Politics or Economics? International Migration during the Nicaraguan Contra War*

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Abstract. The issue of whether Central Americans in the United States are 'political' or 'economic' migrants has been widely debated, yet little empirical research has informed the controversy. Earlier studies have relied primarily on cross-sectional aggregate data. In order to overcome these limitations we draw on recent surveys conducted in five Nicaraguan communities by the Latin American Migration Project. Using retrospective data, we reconstruct a history of a family's migration to the United States and Costa Rica from the date of household formation to the survey date and link these data to national-level data on GDP and Contra War violence. While out migration to both Costa Rica and the United States is predicted by economic trends, US-bound migration was more strongly linked to the level of Contra War violence independent of economic motivations, especially in an interactive model that allows for a higher wartime effect of social networks. We conclude that elevated rates of Nicaraguan migration to the United States during the late 1980s and early 1990s were a direct result of the US-Contra intervention. The approach deployed here – which relates to the timing of migration decisions to macro-level country trends – enables us to address the issue of political versus economic motivations for migration with more precision than prior work.

The issue of whether Central Americans enter the United States as 'economic' or 'political' migrants has been a contentious one for scholars, policy makers and the public. On the one hand are those who argue that Nicaraguans, Guatemalans and Salvadoreans left their communities of origin during the 1980s primarily to escape poverty and to reap the benefits of higher wages and better employment in the United States. On the other hand are those who believe that Central Americans fled their homes involuntarily to escape violence and persecution, entering the United States more in search of safety than jobs or money.

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Officials of the US Immigration and Naturalization Service (INS) generally subscribe to the former position and have applied stringent criteria to Central Americans seeking to qualify for asylum or refugee status in the United States. They see their job as that of weeding out a small number of genuine political refugees from a much larger number of economically-motivated migrants who illegitimately claim persecution to gain access to jobs and benefits in the USA. In contrast, a variety of refugee advocacy organisations, church groups, pacifist leagues, solidarity associations, and other non-profit groups take the latter position. They lobby Congress, petition the courts, and pressure the INS to recognise Central Americans as political migrants who have well-founded fears of persecution, torture, or even death for their beliefs.

The two motivations, however, are rarely mutually exclusive and distinguishing between them and determining each one's relative importance in prompting international migration has proved difficult in practice. During periods of military conflict and civil war, economic hardship and political persecution often go hand-in-hand and frequently interact with one another to compound migratory pressures.[1] In his cross-sectional analysis of US emigration from different Salvadorean provinces during the period 1982–1985, Jones found that political violence functioned more as an indirect cause of out-migration, resulting in economic setbacks in certain provinces that, in turn, promoted out-migration.[2] He also found that poor rural dwellers generally migrated internally or to neighbouring countries, whereas better-off urban dwellers went to the United States.[3]

Similarly, using survey data from Managua, Nicaragua in late 1989, Funkhouser found that the 10–12 per cent of the population with US migration experience was disproportionately better educated and of white collar status.[4] In contrast to the Jones study, Stanley used five different measures of political violence together with numbers of migrants apprehended by the INS to show that fear of violence, not economic distress, was the primary motivation for Salvadorean emigration to the United States.[5]

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[1] See A. Dowty, *Closed Borders: The Contemporary Assault on Freedom of Movement* (New Haven, 1987), pp. 234–50.

[2] See Richard C. Jones 'Causes of Salvadorean migration to the United States,' *The Geographical Review*, vol. 79 (1989), pp. 193–4.

[3] *Ibid.* See also Edward Funkhouser, 'Mass emigration, remittances, and economic adjustment: the case of El Salvador in the 1980s,' in George J. Borjas and Richard B. Freeman (eds.), *Immigration and the Workforce: Economic Consequences for the United States and Source Areas* (Chicago, 1992), pp. 139–42.

[4] See Edward Funkhouser, 'Migration from Nicaragua: Some Recent Evidence,' *World Development*, vol. 20 (1992), pp. 1211–2.

[5] See William Stanley, 'Economic Migrants or Refugees from Violence? A Time Series of Analysis of Salvadorean Migration to the United States,' *Latin American Research Review*, vol. 22 (1987), pp. 147–8.

The small samples in the Jones and Stanley studies, however, were constrained by limited degrees of freedom, yielding results of low reliability and limited application.

