The initiation and growth of migration streams
from communities in five Latin American countries

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Abstract

A variety of theories describe how a migration stream begins and how it is perpetuated, providing a synthetic account of international migration. In this research I model the proportion of a community that has ever migrated in a given year as a function of the level of development of the community, economic opportunities in the community, and the characteristics of migrants from that community in the U.S. I use the Mexican Migration Project and Latin American Migration Project data for communities in Costa Rica, the Dominican Republic, Mexico, Nicaragua, and Puerto Rico. I find significant and positive relationships between indicators of the level of development and the initiation of migration. Furthermore, the greater remittances lead to the perpetuation of the migration stream in most cases. These findings provide empirical evidence for a synthetic account of international migration.

Introduction

A variety of theories describe how a migration stream begins and how it is perpetuated, providing a synthetic account of international migration (Massey 1999). World systems theorists argue that capitalist penetration into relatively self-contained local economies in the periphery creates a surplus labor pool and connects potential migrants to destinations in core regions, thus initiating a migration stream. In this way, "development" initiates international migration. Once a migration flow between two places is established several things occur which may cause the flow to persist and grow. According to neo-classical economists the wage differential between the two places encourages more migration with the promise of economic gain. Revisionists of this approach see a more social process occurring which they call the new economics of migration. Members of the periphery communities see the remittances gained through migration as a way in which they can diversify the economic risks inherent in living in an unstable economy. Furthermore, remittances can overcome the market failures of peripheral economies such as lack of access to savings mechanisms and consumer credit for home mortgages and business improvements. However, migration is made possible as well by segmented labor demand in migrant destinations, meaning that migrants must possess the skills (often for manual labor) for which there is unmet demand in the destination. Finally these conditions are established (supply of and demand for migrant labor), the social networks that have been established and through which information and assistance is transmitted perpetuate the migrant stream leading to the cumulative causation of migration.

In this study I investigate this process of the cumulative causation of migration from Costa Rica, the Dominican Republic, Nicaragua, Mexico, and Puerto Rico to the

United States. Most research has used the migration prevalence ratio of a community as a determinant of individual migration (Massey 1990; Massey, Goldring, and Durand 1994; Fussell and Massey 2004). For example, in previous research I have shown that the level of migration prevalence in a community is positively related to the probability that a man in a community in one of these countries will make a first migratory trip to the U.S., thus resulting in the cumulative causation of migration (Fussell 2004). This effect is so powerful that it appears that when migration networks are in place in a community, U.S. migration policy has very little effect on deterring individuals from migrating.

In the current research I extend my investigation of the process of cumulative causation by using the migration prevalence ratio of a community in a given year as the dependent variable, which I explain as a function of the level of development of a community and the characteristics of the migration stream from that community. The hypothesis that migration prevalence is a function of the level of development of a community is tested using measures of the presence and duration of schools, utilities, and communications, and financial services in a community. The first theory I investigate posits that as communities in these five countries develop, migration to the U.S. will grow.

The second theory I investigate is based on research showing that the community is changed as a result of migration. The primary mechanisms for changing the community stem from the sense of relative deprivation that non-migrants experience when they see the benefits of migration that accrue to migrants and their families, and the spread of the migration-related social capital that reduces the costs of migration for potential migrants. These two mechanisms are captured in this analysis with estimates of the annual level of remittances received by families of migrants within the community that create a sense of relative deprivation and the percentage of migrants in the U.S. who are concentrated in one of the primary destination states for community members and the percentage of those migrants who are undocumented. The concentration of migrants in primary destinations is expected to aid new migrants in making a trip, while the percentage of migrants who are undocumented is expected to discourage migration since they are less able to sponsor new migrants through family reunification. However, much research suggests that documentation status is hardly a deterrent to migration, so the effect of this variable is likely to be insignificant.

To fully model the synthetic theoretical framework outlined above, I need to develop more measures than are presented here. The variables I have included in this analysis best represent the world systems theory which describes how communities develop and join the global economy, thus initiating migration, and the theory of cumulative causation which describes how social capital perpetuates migration. Between now and the PAA I plan to incorporate these additional indicators.

