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INTERNATIONAL MIGRATION AND DEVELOPMENT IN MEXICAN COMMUNITIES*

JORGE DURAND, WILLIAM KANDEL, EMILIO A. PARRADO, AND DOUGLAS S. MASSEY

The theoretical and empirical literature generally regards international migration as producing a cycle of dependency and stunted development in sending communities. Most migrants' earnings are spent on consumption; few funds are channeled into productive investment. We argue that this view is misleading because it ignores the conditions under which productive investment is likely to be possible and profitable. We analyze the determinants of migrants' savings and remittance decisions, using variables defined at the individual, household, community, and macroeconomic levels. We identify the conditions under which U.S. earnings are repatriated to Mexico as remittances and savings, and indicate the factors leading to their productive investment.

Migration researchers and policy analysts are generally pessimistic about the relationship between international migration and economic development, viewing it as negative, weak, or at best "uncertain" (see Papademetriou and Martin 1991). In the words of one official at the International Labour Office, "Migration and development—nobody believes that anymore" (see Taylor et al. forthcoming a). Rather than promoting economic growth, foreign earnings sent or brought home by international migrants are thought to exacerbate the dependency of sending communities by raising material expectations without providing a means of satisfying them, other than more migration. Individual families attain higher standards of living, but communities achieve little autonomous economic growth.

Such pessimism typifies the Mexican research literature (see Diaz-Briquets 1991; Kearney 1986), which consists mainly of case studies of migrant-sending communities. These studies show that migrants' earnings are spent largely on nonproductive ends such as family maintenance, housing, and consumer goods (see Cornelius 1990; Dinerman 1982; Fernández 1988; Goldring 1992; González and Escobar 1990; López 1986; Massey et al. 1987; Mines and DeJanvry 1982; Reichert 1981; Shadow 1979; Stuart and Kearney 1981; Wiest 1979, 1984).

A few scholars have questioned this pessimism and have hypothesized a strong, positive relationship between migra-

tion and development (see Arnold 1992; Durand and Massey 1991; Goldfarb 1984; Stahl and Habib 1991; Taylor et al. forthcoming a, forthcoming b). Rather than inhibiting economic growth, they argue, international migration plays a key role in promoting both local and national development. In the Mexican case, this alternative viewpoint rests on three lines of reasoning and evidence.

The first is macroeconomic. Reliable estimates suggest that the flow of migrants' savings and remittances into Mexico—what Durand (1988) calls "migradollars"—is huge, on the order of \$2 to \$3 billion per year (see Banco de México 1990; García y Griego and Giner de los Rios 1985; Keely and Tran 1989; Lozano Ascencio 1993; Massey and Parrado 1994; Nolasco 1991). In 1989 migradollars were roughly equivalent to 10% of Mexico's merchandise exports, 65% of its earnings from tourism, and 100% of its revenues from export agriculture; they were sufficient to cover its balance of payments deficit three times over (Taylor et al. forthcoming a). By focusing on isolated communities rather than on the national political economy, case studies undervalue the role of migradollars in promoting development by easing constraints on capital and foreign exchange.

A second line of reasoning focuses on the indirect effects of migradollars. Community case studies usually add up the number of migradollars accruing to particular households, show that they raise incomes and increase consumption, and then conclude that because little money is spent on production, migration has few positive effects on economic development. In the aggregate, however, the arrival of so many migradollars has important multiplier effects, even if the funds are spent mostly on current household needs.

As incomes expand with the arrival of dollars from the United States, family budget constraints are eased, and demand grows for goods and services produced in Mexico. As production expands to meet this demand, workers are hired in firms throughout Mexico, and the additional wages raise aggregate demand further. Adelman and Taylor (1992) developed a Social Accounting Multiplier matrix to measure changes in income stemming from the arrival of each additional migradollar. They found that when successive rounds of indirect effects are taken into account, each arriving migradollar increases the Mexican Gross Domestic Product by \$2.90. At the national level, the entry of 2 billion migradollars per year yields \$5.8 billion in additional income (see Durand, Parrado, and Massey forthcoming).

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Even though most migradollars are spent on consumption, some inevitably are invested in production (see Escobar and Martínez 1990; Fletcher and Taylor 1992; Massey et al. 1987; Taylor and Wyatt forthcoming; Trigueros and Rodríguez 1988). When aggregated across many households, these small productive investments can have significant macro-level effects. Massey and Parrado (1994) found that migradollars accounted for some \$84 million in extra investment within Mexico each year. According to Adelman and Taylor (1992), each arriving migradollar increases output by \$3.30, yielding \$6.5 billion in additional production at the national level (Durand et al. forthcoming).

The last line of evidence focuses on intercommunity differences in the propensity to invest. In their review of studies conducted in 37 Mexican communities, Durand and Massey (1992) found that the share of migradollars spent on production, though always less than 50%, varied widely between communities. In some places, relatively large shares of migrants' earnings were devoted to productive enterprises. The authors thus took issue with the pessimistic conclusions of earlier investigators:

Rather than concluding that migration inevitably leads to dependency and a lack of development, it is more appropriate to ask why productive investment occurs in some communities and not in others. (Durand and Massey 1992:27)

Taylor et al. (forthcoming b) point out that community characteristics leading to out-migration also discourage productive investment. A shortage of arable land, a small and poorly educated work force, poor transportation and communications, and limited access to regional markets *simultaneously* generate high rates of out-migration and low rates of investment. Thus emigration does not create low rates of investment; rather, a lack of investment and a high prevalence of migration stem from common underlying conditions.

If contextual factors simultaneously influence migration and investment decisions, then any study of migradollars must incorporate data gathered across an array of communities. Massey and Basem (1992) used data from four Mexican communities to study what determined decisions about remittances, savings, and spending among international migrants. They found that dummy variables for community membership explained a large share of the variance in the propensity to repatriate and invest U.S. earnings. Whatever factors governed migrants' decisions, they operated at the community level, but with only four communities, the investigators could not say what these factors were.

In this article we seek to clarify the relationship between international migration and economic development by conducting a detailed analysis of migrants' decisions concerning savings and remittances from the United States. We seek to identify those factors which prompt Mexico-U.S. migrants to send or bring migradollars back to their home communities and then to invest them productively; we also seek to understand what variables determine the amounts repatriated and the relative share of funds returned as savings versus remittances.

CONCEPTUAL MODEL

We link migrants' decision making to a set of independent variables defined at the individual, household, community, and macroeconomic levels. These variables are drawn primarily from the new economics of migration (Stark 1991; Taylor 1992) and are supplemented by others derived from neoclassical economics (Todaro 1976; Todaro and Maruszko 1987). Whereas the latter assumes that all markets are complete and well-functioning, the former views market failures as a principal impetus for international migration.