A major problem for researchers has been the lack of adequate data, not only on immigration, but also on shifting levels of political violence. It is for this reason that literature on migration from Nicaragua is so scarce; few articles deal specifically with Nicaraguan migration and none at all quantitatively examine Nicaraguan migration in conjunction with the Contra War. The INS, of course, gathers and reports data on the annual number of legal immigrants arriving from Central America, but these data are flawed in several ways. First, they cover only the legal portion of the flow, omitting many undocumented migrants who overstay tourist visas or cross the US border surreptitiously after clandestine trips through Mexico. Among Salvadoreans who achieved legal status in 1996, for example, Massey and Malone found that 59 per cent had first crossed illegally through Mexico and seven per cent had overstayed a tourist visa.[6] Second, legal immigrants are tabulated by year of admission into permanent resident status, not the time of actual arrival in the United States. Thus, US immigration statistics do not accurately represent the date of departure from Central America or arrival in the United States. For most migrants there is a lag of a few years between the point of departure or entry and the final award of legal permanent resident status.

Despite these problems, INS statistics do provide a rough indicator of levels and trends in Central American immigration over time. According to the *Statistical Yearbook of the Immigration and Naturalization Service*, the annual number of Central Americans entering the United States was rather small through the late 1970s, never exceeding 10,000 persons in any given year. As the Sandinista Revolution gathered momentum in Nicaragua, however, and political violence escalated in neighbouring El Salvador and Guatemala, the numbers began to rise, reaching 16,000 in 1977 and 20,000 in 1978. After a brief decline with the collapse of the Samoza regime in Nicaragua during 1979, Central American immigration resumed and then grew slowly, rising to a level of around 30,000 per year in 1986.

After the Reagan administration came to power in 1981, it began to fund a proxy army of Nicaraguan expatriates. These soldiers were trained and armed by the US military and the CIA to fight the revolutionary Sandinista regime. During the latter half of the 1980s this army of 'Contras' took to the field in an intensifying effort to overthrow the Sandinistas, ostensibly to protect the US government's own political and economic interests in Nicaragua and

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[6] See Douglas Massey and Nolan J. Malone, 'Pathways to Legal Immigration,' *Population Research and Policy Review*, vol. 21 (2003), pp. 473–504.

to check the spread of revolutionary socialism in Central America. As the Contra War escalated, the number of out-migrants from the region surged. All told, some 1.1 million Central Americans entered the United States as permanent residents between 1970 and 1999, according to INS statistics.

Thus, official data show minimal Central American emigration before 1976, a modest and gradual acceleration between 1977 and 1988, followed by a massive surge between 1989 and 1993, and a return trend late in the 1990s. Is this pattern of temporal change explained by shifting levels of violence or fluctuating economic conditions?

In reality, the line demarcating economic migrants from political migrants is often artificial. The causal process of migration is complex and political motivations are not easily distinguishable from economic motivations; economic instability can result in political repression just as political repression can lead to economic instability.[7] Richmond, writing on the special case of refugee migration, notes that most movements fall some-where in the middle of a continuum characterised by purely economic migrants at one end and purely political migrants on the other.[8] He cautions that it is inappropriate to conceptualise economic and political migration in isolation in most cases.

Unfortunately, the INS has built this false dichotomy into its refugee policy. During most of the Contra War, migrants were granted refugee or political asylum status only on the basis of proof of 'a clear probability of persecution.' The policy was amended in 1987 following INS versus Cardoza-Fonseca, a Supreme Court ruling that resulted in a change in wording from 'clear probability of persecution' to a 'well-grounded fear of persecution' in assigning refugee status to Nicaraguans.[9] Whereas the INS had previously rejected 95 per cent of all asylum and refugee applications, acceptances increased in the years subsequent to this modification. Even so, attaining refugee status remained elusive for many applicants to the INS, with only a 16 per cent average acceptance rate following the policy change.[10] In our sample of US migrant households, only two individuals were orig-inally admitted as refugees and none were later granted asylum status (92 per cent of our sample consists of illegal migrants to the United States, who either overstayed tourist visas or entered the country through Mexico without legal documentation). Both before and after the change, INS immigration policy specifically stipulated that neither economic suffering

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[7] See Nora Hamilton and Norma Stoltz Chinchilla, 'Central American Migration: A Framework for Analysis,' *Latin American Research Review*, vol. 26 (1991), p. 75.

[8] Anthony Richmond, 'Sociological Theories of International Migration: The Case of Refugees,' *Current Sociology*, vol. 36 (1988), p. 12.

