

Remittances to Latin America from Migrants in the United States: Assessing the Impact of Amnesty Programs

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January 22, 2008

Abstract

The magnitude of remittance flows to Latin America exceeds the combined inflows of foreign direct investment and official development assistance to the region. Since the United States are the destination country of the vast majority of Mexican, as well as of other Latin American migrants, U.S. immigration policy, via its impact on both migration inflows and the characteristics of the existing immigrant population, can have a significant impact on the volume of remittances to the Latin American region. This paper studies how a generalized amnesty –a provision in the 1986 Immigration Reform and Control Act (IRCA), affected immigrants' remitting patterns. In the case of Mexicans, who account for the vast majority of Latin American migrants in the United States, we find substantial drops in remittances following legalization. This finding underscores the importance for developing nations and international development agencies to gain a better understanding of the impact of immigration policies in immigrant-receiving countries on the stream of remittance flows to developing regions.

JEL codes: F24, O15

Keywords: Remittances, Latin American migrants, legal status, amnesty

I. Introduction

Remittances, the repatriated earnings of emigrants, have been increasing in size at rather dramatic rates. As a reference, the Inter-American Development Bank (IADB) reports that remittance inflows to the Latin American and Caribbean (LAC) region stood at about \$45 billion in 2004 (Terry 2005). A year later, the IADB reported that inflows in 2005 had reached \$53.6 billion (IADB 2006). By the year 2006, the IADB estimated remittance inflows to Latin America at approximately \$62.8 billion (Bachelet 2007). In terms of its share of the Latin American remittance market, Mexico is at the pinnacle. According to the IADB, remittances to Mexico in 2006 amounted to \$24.3 billion, thus representing approximately 2.9 percent of its GDP (Bachelet 2007). The magnitude of remittance flows to Latin America is impressive as it exceeds the combined inflows of foreign direct investment and official development assistance to the region. But, more important from an economic development perspective is the fact that remittance flows have proven to be quite stable at a macroeconomic level, even during economic downturns (Ratha 2004). Consequently, remittance inflows have been regarded as an important source of external funding for fueling economic development (Taylor 1999, Bachelet 2007). As some developing economies have grown accustomed to remittances, policy-makers have become increasingly worried about the potentially transitory versus permanent nature of international money transfers. This concern has been partially nourished by recent press reports on how the growth of remittance flows to Latin American countries (especially Mexico) appears to have stalled over the past year (e.g. Malkin 2007).

A variety of factors are likely to affect the temporary versus long-lasting character of remittance inflows, including changes in the cost of remitting funds, changes in the composition and magnitude of migration flows, and changes in the characteristics of the existing migrant

stock. Since the United States are the destination country of the vast majority of Mexican, as well as of other Latin American migrants, U.S. immigration policy, via its impact on both migration inflows and the immigrant stock, can have a significant impact on the volume of remittances to the Latin American region. While the remittance literature has paid close attention to the motivation, transfer, uses, and the micro and macroeconomic implications of these money flows in the receiving economies, we are unaware of any studies examining the impact of specific U.S. immigration policies on migrants' remitting patterns.

This paper aims at addressing this void in the literature by providing an analysis of how immigrants' legalization affects their propensity to remit money back home. In particular, we study how a generalized amnesty –a provision in the 1986 Immigration Reform and Control Act (IRCA), affected immigrants' remitting patterns. Amnesty can improve the well-being of newly legalized immigrants via higher wages (Kossoudji and Cobb-Clark 2002, 2004), in which case immigrants may have more disposable income to remit to their families and communities back home. However, since the acquisition of legal permanent resident (LPR) status facilitates family reunification, a generalized amnesty may curtail migrants' remitting incentives (Fuka 1995, Grieco 2003, 2004). The acquisition of LPR status might also affect remittances by changing an immigrant's perceived degree of uncertainty regarding her/his migration experience. To the extent that legalization reduces deportation risk and possibly income uncertainty by opening up new job opportunities, the propensity to remit might decrease among recently legalized immigrants that primarily remitted for insurance purposes (Lucas and Stark 1991, Amuedo-Dorantes and Pozo 2006).

We assess the impact of legalization on remittance behavior using data drawn from the Legalized Population Survey (LPS) –a nationally representative sample of undocumented

immigrants who benefited from IRCA's amnesty program. Specifically, we estimate changes in immigrants' remitting patterns between 1987 (before they became legal) and 1991 (after they became legal). In models that control for immigrants' length of residence in the United States (as a way to capture remittance decay arising from "assimilation") and for economic conditions in the U.S. state of residence (as a way to capture business cycle effects), we estimate a post-legalization drop of 5 percentage points in the likelihood that Mexican-born immigrants remitted money home and a 26 percent drop in the dollar amount remitted. In contrast, post-legalization changes in the remitting patterns of other Latin American immigrants are, for the most part, non-statistically different from zero once we account for the time spent in the United States, which suggests that for this group assimilation explains most of the observed remittance decay over time.

This study addresses a policy question that is increasingly important in the light of recent bipartisan discussions in the U.S. Congress on a comprehensive immigration bill that would allow legalization for a large fraction of the undocumented population residing in the United States – a population recently estimated at around 12 million (Passel 2006). While there has been a large debate on the *pros* and *cons* of such a generalized amnesty for the United States, much less attention has been devoted to the potential impacts of such a policy on immigrant-sending regions. Our findings suggest that a generalized amnesty in the United States could significantly alter the stability and volume of remittance flows to developing immigrant-sending countries in the world. Since most of the undocumented population in the United States originates from Latin America, the drop in resource flows would be the largest for this region, and would exacerbate the recently observed slowdown in money transfers to the region.

II. Conceptual Framework

The primary objective of this study is to examine the impact that legalization may have on the remitting patterns of newly legalized immigrants. In this regard, it is helpful to briefly review some of the motives for remitting. For the purposes of this study, we focus on three of the motives most widely recognized in the literature: altruism, investment/saving, and insurance.

Altruism is one of the key motives for remitting money home (Becker 1974, Stark 1991). If migrants primarily remit altruistically, remittances should vary with migrants' remitting capacity and the needs of friends and family back home. A second reason for remitting money back home often discussed in the literature is to make a specific purchase (e.g., a plot of land or a house) or investment (e.g., setting up a small business). This is particularly common among short-term or temporary migrants who migrate for the specific purpose of accumulating financial assets for consumption smoothing or future retirement (Ahlburg and Brown 1998, Glytsos 1997). Finally, a third motive for remitting contemplated in the literature is insurance. Because migration is fraught with uncertainties, it is prudent for migrants to cover for these risks by remitting funds home. In this way, migrants maintain a "good standing" with family members in the home country, securing a place within the family in the event of an unsuccessful migration experience (Lucas and Stark 1991, Amuedo-Dorantes and Pozo 2006).

Depending on the motive behind migrants' remitting behavior, we may expect legalization to affect remittance flows differently. If migrants remit for, primarily, altruistic or saving/investment purposes, legalization may result in larger remittance flows to the extent that the acquisition of LPR status is associated with higher earnings (Kossoudji and Cobb-Clark 2002, Kaushal 2006). However, since legalization facilitates family reunification, we could also observe a reduction in remittances when altruism is a key motive for sending money back home.