Data and Methods

This study uses data collected by the Latin American Migration Project (LAMP: http://lamp.opr.princeton.edu/) in Puerto Rico, the Dominican Republic, Nicaragua and Costa Rica and the Mexican Migration Project (MMP: http://mmp.opr.princeton.edu/). Both are collaborative research projects based at the Office of Population Research at Princeton University and the University of Guadalajara and supported by the National

Institute of Child Health and Human Development (NICHD). The surveys in Nicaragua and Costa Rica were conducted in association with the Central American Population Center of the University of Costa Rica (CCP: http://ccp.ucr.ac.cr), with support from the Mellon Foundation. The LAMP data come from household surveys carried out in twenty-one communities in Costa Rica (4), the Dominican Republic (7), Nicaragua (5), and Puerto Rico (5) between 1999 and 2002. Likewise, the MMP data come from the last twenty-one communities surveyed in Mexico during the same period to maximize comparability.

The questionnaires gathered basic information on the social, economic, and demographic characteristics of the household head, the spouse, the head's children, and other household members. Researchers determined which of the above people had ever been to the United States and for each person with migratory experience they compiled data on the date, duration, destination, legal status, occupation, and wages earned on the first and last U.S. trips. A trip is defined as a move to the United States that involved a change in usual residence, excluding short visits for reasons other than employment. Thus, the purpose of the trip, more so than the duration, is the criterion for defining a U.S. trip. The questionnaire also compiled detailed life histories for all household heads that included histories of employment, migration, border-crossing, marriage, fertility, residence, and property ownership. These individual level data are used in this analysis to create community level variables that describe the migration flow from that community and to construct the migration prevalence ratio.

The dependent variable in my analysis is the migration prevalence ratio measured within each community for each year since 1950 up to the time of the survey. The migration prevalence ratio is a gauge of the migration-related social capital available within a community, but examined over time it also measures the phenomenon of mass migration when migration experience accumulates within a community. Using data on date of birth and date of first U.S. trip, I first compute ratios that measure the prevalence of U.S. migration in years from 1950 to the present. Following Massey, Goldring, and Durand (1994), I define migration prevalence as the ratio of the number of persons who have ever been to the United States over the total number of persons aged 15 and older within a given year. The numerator is computed retrospectively from the date of the first U.S. trip and the denominator from the date of birth. This ratio is potentially biased by permanent out-migration from the sample community to other areas of the country. Such out-migration would overstate the prevalence of U.S. migration by removing people from the denominator (permanent emigration in the U.S., however, is accounted for by the U.S. sample). The size of the bias can generally be expected to increase as one moves back in time. Although it cannot be corrected, since we know nothing about the number of out-migrants to other communities, it is conservative. Since migration prevalence ratios tend to increase over time, the effect of the bias is to make the increase more gradual, especially in rural communities, which are more prone than cities to permanent internal out-migration.

The first group of independent variables I constructed measures the level of development of a community and the second group measures the characteristics of the migration stream from each community. To measure the level of social and economic development of a community I used several time-varying variables which were recorded for each community. Using information on the years in which primary and secondary

schools were established, light, electricity, water, phone, and postal service began, and the year in which a federal highway was built near the community, I calculated the number of years since that service began for each year. This gauges not only whether or not a particular kind of service was present but how long it had been present in the community. This is important since in many cases services had been established well before the period of observation. I also include a dummy variable for whether or not the community has a bank branch that may be a source of credit or savings.

A second group of independent variables measures the characteristics of the migration stream in a particular year. The first is a measure of remittances to households within the community. Using information from the sample of migrants' last trips I estimated the total amount of annual remittances to households in the community by assuming that a migrant sent back the average monthly amount reported for at last nine months of each year he was in the U.S on his last trip. This is a rough estimate of the inflow of remittances to a community. I also measured the percentage of migrants on their last U.S. trip in a given year who were in the U.S. without documentation and the percentage of these migrants who were residing in one of the primary destinations of migrants from their country. In the case of Costa Ricans these destinations were Florida and New Jersey; for Dominicans these were New York, New Jersey, and Puerto Rico; for Mexicans these were California, Illinois, and Texas; for Nicaraguans these were California, Florida, and New York; and for Puerto Ricans these were New York, Pennsylvania, and New Jersey.

I use an ordinary least squares model to predict the migration prevalence ratio as a function of the level of development and the characteristics of the migration stream in the previous year. I report separate models for each country. The independent variables are highly collinear since schools, utilities, and communication services were often installed at similar points in time. Therefore, I run the regressions separately for five groups of variables (four development groups and one migration stream group). These results show how each of these indicators is associated with increases in the migration prevalence ratio however, it does not show their relative importance. Nevertheless, it allows us to test hypotheses regarding the relationship between development and migration. A more refined model would merge similar sets of variables into an index; however, I am interested here in exploratory testing of the hypotheses.