[9] See United States Immigration and Naturalization Service, *Triennial Comprehensive Report on Immigration* (http://www.immigration.gov, 2002).   [10] *Ibid.*

nor the economic state of one's country was sufficient grounds for gaining asylum or admittance as a refugee.

In order to analyse INS migration policy, and for the sake of argument, we adopt the viewpoint of the INS, which maintains the highly polarised and categorical interpretation of international migration to the United States. To this end, we specify two macrolevel measures, one of which proxies the INS's asylum/refugee status requirement and the other of which proxies economic conditions. We then combine these with the individual level variables from the Latin America Migration Project's data on Nicaragua. While we reject the logic of separating the effect of political turmoil from the role of economics, we dichotomise them here for the sake of analysing INS policy.[11]

Evidence suggests that international migration to neighbouring Costa Rica as well as to the United States was 'economic' in the sense that it was associated with Nicaraguan economic performance. However, we find greater evidence that it was 'political' in that out-migration to the United States but not emigration to Costa Rica was strongly predicted by fluctuating levels of Contra War violence. Thus, while US-bound migration from the five communities in our sample appears to be driven by both the economic and the political, the latter is far more important in determining migration to the United States.

Economics, politics and migration

The new economics of labour migration views migration as an attempt by families to diversify risks and overcome market failures by sending migrants to work internationally. Circular movements generally characterise this type of migration.[12] Neoclassical economics, in contrast, predict that rational actors choose to emigrate because they have considered the costs and benefits of moving versus staying and have concluded that it is in their material interest to go. For many poor countries in Latin America, the United States represents the primary destination for both types of economic migrants. Nicaragua, however, is in the unique geographical situation of bordering Costa Rica, which has historically been an exception to prevailing conditions

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[11] The LAMP, which is co-sponsored by the Universities of Pennsylvania and Guadalajara with funding from the National Institutes of Health (grant R01-HD35848), is modelled on the Mexican Migration Project, which since 1987 has undertaken annual binational surveys of Mexican communities to study patterns and processes of migration to the United States. Since its inception in 1998 the LAMP has undertaken surveys of five communities in Puerto Rico, seven in the Dominican Republic, four in Peru, two in Paraguay, one in Haiti, four in Costa Rica, and five in Nicaragua. The LAMP data are available from the project website at: www.pop.upenn.edu/lamp/.

[12] See Oded, Stark and David Bloom, 'The New Economics of Labor Migration,' *American Economic Review*, vol. 75 (1985), pp. 173–8.

in Central America of poverty and political instability. While Costa Rica's labour markets lack the breadth and depth of those in the United States, they are nonetheless stable and offer the highest standard of living in the region, with a per capita income that is nearly three times that of Nicaragua.[13] Given its geographic proximity to Nicaragua, its shared cultural-linguistic heritage, and its comparatively lax immigration policy, Costa Rica thus offers economically-motivated migrants a much lower-risk destination than the United States. It was therefore hypothesised that Costa Rica-bound migration would be primarily comprised of economic migrants.

In contrast, it was hypothesised that migration from Nicaragua to the United States would be more likely to be composed of politically motivated migrants. Wallerstein predicted the creation of migration pathways in the wake of military incursions undertaken by core nations to maintain order and stability in the peripheral regions[14] and Nicaragua has a long history of geopolitical dependency on the United States. This long history of US political involvement in Nicaragua established a myriad of political and social networks connecting the two countries, particularly among the conservative, land-owning classes. After coming to power in 1979, the politics of the Sandinistas posed a threat to the economic and political agenda of the Reagan Administration and the response was to field an army of Nicaraguan expatriates known as the Contras. Both Nicaragua's historical relationship with the United States and the anti-Sandinista political alliance of the Reagan years pointed to the emergence of Contra-sympathetic migration streams to the United States during the 1980s.

Figure 1 traces significant events in the development of the Contra War, which lasted from the early 1980s until 1990, when the Sandinista government was voted out of power. Creating an accurate measure of Contra War escalation is challenging, not least because of the political agenda on the part of both countries involved in the conflict. The war's covert nature in the United States made official data difficult to obtain while Nicaraguan data was highly polarised, falling almost entirely under the propaganda discretion of the Sandinista regime after opposing media organisations had been eliminated. Given the lack of reliable data from either government, along with an absence of systematic reports from human rights groups, we quantified the

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[13] As of 1998, GDP per capita in Costa Rica was 2.8 times greater than in its immediate northern neighbour ($5,987 versus $2,142 in dollars adjusted for purchasing power parity).