Most relevant to migrants' savings and investment decisions are failures in Mexican capital markets. In Mexico, families of modest means do not have access to credit, either to finance large consumer expenditures such as furniture, appliances, housing, and medical care or to underwrite productive investments such as education, farming, cattle raising, manufacturing, or retail sales. Credit may be unavailable for a variety of reasons: because the family lacks collateral or standing with potential lenders; because Mexican financial institutions have little interest in serving people of low socioeconomic status; or because the transaction costs (interest rates and fees) make borrowing prohibitively expensive for most families.

In the context of such market failures, a period of short-term labor in the United States represents an attractive way of acquiring capital quickly, particularly in view of higher U.S. wages and widespread access to social networks that reduce the costs and risks of undocumented entry (Singer, Durand, and Massey 1995; Taylor 1986, 1987). In this sense, international migration represents a strategy to acquire capital in order to cover peaks in household consumption or to finance new productive activities, not a means of reaping higher net lifetime earnings, as implied by neoclassical economics.

Capital acquired through labor in the United States may be sent back to Mexico each month in the form of remittances, or saved over time and repatriated upon the migrant's return as a "pocket transfer" (see Lozano Ascencio 1993). Whether or not a migrant engages in these behaviors depends on an array of personal, household, and trip characteristics as well as on community and macroeconomic conditions. The specific variables that we hypothesize to be relevant to savings and remittance decisions are listed and defined in Table 1.

Several key personal and household characteristics define the decision maker's life cycle stage: age, marital status, and household dependency (which captures consumption needs but also represents potential workers in household enterprises). Other personal and household-level characteristics measure endowments of human and physical capital: education, prior U.S. experience, landownership, homeownership, and business ownership (predictors deemed relevant by neoclassical economics). In early specifications of the model we also included English-language ability as an indicator of human capital, but dropped it from the final estimates for lack of significance when other variables were controlled.

The propensity to repatriate earnings is also likely to depend on a variety of trip characteristics. Broadly speaking, the stronger a migrant's attachment to U.S. society, the less

TABLE 1. DEFINITION OF VARIABLES USED IN ANALYSIS OF MIGRANTS' REMITTANCES AND SAVINGS

Personal Characteristics	
Age	Age at time of last U.S. trip
Married	Marital status at time of last U.S. trip
Years of schooling	Education at time of last U.S. trip
Prior U.S. Experience	Time spent in U.S. before last trip
Household Characteristics	
Dependency ratio	Proportion of family members under age 18 at time of last U.S. trip
Land owned	Farmland owned at time of last U.S. trip
Business owned	Business owned at time of last U.S. trip
Home owned	Home owned at time of last U.S. trip
General Trip Characteristics	
Settled U.S. Sample	In U.S. survey of permanent out-migrants
Duration of trip	Length of last U.S. trip, in months
Accompanied by spouse	Spouse present on last U.S. trip
Economic Characteristics of Trip	
Monthly earnings (\$000)	Monthly income earned on U.S. job
Monthly food and rent (\$00)	Average monthly expenses for food and rent while in U.S.
Cost of coyote (\$00)	Money paid to smuggler to cross U.S. border without documents
Federal taxes withheld	Taxes withheld from U.S. paycheck
Community Economic Context	
Prop. earning twice minimum wage	Proportion of workers earning at least twice the legal minimum wage
Prop. self-employed	Proportion of workers who are self-employed
Prop. females in manufacturing	Proportion of female workers employed in manufacturing
Community Infrastructure	
Paved road to highway	Paved road between community and highway
Preparatory school in community	Preparatory school in municipio
Bank in community	Bank office open in municipio
Community Agrarian Context	
Agrarian economy	1 if more than 50% of male labor force is employed in agriculture; 0 otherwise
Agrarian population density	Agrarian workers divided by arable land
Proportion of land arable	Cultivable divided by total land base
<i>Ejido</i> established	1 if community has <i>ejido</i> ; 0 otherwise
Macroeconomic Context	
Real interest rate	Average cost of funds in Mexico minus Mexican inflation rate
Rate of peso devaluation	Percentage drop in value of Mexican peso relative to U.S. dollar
Inflation rate	Annual rate of change in Mexican consumer price index

likely that person is to transfer earnings to Mexico (see Massey et al. 1987). Attachment to the United States is measured by the duration of the trip, the presence of a spouse in the United States, and whether the migrant was interviewed as part of our survey of permanent out-migrants (described below). Exploratory analyses showed that neither the presence of children nor the migrant's legal status, U.S. occupation, or state of destination were related to savings and investment decisions; thus we excluded them from the final models to conserve degrees of freedom and to facilitate the estimation of missing variables (discussed below).

Various economic characteristics of the trip are also relevant to decision making because they determine a migrant's relative ability to hold back a portion of U.S. earnings for repatriation. The most important of these characteristics, of course, is monthly income, which ultimately determines migrants' capacity to remit or save. Other economic characteristics of the trip include the cost of food and rent, the cost of hiring a coyote (border-crossing guide), and whether taxes were withheld from U.S. pay.

Community economic conditions are crucial in determining whether a migrant is likely to garner a favorable re-

turn on productive investments at home (see Lindstrom 1994). In general, a dynamic, entrepreneurial economy characterized by high wages, widespread self-employment, and a high degree of female participation in manufacturing suggests a dynamic, growing economy and an environment conducive to productive investment, whether in agriculture, manufacturing, sales, or services. Female participation in manufacturing is particularly a leading indicator of industrial development in Mexico (Arias 1992; Sassen 1988).

A community's economic climate is also influenced by the degree of development of the local infrastructure. The existence of a paved road to the nearest highway indicates how easily products may be shipped into and out of the community. The presence of a preparatory school (the equivalent of a U.S. high school) indicates the degree to which employers can count on a well-educated work force; and a bank offers access to basic financial services such as checking, interest-bearing deposits, and monthly statements of account.

Communities with an agrarian economy (in which more than half of the male labor force works in agriculture) have special features that also affect the desirability of productive investment. The first is the degree of access to farmland, measured by agrarian population density (agricultural workers divided by hectares of arable land). The second is the quality of the land base, indicated by the proportion of total nonurban land that is arable.

The last facet of community agrarian context that we consider is the presence of an *ejido*. *Ejid*os are communal lands redistributed to Mexican farm households after the 1910 revolution (but principally during the 1930s). *Ejid*os were granted to specific families for their perpetual use. Rights of usufruct could be passed down within families, but the land itself could not be rented or sold. These restrictions were lifted in 1994 by Mexican President Carlos Salinas de Gortari as part of his broader move toward privatization. During the entire period under study, however, *ejidos* could not be mortgaged and thus could not be used as collateral for loans. In this sense, the existence of an *ejido* constitutes a barrier to capital acquisition (see Massey et al. 1987; Massey et al. 1993).