Likewise, remittances may decrease if they are mainly sent for insurance purposes. To the extent that legalization reduces deportation risk and possibly income uncertainty by opening up new job opportunities, we would expect to find a negative “residual” effect of legalization on migrants’ remitting patterns even after accounting for changes in family composition possibly reducing remittances sent for altruistic purposes.

In sum, legalization may increase or reduce remittance flows to different degrees depending on the motive for which those funds are sent home. As such, learning about the impact of a generalized amnesty on immigrants’ remitting patterns will also provide valuable information regarding the key motives behind the remittance transfers being examined.

III. The 1986 Immigration Reform and Control Act

Enacted in 1986, IRCA granted legalization to many unauthorized workers already present in the United States. In particular, around 1.6 million individuals who could demonstrate continuous presence in the United States since the end of 1981 legalized through a general amnesty program.¹

The general amnesty program consisted of two phases. First, undocumented migrants had to apply for adjustment of status.² In this phase, they had to prove continuous unlawful residence since January 1, 1982, as well as continuous physical presence since the enactment of the law. As proof of their continued residence in the United States, migrants were allowed to use a variety of documents, such as a driver’s license, gas, electric or telephone bills, bank statements, etceteras.³

¹ In addition, around 1.1 million individuals who demonstrated 60 days of seasonal agricultural work between May 1985 and May 1986 legalized through the Special Agriculture Worker (SAW) Program included in IRCA. Due to data limitations, this study focuses on the effects of the general amnesty provision that applied to long-term (“pre-1982”) undocumented immigrants.

² Immigrants could do so during the 12-month period beginning on a date (not later than 180 days after November 6, 1986) designated by the Attorney General (Immigration and Nationality Act, section 245A).

³ From discussions with immigration lawyers, we gathered that a wide variety of documents were in practice accepted for the purpose of proving continuous U.S. residence.

Applicants also had to demonstrate “good moral character”, primarily established on the basis of not having been convicted of any felony or three or more misdemeanors in the United States. Filing fees were approximately \$185 (Cooper and O’Neil 2005), but poor families were eligible for fee waivers.⁴ After obtaining temporary legal status, migrants were given an additional eighteen months to prepare their application for LPR status (i.e., for obtaining a “green card”). In this phase, they had to prove “basic citizenship skills”, such as a minimal understanding of English and of U.S. history and government. To this end, they had to pass a test or provide proof of having satisfactorily pursued a course of study, e.g., English and U.S. History/Government courses in a certified institution.

It is estimated that most undocumented migrants applied for legalization (Warren 1995, Hoefer 1991). The process of legalization lasted an average of two years –more than 95 percent of legalizations took place between 1989 and 1991, and had a high rate of success –about 9 out of 10 applicants obtained LPR status (Rytina 2002).

IV. Data: Sample Characteristics and Summary Statistics

To assess the impact of legalization on remittance patterns, this study analyzes data from the Legalized Population Survey (LPS) –a nationally representative sample (the only one available) of the population that legalized through IRCA’s general amnesty program.⁵

The Legalized Population Survey is a two-wave nationwide longitudinal survey. The universe for the first wave (LPS1) was the population of adult legalization applicants. Interviews took place between February and June of 1989, and collected information from 6,193 individuals who had applied for temporary residence status by January 31, 1989. In this first survey wave, respondents were asked about *the dollar amount remitted to family and friends in other countries*

⁴ Fee waivers could be requested using Form EOIR-26A.

⁵ The SAW population was not surveyed.

during 1987. In the follow-up survey wave (LPS2), conducted between April and September of 1992, about 4,012 LPS1 respondents who were granted legal permanent residence by January 1992 were re-interviewed and asked about *the dollar amount remitted to family and friends in other countries during 1991*. As shown in Table A1 (in Appendix), the universe for the follow-up survey excluded 1,193 individuals who were either randomly selected for exclusion because of resource limitations (691 individuals), or were found to be ineligible by January 1992 (502 individuals, most of which were still waiting for a decision). Of the remaining 5,000 individuals sampled for the LPS2, there were 890 non-respondents and 98 individuals who were later found ineligible.

As it is usually the case with panel data, a sample selection problem would arise if the probability of dropping out from the sample were systematically related to the outcome of interest (in this case remittances) after we condition on explanatory variables. We test for sample selection bias by specifying a model for the outcomes of interest that: (i) is estimated for all respondents in LPS1, and (ii) includes an indicator variable that takes on the value one for respondents that are also in LPS2. Since the coefficient on this “selection indicator” is not statistically significantly different from zero, we conclude that sample selection should not be an issue in our analysis. The results reported in the paper are obtained from restricting the sample to respondents in both waves. However, consistent with sample selection not being an issue, results are robust to running the analyses on an unbalanced panel.⁶

Mexicans made up 75 percent of the population that legalized through IRCA (Rytina 2002). Even if non-Mexicans were over-sampled in the LPS, sample sizes hinder the possibility

⁶ Results using the unbalanced panel were omitted for the sake of brevity but are available from the author upon request.

to run multivariate analyses for groups other than Latin Americans. Therefore, in this study, we restrict the analysis to individuals born in Mexico or in other Latin American countries.

What are some of the variables we have information on? The LPS1 includes information on the years of first and last entry in the United States, and on the number of times the respondent entered the United States and stayed for longer than three days. We approximate length of residence in the United States as the number of years elapsed since the immigrant first entered the United States and stayed longer than 3 days. Additionally, both waves include information on family composition at the time of the interview. In particular, for married respondents, we have information on whether the spouse lives in the United States (either in the same household or elsewhere) or abroad. We also know the number of children (as well as of parents and siblings) living in the same household in the United States but, unfortunately, we do not have enough information to infer the composition of the family residing abroad at the time of each wave. Table A2 (in Appendix) provides a more detailed description of the variables used in the analysis.

Table 1 reports summary statistics separately for Mexicans and other Latin Americans in each of the two survey waves. In 1987, about 66 percent of respondents remitted home an average of \$2,100. By 1991, there is a reduction in both the percentage of individuals who remit and in the average dollar amount sent: the former drops to 55 percent and the latter to approximately \$1,610.

What are some of the characteristics of migrants in our sample according to Table 1? To start with, fifty-five percent of respondents are men. In 1987, respondents were on average 32 years old and had been in the United States for about 10 years. About 78 percent of them did not have a high-school degree and approximately 61 percent resided in California. Since only a negligible number of respondents either acquire more education or are observed to change state of

residence between the two waves, average values for these two variables are remarkably stable across waves.⁷ Most immigrants in our sample have family incomes below \$30,000 dollars, although a higher fraction of households report income over \$30,000 by 1991.⁸ There is, however, a decline in the respondents' employment rate between the two sample periods, from 80 percent to 77 percent. Finally, we observe significant changes in family composition taking place after legalization. Specifically, a higher fraction of migrants declare having their spouse as well as more children in the United States by 1991. The fraction of respondents with spouses abroad is stable over time, while the percentage of respondents with spouses in the United States increases from 49 to 61 percent. This finding suggests that new marriages, rather than family reunification, drive the observed changes in family composition. The number of children residing in the same household in the United States increases by one child on average. On the contrary, the number of parents or siblings living in the United States declines. This might seem puzzling at first. However, it is worth noting that family composition pertains to individuals residing in the same household. Therefore, it is possible that parents and siblings residing in the United States at the time of the first interview may have moved out of the respondent's household and into their own by the second wave. Alternatively, some elderly parents may have passed away by the second wave. As such, this evidence does not necessarily rule out family reunification. More relatives might be living in the United States after legalization, but they might be residing in a different household.