[14] See I. Wallerstein, *The Modern World System I: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century* (New York, 1974), pp. 2–10, D. Massey et al., *Worlds In Motion: Understanding Migration at the End of the Millennium* (Oxford, 1998), pp. 2–10, and Guillermina Jasso and Mark Rosenzweig, 'Family Reunification and the Immigrant Multiplier: United States Immigration Law, Origin-Country Conditions, and the Reproduction of Immigrants,' *Demography*, vol. 23 (1988), p. 300.
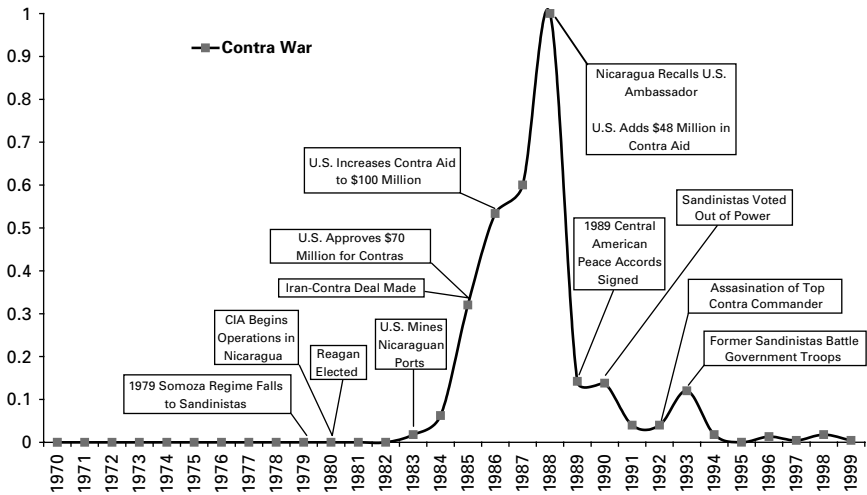
Fig. 1. *Measure of Contra War intensification.*

level of Contra War violence by using journalistic reports from Central, South, and North American press sources over the time period.[15]

Figure 2 considers prima facie evidence for the political versus economic origins of Nicaraguan migration by plotting trends in US migration from our sample, Nicaraguan Gross Domestic Product, and the level of Contra war violence for Nicaragua during the years 1970 through 1998. Data on Nicaraguan emigration came from successive issues of the *Statistical Yearbook of the Immigration and Naturalization Service*.[16] GDP statistics were taken from

[15] Using the Lexis-Nexis news database, we created an annual count of articles featuring the following Boolean specifications: 'Nicaragua' and 'Contra' in the title along with 'kill(ed)' or 'death' and 'military' or 'battle' or 'fight(ing)' within the text. We then closely reviewed the articles and eliminated all coverage from our search which focused on the US Iran-Contra scandal more than on the war's actual escalation, as well as articles on the controversial 1990 elections. To ensure that counts derived from international press sources by the Lexis-Nexis database search reflected conflict levels in practice, we tested their accuracy by comparing them to war trends reported in the monthly *Latin American Regional Reports on Central America*. These reports are collected independently by a London publisher and culled directly from a variety of news sources throughout Central America. The pattern and magnitude of the violence trends reported by both sources over the ten-year period generally corroborate one another. We therefore conclude that the Lexis-Nexis measure constitutes a reliable and valid proxy for Contra violence levels.

[16] See the following reports from United States Immigration and Naturalization Service: 1975 Annual Report of the Immigration and Naturalization Service (Washington, DC, 1976), 1980 Statistical Yearbook of the Immigration and Naturalization Service (Washington, DC, 1981), 1985 Statistical Yearbook of the Immigration and Naturalization Service (Washington, DC, 1986), 1990 Statistical Yearbook of the Immigration and Naturalization Service (Washington, DC, 1991), 1995 Statistical Yearbook of the Immigration and
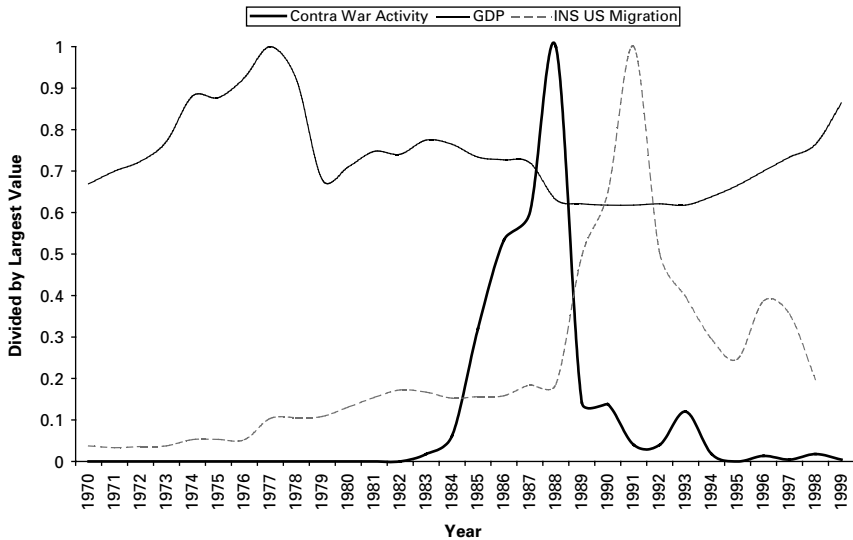
Fig. 2. *Emigration to USA by INS estimation, Contra activity, and GDP in Nicaragua.*