Finally, our model controls for three aspects of Mexico's macroeconomic picture. First, the leading indicator postulated by the new economics of migration is the real interest rate, which measures the cost of acquiring capital. Second, the rate of peso devaluation during the prior year indicates the degree to which Mexico's currency has been losing value. Third, the inflation rate indicates how rapidly prices in Mexico are rising. These indicators were derived from statistics published by the International Monetary Fund (1994).

DATA AND METHODS

Data for this analysis come from simple random samples gathered during the winter months of 1982–1983 and 1987–1992 in 30 communities located in the Mexican states of Jalisco, Michoacán, Guanajuato, Nayarit, and Zacatecas; these areas traditionally have sent the majority of Mexican migrants to the United States (Dagodag 1975; Gamio 1930; Jones 1988; North and Houstoun 1976). Information about

the samples is summarized in Table 2. In most cases, the sample size was 200 households, but in several instances we chose a smaller number of households; in one case a larger number was selected. Sampling frames were constructed by conducting a house-to-house census of each community. Usually an entire town or city was canvassed, but in large metropolitan areas this operation proved infeasible; there we sampled specific working-class neighborhoods instead. Sampling fractions ranged from .029 to .803 and averaged about .226.

Our sampling procedures yielded a total sample size of 5,653 households covering a hypothetical population of 5.2 million persons. Refusals were generally not a problem: although the rate reached 15% in one case and 11% in another, in 13 cases the refusal rate was 6% or less, and overall the rate was only 6.5%. Higher refusal rates in some areas reflected a general distrust of outsiders that stemmed from local political circumstances and cultural conditions, not from suspicions about the study itself.

December and January are generally the best times to locate and interview U.S. migrants within Mexico because most return to spend the Christmas holidays with their families. In one Michoacán town, however, fieldwork revealed that many migrants also returned in July (because they worked in Florida's winter citrus harvest; see Reichert and Massey 1979), so we sent an interviewer during the summer to complete the survey. In general, however, the Mexican community samples represent dwellings occupied during the winter months of 1987–1991.

These data were supplemented with nonrandom samples of out-migrants located in the United States during the summer following each winter's survey. From the community samples, we determined where in the United States migrants went, and sent interviewers to those areas to survey out-migrants who had settled abroad. We used snowball sampling methods (Goodman 1961) to compile the sample of out-migrants. In most places, 20 out-migrant households were interviewed, but in some cases 10 to 15 households were questioned. In three cases we were unable to include any U.S. households because of limitations of time and money.

Although the snowball samples are not strictly representative of the U.S. out-migrant communities, we did developed a set of weights to reflect the relative contribution of U.S. households to the binational sample. The weights, which are applied to each case, are the inverse of the sampling fraction employed at each site (Sudman 1983). All of the analyses used in this article are based on weighted data.

In Mexico we computed sampling fractions as the number of households in the sample divided by the number of eligible households in the sampling frame. In the United States, sampling fractions were estimated by dividing the number of sample households by the *estimated* number of households in the out-migrant community. We derived an estimate of each community's out-migrant population by using data on the current location of offspring of the household head who were no longer household members.

Our survey gathered information about *all* children of the household head, whether or not they were presently

TABLE 2. MEXICAN COMMUNITIES SAMPLED FOR STUDY OF SAVINGS AND REMITTANCES OF MIGRANTS TO THE UNITED STATES

State and Urban Rank	Rounded 1990 Population	Mexican Sample		U.S. Sample	
		Sample Size	Sampling Fraction	Sample Size	Sampling Fraction
Guanajuato					
Metro area	868,000	200	.232	0	.000
Metro area	363,000	200	.100	20	.999
City	52,000	200	.256	20	.121
City	33,000	200	.072	15	.023
City	24,000	200	.113	15	.217
City	21,000	200	.053	20	.047
Town	17,000	200	.073	20	.816
Rancho	1,500	150	.605	20	.999
Rancho	1,000	100	.699	10	.999
Jalisco					
Metro area	2,870,000	200	.241	0	.000
City	74,000	201	.119	20	.052
City	31,000	200	.113	20	.038
Town	12,000	200	.105	20	.228
Town	5,000	200	.250	20	.642
Town	3,500	200	.392	20	.127
Rancho	3,000	200	.375	15	.260
Rancho	2,500	106	.183	14	.159
Rancho	2,500	94	.215	6	.144
Rancho	1,000	100	.467	7	.425
Michoacán					
Metro area	493,000	200	.056	20	.098
Metro area	217,000	200	.184	13	.065
City	32,000	200	.029	20	.009
Town	7,000	200	.104	20	.020
Town	7,000	200	.139	20	.248
Rancho	6,500	200	.143	20	.035
Rancho	2,000	150	.335	20	.999
Nayarit					
City	20,000	200	.045	20	.012
Town	11,000	200	.074	20	.014
Zacatecas					
Town	7,500	365	.213	20	.017
Rancho	6,000	187	.803	0	.000

members of the sample household. Nonmember children were generally offspring who had grown up and moved out to form their own households. As relatives of sample members, they constitute a multiplicity sample of the binational community (see Hill 1981; Kalton and Anderson 1986; Somoza 1981). Following Massey and Parrado (1994), we determined the number of nonmember children who were living in the United States and Mexico at the time of the survey, and formed the ratio between them to indicate the relative size of the U.S. community. We then applied this ratio to the Mexican community sampling frame to estimate the size of the out-migrant community.

The Mexican community samples depict conditions in the core migrant-sending region at the time of the survey;

the U.S. surveys describe conditions in the corresponding U.S. branch communities at roughly the same time. When pooled and weighted, the surveys offer a comprehensive portrait of 30 binational communities created through recurrent international migration and settlement. In choosing our Mexican study sites, we sought to include a range of population sizes, ethnic compositions, and economic bases; communities were not chosen to locate U.S. migrants *per se*. Although our sample is not strictly representative of the states of western Mexico, it provides a rather broad cross-section of households and communities in that region.

We interviewed respondents using ethnosurvey methods (Massey et al. 1987). From each household head we gathered a complete life history that included a fertility history, a

property history, a marital history, and a labor history. The latter, of course, necessarily contains a complete inventory of trips to the United States. Household heads who reported at least one U.S. trip received a detailed battery of questions about the most recent visit, which included items about how much money they remitted home each month and how much they brought with them when they returned to Mexico.

Because of the small number of female household heads, we restricted the analysis to male heads. We also confined our attention to trips taken in 1965 or later. For the analysis of both remittances and savings, independent variables were defined as of the year corresponding to the midpoint of the migrant's trip. We converted all monetary amounts to constant 1990 dollars.

Answers to questions about the amount remitted each month and the amount repatriated as savings allow us to define three sets of dependent variables for analysis: whether or not the migrant remitted and/or saved; the amount of the remittances and/or savings; and how the remittances and/or savings were spent (on consumption, housing, or production). Therefore we analyze migrants' decision making in three stages.