Finally, the figures in Table 1 underscore important differences in the levels and changes of remitting patterns as well as differences in socio-demographic characteristics of Mexicans and

⁷ Effort to relocate LPS respondents in wave 2 focused in states of residence in 1989, so that out-of-state migrants are likely to be underrepresented.

⁸ Because information on family income is available by brackets, and the income brackets are the same in the two waves, income variables cannot be deflated. Hence, the observed increase in the fraction of households in higher (nominal) income brackets is not necessarily indicative of real income improvements.

other Latin Americans. For instance, in 1987, Mexicans were less likely than other Latin Americans to remit money home, but, if they did, they remitted larger sums. Following legalization, both the propensity to remit and the amount remitted decrease more (both in absolute and relative terms) among Mexicans. Likewise, there are key socio-demographic differences between Mexicans and the remaining Latin American migrants in the sample, such as the lower educational attainment, the longer U.S. migration experience and the higher percentage of undocumented migrants among Mexicans. Consequently, we separate Mexicans and other Latin American migrants in our analysis. In the next section, we describe our methodological approach.

V. Research Strategy

The goal of this paper is to assess whether legalization affects the remittance behavior of undocumented immigrants who obtain LPR status. Under current U.S. immigration laws, there are thousands of undocumented migrants who obtain LPR status every year. For example, in 2000, out of the 450 thousand immigrants that adjusted their status to permanent legal residents, about 6 percent had entered the country “without inspection” (INS, 2000 Statistical Yearbook). The share of undocumented at the time of adjustment might have been even larger, since some might have overstayed their visas. Quantifying legalization effects on remittances is even more relevant in light of recent bipartisan discussions in the U.S. Congress on measures that would offer legal status to a large fraction of the undocumented population residing in the United States.

A simple comparison of the remittance behavior of undocumented and legalized immigrants at a point in time would not be informative of the effects of changes in their legal status, as some of the differences between the two groups might be due to unobservable characteristics of migrants who successfully apply for adjustment of status. The relationship

between remittances and legalization should instead be modeled by an equation such as the following:

$$(1) \quad R_{it} = \alpha_1 \text{Legalized}_{it} + \alpha_2 \text{YearsUS}_{it} + \alpha_3 L_i * \text{YearsUS}_{it} + \alpha_4 X_{it} + \gamma_t + c_i + \eta_{it}$$

where R_{it} is a measure of remittances of individual i in year t ; Legalized_{it} is an indicator variable that takes on the value one if the foreign-born person is a legal permanent resident in year t , while L_i is a time-invariant indicator for those who eventually legalize; YearsUS_{it} measures length of residence in the United States; and X_{it} is a vector of other individual characteristics. Finally, γ_t is a time fixed effect, c_i is an individual fixed effect and η_{it} is an idiosyncratic shock.

Inclusion of the individual effect c_i in equation (1) is meant to address the self-selection bias arising from the fact that individuals choose to apply for legalization – a choice that could be correlated with time-invariant unobservable characteristics also affecting their remitting behavior. The specification also allows for the remittance decay process arising from “assimilation” ($\alpha_2 < 0$) to differ for those who eventually legalize and those who do not. If, for example, those who eventually legalize were more committed to stay in the United States since they first migrated (and as such, more prone to assimilate quickly and reduce their remittance outflows), then we would expect α_3 to be negative. Thus, a fixed effects (FE) estimator of α_1 would arguably capture the impact of legalization on remittances. Unfortunately, estimation of equation (1) would require data that are not available, that is, longitudinal data on undocumented immigrants who may or may not adjust their status.

However, self-selection bias can be ruled out in the case of a program that either randomly or universally assigns legal status. If self-selection is not an issue, the inclusion of individual fixed effects is not needed. We argue that self-selection, if any, is a second-order concern in the case of IRCA, since the amnesty was close to a universal program. First, the take-up rate of

IRCA's amnesty program is estimated to have been very large, between 75 and 100 percent: three million persons applied for legalization at a time when estimates of the illegal immigrant population residing in the United States ranged between 3 and 5 million (Hoefer 1991). Second, there is no clear reason to expect the incomplete take-up rate (if any) to be systematically related to unobservable personal characteristics that also affect remittance behavior. The administrative filing costs should not have disproportionately deterred low-income people from applying for amnesty because poor families were eligible for fee waivers. The other key requirement for obtaining general amnesty was the ability to prove continuous residence in the United States since 1982. However, given that a large variety of documents were accepted at this scope, this requirement should not have significantly affected the composition of the pool of eligible applicants.

Therefore, assuming a negligible selectivity bias, we can estimate whether IRCA affected remittance patterns of undocumented immigrants by studying the 1987-1991 change in the propensity to remit among the LPS respondents. Using pooled data from the two waves, we estimate the following regression model:

$$(2) \quad R_{it} = \beta_0 + \beta_1 \text{YearsUS}_{it} + \beta_2 X_{it} + \gamma_{1991} + \varepsilon_{it}, \quad t = 1987, 1991$$

where R_{it} is either an indicator for whether individual i remitted any amount of money in year t , or the amount remitted, if positive; γ_{1991} is a dummy that takes the value one if the observation comes from the second wave, and zero otherwise; YearsUS_{it} measures the number of years since the respondent first entered in the United States (we include linear, quadratic and cubic terms in the estimated equation); and X_{it} is a vector of individual and family characteristics, including gender, state of residence, age and education. Equation (2) is estimated with pooled Ordinary Least Squares (OLS). Given that the composite error: $\varepsilon_{it} = (c_i + \eta_{it})$ is serially correlated because

of repeated observations for the same individual, standard errors are estimated allowing for clustering at the individual level.⁹

The main identification issue in equation (2) arises from the fact that the estimated γ_{1991} captures not only the effects of legalization, but also of any other time-varying factors contemporaneous with IRCA that might have affected migrants' remittance behavior. The economic downturn in the early 1990's is an example of such an event. If the weak labor market worsened migrants' work opportunities and lowered their earnings, then remittances would have dropped in 1991, even in the absence of legalization. To disentangle the effects of legalization from the effects of the economy, we include the state-level unemployment rate in equation (2). As a robustness check, we also present estimation results from specifications that control for personal and family time-varying characteristics –such as the respondent's employment status and family income– through which most of the business cycle effect on migrants' remitting capacity is likely to take place. In this manner, we are able to control for the first-order effects of the business cycle. However, including employment and income controls in the right-hand-side of equation (2) is problematic because it might deliver inconsistent estimation results, unless we can rule out that legalization has a causal impact on migrants' labor and earnings outcomes.