the *International Financial Statistics Yearbook*[17] and were expressed in constant 1977 dollars. The three series in Figure 2 – trends in US emigration, Gross Domestic Product, and the level of Contra war violence for Nicaragua (taken from Figure 1) – are each divided by their largest value to place them on a comparable scale between one and zero. It is important to note that, because the GDP measure has a smaller range than the other two measures, its variance appears smaller than what it is when graphed at this scale.

Overall, the trend for Nicaraguan GDP displays no obvious pattern of association with the level of out-migration. GDP rose slowly from 1970 through 1978 and then fell with the Sandinista Revolution in 1979. Although the economy recovered somewhat in the early 1980s it never regained a trajectory of growth and declined further throughout the rest of the decade. The economy experienced its greatest drop following the Sandinista Revolution, but hit its lowest points in the years toward the end of the Contra War. Although modest growth resumed in 1996, as of 1998 the economy still had not reached the level of production it had achieved in the last year before the Sandinista Revolution.

The INS data on Nicaraguan immigration to the United States, shown in Figure 2, replicate the patterns described earlier for Central America as a

Naturalization Service (Washington, DC, 1996), and 1998 *Statistical Yearbook of the Immigration and Naturalization Service* (Washington, DC, 1999).

[17] See International Monetary Fund's *International Financial Statistics* (Washington, DC, 2001).
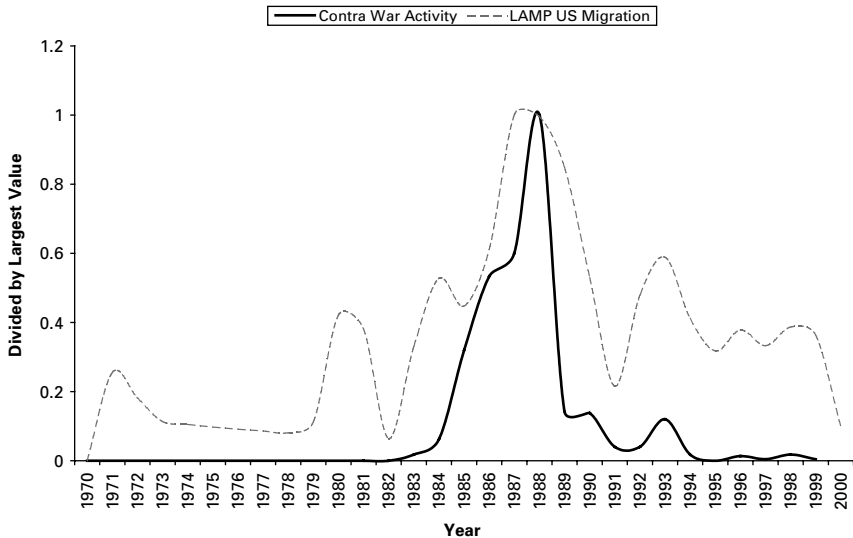
Figure 3. *Emigration to U.S. by LAMP Estimates and Contra Activity.*

whole. The dashed line indicates the number of legal immigrants admitted by the INS each year. The number is very small in the early 1970s, jumps in 1976 and then rises slowly until 1988, whereupon the number of immigrants surges during 1989 through 1992 before falling thereafter. The solid line indicates the level of Contra War activity as determined by the aforementioned measure.