In the first stage we estimate a bivariate probit model to predict the relative odds that a migrant sent monthly remittances and/or returned with savings. These behaviors are not mutually exclusive: migrants can do one, both, or neither. The bivariate probit model allows us to test whether the decisions to remit and/or save are independent, or whether they are different manifestations of the same underlying behavior. According to Martin (1991:33), the repatriation of foreign earnings is "the *raison d'être*" of international migration.

In the second stage of the analysis we estimate an OLS regression equation to determine which factors influence the quantity of migradollars repatriated to Mexico, given an estimated hazard of selection into the pool of remitters or savers. Because the bivariate probit analysis reveals that remitting and saving are interdependent, we add together migrants' savings and remittances to find total migradollars and regress the log of this quantity on the set of predictor variables. We estimate a second OLS model to predict the share of migradollars returned as savings to determine how independent variables influence the strategy of capital repatriation (i.e., the mix of savings and remittances). This equation also controls for the hazard of selection into the pool of remitters or savers.

In the third and final stage we estimate a multinomial logit model to predict whether migradollars were spent on production, housing, or consumption; once again we control for the hazard of selection into the pool of persons repatriating funds. Production is defined to include the purchase of farmland, livestock, motor vehicles, or tools, or the funding of a business enterprise. The purchase of motor vehicles might be regarded as consumption under some circumstances, but we chose to code it as production because trucks are often used in farming and hauling for profit, and passenger cars are frequently used to provide taxi and delivery services in smaller towns and cities. Spending on housing includes the purchase, construction, or repair of a home; and spending on

consumption embraces just about everything else: consumer goods, recreation, family maintenance, debts (often undertaken to finance the trip), and other, unspecified items.

Cases with missing values on the remittance and savings variables were excluded from the analysis, but in order to conserve degrees of freedom we used instrumental variable techniques to estimate missing values for several key independent variables. We took variables that preliminary analyses had revealed to be unrelated to remittance and savings decisions, and used them to predict missing values for the following variables: tax withholding (where 19% of the cases were missing), coyote costs (29% missing), U.S. wages (24% missing), and rent (20% missing).

In deriving these estimated values we proceeded in two phases. First we fit a probit model to estimate the odds of selection into the sample of nonmissing cases. Then, controlling for the hazard of selection into the sample of observed cases (λ), we estimated an OLS model that regressed the following predictors on the variable of interest: legal status, number of children in the United States, number of prior U.S. trips, period in five-year intervals, whether or not a friend or family member provided lodging on arrival in the United States, whether the respondent had Chicano friends in the United States, whether the respondent had non-Hispanic white friends in the United States, whether a friend or family member helped the respondent find a U.S. job, whether the respondent's father was a U.S. migrant, and the number of the respondent's siblings with U.S. migrant experience. Preliminary analyses revealed that all of these variables were unrelated to either savings or remittance decisions, and thus were appropriate for use as predictors. We then employed the resulting equations to estimate values for missing cases. The estimated probit and OLS equations used to create these instrumental variables are displayed in Appendix Table A1; means and standard deviations for all dependent and independent variables used in the analysis are shown in Appendix Table A2.

THE PROPENSITY TO REPATRIATE U.S. EARNINGS

Table 3 presents the results of a bivariate probit analysis of decisions made by migrant household heads to remit and/or return with savings. The outcome in the left-hand equation is a dichotomous indicator that equals 1 when the respondent reported remittances and 0 otherwise; the right-hand equation predicts an outcome that equals 1 when the respondent returned with savings and 0 otherwise. We estimated the two equations simultaneously because remitting and saving are not mutually exclusive: 47% of migrants remitted and saved; 22% only remitted; 13% only saved; and 18% did neither (see the means in Appendix Table A2).

In estimating these and subsequent equations, we guarded against potential problems stemming from multicollinearity. We examined the correlation matrix, and aside from the obvious correlation between age and age squared, we found few strong associations. The highest coefficient we observed was .62, and only 13 of the 406 correlation coefficients were above .40. The amount of prior U.S. experience

was associated with age (.42); membership in the U.S. sample was correlated with trip duration (.49), the presence of a spouse (.62), and the amount of U.S. rent paid (.61). Trip duration itself was correlated with the presence of a spouse (.42) and the amount of rent paid (.50).

Several community indicators were also interrelated: the percentage earning more than twice the minimum wage was associated negatively with an agrarian economy (-.61) and with the percentage of self-employed workers (-.46); the existence of a bank was associated positively with the presence of a preparatory school (.53) and negatively with the percentage of women employed in manufacturing (-.54); and the percentage self-employed was associated positively with an agrarian economy (.50). Finally, among the macroeconomic indicators, the real exchange rate correlated .52 with the inflation rate.

Despite these modest correlations, we performed several sensitivity checks to examine the stability of results when intercorrelated variables were deleted. In general we found that the model was robust with respect to the inclusion or exclusion of collinear variables; thus we conclude that the reported effects are accurate and reliable estimates of true effects, rather than simply artifacts of multicollinearity.

The rho coefficient of .213 indicates a significant ($p < .05$) positive association between the equations for remitting and for saving, which suggests that the two decision processes are interdependent. These behaviors thus appear to be different manifestations of the same underlying motivation: the desire to repatriate foreign earnings. Both decisions are sensitive to general trip characteristics: the repatriation of earnings is considerably less likely if a respondent is settled in the United States and is accompanied by a spouse, and the odds of repatriation decline with the duration of time spent abroad. The presence of a spouse is particularly strong in lowering the odds of remitting (because it is the wife who usually receives the transfers), and being settled in the United States markedly reduces the odds of returning with savings (because among settled migrants, return trips assume the character of a vacation rather than a reentry into community life; see Goldring 1992; López 1986; Mines 1981; Reichert 1979).

The odds of remitting and saving are also linked to the economic characteristics of the trip. Not surprisingly, the odds of repatriating funds rise with monthly earnings: the more dollars a migrant earns each month, the more likely he is to transfer a portion of his earnings home (the effect, however, is significant only in the savings equation). In addition, migrants who work in a job where taxes are withheld display a higher likelihood of remitting, whereas those who spend more on food and rent are more likely to return with savings. The cost of a coyote is related positively to the odds of both remitting and saving.

The latter effects may seem puzzling because coyote fees, food, rent, and taxes all lower net earnings and thus might be expected to reduce the odds of repatriating migradollars. But migrants who hire a coyote often borrow the money, and paying off this debt (usually \$300 or more) is a high priority that creates a greater propensity to remit. Moreover, to avoid going into debt on the subsequent trip, mi-

grants strive to return with sufficient savings to cover the next coyote fee. The withholding of taxes meanwhile is associated with stable, less tenuous employment, which produces a higher rate of remitting; paying more for food and rent also indicates greater stability in the United States, which increases the migrant's ability to save.