In this regard, it is worth noting that evidence on the effect of IRCA on the employment and earnings of immigrants legalized by the amnesty program is quite limited and often inconclusive. Kossoudji and Cobb-Clark (2002) estimate that IRCA raised the wages of newly legalized immigrants by 6 percent, relative to a comparison group of legal Latino men. However, as pointed out by Kaushal (2006), if the issue of concern is whether legalization opens up

⁹ As opposed to equation (1), equation (2) places the individual effect c_i in the error term. In addition to pooled OLS with cluster-robust variance estimation, we have also used random-effects (RE) inference and found no discernable differences between the two methods. Consequently, since RE estimation imposes more assumptions than pooled OLS, we present results for the latter.

employment opportunities, then the appropriate comparison group is not workers with legal right to work, but a randomly selected group of undocumented immigrants, similar to the target group, but ineligible for, or unaffected by, amnesty. The programmatic features of IRCA make it virtually impossible to identify such a comparison group, and preclude any attempt to rigorously identify the effects of legalization on labor outcomes net of the effects of the business cycle. While assessing the impact of legalization on migrants' labor outcomes is beyond the scope of this paper, we need to adequately clean the before-after estimate of the impact of legalization from the confounding effects of the business cycle. To the extent that the inclusion of state-level unemployment rate achieves this goal, we can interpret the estimated γ_{1991} as a measure of the impact of amnesty on remittances. If, in addition, we include individual-level economic variables, we would expect the estimated γ_{1991} to capture two effects according to the discussion on remitting motives in Section II. First, legalization may facilitate family reunification (or family formation in the United States) and, as such, reduce remittances sent for *altruistic* purposes. Second, to the extent that legal status reduces deportation risk, and, more generally, an immigrant's perceived uncertainty about her migration experience, legalization might also reduce remittances sent for *insurance* purposes. In both instances, the estimated γ_{1991} should be non-positive.

Before presenting the estimation results, it is worth discussing a final identification issue. One might be worried that a before-after estimate of the effects of legalization on remittances in a sample of legalized immigrants does not adequately control for changes that, even in the absence of legalization, would have happened over time as a result of an immigrant's "assimilation." For example, the fact that four years elapse between 1987 and 1991 should result in remittance decay.

Equation (2), however, controls for this effect through the inclusion of the term $YearsUS_{it}$.¹⁰ Therefore, the estimated γ_{1991} represents the average change in remittances over time, once the effects of assimilation have been accounted for by controlling for length of residence in the United States. We have also estimated regressions in which we allow the effects of additional years of residence in the United States to be different after legalization. This amounts to including an interaction term between $YearsUS_{it}$ (and its quadratic and cubic transformation) and γ_{1991} .¹¹ Since the coefficient on the interaction term is not statistically different from zero, we exclude this term from our final specification.

VI. Results

A. Effects of Legalization on Remittances to Mexico

Table 2 displays the results from estimating variants of equation (2) on a balanced panel of Mexican-born LPS respondents. The dependent variable is either an indicator for whether an immigrant remitted any amount of money home (columns 1 through 4),¹² or the logarithm of the dollar amount remitted home (columns 5 through 7). The parameter of interest is γ_{1991} —the mean post-legalization change in the dependent variable.

In a specification that controls for gender, age, documentation status at last entry, education and state of residence, Mexican immigrants' probability of remitting is estimated to decrease by 13.3 percentage points post-legalization (column 1). Adding controls for the number of years an immigrant spent in the United States (column 2) reduces by half the estimated post-

¹⁰ In a fixed-effects estimation, the “assimilation” effect would not be separately identified because of perfect multicollinearity between γ_{1991} , the linear term $YearsUS_{it}$ and c_i —which absorbs the effect of any time-invariant characteristics, such as year of first entry in the United States. But, in a pooled OLS estimation, c_i is in the error term and the same individual provides two separate observations—one for each time period.

¹¹ In the more general model in equation (1), this would amount to including the term: $Legalized_{it}*(YearsUS_{it} - YearsUS_{itL})$, where $YearsUS_{itL}$ denotes length of residence in the United States at the time of legalization.

¹² Since the dependent variable is in this case a zero-one dummy variable, we calculate the fraction of predictions that fall outside the unit interval and find it to be negligible (never higher than 1 percent across different specifications). Also, standard errors are always corrected for heteroskedasticity that naturally arises in a linear probability model.

legalization drop (to 6.4 percentage points). This suggests that a 7-percentage-point drop in the propensity to remit between 1987 and 1991 is attributable to Mexican immigrants' assimilation to the host country—a process that would have taken place even in the absence of legalization.

As noted in the previous section, the business cycle between 1987 and 1991 may have affected migrants' remitting patterns. To address this concern, column 3 includes the state unemployment rate as a measure of the performance of local labor markets. We find that a 1-percentage-point increase in the local unemployment rate is associated with a 1.7 percentage point drop in the probability to remit.¹³ Since unemployment rates did rise in the early 1990s, the deterioration of the economy explains some of the observed decrease in remittances between 1987 and 1991. However, the impact of legalization is still found to be economically and statistically significant, and equal to a drop of almost 5 percentage points (column 3), that is, an 8 percent decrease relative to the average probability of remitting money home among Mexicans in 1987.

Column 4 also includes controls for the respondent's employment status and family income. To the extent that most of the impact of the economy on migrants' remitting capacity is captured by changes in their income and labor outcomes, controlling for these variables provides a robustness check for the ability of our model to purge a before-after estimate of the impact of legalization from business cycle effects. The estimated post-legalization drop is found to be remarkably stable to the inclusion of these controls. Given the concern that migrants' economic outcomes might be endogenous to legalization, we do not want to put too much emphasis on this result, but the stability of the coefficient of interest across the specifications in columns 3 and 4 is

¹³ Including state-year unemployment rates might cause clustering (that is, correlations across residuals) at this level (Moulton 1986) and lead to under-estimated standard errors. However, cluster-robust standard errors at the state-year level do not seem to differ from cluster-robust standard errors at the individual level; therefore, we only report the latter in the tables.

consistent with: (i) business cycle effects being successfully controlled for by the inclusion of state unemployment rates, and (ii) the consistency of the estimates being preserved.

A concern remains that the business cycle had heterogeneous effects on different groups of workers. If so, the estimated legalization effect might still be confounded by the impact of economic fluctuations. To explore this issue, Table 3 presents before-after estimates of the impact of legalization obtained on sub-samples defined by gender, age (up to 30 years old, or older), legal status (undocumented at last entry versus visa overstayers), year of first entry in the United States (before or after 1976), U.S. state of residence (California or other states) and highest educational attainment (high-school diploma or not). In addition, since economic conditions in the Mexican communities of origin may as well directly influence migrants' remitting decisions, we also split the analysis according to the standard of living in the Mexican state where migrants last resided.¹⁴

We find that, after legalization, the probability of remitting money home dropped for most sub-samples of LPS Mexican migrants anywhere between 4 and 14 percentage points. The fact that the likelihood of remitting diminished across the board suggests that the before-after drop estimated in the full sample is not driven by some group-specific reductions potentially attributable to causes other than legalization. As regards to differences in the estimated post-legalization change in remitting patterns across the various sub-samples, they might reasonably reflect heterogeneous effects of legalization on remittance behavior. For example, there are reasons why women and young migrants might be expected to be more consistent remitters. Specifically, for these two groups remitting patterns might be less affected by (new) family

¹⁴ Information on the state of residence in the country of origin before migration is only available for migrants originating from Mexico. Mexican states are grouped based on a measure of standard of living provided by the Instituto Nacional de Estadística Geografía e Informática (INEGI). States with the lowest standard of living include: Guerrero, Oaxaca, Chiapas, Campeche, Tabasco, Veracruz, Puebla, Hidalgo, San Luis de Potosí, Michoacán, Guanajuato and Zacatecas.

responsibilities in the United States when compared to those of males and older migrants. Likewise, legal migrants' remitting patterns may not be affected by the acquisition of LPR status as much as those of immigrants who entered the country without documents. Finally, Mexican migrants residing in California, because of their strong social networks in a state where most of them reside, or because of the geographic proximity to their country of origin, may maintain stronger ties with relatives and friends in Mexico and reduce their remittances to a lesser extent following legalization than Mexican migrants in other U.S. states.