Results

Each of the countries analyzed here is in a very different stage of the development of their migration stream. These differences are evident in the means and frequencies displayed in Table 1. Thus, it is not surprising to see that the mean community prevalence ratio for the Costa Rican and Nicaraguan communities was quite low during the period 1950-2002, 1.9 and 1.7 percent respectively. This is largely due to the fact that migration to the U.S. from those countries only began in the 1980s and has grown rather gradually since then. At the other extreme, the Puerto Rican communities have high average measures of migration experience; roughly 29 percent of community members had ever been to the U.S. or were currently residing in the U.S. during this period. The Dominican Republic and Mexico have lower average values of migration experience within the surveyed communities; these are 8.6 and 8.5 percent respectively. These patterns are

better conveyed with the trend lines in Figure 1. In this research, I am investigating whether these patterns of migration prevalence within a community is a function of the level of economic development of the community and the characteristics of the migration stream. The values for the independent variables are shown in Table 1.

The development variables are broken into four groups. The first group of development variables shows the average year in which primary and secondary schools were established. They enter into the regression equation as the number of years they have existed in the community since this demonstrates both whether the service is present and the length of time it has been present in the community. For example, we see that in all countries except Nicaragua, most communities had a primary school long before the period of observation began, although there is variation in the timing of the establishment of primary schools. On average, Costa Rican and Mexican communities have had primary schools since 1903 and 1906, respectively. Primary schools were established somewhat later in the Dominican Republic (1933) and Puerto Rico (1922). In contrast, Nicaraguan communities have only had primary schools since 1955, on average. Secondary schools have only been established more recently, mostly during the period under observation. The only exception is that of the Puerto Rican communities, where almost all secondary schools were established prior to 1950.

The second group of development variables describes the years in which electric, water, and public lighting services were provided in the community. These services were established very close together in time, often during the 1960s and 1970s when many countries were undertaking massive development efforts. The only exception is Puerto Rico, where these services were installed much earlier due to the country's status as a U.S. territory. The third group of development variables describes the years in which communication infrastructure was established, including telephone and postal service, as well as the year in which the nearest highway was paved. Highways often facilitate communication by allowing for transportation of mail and tradables, as well as allowing community members to travel back and forth between places within the country. This communication infrastructure was often installed in the same period, roughly the 1960s through the 1980s, although postal service often began much earlier. The fourth development variables is the year in which a bank was established which is an indicator of access to credit and savings. However, there is great variability in this measure; in the Nicaraguan and Puerto Rican communities banks have never been established (or the data was not recorded – I need to check this).

The final group of variables describes characteristics of the migrant community in the U.S. These gauge some of the feedback effects that are theorized to be relevant to the perpetuation of U.S. migration. Table 1 shows a wide range in terms of the presence of migrants in destinations in any given year. In the observed years, on average, 31 percent of Puerto Rican community members with migration experience were in their primary destinations. Puerto Ricans and Mexicans were among the most strongly represented in the U.S. in any given year. At the other extreme, only 3 percent of Dominican community members with migration experience were in their primary destinations on their last U.S. trip. Mexicans and Nicaraguans were most likely to have been in the U.S. without documentation in a given person year, whereas Dominicans are least likely to have been undocumented. Of course, Puerto Ricans are U.S. citizens, so this variable does not apply.

Turning to the regression results, I first consider the effects of educational institutions on the migration prevalence ratio. For every year since the primary school was established in a community, there is generally a positive effect on the migration prevalence ratio. In the Dominican Republic, Nicaragua, and Puerto Rico, for each year since the primary school was established there has been between a 0.07 to a .49 percent increase in the migration prevalence ratio. In contrast in Mexico, there is a small negative effect on the migration prevalence ratio, while there is no significant effect in Costa Rica. The effect of secondary schools on the migration prevalence ratio is less consistent. Only in Mexico and Nicaragua does each year since the establishment of the secondary school lead to an increase in the migration prevalence ratio. In Costa Rica this effect is negative, while there is no effect in the Dominican Republic or Puerto Rico.