The peak in Contra War activity occurred in 1988, about three years before the peak in legal immigration, which probably reflects the lag between departure and regularisation discussed earlier. Figure 3, which replaces INS counts of Nicaraguan migration with measures from our own data, illustrates the advantage of using the more time-sensitive LAMP data which additionally takes undocumented migration into account. Here, the annual number of Nicaraguan migrants to leave for the United States[18] corresponds much more closely to the Contra War measure, with both peaking in 1988.

Data and methods

Statistical trends shown in Figures 2 and 3 suggest a connection between Contra War violence and the rate of out-migration to the United States, but

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[18] This measure is the average annual number of out migrants divided by the migrants' community's population size for that year. We then convert this measurement into the same scale as that for GDP and Contra War trends.

Table 1. *Characteristics of the surveyed Nicaraguan communities*

Community	Population	Location	Interview date	House holds	Located in War Zone
La Piedad	28,000	East central Nicaragua, located near nation's capital and close to Pacific coast	2000	200	no
San Juan	13,000	Southeast Nicaragua, near Costa Rica border and close to the Pacific coast	2000	195	no
Lucena	18,500	Northeast central Nicaragua	2002	202	no
Rosario	12,000	North central Nicaragua, near the Honduras border	2002	200	no
El Real	36,000	Northeast central Nicaragua	2002	200	no

indicate little connection between US-bound migration and the performance of the Nicaraguan economy. In order to investigate the relative importance of politics and economics in determining out-migration from Nicaragua more closely, we combined the above time series data on GDP and violence with survey data gathered in five Nicaraguan communities studied by the Latin American Migration Project (LAMP).

In Central America, LAMP is associated with the Centro Centroamericana de Población of the University of Costa Rica, which undertook the binational surveys of Central American migrant sending communities with supplemental funding from the Mellon Foundation. LAMP provided technical assistance as well as additional financial support. Basic characteristics of the five communities surveyed are listed in Table 1 (fictitious place names are used to protect anonymity).

During 2000 and 2002, households in each community were randomly selected using simple random sampling methods and then interviewed using the ethnosurvey technique pioneered by the Mexican Migration Project.[19] As in Mexico, sampling frames were constructed by completing a systematic census of dwellings in each community, and ethnographic field workers interviewed randomly-chosen households in each community for a total sample of just under 1,000 households. The semi-structured questionnaire compiled basic data on the social, demographic, and economic characteristics of the household head, spouse, children and others in the household. It also gathered information for each person in the household on first and last trips to the United States, to Costa Rica, and to destinations within Nicaragua. Each household head also provided a detailed life history that

[19] See Douglas S. Massey, 'When Surveys Fail: An Alternative Approach to Studying Illegal Migration,' in Arthur A. Stone et al. (eds.), *The Science of the Self-Report: Implications for Research and Practice* (New York, 1999), pp. 145–60, and Douglas Massey and René Zenteno, 'A Validation of the Ethnosurvey: The Case of Mexico-United States Migration,' *International Migration Review*, vol. 34 (2000), pp. 765–92.

included time-varying information on labour force participation, migration, property ownership, marriage, and fertility. Of all the households, 139 had migration experience to Costa Rica and 98 had migration experience to the United States.

To consider the influence of economic versus political determinants of migration, we created an event history file that tracked each household from its formation onward during the period 1970 to 2000. In each year we measured the household's basic demography (gender of head, age of household, age of spouse [if present], children born, number of minors), along with its access to human capital (head's education and occupation, spouse's employment and education), physical capital (ownership of home, land, or business) and social capital (number of family members with prior migratory experience).[20]

During each 'household-year' a trichotomous outcome was coded: 0 if no one in the household migrated internationally, 1 if someone undertook a first trip to the United States, and 2 if someone left for the first time to Costa Rica. We coded all first trips as migration events regardless of legal status. Among US migrants, only eight per cent were documented (including two persons given official refugee status) and the rest were undocumented. Once a household experienced migration either to the United States or Costa Rica, all subsequent years were excluded.

The resulting data file is structured to analyse the risk that a sample household sent a migrant on a first trip to the United States or Costa Rica from 1970 through 1999; the comparison in each scenario is to a nonmigrant household. Costa Rica and the United States are treated as mutually exclusive destinations based on the descriptive trends we observe in our sample (although one household did send migrants to both locations in the same year, we coded it as an instance of US migration). The data revealed a marked tendency for migrants to specialise with respect to destination. Of all migratory households, 96 per cent sent migrants either to the United States or to Costa Rica but not both; and of all persons with migratory experience, 99 per cent went to just one place.