Did the amounts sent home by Mexicans who continued to remit drop as well following legalization? In a specification that controls for gender, age, documentation status at last entry, education and state of residence, we find that, post legalization, the dollar amount sent home fell by 37 percent (column 5, Table 2). Once we control for the number of years an immigrant spent in the United States (column 6) –that is, for the decay due to assimilation, the reduction attributable to legalization drops to 25 percent. As in the case of the likelihood of remitting money home, a concern is that the impact of legalization might be confounded by the effects of the economic cycle. However, including the state unemployment rate in the right-hand side of equation (2) does not significantly affect the before-after estimate (column 7). The estimate is also stable to the inclusion of individual-level economic variables.¹⁵ In addition, when testing the robustness of the results to differences across sub-samples defined on the base of observable socio-demographic characteristics, U.S. state of residence or Mexican state of last residence, reductions in remittance flows are common to most subgroups.¹⁶

In sum, in a sample of Mexican-born LPS respondents, we find economically and statistically significant reductions both in the likelihood of remitting money home and in the

¹⁵ Results are available from the authors upon request.

¹⁶ Along with more educated Mexicans, the exceptions continue to be young migrants and Mexicans residing in California.

dollar amount remitted. What are the likely causes of these drops? To the extent that legalization facilitates family reunification or family formation in the United States, it might reduce remittances sent for *altruistic* purposes. In addition, to the extent that the acquisition of LPR status reduces an immigrant's perceived uncertainty about her migration experience, legalization might also reduce remittances sent for *insurance* purposes. While we cannot precisely estimate the importance of the latter factor, the former can be roughly approximated on the base of: (i) the observed changes in family composition between 1987 and 1991 (Table 1), and (ii) the estimated impact of family composition characteristics on remittance behavior at a point in time.

Table 5 presents the estimated coefficients on the explanatory variables of a model for remittances that controls not only for the socio-demographic variables included in equation (2), but also for family composition characteristics. The model is estimated separately for the pre- and post-legalization years. In 1987, relative to unmarried respondents, the probability of sending money back home was 3.8 percentage points lower among married respondents with a spouse residing in the United States, and 13.9 percentage points higher among married respondents with a spouse residing in Mexico. Using these estimated effects,¹⁷ we predict that a 0.8-percentage-point drop in the likelihood to remit between 1987 and 1991 can be attributed to changes in marital status and spouse's residence.¹⁸ This reduction amounts to 16 percent of the 4.9 percentage point drop in the likelihood of remitting attributable to legalization (column 2, Table 2). The reduction in remittance-sending imputed to having more children living in the United States is estimated to be even larger,¹⁹ accounting for 43 percent of the post-legalization decrease in these monetary flows. However, even after accounting for the effects of changes in the number

¹⁷ The main findings are robust to the choice of the base year, that is, to the case when the coefficients from the model of remittances estimated in 1991 are used instead of those from 1987.

¹⁸ The change is calculated as: $-0.038*(0.64-0.51)+0.139*(0.03-0.05)=-0.008$.

¹⁹ That is: $-0.038*(2.30-1.75)=-0.021$

of parents and siblings in the United States, almost 40 percent of the estimated post-legalization drop remains unexplained.²⁰ Similar considerations apply to the case of changes in the amounts remitted.²¹ These results suggest that a non-negligible share of the drop in remittances after acquisition of legal status is due to factors other than fewer family ties in Mexico. A potential explanation for the residual drop is that legalized immigrants might perceive a weaker need to remit money home for insurance purposes.

B. Effects of Legalization on Remittances to other Latin American Countries

Tables 6 through 8 report estimation results obtained from replicating the analyses carried out for Mexican migrants for other Latin American migrants. Separate analyses for the two groups are warranted by the different characteristics of immigrants from Mexico and from other Latin American countries, as well as by their different remitting patterns in 1987. As shown in columns 1 and 5 of Table 6, the probability to remit among Latin American immigrants is estimated to drop by 8 percentage points and the amount remitted by 15 percent post-legalization in a specification that controls for a wide array of socio-demographic characteristics except for length of stay in the United States. However, these drops would have likely taken place even in the absence of legalization. As shown in columns 2 and 8 of Table 6, adding controls for years of residence in the United States makes the estimated post-legalization changes not statistically different from zero. As for Mexicans in the previous section, we have also estimated post-legalization changes in remittances for other Latin American immigrants within various socio-

²⁰ In addition, summing the contributions of each change in family composition –each derived holding everything else constant– is likely to overestimate the combined impact of the different factors.

²¹ In that case, changes in family composition overall explain approximately 64 percent of the post-legalization reduction in the dollar amount sent home by Mexican migrants.

demographic groups.²² However, we do not find evidence of statistically significant post-legalization drops in any sub-sample.

In sum, as opposed to the case of Mexicans, the remitting patterns of other Latin Americans immigrants do not seem to have been significantly changed post-legalization. There could be various explanations for the differential impact of amnesty on remittances from Mexicans versus other Latin American immigrants. One reason could lay in the nature of the remittance data included in the LPS, which solely refers to monetary sums sent home. Yet, migrants may take savings back home when they go back to visit or permanently return to their countries of origin. Therefore, we are likely to lack a full understanding of the way in which amnesty affects the overall dollar amount repatriated. Furthermore, owing to differences in the geographic distance between the U.S. and Mexico and between the U.S. and other Latin American countries, it is reasonable to find differences in the remitting practices between the two groups of migrants. After all, Mexicans, owing to their proximity to the U.S., may be more likely to take back home any savings they fail to remit, whereas this may be a prohibitively expensive option for most Latin American migrants.

VII. Concluding Remarks

While the literature has paid close attention to issues such as the reasons for a migrant's propensity to remit money home or the uses of these money flows in the receiving countries, we are unaware of any work that specifically examines the impact of U.S. policies on migrants' remitting patterns. Our study addresses this void in the literature with an analysis of how legalization through a generalized amnesty (such as the one included in IRCA) may impact the remitting patterns of immigrants from Latin American countries.

²² Results available from the authors upon request.

This analysis is of particular interest for various reasons. First, remittances to Mexico and other Latin American countries have reached an incredible magnitude in recent years. According to the IADB, remittances to Latin America soared to \$62.8 billion in 2006, with Mexico alone receiving approximately \$24.3 billion. Second, these monetary transfers have proven more stable than other development aid to the region and, as such, many of these economies have learned to rely on remittances as development funds. As noted by Donald Terry, a top official of the IADB, remittances constitute “the world’s most effective poverty alleviation program” (Bachelet 2007). However, the yearly growth rate in remittances –that picked at more than 20 percent between 2000 and 2006, has slowed down to less than 2 percent in 2007 (Malkin 2007). Given the importance of these funds from an economic development perspective, it is imperative to gain a better understanding of the factors possibly shaping these flows, including the role played by U.S. immigration policy via its impact on migration flows and the migrant stock.

In this study, we focus on one type of immigration policy, i.e. a generalized amnesty –a policy partially comparable to the comprehensive immigration bill discussed by the U.S. Congress last year and intended to offer legal status to most of the nation’s 11.5 to 12 million undocumented immigrants estimated to be living in the United States (Passel 2006). As at the time of IRCA implementation, most of the undocumented population now residing in the United States originates from Latin America (57 percent from Mexico and another 24 percent from Central and South America). Therefore, focusing the analysis on Latin Americans is of particular interest.