To summarize the effects of access to education, it appears that growing migration streams from the Dominican Republic, Nicaragua, and Puerto Rico came from communities where primary school education was accessible and perhaps widespread among community members. Similarly growing migration streams are associated with communities where secondary education was accessible and widespread in Mexico and Nicaragua. This suggests that with respect to the provision of education, the greatest migration prevalence ratios are found in those communities that offer at least primary education and often secondary education. This is not the case for Costa Rica, where secondary schools are associated with lower migration prevalence ratios. These results show that migration streams are very much influenced by access to education in the sending community. Indeed, migrants are most often drawn from the population with at least a primary education, but less often from those with the highest levels of education.

Public services are also positively associated with higher migration prevalence ratios. Electricity, water, and public lighting services are often installed in a community during the same period, consequently these effects are often collinear. In all cases, electricity and public lighting are collinear, and sometimes water and public lighting are collinear. Therefore, I drop one of the collinear variables from the set if the tolerance level is below .2. In communities in most countries, public services are positively related to the migration prevalence ratio. The size of these effects is especially large in the Dominican Republic, Mexico, Nicaragua, and Puerto Rico. Most likely, it isn't the access to services *per se* that stimulates migration, but rather these services reflect the economic context in which the migration decision is made. These communities are benefiting from development, and most likely some members of the community benefit more than others. This may motivate community members to seek their fortune abroad so that they too can have the luxuries of those with more money.

The next set of development related variables are the means of communication that may facilitate migration. The longer telephone service has been available in communities in Costa Rica, Nicaragua, and Puerto Rico, the higher the migration prevalence ratio, though the opposite is true in Mexico. Telephone service may facilitate migration by being the most effective way of conveying information between the home community and migrants living abroad, thus passing migration-related information back to potential migrants, especially for Costa Rica and Nicaragua where migration streams have developed more recently, around the same time that phone service became available there. Likewise, phone service became available much earlier in Puerto Rico, but also preceded the growth of the migration stream. Postal service serves a similar purpose,

though it is less efficient. Nevertheless, the relationship between the establishment of postal service and the migration prevalence ratio is positive in the Dominican Republic, Mexico, and Puerto Rico, all countries where postal service was established well before phone service and where migration streams began relatively earlier (than in Costa Rica and Nicaragua). Having a paved highway is also positively related to the migration prevalence ratio, but it is often collinear with postal service and is therefore dropped from the regression. Finally, having a bank branch in the community is theorized to be negatively related to migration, since it offers potential migrants another source for borrowing or saving money. This is the case in Costa Rica and Mexico, though the coefficients are small, but not in the Dominican Republic. Granted, many potential migrants may be unable to open bank accounts or obtain loans without first having an adequate income.

The final set of variables gauge the characteristics of the migration stream. The first variable is a measure of the total remittances from migrants to households in the community during a particular year, based on the sum of the remittances of migrants who were on their last U.S. trip in that year. In all communities except those in Puerto Rico, larger amounts of remittances sent to households in a given year were associated with higher migration prevalence ratios in the following year. This effect was particularly large in the Dominican Republic and Mexico, both older migration streams, and smaller in Costa Rica and Nicaragua, where the migration streams were more recent. This confirms the theory that remittances perpetuate the migration stream by demonstrating the rewards of migration to members of the sending community, thus enticing more members to go to the U.S.

The percentage of migrants who are undocumented is also theorized to be related to increases in the migration prevalence ratio, but the effect is opposite of what might be expected. Rather than having a deterrent effect on migration, having larger percentages of undocumented migrants who are currently on their last U.S. trip was associated with greater migration prevalence ratios in the following year among communities in the Dominican Republic and Nicaragua. Again, this may be a demonstration effect, since undocumented migrants can pass along migration-related information and provide assistance to community members who want to try their luck but lack access to visas.

The final variable measuring the characteristics of the migration stream is the percentage of migrants on their last U.S. trip who are in one of the primary destination states for that country. Only among communities in Costa Rica was the concentration of migrants in a destination state positively associated with the migration prevalence ratio in the following year. Perhaps since the migration stream from Costa Rica is relatively new, migrants are more concentrated in a few destinations. The percentage of migrants in primary destinations is negatively related to increases in the migration prevalence ratio from the Dominican Republic and Puerto Rico, two countries with old and well developed migration streams. Perhaps the labor markets in these destinations are saturated, sending negative feedback messages to potential migrants.