Despite the common effects of trip characteristics, the remaining variables in our model affect the odds of remitting and of saving differently. Remittance behavior is connected strongly to life cycle and human capital characteristics; saving behavior is not. The propensity to remit is highest when migrants are married and in middle labor force ages; the odds of remitting increase until the late forties and then decline with advancing age. As human capital in the form of education increases, the relative likelihood of remitting falls.

Household assets influence both remittance and saving decisions, but in different ways. The ownership of land, a business, or a home tends to reduce the likelihood of remitting (although only the coefficient for business ownership is significant). In contrast, property ownership increases the odds of repatriating savings (the effects of both landownership and homeownership are strong and statistically significant). It seems that household assets reduce the need for regular transfers by providing an alternative means of support in the absence of the male head, but they increase the demand for savings by providing opportunities for fruitful investment (in housing, agricultural production, and household business activities).

In keeping with our arguments and with the earlier results of Massey and Basem (1992), community-level factors are strong determinants of remittance decisions and (to a lesser degree) of saving decisions. In general, migrants are significantly more likely to remit earnings to economically dynamic, entrepreneurial communities than to stagnant, depressed areas. The odds of remitting are greater for communities characterized by high rates of self-employment and high rates of female participation in manufacturing, which display strong and significant effects. High local wages also seem to encourage remitting, but the effect does not quite attain statistical significance ($p = .07$).

Although the effects of community economic factors operate in the same direction in predicting saving, none of the effects is statistically significant. Rather, the propensity to save is conditioned strongly by a facet of community infrastructure development: the existence of a paved road connection to a federal highway. Thus migrants are relatively unlikely to channel savings into communities with poor links to Mexico's transportation grid. In such areas, investments to enhance production are unlikely to pay off because of an inability to deliver products to market.

Finally, remitting appears to be sensitive to one aspect of community agrarian structure, and saving is connected to one macroeconomic condition. As hypothesized, the presence of an *ejido* substantially increases the odds of remitting. *Ejidors* provide rural families with land but no access to the means to make it productive; thus they create a need for regular infusions of cash to finance the purchase of seeds, fertilizers, irrigation, labor, and other inputs used in the

TABLE 3. BIVARIATE PROBIT MODEL PREDICTING WHETHER A MIGRANT REMITTED AND/OR SAVED DURING THE MOST RECENT U.S. TRIP: MALE HOUSEHOLD HEADS FROM 23 MEXICAN COMMUNITIES

Independent Variables	Outcomes			
	Migrant Remitted		Migrant Returned with Savings	
	β	SE(β)	β	SE(β)
Personal Characteristics				
Age	0.054 [*]	0.020	-0.002	0.021
Age squared	-0.0006 [*]	0.0002	0.000	0.000
Married	0.447 [*]	0.118	0.034	0.142
Years of schooling	-0.031 [*]	0.011	0.025	0.013
Months of prior U.S. experience	0.000	0.001	-0.001	0.001
Household Characteristics				
Dependency ratio	-0.019	0.174	-0.236	0.200
Land owned	-0.082	0.109	0.497 [*]	0.127
Business owned	-0.238 [*]	0.112	0.128	0.118
Home owned	-0.076	0.098	0.193 [*]	0.090
General Trip Characteristics				
Settled U.S. sample	-0.318 [*]	0.149	-1.970 [*]	0.167
Duration in months	-0.001	0.001	-0.002 [*]	0.001
Accompanied by spouse	-1.216 [*]	0.117	-0.267	0.143
Economic Characteristics of Trip				
Monthly earnings (\$000)	0.074	0.053	0.170 [*]	0.006
Monthly food and rent (\$00)	0.000	0.014	0.036 [*]	0.018
Cost of coyote (\$00)	0.059 [*]	0.016	0.064 [*]	0.017
Federal taxes withheld	0.376 [*]	0.107	-0.081	0.112
Community Economic Context				
Prop. earning twice minimum wage	0.982	0.534	0.405	0.658
Prop. self-employed	1.283 [*]	0.445	0.065	0.455
Prop. of females in manufacturing	0.679 [*]	0.360	0.212	0.349
Community Infrastructure				
Paved road to highway	-0.177	0.181	0.672 [*]	0.167
Preparatory school in community	0.031	0.109	-0.062	0.123
Bank in community	-0.194	0.199	0.165	0.194
Community Agrarian Context				
Agrarian economy	-0.206	0.108	0.141	0.119
Agrarian population density	-0.002	0.003	0.001	0.003
Proportion of land arable	0.244	0.181	0.370	0.225
<i>Ejido</i> established	0.350 [*]	0.165	-0.232	0.167
Macroeconomic Context				
Real interest rate	0.443	0.447	0.194	0.482
Rate of peso devaluation	-0.040	0.091	-0.025	0.106
Inflation rate	0.243	0.242	1.318 [*]	0.260
Intercept	-1.494 [*]	0.619	-0.968	0.596
Rho	0.213 [*]			
Log-Likelihood			-1,389 [*]	
Number of Migrants			1,501	

^{*} $p < .05$

growing cycle. Meanwhile a high inflation rate dramatically raises the odds of returning with savings. During periods of high inflation, those with U.S. dollars can buy Mexican assets cheaply at deflated prices; this situation creates a strong incentive to repatriate savings in order to take advantage of short-term financial windfalls.

In general, then, a careful analysis of remitting and saving suggests a structured decision process among Mexican migrants to the United States. The odds of remitting are determined by life cycle stage (age, marital status), access to human and financial capital (education, business ownership), attachment to the United States (settlement, presence of spouse), economic circumstances of the trip (tax withholding, coyote costs), and conditions prevailing in the sending community (wages, self-employment levels, female participation in manufacturing, the presence of an *ejido*). The odds of repatriating savings are determined by access to capital (land and home), attachment to the United States (settlement, trip duration, presence of spouse), economic circumstances of the trip (monthly earnings, food and rent costs, coyote costs), community conditions (paved connection to highway), and macroeconomic circumstances (the Mexican inflation rate). As suggested by the overlap in the two lists of variables, the two decision processes are interdependent, an indication that remitting and saving are complementary strategies of capital repatriation.

THE QUANTITY AND THE MIX OF MIGRADOLLARS

Given linked decisions to remit and save, we next consider which factors influence how much money is repatriated and in what form. The left-hand columns of Table 4 show an equation estimated to predict the total quantity of migradollars returned during the respondent's most recent trip to the United States. We computed total migradollars by adding savings to the estimated quantity of remittances sent over the course of the trip (trip duration in months times average monthly remittance); all figures are expressed in 1990 U.S. dollars. The right-hand columns show an equation estimated to predict the proportion of migradollars returned as savings (as opposed to remittances).