The findings in this paper suggests that IRCA legalization explains a substantial drop in the likelihood to remit and in the amounts remitted by Mexicans observed immediately after the acquisition of LPR status. In addition, the analysis shows that, aside from remittance reductions

driven by weakened families ties in Mexico (because of family reunification or family formation in the United States), legalization might have reduced remittances sent by migrants for insurance purposes as a means to maintain a “good standing” with family members in the home country in the event of an unsuccessful migration experience.

Based on these findings, we can speculate on the impact of a hypothetical current universal legalization program on the remittance flows sent by Mexican migrants to family and friends back home. In particular, back-of-the envelope calculations –based on (i) the impact of legalization estimated in this study, (ii) the number of undocumented Mexican migrants estimated to be residing in the United States as of the early 2000s,²³ (iii) the fraction of undocumented Mexicans remitting money home and of the dollar amount sent,²⁴ show that a generalized amnesty might cause an overall remittance loss to Mexico of approximately 2.2 billion dollars per year.²⁵ Around one-fourth of the estimated loss is attributable to fewer migrants remitting money home, while the remaining loss is due to the smaller amounts remitted.

How much of these potential losses would result in lower investments in Mexico? Researchers have found that remittances are primarily used to pay for daily expenses, such as food and rent, with the rest being used to improve housing conditions, education, and health among other purposes. In this vein, Durand et al. (1996) find that about 76 percent of Mexican remittance receivers use the funds for consumption purposes, fourteen percent spend them on housing and about 10 percent use remittances for productive purposes –a figure that coincides

²³ Passel (2002) estimates that about 4.7 million undocumented immigrants from Mexico and about 2 million from other countries in Latin America were living in the U.S. as of the year 2000.

²⁴ On data from the Mexican Migration Project (MMP), we find that approximately 75 percent of undocumented Mexican migrants remitted in the year 2000 and, on average, they sent about \$200/ per month.

²⁵ The total loss is calculated as the sum of (1) the remittances lost because fewer migrants remit money home, given the amount remitted; and (2) the remittances lost because of the smaller amount remitted, given the fraction of the population remitting money home. Using information on the estimated undocumented Mexican population from Passel (2002) and information regarding the remitting patterns of Mexican migrants from the MMP, we calculate the total loss as follows: $[(4.7 \text{ million}) * (-0.05) * \$2,400] + [(4.7 \text{ million} * 0.75) * (\$2,400/\text{yr} * (-0.26))] = - \$2.2 \text{ billion}/\text{yr}$.

with the one reported by Amuedo-Dorantes and Pozo (2006) and Amuedo-Dorantes (2007) for Mexico. Likewise, Suro (2003) reports that, for Mexico, about 9 percent of remittances are either invested or saved, with up to 7 percent being used for educational purposes. Therefore, using the latter figures, about \$198 million in investment funds and approximately \$154 million in education could be lost in the aftermath of a generalized amnesty in the United States. These figures underscore the importance for developing nations and international development agencies to gain a better understanding of the impact of immigration policies in immigrant-receiving countries on the stream of remittance flows to developing regions and help design policies to replace any lost funds.

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Table 1: Descriptive Statistics

Sample: Immigrants from	All countries		Mexico		other Latin America	
	1987	1991	1987	1991	1987	1991
Fraction remitting	0.66	0.55	0.65	0.52	0.71	0.63
\$ Amount remitted (if >0)	2,095.4	1,611.7	2,193.9	1,628.9	1,802.2	1,567.8
Male	0.55	0.55	0.56	0.56	0.51	0.51
Age	32.0	35.9	31.3	35.3	34.1	37.8
Less than 12 years of education	0.78	0.77	0.84	0.83	0.60	0.59
California	0.61	0.61	0.65	0.65	0.48	0.48
Years in U.S.	9.92	13.90	10.36	14.37	8.46	12.45
Undocumented at last entry	0.82	0.82	0.85	0.85	0.74	0.74
Family Income						
less than \$15,000	0.36	0.29	0.35	0.29	0.39	0.29
\$15,000-\$29,999	0.37	0.38	0.38	0.39	0.35	0.36
\$30,000 or more	0.16	0.24	0.16	0.23	0.16	0.26
Employed	0.80	0.77	0.78	0.75	0.86	0.80
Spouse in the U.S.	0.49	0.61	0.51	0.64	0.42	0.52
Spouse abroad	0.04	0.04	0.05	0.03	0.04	0.04
Children in the U.S.	1.64	2.18	1.75	2.30	1.26	1.79
Parents in the U.S.	0.24	0.17	0.26	0.17	0.17	0.16
Siblings in the U.S.	0.78	0.47	0.86	0.52	0.52	0.32
Observations	3,168	3,168	1,795	1,795	1,373	1,373

Notes: Sample restricted to individuals at least 16 years old, born in a Latin American country, and interviewed in both waves. Since non-Mexicans are sampled at about 2.6 times the rate of the Mexican-born, all figures are weighted.

Source: Legalized Population Survey.

Table 2: Before and After Estimates of Remitting Decisions among Mexicans

Dependent Variable	Probability(Remittances>0)				Log (Amount Remitted)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year 1991	-0.133*** (0.014)	-0.064*** (0.017)	-0.049*** (0.019)	-0.048** (0.020)	-0.366*** (0.047)	-0.254*** (0.057)	-0.257*** (0.064)
Male	0.156*** (0.019)	0.159*** (0.019)	0.158*** (0.019)	0.074*** (0.022)	0.548*** (0.059)	0.550*** (0.059)	0.550*** (0.059)
Age	0.044*** (0.014)	0.051*** (0.014)	0.051*** (0.014)	0.035** (0.015)	-0.018 (0.051)	0.020 (0.053)	0.020 (0.053)
Age squared	-0.090*** (0.032)	-0.096*** (0.032)	-0.096*** (0.032)	-0.062* (0.035)	0.035 (0.124)	-0.035 (0.129)	-0.036 (0.129)
Age cubic	0.001** (0.000)	0.001** (0.000)	0.001** (0.000)	0.000 (0.000)	-0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
Undocumented at last entry	0.116*** (0.029)	0.100*** (0.029)	0.100*** (0.029)	0.086*** (0.030)	0.028 (0.097)	0.013 (0.099)	0.013 (0.099)
<i>Education</i>							
At most 5 th grade	0.083** (0.042)	0.082** (0.041)	0.082** (0.042)	0.141*** (0.044)	-0.372*** (0.135)	-0.363*** (0.134)	-0.363*** (0.134)
6 th -11 th grade	0.068* (0.039)	0.063 (0.039)	0.062 (0.039)	0.104** (0.041)	-0.116 (0.128)	-0.108 (0.127)	-0.108 (0.127)
12 th grade/ HS diploma	0.029 (0.044)	0.026 (0.044)	0.025 (0.044)	0.047 (0.046)	-0.157 (0.144)	-0.152 (0.143)	-0.151 (0.143)
California	-0.025 (0.020)	-0.012 (0.020)	-0.018 (0.020)	-0.029 (0.021)	-0.077 (0.059)	-0.054 (0.059)	-0.052 (0.061)
Years in U.S.		-0.057*** (0.016)	-0.058*** (0.016)	-0.068*** (0.017)		-0.153*** (0.047)	-0.153*** (0.047)
Years in U.S. squared		0.002** (0.001)	0.002** (0.001)	0.002*** (0.001)		0.007*** (0.002)	0.007*** (0.002)
Years in U.S. cubic		-0.000 (0.000)	-0.000* (0.000)	-0.000* (0.000)		-0.000*** (0.000)	-0.000*** (0.000)
Unemployment rate			-0.017** (0.008)	-0.011 (0.008)			0.003 (0.027)
<i>Family Income</i>							
\$3,000-\$5,999				0.015 (0.066)			
\$6,000-\$8,999				0.017 (0.059)			
\$9,000-\$11,999				0.064 (0.057)			
\$12,000-\$14,999				0.136** (0.056)			
\$15,000-\$19,999				0.185*** (0.056)			
\$20,000-\$24,999				0.238*** (0.056)			
\$25,000-\$29,999				0.208*** (0.059)			
\$30,000 or more				0.230*** (0.055)			
Employed				0.171*** (0.024)			
R-squared	0.06	0.08	0.12	0.12	0.09	0.10	0.10