Discussion and areas for further investigation

The relationships described above dig more deeply into migration theories to understand how migration streams begin and are perpetuated. For the most part we see a

positive relationship between development in the sending community and the percentage of the community that has ever been to the U.S. This reflects the ways in which communities, once drawn into the global economy, begin to participate in it as international migrants. But water, electricity, lighting, postal and phone service are the most basic indicators of development. Not all communities that have these services become migrant sending communities. I suspect the more critical variables gauge the demand for labor in the origin community, in other words, the creation of a surplus labor force. If all the members of the origin community are employed to the best of their abilities, they would most likely not find international migration to be an attractive option. These variables can be developed for future research.

However, once communications and networks have been established between two places, factors other than the level of development may become more important in facilitating the growth of the migration stream. Remittances flowing back to the community allow that community to develop its economy and infrastructure, further reinforcing the transnational flows. However, the nature of these transnational flows may change over time, especially as a migration stream reaches maturity. Thus, we see large differences in the effects of the characteristics of the migration stream between the countries that have new migration flows – Costa Rica and Nicaragua – and those countries that have mature migration flows – the Dominican Republic and Mexico – and the country that has moved beyond its peak in migration flows – Puerto Rico.

These differences can be viewed as either a function of the maturity of the migration flow, or a function of the historical moment in which the migration stream began and developed. Most likely, both views contain critical explanatory elements. For example, we see that utilities services are more influential in the growth of older migration streams – the Dominican Republic, Mexico, and Puerto Rico – most likely because they were more distinctive of communities that were part of the global economy at mid-century (1950s-1970s). In contrast, the newer migration streams are from countries where a greater number of communities had these services, therefore they didn't differentiate these communities to the same degree. The spread of technology is also found in the communications services that were available at different periods. Postal service was more influential in increasing the migration prevalence ratio in the older migration streams (the Dominican Republic, Mexico, and Puerto Rico), while phone service was more salient in the newer migration streams (Costa Rica and Nicaragua) and the older migration stream for which phone service had been available (Puerto Rico). These relationships favor the historical explanation for why these migration streams were able to grow at particular moments.

The effect of educational resources on migration flows is more universal. Clearly, we see that access to basic education is helpful for the growth of a migration stream. Basic literacy and numeracy embolden potential migrants to try their luck abroad. These skills also allow them to partake of the migration-related information that community members abroad send back through letters and phone calls, not to mention the advertisements of recruiters seeking migrant laborers. Therefore, in most countries having a primary and/or secondary school in the community is positively related to an increasing migration prevalence ratio.

Only in Costa Rica is this not true. But Costa Rica is a country with a long history of education – on average communities there established primary schools in 1903, the

earliest of all our countries – and a social security system that assists citizens in surviving spells of unemployment. Therefore, it is not surprising that many of these effects are muted in Costa Rica and migrants from that country are selected on different characteristics than those from the other four countries.

This leads to the question of how labor migrants are selected. Segmented labor market theory argues that demand for migrant labor typically selects those with lower levels of skill than is available in the domestic labor market of the destination country. As secondary education became nearly universal in the U.S. in the post-WWII period, the demand for migrant labor grew, specifically to fill those low skill jobs that domestic workers were unwilling to perform. This certainly contributes to the explanation of why the Dominican and Mexican migration flows grew after the 1960s or so. However, Puerto Ricans shared in the spread of primary and secondary education in the U.S., though they often lacked English skills. This allowed earlier waves of Puerto Rican migrants to access relatively good jobs through the mid-century, but their comparatively higher levels of human capital may have slowed labor demand for Puerto Rican migrants in the later period.

Finally, we see evidence that the feedback effects that come from the flows of remittances exerts a powerful effect on the growth of the migration prevalence ratio in home communities. In all countries except Puerto Rico, remittances to the community have a positive impact on the migration prevalence ratio – especially in the Dominican Republic and Mexico, the two mature migration streams. The effect is weakest in the new migration streams from Costa Rica and Nicaragua. The effect is not significant in Puerto Rico, perhaps because the migration stream had already surpassed the point where the experience of relative deprivation motivated new migrants to enter the migration stream. This suggests that these feedback effects may reflect the maturity of the migration flow.

The last two characteristics of the migration stream – the percentage of undocumented migrants in the U.S. and the percentage in primary destination states – may also be a function of the stage of maturity of the migration stream, though the evidence is not as strong. For Costa Rica – a country with a new migration stream – the concentration of migrants in a primary destination exerts a strong positive feedback effect. However, in the Dominican Republic and Puerto Rico – two more mature migration streams – the effect is negative. This may also be a function of the destinations of these later two groups which are in slow growing economies of the U.S. with weaker demand for migrant labor (New York and New Jersey). Migrants in those destinations may discourage their compatriots from joining them in the U.S. Notably, documentation status does not seem to deter migrants from the Dominican and Nicaraguan migration streams, suggesting that these migration streams effectively communicate to their compatriots how to work in the U.S. without authorization. Mexicans, having benefited recently from the 1987 amnesty, may not show as strong an effect for this variable.