To improve fit and to conform to OLS assumptions, migradollars were expressed in terms of natural logarithms and the proportion of migradollars returned as savings was transformed into a logit (where $\text{logit}(p) = \log(p/(1-p))$). In both equations we correct for selection into the pool of those with migradollars by including a Mills ratio (lambda coefficient) derived from a probit model estimated to predict a dichotomous variable: 1 when the migrant remitted or saved, and 0 otherwise.

Roughly 82% of the sample repatriated U.S. earnings in one form or another. The average amount repatriated on the most recent trip was \$7,233 (see Appendix Table A2). The large standard deviation for migradollars partially reflects variation in the length of the trip, which determines the number of months over which remittances are accumulated. On average, about 34% of all migradollars entered Mexico as savings; about two-thirds entered as remittances (Appendix Table A2).

Given selection into the pool of remitters and savers, the quantity of migradollars repatriated varies strongly with age, U.S. experience, and education. The quantity rises to a peak just above age 40 and then falls, but grows steadily with each year of schooling and each month of prior U.S. experience. The effect of education is particularly strong: each year of schooling increases migradollars by 4.3%, compared with a 0.2% increase for each month of U.S. experience. By definition, migradollars increase steadily as the trip lengthens: each month adds one more remittance check to the total.

In general, homeowners tend to repatriate more money than those without homes; the possession of a home increases the amount repatriated by 23%. Ownership of land or businesses, however, has no significant effect on the overall quantity of migradollars returned to Mexico. The quantity of migradollars also tends to increase sharply with monthly income: for every \$1,000 in additional monthly income, the amount repatriated rises by nearly 17%. Likewise, the more a respondent spends on a coyote, the more money is returned to Mexico. For every \$100 in coyote costs, migradollars rise by 4.5%. We believe that this relationship reflects a respondent's need to repay coyote fees and to save for the next use of a coyote's services, but it could also mean that migrants entering with coyotes find better jobs and more stable working conditions leading to higher rates of capital repatriation.

Finally, the quantity of migradollars is influenced by one aspect of community infrastructure and one facet of national macroeconomic context. The quantity of migradollars is sharply lower (by 23%) among migrants from communities containing a preparatory school, but the reason for this effect is unclear. Migrants also tend to repatriate fewer funds during periods of high inflation, probably reflecting a desire to keep earnings in a currency less likely to depreciate over time. Thus, although migrants display a higher propensity to return with savings during periods of inflation, they do so in order to make specific purchases of Mexican assets at deflated prices. In general, inflation lowers the amount of money sent or brought from the United States.

The right-hand equation in Table 4 examines the mix of savings versus remittances used by migrants to repatriate their U.S. earnings. The relative amount returned as savings tends to fall with age, marriage, and U.S. settlement, and to rise with education and business ownership; it increases greatly when migrants are accompanied by their spouses (because the spouse, the usual receiver of remittances, is in the United States). Working at a U.S. job where taxes are withheld tends to reduce the proportion of migradollars returned as savings, most likely because formal employment is more conducive to regular remitting.

Migrants originating in communities characterized by dynamic economies tend to repatriate migradollars less in the form of savings and more as remittances. With a rise in the proportion of females in manufacturing and the relative number of self-employed workers, the share of migradollars returned as savings declines. Other things being equal, migrants from agrarian communities tend to rely more on savings unless their community has an *ejido*, in which case remittances are favored.

TABLE 4. OLS REGRESSION PREDICTING TOTAL MIGRADOLLARS REPATRIATED AND THE SHARE RETURNED AS SAVINGS DURING THE MOST RECENT U.S. TRIP: MALE HOUSEHOLD HEADS FROM 23 MEXICAN COMMUNITIES

Independent Variables	Log of Total Migradollars		Log of Share Returned as Savings	
	β	SE(β)	β	SE(β)
Personal Characteristics				
Age	0.039*	0.017	-0.232*	0.068
Age squared	-0.0005*	0.0002	0.003*	0.001
Married	-0.217	0.125	-1.820*	0.498
Years of schooling	0.043*	0.011	0.135*	0.042
Months of prior U.S. experience	0.002*	0.0005	-0.001	0.002
Household Characteristics				
Dependency ratio	-0.096	0.165	-0.350	0.656
Land owned	-0.066	0.105	0.499	0.417
Business owned	-0.013	0.102	0.989*	0.404
Home owned	0.233*	0.079	0.389	0.315
General Trip Characteristics				
Settled U.S. sample	0.297	0.300	-0.127*	1.194
Duration in months	0.015*	0.001	0.002	0.004
Accompanied by spouse	0.001	0.177	5.760*	0.707
Economic Characteristics of Trip				
Monthly earnings (\$000)	0.169*	0.043	-0.231	0.169
Monthly food and rent (\$00)	0.022	0.014	0.019	0.059
Cost of coyote (\$00)	0.045*	0.018	-0.215	0.073
Federal taxes withheld	0.166	0.093	-1.453*	0.368
Community Economic Context				
Prop. earning twice minimum wage	-0.698	0.493	-2.244	1.960
Prop. self-employed	-0.447	0.443	-3.754*	1.762
Prop. of females in manufacturing	-0.182	0.287	-2.375*	1.139
Community Infrastructure				
Paved road to highway	0.080	0.137	0.633	0.545
Preparatory school in community	-0.282*	0.094	0.069	0.373
Bank in community	-0.053	0.157	0.745	0.623
Community Agrarian Context				
Agrarian economy	-0.117	0.095	1.061*	0.377
Agrarian population density	-0.003	0.002	0.008	0.009
Proportion of land arable	-0.128	0.173	-0.816	0.689
<i>Ejido</i> established	0.033	0.131	-1.364*	0.519
Macroeconomic Context				
Real interest rate	-0.582	0.369	-1.956	1.466
Rate of peso devaluation	0.072	0.072	0.097	0.286
Inflation rate	-0.382*	0.198	-0.571	0.789
Selection Instrument				
Lambda	-1.334*	0.514	-6.030*	2.043
Intercept	7.220*	0.593	11.796*	2.356
R ² (Adjusted)	0.288*		0.165*	
Number of Migrants	1,225		1,225	

* $p < .05$

HOW MIGRADOLLARS ARE SPENT

In keeping with prior research, we find that most migradollars repatriated by Mexican migrants to the United States are spent on consumption. Among those reporting remittances and/or savings, 10% said they spent at least some of the money productively, another 14% spent some of the money on housing, and 76% reported spending migradollars only on consumption (see Appendix Table A2).

Yet the allocation of migradollars among these three spending categories is not constant, but variable; it depends on factors such as human capital, property ownership, trip characteristics, and community circumstances. Table 5 presents a multinomial logit model that estimates the effect of independent variables on the use of migradollars, controlling for selection into the sample of those who saved and/or remitted. The columns on the left show how various factors influence the odds of spending on housing, compared with the odds of spending on consumption; the columns on the right show how the same variables affect the odds of spending on production relative to consumption.