Notes: Pooled OLS weighted estimates. Regressions include a constant term. Standard errors (in parentheses) account for correlation across observations for the same individual. * significant at 10%, ** significant at 5%, *** significant at 1%. Sample: LPS balanced panel of 1,795 individuals at least 16 years old born in Mexico.

Table 3: Before-After Estimates of the Likelihood of Remitting to Mexico; Selected Sub-samples

Sample restrictions	Gender		Age		Documents at last entry	
	Men (1)	Women (2)	≤ 30 (3)	> 30 (4)	No (5)	Yes (6)
Mean Dependent Variable `87	0.73	0.53	0.66	0.63	0.68	0.47
Year 1991	-0.066*** (0.024)	-0.026 (0.030)	-0.006 (0.028)	-0.069*** (0.026)	-0.049** (0.021)	-0.044 (0.043)
Observations	1781	1383	1793	1371	2689	475

Sample restrictions	Year of first entry		State of residence		Years of education	
	≤ 1976 (7)	>1976 (8)	CA (9)	Other State (10)	< 12 (11)	≥ 12 (12)
Mean Dependent Variable `87	0.57	0.69	0.64	0.66	0.66	0.59
Year 1991	-0.095*** (0.025)	-0.139*** (0.020)	-0.243 (0.182)	-0.093*** (0.033)	-0.043** (0.020)	-0.147*** (0.055)
Observations	1256	1923	2071	1095	2650	516

Sample restrictions	Mexican state of residence before migration	
	Poor (13)	not poor (14)
Mean Dependent Variable `87	0.71	0.62
Year 1991	-0.047** (0.023)	-0.038** (0.016)
Observations	1036	2027

Notes: Dependent variable: Dummy equal to one if the family remitted a positive amount of money to family or friend in Mexico. Pooled OLS weighted estimates. All models include the same controls as in column 3 of Table 2, except those that need to be dropped because of the specific sample restriction applied. For time-varying variables (age, education, state of residence), the sample restriction is applied based on the value of the variable in 1987. Standard errors (in parentheses) account for correlation across observations for the same individual. * significant at 10%, ** significant at 5%, *** significant at 1%. Sample: LPS balanced panel of individuals 16 years of age and older born in Mexico.

Table 4: Before-After Estimates of the Log Amount Remitted to Mexico; Selected Sub-samples

Sample restrictions	Gender		Age		Documents at last entry	
	Men (1)	Women (2)	≤ 30 (3)	> 30 (4)	No (5)	Yes (6)
Mean Dependent Variable `87	\$2,568	\$1,534	\$2,233	\$2,140	\$2,218	\$2,008
Year 1991	-0.211*** (0.082)	-0.353*** (0.102)	-0.090 (0.087)	-0.453*** (0.098)	-0.243*** (0.068)	-0.421** (0.187)
Observations	1,182	694	1,086	790	1,660	216

Sample restrictions	Year of first entry		State of residence		Years of education	
	≤ 1976 (7)	>1976 (8)	CA (9)	Other State (10)	< 12 (11)	≥ 12 (12)
Mean Dependent Variable `87	\$1,964	\$2,312	\$2,048	\$2,452	\$2,153	\$2,422
Year 1991	-0.407*** (0.104)	-0.387*** (0.063)	0.591 (0.491)	-0.237** (0.116)	-0.269*** (0.067)	-0.087 (0.200)
Observations	662	1,223	1,207	671	1,596	282

Sample restrictions	Mexican state of residence before migration	
	Poor (13)	not poor (14)
Mean Dependent Variable `87	\$2,439	\$2,030
Year 1991	-0.368*** (0.113)	-0.222*** (0.081)
Observations	670	1,149

Notes: Dependent variable: Dummy equal to one if the family remitted a positive amount of money to family or friend in Mexico. Pooled OLS weighted estimates. All models include the same controls as in column 3 of Table 2, except those that need to be dropped because of the specific sample restriction applied. For time-varying variables (age, education, state of residence), the sample restriction is applied based on the value of the variable in 1987. Standard errors (in parentheses) account for correlation across observations for the same individual. * significant at 10%, ** significant at 5%, *** significant at 1%. Sample: LPS balanced panel of individuals 16 years of age and older born in Mexico.

Table 5: Determinants of Remittances to Mexico: 1987 and 1991

Year Dependent variable	1987		1991	
	Dummy for remittances>0 (1)	Log amount remitted (2)	Dummy for remittances>0 (3)	Log amount remitted (4)
Male	0.142*** (0.023)	0.417*** (0.070)	0.116*** (0.025)	0.410*** (0.083)
Age	0.047** (0.019)	0.037 (0.061)	0.083*** (0.023)	0.105 (0.131)
Age squared	-0.092** (0.045)	-0.041 (0.144)	-0.155*** (0.048)	-0.251 (0.303)
Age cubic	0.001 (0.000)	0.000 (0.001)	0.001*** (0.000)	0.002 (0.002)
Undocumented at last entry	0.115*** (0.034)	-0.017 (0.109)	0.066* (0.036)	0.076 (0.133)
<i>Education</i>				
At most 5 th grade	-0.042** (0.021)	-0.059 (0.066)	-0.037 (0.033)	-0.001 (0.109)
6 th -11 th grade	0.002 (0.001)	0.002 (0.004)	0.001 (0.002)	0.000 (0.005)
12 th grade/ HS diploma	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
California	0.095* (0.055)	-0.001 (0.181)	0.118** (0.052)	-0.468** (0.191)
Years in U.S.	0.062 (0.053)	0.107 (0.176)	0.084* (0.049)	-0.169 (0.179)
Years in U.S. squared	0.039 (0.060)	0.184 (0.194)	0.060 (0.057)	-0.384* (0.210)
Years in U.S. cubic	-0.095*** (0.036)	-0.079 (0.116)	-0.002 (0.046)	-0.099 (0.145)
Unemployment rate	-0.055*** (0.015)	-0.034 (0.050)	0.018 (0.042)	0.182 (0.136)
<i>Family composition</i>				
Spouse in the U.S.	-0.038 (0.026)	-0.260*** (0.076)	0.019 (0.028)	-0.253*** (0.094)
Spouse in Mexico	0.139*** (0.038)	0.438*** (0.142)	0.141** (0.061)	1.030*** (0.190)
Children in the U.S.	-0.038*** (0.008)	-0.108*** (0.024)	-0.051*** (0.008)	-0.105*** (0.028)
Parents in the U.S.	-0.104*** (0.024)	-0.337*** (0.076)	-0.122*** (0.028)	-0.229** (0.111)
Siblings in the U.S.	0.006 (0.009)	0.093*** (0.034)	0.016 (0.012)	0.021 (0.043)
R-squared	0.13	0.17	0.09	0.17

Notes: OLS weighted estimates. All models contain a constant term. Heteroskedasticity-robust standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. Sample: LPS balanced panel of 1,795 individuals at least 16 years old born in Mexico.