Our analytic strategy was to estimate a multinomial logistic model (a model which predicts more than two mutually exclusive outcomes, e.g. (1) migration to the USA; (2) migration to Costa Rica; (3) or no migration at all) predicting the household odds of undertaking a first trip to Costa Rica, to the United States, or no trip at all based on trends in GDP and Contra War violence while controlling for the household's demographic composition and

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[20] For more detailed information on the construction of these variables or the methodology behind the collection of the LAMP survey data, see the Latin American Migration Project web site at www.pop.upenn.edu/lamp.

its relative access to human, social, and physical capital. Given the high costs and risks of migration to the United States compared with Costa Rica, we expect US migrants to have been highly selected with respect to various kinds of capital and strongly influenced by Contra War violence. In contrast, given the comparatively low costs and risks of migration to Costa Rica, we predicted that migrants there would be less positively selected with respect to social background and more influenced by economic as opposed to political conditions.[21]

As mentioned above, economic migration to Costa Rica would be logical according to both neoclassical and new economic theories. Costa Rica has a richer and more dynamic economy than Nicaragua, boasting a much higher standard of living and a higher rate of economic growth and job creation.[22] For many in Nicaragua, a higher-paying job may be had by taking a short bus ride and surreptitiously crossing a lightly defended border (Costa Rica has no standing army). As a result, Costa Rica has long been a destination for seasonal and permanent migrants from Nicaragua, much of it clandestine, and the country now houses a large community of Nicaraguan expatriates.[23]

Table 2 shows characteristics of sample households during the average household year. During the typical year of observation, the average household had been in existence for around 12 years and had a 34-year old spouse. About a third (34 per cent) of these were headed by a woman and over half (56 per cent) had a spouse present. The typical household had 4.7 children ever born and in the average household year 2.4 were minors under the age of 18. Average education for the head was five years compared to six years for spouses; but in both cases the range was great. Among heads, 55 per cent had only a primary education whereas six per cent had at least one year of secondary schooling. Some 12 per cent of heads were unskilled manual workers and 16 per cent worked in agriculture, 17 per cent were skilled manual workers and 21 per cent were employed as professionals. Sixty per cent of households owned their own homes, 24 per cent operated a business and seven per cent owned land.

Social capital was measured by counting the number of family ties to people with migratory experience in the United States or in Costa Rica. Among immediate family and current household members (head, spouse,

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[21] However, it is important to note that none of the communities in our sample were located in direct war zones. If they had been, refugee displacement migration to Costa Rica would probably be more common than to the USA, because of the high costs and planning involved in migrating to the latter country.

[22] See United Nations, *Population, Environment, and Development* (New York, 2002).

[23] See James Wiley, 'Undocumented Aliens and Recognized Refugees: The Right to Work in Costa Rica,' *International Migration Review*, vol. 29 (1995), p. 426, and Jimmy Rosales et al., 'Nicaragüenses en el Exterior,' in Luis Rosero Bixby (ed.), *Población del Istmo* (Costa Rica, 2001), p. 240.

Table 2. *Characteristics of the sample households and of migrant households to Costa Rica and the United States from five Nicaraguan communities*

Variable	All Households	Non-Migrant Households	US Migrant Households*	CR Migrant Households*
Economic-political situation				
Gross domestic product	21.42	21.42	20.46	20.87
Contra war activity	0.11	0.11	0.21	0.08
Demographic characteristics				
Female head	0.34	0.34	0.36	0.31
Spouse present	0.56	0.56	0.56	0.55
Age of household	12.5	12.46	15.96	16.01
Age of spouse (if present)	33.61	33.56	39.6	35.58
Children ever born	4.67	4.67	4.39	4.78
Number of minors	2.37	2.37	1.66	2.12
Human capital				
Head's education	5.09	5.08	7.16	4.58
Spouse's education	6.10	6.09	7.10	6.14
Head's occupation				
Agriculture	0.16	0.16	0.07	0.14
Unskilled manual	0.12	0.12	0.07	0.16
Domestic service	0.03	0.03	0.01	0.06
Other services	0.03	0.03	0.02	0.01
Skilled manual	0.17	0.17	0.12	0.19
Professional	0.21	0.21	0.42	0.17
Unemployed/not in LF	0.17	0.17	0.18	0.13
Spouse employed	0.43	0.43	0.42	0.39
Physical capital				
Own home	0.60	0.60	0.73	0.57
Own land	0.07	0.07	0.10	0.05
Business owned	0.24	0.24	0.37	0.17
Social capital				
No. family ties to US	0.16	0.16	0.67	0.12
No. family ties to C.R.	0.11	0.11	0.03	0.26
Community traits				
La Piedad	0.21	0.21	0.29	0.19
San Juan	0.19	0.19	0.09	0.41
Lucena	0.20	0.20	0.44	0.14
Rosario	0.20	0.20	0.03	0.09
El Real	0.20	0.20	0.14	0.17
Paved road access to highway	0.55	0.55	0.54	0.81
Number of household years	18,702	18,465	98	139