This investigation lends support for a synthetic theory of international migration with provocative empirical evidence. New variables need to be developed to further explore labor market based explanations. To be continued…

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Table 1. Means and frequencies of variables in analysis

Variables	Costa Rica		Dom. Rep.		Mexico		Nicaragua		Puerto Rico	
	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.	mean	s.d.
Prevalence ratio, t+1	1.9	3.6	8.6	10.7	8.5	6.9	1.7	2.7	28.8	9.2
Year first primary school	1903.3	21.8	1933.3	5.3	1906.2	98.4	1955.0	5.9	1921.6	29.5
Year first secondary	1967.8	21.0	1967.6	22.4	1955.2	55.1	1972.8	7.6	1953.8	19.7
Year electric service	1970.3	5.1	1966.7	23.7	1979.3	23.6	1963.0	2.1	1919.4	2.9
Year water service	1960.5	25.5	1964.4	23.5	1967.1	34.0	1967.8	4.2	1925.5	4.6
Year public lighting	1961.5	9.4	1947.7	16.1	1980.0	18.2	1966.6	4.3	1920.2	1.9
Year telephone	1979.3	14.0	1975.4	21.1	1972.5	34.2	1956.4	6.5	1936.6	7.7
Year postal	1963.0	42.0	1935.1	7.6	1961.3	20.3	1953.0	15.1	1904.0	8.0
Year hwy paved	1983.3	22.6	1981.6	13.5	1972.7	27.5	1979.8	19.0	1930.4	10.6
Year bank	1971.5	29.9	1958.2	21.4	1970.2	47.6	2001.0	0	1999.0	0.0
Total remittances to community ($1,000s)	$7.69	$24.1	$5.70	$5.78	$6.68	$10.29	$1.91	$3.42	$1.14	$1.44
% undocumented migrants in U.S.	19.3	37.9	10.5	19.3	54.9	40.5	25.6	37.8	0.0	0.0
% in primary destination states	5.6 FL, NJ	18.4	2.5 NY,NJ, PR	7.8	29.1 CA,IL, TX	35.4	4.8 CA,FL, NY	17.4	31.4 NY,PA ,NJ	29.1
N (community years)	200		345		1062		250		240	
N (communities)	4		7		21		5		5	

Table 2. Regression coefficients predicting percentage of migrants in the U.S. from a community for groups of variables

Coefficients	Costa Rica		Dom. Rep.		Mexico		Nicaragua		Puerto Rico	
	b	s.e.	b	s.e.	B	s.e.	b	s.e.	B	s.e.
Years since…										
first primary school	.02	.01	.49**	.03	-.05**	.01	.07**	.01	.24**	.01
first secondary school	-.06**	.02	-.05	.03	.08**	.01	.09**	.02	-.05	.02
electric service	-	-	-	-	-	-	-	-	-	-
water service	.04**	.02	.34**	.03	-.03**	.01	.17**	.01	.37**	.03
public light service	-.02	.02	.15**	.02	.19**	.02	-	-	-	-
telephone service	.16**	.03	.04	.03	-.06**	.01	.12**	.01	.23**	.04
postal service	-.04**	.01	.30**	.03	.04**	.01	-	-	.18**	.04
highway paved			.36**	.06	-	-	-.02*	.01	-	-
bank opened	-.03*	.01	.15**	.03	-.03**	.01	-	-	-	-
total remittances	.03**	.01	.36**	.09	.33**	.02	.13**	.05	.41	.40
% undocumented migrants	-.00	.00	.22**	.03	.00	.00	.02**	.01	-	-
% in primary destinations	.17**	.01	-.24**	.07	-.01	.00	.01	.01	-.09**	.02
N	200		345		1062		250		240	

Note: Each group of variables was regressed separately on the dependent variable, the percentage of the community that had U.S. migration experience in the following year, to avoid collinearity.

Figure 1. National-level trends in migration prevalence ratios, 1950–2002

Costa Rica — Dominican Rep. — Nicaragua — Puerto Rico — Mexico