." *Economic Review* 90(1): 37–58.
- Amuedo-Dorantes, Catalina, and Susan Pozo. 2005. "Remittances and the Healthcare Use of Populations in Origin Communities: Evidence from Mexico." Paper presented at the 2005 Midwest Economics Association meeting, held in Milwaukee, WI, March 11–13; and at the 2005 Population Association of America meeting, held in Philadelphia, PA, March 31–April 2.
- . 2006. "Remittances as Insurance: Evidence from Mexican Immigrants." *Journal of Population Economics* 19(2): 227–254.
- Bauer, Thomas, and Mathias Sinning. 2005. "The Savings Behaviour of Temporary and Permanent Migrants in Germany." CEPR Discussion Paper 5102. London: Centre for Economic Policy Research.
- Becker, Gary S. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82(6): 1063–1093.
- Cox, Donald. 1987. "Motives for Private Transfers." *Journal of Political Economy* 95(3): 508–546.
- de la Garza, Rodolfo O., and Briant Lindsay Lowell. 2002. *Sending Money Home: Hispanic Remittances and Community Development*. Lanham, MD: Rowman and Littlefield.
- de Vasconcelos, Pedro. 2004. "Sending Money Home: Remittances to Latin America from the United States." <http://www.iadb.org/publications/search.cfm?language=English&topics=CM-REM> (accessed January 2, 2007).
- Ilahi, Nadeem, and Saqib Jafarey. 1999. "Guestworker Migration, Remittances and the Extended Family: Evidence from Pakistan." *Journal of Development Economics* 58(2): 485–512.
- Lucas, Robert E.B., and Oded Stark. 1985. "Motivations to Remit: Evidence from Botswana." *Journal of Political Economy* 93(5): 901–918.
- Massey, Douglas S., and René Zenteno. 2000. "A Validation of the Ethnosurvey: The Case of Mexico-U.S. Migration." *International Migration Review* 34(3): 766–793.
- Munshi, Kaivan. 2003. "Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market." *Quarterly Journal of Economics* 118(2): 549–599.
- Taylor, J. Edward. 1999. "The New Economics of Labour Migration and the Role of Remittances in the Migration Process." *International Migration* 37(1): 63–88.



# **Immigrants and Their International Money Flows**

Susan Pozo  
*Editor*

2007

W.E. Upjohn Institute for Employment Research  
Kalamazoo, Michigan

## Library of Congress Cataloging-in-Publication Data

Immigrants and their international money flows / Susan Pozo, editor.

p. cm.

Includes bibliographical references and index.

ISBN-13: 978-0-88099-299-2 (pbk. : alk. paper)

ISBN-10: 0-88099-299-9 (pbk. : alk. paper)

ISBN-13: 978-0-88099-325-8 (hardcover : alk. paper)

ISBN-13: 0-88099-325-1 (hardcover : alk. paper)

1. Emigration and immigration—Economic aspects. 2. Emigrant remittances. I. Pozo, Susan.

JV6217.154 2007

330.9172'4—dc22

2007011020

© 2007

W.E. Upjohn Institute for Employment Research  
300 S. Westnedge Avenue  
Kalamazoo, Michigan 49007-4686

The facts presented in this study and the observations and viewpoints expressed are the sole responsibility of the authors. They do not necessarily represent positions of the W.E. Upjohn Institute for Employment Research.

Cover design by Alcorn Publication Design.

Index prepared by Diane Worden.

Printed in the United States of America.

Printed on recycled paper.