In general, migrants are likely to channel migradollars into housing if they are well educated, and when they already own a house or lot. Paradoxically, the odds of spending on housing are considerably higher among migrants settled in the United States and among those who migrate with a spouse. Thus a long-term presence north of the border by no means precludes property ownership in Mexico. Indeed, by providing superior access to high-wage employment, it increases the odds of purchasing, improving, and furnishing a home in Mexico.

Migradollars tend to be channeled away from housing and toward consumption when migrants come from communities with high wages (a significant effect at $p = .02$), high rates of self-employment (an effect that approaches significance at $p = .09$), and a high degree of infrastructure development (the effect of preparatory school is significant at $p = .01$ and the effect of a paved road approaches significance at $p = .08$). In general, then, migrants from more highly developed communities are less likely to spend on housing, probably because housing is more accessible anyway in such locations. Paying more money for a coyote lowers the likelihood of spending on housing because it channels funds toward the payment of smuggling fees rather than home purchase or construction.

The right-hand columns of Table 5 reveal that the odds of spending on production are determined primarily by access to productive resources, namely human capital, potential household labor, and property. The odds of productive investment rise sharply with each year of schooling, and they increase as the relative number of dependents grows (because older children constitute an important source of unpaid family labor). Although marriage itself lowers the odds of investment, this negative influence is counterbalanced if the spouse begins migrating and contributing to the pool of funds available for investment. Finally, migradollars are much more likely to be spent on production if the migrant owns land, a business, or a home, or if he or she comes from a

community where an *ejido* has been established. Thus access to the means of production is crucial in determining who spends remittances productively.

SUMMARY AND CONCLUSION

This analysis of migrants' decision making with respect to remittances, savings, and spending produces a picture of conscious economic actors making relatively logical decisions about the disposition of migradollars in response to changing individual and household circumstances, shifting attachments to U.S. society and its labor market, and fluctuating economic conditions in the community and the transnational political economy. As far as we can discern, U.S. migrants do not engage in unrestrained consumer spending to their own detriment and that of their communities. Rather, they do what they can to improve their own and their families' well-being given the constraints of their social and economic circumstances.

With respect to migradollars repatriated from the United States, our analysis leads us to the following conclusions:

- (1) Sending monthly remittances to Mexico and returning home with savings are interrelated behaviors that represent different ways of accomplishing the same thing: repatriating earnings from the United States.
- (2) Remitting and saving are more likely the higher a migrant's monthly earnings and the more stable his job situation in the United States. These behaviors become less likely as migrants build up time abroad, settle north of the border, and bring their spouses.
- (3) The more money a migrant has paid to be smuggled into the United States, the higher the propensity to remit and save in order to repay loans and finance the next trip.
- (4) Migrants are most likely to remit when they are married and in the older labor force ages, and when they come from economically dynamic communities characterized by high wages, widespread self-employment, and high percentages of women employed in manufacturing. Among migrants from agrarian economies, the presence of an *ejido* increases the odds of remitting.
- (5) Migrants are more likely to return with savings if they come from households with access to capital resources, notably land and dwellings, and if they come from communities with good road connections to Mexico's highway system. The likelihood of returning with savings is also greater during periods of high inflation.
- (6) The quantity of migradollars repatriated to Mexico rises directly with education, U.S. labor market experience, duration of the trip, and monthly U.S. earnings. This quantity increases until age 40 and then declines. Migrants who own homes tend to repatriate more money than those who do not. Also, the more money a migrant pays to a coyote, the more migradollars are repatriated later to Mexico.
- (7) The share of migradollars repatriated in the form of savings declines with age, marriage, U.S. settlement, and the attainment of a more stable U.S. job. The share repatriated as sav-

TABLE 5. MULTINOMIAL LOGIT MODEL PREDICTING HOW MIGRADOLLARS WERE SPENT (REFERENCE IS CONSUMPTION)

Independent Variables	How Migradollars Were Spent			
	Housing		Production	
	β	SE(β)	β	SE(β)
Personal Characteristics				
Age	-0.025	0.041	-0.010	0.051
Age squared	0.000	0.001	0.000	0.001
Married	-0.333	0.314	-0.763*	0.359
Years of schooling	0.063*	0.026	0.144*	0.028
Months of prior U.S. experience	-0.001	0.001	-0.003	0.002
Household Characteristics				
Dependency ratio	0.336	0.399	1.516*	0.497
Land owned	-0.313	0.260	1.033*	0.278
Business owned	0.150	0.253	1.103*	0.259
Home owned	1.684*	0.218	0.795*	0.230
General Trip Characteristics				
Settled U.S. sample	2.214*	0.765	1.033	0.910
Duration in months	0.000	0.002	-0.010	0.004
Accompanied by spouse	1.470*	0.435	1.400*	0.483
Economic Characteristics of Trip				
Monthly earnings (\$000)	0.086	0.104	0.107	0.124
Monthly food and rent (\$00)	-0.033	0.038	0.072	0.041
Cost of coyote (\$00)	-0.114*	0.044	-0.066	0.051
Federal taxes withheld	0.030	0.220	0.108	0.257
Community Economic Context				
Prop. earning twice minimum wage	-2.767*	1.191	-2.057	1.395
Prop. self-employed	-1.766	1.094	-1.525	1.226
Prop. of females in manufacturing	-0.807	0.680	0.493	0.872
Community Infrastructure				
Paved road to highway	-0.608	0.351	-0.099	0.419
Preparatory school in community	-0.832*	0.222	-0.231	0.274
Bank in community	0.280	0.377	0.639	0.489
Community Agrarian Context				
Agrarian economy	-0.021	0.228	-0.240	0.263
Agrarian population density	0.000	0.006	0.006	0.006
Proportion of land arable	-0.488	0.412	-2.108*	0.524
<i>Ejido</i> established	0.291	0.301	0.774*	0.402
Macroeconomic Context				
Real interest rate	-1.047	0.878	-1.604	1.041
Rate of peso devaluation	0.146	0.167	0.172	0.197
Inflation rate	0.515	0.460	-0.437	0.662
Selection Instrument				
Lambda	-3.983*	1.355	-3.059*	1.531
Intercept	0.991	1.448	-1.903	1.743
Log-Likelihood				-941.9*
Chi-Square				281.0*
Number of Migrants				1,140

* $p < .05$

ings rises with education, the migration of the spouse, and business ownership.