Table 6: Before-After Estimates of Remitting Decisions among Other Latin Americans

Dependent Variable	Probability(Remittances>0)				Log (Amount Remitted)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year 1991	-0.084*** (0.015)	0.024 (0.023)	0.023 (0.025)	0.035 (0.027)	-0.147*** (0.047)	0.015 (0.066)	-0.000 (0.074)
Male	0.085*** (0.021)	0.087*** (0.021)	0.086*** (0.021)	0.033 (0.022)	0.316*** (0.058)	0.315*** (0.058)	0.315*** (0.058)
Age	0.070*** (0.021)	0.073*** (0.022)	0.072*** (0.022)	0.059** (0.024)	0.027 (0.071)	0.051 (0.072)	0.052 (0.072)
Age squared	-0.139*** (0.051)	-0.133** (0.053)	-0.133** (0.053)	-0.107* (0.057)	-0.033 (0.175)	-0.075 (0.176)	-0.076 (0.177)
Age cubic	0.001** (0.000)	0.001 (0.000)	0.001 (0.000)	0.001 (0.000)	-0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
Undocumented at last entry	0.135*** (0.029)	0.096*** (0.030)	0.094*** (0.030)	0.091*** (0.031)	0.279*** (0.081)	0.247*** (0.083)	0.249*** (0.083)
<i>Education</i>							
At most 5 th grade	0.100*** (0.037)	0.091** (0.038)	0.091** (0.037)	0.146*** (0.040)	-0.073 (0.104)	-0.073 (0.104)	-0.075 (0.104)
6 th -11 th grade	0.087*** (0.031)	0.088*** (0.031)	0.088*** (0.031)	0.136*** (0.033)	0.065 (0.084)	0.062 (0.084)	0.062 (0.084)
12 th grade/ HS diploma	0.046 (0.033)	0.047 (0.033)	0.045 (0.033)	0.084** (0.034)	-0.088 (0.092)	-0.085 (0.093)	-0.084 (0.093)
California	-0.036* (0.021)	-0.024 (0.021)	-0.019 (0.021)	-0.016 (0.022)	-0.089 (0.058)	-0.071 (0.058)	-0.075 (0.058)
Years in U.S.	(0.020)	-0.040* (0.022)	-0.041* (0.022)	-0.041* (0.023)		-0.188*** (0.059)	-0.188*** (0.059)
Years in U.S. squared		0.001 (0.001)	0.001 (0.001)	0.001 (0.001)		0.009*** (0.003)	0.009*** (0.003)
Years in U.S. cubic		0.000 (0.000)	0.000 (0.000)	0.000 (0.000)		-0.000** (0.000)	-0.000** (0.000)
Unemployment rate		(0.000)	-0.015* (0.008)	-0.015* (0.009)			0.010 (0.025)
<i>Family Income</i>							
\$3,000-\$5,999				0.015 (0.081)			
\$6,000-\$8,999				0.134* (0.073)			
\$9,000-\$11,999				0.097 (0.071)			
\$12,000-\$14,999				0.115* (0.070)			
\$15,000-\$19,999				0.159** (0.069)			
\$20,000-\$24,999				0.129* (0.070)			
\$25,000-\$29,999				0.163** (0.071)			
\$30,000 or more				0.228*** (0.069)			
Employed				0.137*** (0.028)			
R-squared	0.07	0.08	0.08	0.10	0.05	0.05	0.05

Notes: Pooled OLS weighted estimates. Regressions contain a constant term. Standard errors (in parentheses) account for correlation across observations for the same individual. * significant at 10%, ** significant at 5%, *** significant at 1%.
Sample: LPS balanced panel of 1,373 individuals at least 16 years old born in a Latin American country other than Mexico.

Table A1: Sources of Attrition in the Legalized Population Survey

	Respondents	Comments
LPS1 Sample	6,193	Universe: Population of adult legalization applicants to IRCA general amnesty program by January 1989 (“pre-1982 immigrants”)
LPS2 Sample	4,012	Universe: Legalization applicants who were granted LPR status by January 1992
<i>Not sampled for LPS2</i>	<i>1,193</i>	
Ineligible in January 1992	502	Not in the universe
Not in the Legalization Application Processing System file	3	Not in the universe
Known dead	2	Not in the universe
No decision	471	Not in the universe
Awaiting information	18	Not in the universe
Denied	4	Not in the universe
Terminated	5	Not in the universe
Others excluded from sample	691	Randomly selected for exclusion because of resource limitations
<i>Sampled, but later found to be ineligible</i>	<i>98</i>	
Left U.S. permanently	70	
Known to be dead	28	
<i>Non-respondents</i>	<i>890</i>	
Could not be located	670	Effort to relocate respondents focused in states of residence in 1989
Refusal	103	
Not at home	48	
Left U.S. temporarily	23	
To ill to interview	17	
Moved too far, no phone	16	
Postal problem	8	
Language problem	5	

Table A2: Variable Description (Legalized Population Survey)

Fraction remitting	=1 if respondent (and her family) sent money to family and friends in other countries; 0 otherwise.
Dollar remitted	Amount of money sent to family and friends excluding zeros and in 1991 dollars (adjusting for inflation using consumer price index).
Year 1991	=1 for year 1991 (post legalization period); 0 otherwise.
Male	=1 if respondent is male; 0 otherwise.
Age	age of the respondent (16+). Linear, quadratic and cubic terms included.
Education	Four dummy variables indicating highest grade completed: at most 5 th grade, between 6 th and 11 th grade, 12 th grade or a high school diploma, at least some college education.
State of residence	=1 if respondent lives in California; 0 otherwise.
Undocumented at last entry	=1 if respondent entered the U.S without documents; 0 if overstayed his visa.
Years in the U.S.	Number of years since the respondent first entered the United States and stayed longer than 3 days. Linear, quadratic and cubic terms included.
Family income	Nine dummy variables indicating total family income from all sources and from all family members living in the United States in the same household as the respondent: less than \$3,000; \$3,000-\$5,999; \$6,000-\$8,999; \$9,000-\$11,999; \$12,000-\$14,999; \$15,000-\$19,999; \$20,000-\$24,999; \$25,000-\$29,999; \$30,000 or more.
Employed	=1 if the respondent worked during the year; 0 otherwise.
Spouse in the U.S.	=1 if the respondent is married and the spouse lives in the U.S.; 0 otherwise.
Spouse abroad	=1 if the respondent is married and the spouse lives abroad; 0 otherwise.
Children in the U.S.	Number of children living in the United States.
Parents in the U.S.	=1 if the any of the respondent's parents (or the spouse's parents) live in the same household in the United States.
Siblings in the U.S.	=1 if the any of the respondent's siblings (or the spouse's siblings) live in the same household in the United States.