- (8) In general, migrants from agrarian communities tend to return money as savings unless their community has an *ejido*; in that case, remittances are favored. People from economically dynamic communities tend repatriate their U.S. earnings as remittances rather than savings.
- (9) Migrants with access to resources such as education, potential family workers, a migrant spouse, *ejidos*, and real assets such as land, businesses, and housing are far more likely to channel their migradollars into productive investments than are persons without access to such resources, who tend to devote their earnings to current consumption.
- (10) Migrants who have education and strong contacts with the United States but who come from communities with unfavorable economic conditions tend to channel their migradollars into housing, especially if they already own a dwelling.

We hope that these conclusions move researchers away from a view of international migrants as pawns of global forces who unwittingly contribute to the marginality of their own communities. Rather than being buffeted by all-powerful forces beyond their control, migrants are active agents working forcefully to better themselves and their communities, given personal, family, community, and macroeconomic constraints that are often quite difficult.

Although most of the money earned in the United States goes toward consumption, the funds typically yield a substantial improvement in nutrition, clothing, and shelter; and even though most of the funds are spent to improve the family's material well-being, migrants are generally watching for investment opportunities that might produce additional family income. Under the right circumstances (a high-paying U.S. job, secure attachment to the U.S. labor force, access to complementary resources in Mexico), the odds of productive investment rise substantially.

Moreover, unlike grants from foundations or development funds provided by international organizations, migradollars are not channeled through bureaucracies staffed by middle-class workers earning relatively high salaries. Virtually all of the money goes directly to people of modest means drawn from the lower segments of Mexico's socioeconomic hierarchy. In addition, migradollars are not handed out as gifts or grants with strings attached; rather, they are earned through the migrant's own effort and initiative and may be used in any way he or she sees fit. Insofar as they elevate a family's standard of living, contribute to business formation, and lead to community improvements, migradollars represent a tangible accomplishment of which migrants can be justly proud.

In this alternative interpretation of the migrant experience, the way for policy makers to encourage productive investment is not to harangue migrants about their excessive consumption or to attempt to change their micro-level behavior. Rather, the best way is to pursue macroeconomic policies that yield a stable and propitious investment climate and to make expenditures on the infrastructure of specific communities which make investment an attractive, profitable proposition.

APPENDIX TABLE A1. MODELS USED TO PREDICT MISSING VALUES ON SELECTED VARIABLES OUTCOME VARIABLES

Independent Variables	Outcome Variables			
	Taxes Withheld	Coyote Cost	Monthly Earnings	Monthly Rent
Probit Analysis (Not Missing = 1)				
Documented migrant	0.033	0.417*	0.092	-0.020
Children on last trip	0.088*	-0.011	0.088*	0.155*
No. prior U.S. trips	0.008	-0.090*	-0.004	-0.013*
Lodged with friends/relatives	1.814*	1.381*	0.111	0.010
Has Chicano friends	0.397*	0.088	0.343*	0.368*
Has Anglo friends	0.327*	0.091	0.036	0.216*
Got job through friend/relative	0.749*	0.410*	0.275*	0.209*
Father a U.S. migrant	0.446*	0.243*	0.402*	0.379*
No. of migrant siblings	0.175*	0.119*	0.082*	0.101*
Period				
1965-69	—	—	—	—
1970-74	0.257	-0.237	-0.127	0.247
1975-79	0.149	-0.138	0.191	0.444*
1980-84	-0.253	-0.374	-0.051	0.378*
1985-89	0.293	-0.074	-0.310	0.117
1990-92	0.337	0.492*	-0.252	0.315*
Intercept	-1.463*	-0.745*	0.198	-0.012
Log-Likelihood	470.670*	810.280*	1048.300*	933.730*
Chi-Square	1007.300*	897.180*	190.990*	220.700*
Number of Cases	2,076	2,076	2,076	2,076
OLS Analysis (Nonmissing Cases)				
Documented migrant	0.193*	-2.746*	0.196*	0.706*
Children on last trip	0.010*	0.061	0.024	0.058
No. prior U.S. trips	0.001	-0.017	0.007	-0.011
Lodged with friends/relatives	-0.108*	-0.138	-0.001	-0.563*
Has Chicano friends	0.010	-0.136	-0.072	-0.150
Has Anglo friends	0.002	-0.180	0.184*	-0.158
Got job through friend/relative	0.031	0.283*	-0.101	-0.242
Father a U.S. migrant	-0.038*	0.019	-0.081	-0.358*
No. of migrant siblings	0.015*	-0.064	-0.006	-0.018
Period				
1965-69	—	—	—	—
1970-74	-0.025	2.145*	0.109	-0.578
1975-79	-0.028	3.247*	-0.118	-0.301
1980-84	0.025	3.010*	-0.291*	-0.194
1985-89	-0.026	2.551*	-0.277	0.234
1990-92	-0.050	2.434*	-0.330*	-0.037
Lambda	-0.104	-1.046	-0.959	-3.738*
Intercept	0.826	1.287	7.392*	7.015*
R-Squared	0.090*	0.294*	0.078*	0.189*
Number of Cases	1,683	1,683	1,683	1,683

* $p < .05$

APPENDIX TABLE A2. MEANS OF VARIABLES USED IN ANALYSIS OF MIGRANTS' SAVINGS AND REMITTANCES

	Mean	Standard Deviation
Outcome Measures		
Remitted only	0.22	0.42
Saved only	0.13	0.33
Remitted and saved	0.47	0.50
For those with migradollars		
Total repatriated	7233.12	25989.86
Share returned as savings	0.34	0.36
Spent on housing	0.14	0.35
Spent on production	0.10	0.30
Personal Characteristics		
Age	36.13	11.82
Married	0.83	0.38
Years of schooling	4.98	3.93
Prior U.S. experience	54.11	74.21
Household Characteristics		
Dependency ratio	0.63	0.23
Land owned	0.15	0.36
Business owned	0.16	0.36
Home owned	0.61	0.49
General Trip Characteristics		
Settled U.S. sample	0.23	0.42
Duration (in months)	31.65	63.49
Accompanied by spouse	0.27	0.44
Economic Characteristics of Trip		
Monthly earnings (\$000)	1.15	0.87
Monthly food and rent (\$00)	3.33	3.69
Cost of coyote (\$00)	1.25	2.16
Federal taxes withheld	0.82	0.39
Community Economic Context		
Prop. earning twice minimum wage	0.27	0.11
Prop. self-employed	0.34	0.12
Prop. of females in manufacturing	0.22	0.18
Community Infrastructure		
Paved road to highway	0.94	0.24
Preparatory school in community	0.66	0.47
Bank in community	0.87	0.33
Community Agrarian Context		
Agrarian economy	0.48	0.50
Agrarian population density	2.76	14.24
Proportion of land arable	0.44	0.25
<i>Ejido</i> established	0.89	0.31
Macroeconomic Context		
Real interest rate	0.06	0.10
Rate of peso devaluation	0.29	0.55
Inflation rate	0.31	0.24
Number of Migrants		1,501

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