* Household characteristics during year prior to first trip.

children, and others present) we counted the number who had migrated to either place prior to household formation. To this we added the number of extended family members with international migratory experience in either destination prior to the household year in question. Our network measures are cumulative rather than dichotomous because each additional migrant family member multiplies an existing network, expanding opportunities and

reducing risk for the entrance of additional migrants.[24] On average, households had 0.16 relatives with prior migratory experience in the United States and 0.11 with Costa Rican migrant experience.

We used dummy variables to control for the five communities and also include a dummy variable for whether or not the community had a paved road to the nearest highway during the household year in question. We included this variable as an indicator of a community's degree of development and connection via transportation to the outside world. In La Piedad the first paved highway connection arrived in 1985, San Juan's was in 1972, Lucena's in 1997, Rosario's in 1999 while El Real had no paved road as of the 2002 surveys. Across all years of observation, households could count on a paved road connecting them to a major highway about 55 per cent of the time.

The rightmost two columns in Table 2 show characteristics of migrant sample households during the year prior to their first international trip. In terms of demographics, international migrant households tended to be older than average, at about 16 years, compared to 13 years for a nonmigrant household. While the number of children ever born appear to be roughly comparable across all households, those sending members to the United States appear to have fewer minors (1.7 compared with 2.1 for Costa Rican migrant households and 2.4 for households generally).

As predicted, households sending migrants to the United States appeared to be more selective with regard to selected with various forms of capital. Compared to Costa Rican migrant households and households in general, those sending migrants to the United States had heads with higher education (7.2 years compared to 4.6 for households sending migrants to Costa Rica and 5.1 for households in general) and professional backgrounds were over-represented (42 per cent had a professional status head compared to just 17 per cent of Costa Rican migrant households and 21 per cent of households generally). US migrant households also had substantially higher rates of home ownership, land and business ownership compared with others. Whereas 73 per cent of US migrant households owned their houses and 37 per cent owned a business, only 57 per cent and 17 per cent (respectively) of Costa Rican migrant households did so (compared with figures of 60 per cent and 24 per cent for households in general). Ten per cent of US migrant households owned land compared to seven per cent of non-migrant households and five per cent of Costa Rica migrant households. Overall, US migrant households generally fell at the higher end of the socioeconomic spectrum while those to Costa Rica were located at the lower end. Nonmigrant households were somewhere in the middle of the two.

[24] Douglas Massey, 'Social Structure, Household Strategies, and the Cumulative Causation of Migration', *Population Index*, vol. 56 (1990), pp. 3–26.

Not surprisingly, migrant households were much richer with respect to destination-specific social capital. Whereas the average number of family ties to US migrants was just 0.12 for Costa Rican migrant households and 0.16 for all households, it was 0.67 for US migrant households. Similarly, the average number of family ties to Costa Rican migrants was 0.26 for Costa Rican migrant households, but only 0.11 for all households and just 0.03 for those sending migrants to the United States. These network differences indicate that there was little network crossover between Costa Rica migrant households and US migrant households. The significantly higher number of social network connections for US migrant households also reflects the fact that migration to the United States is of a considerably higher risk than migration to Costa Rica, necessitating a larger number of family networks to facilitate the trip.

At the community level, data indicated that households from Lucena were over-represented among those sending migrants to the United States and under-represented among those sending migrants to the Costa Rica, while households from San Juan reflected the opposite scenario. The rest of the communities were more balanced in their migrant destination ratios. La Piedad had ten per cent more US-oriented migrant households compared to Rosario and El Real, which have more Costa Rica-oriented migrant households (six per cent and three per cent respectively). Most of the trips were taken after the arrival of a paved road linking each community to the highway and this was especially true in the case of migration to Costa Rica (except in the case of El Real, which to date does not have a paved road linking it to a major highway). In years when households sent migrants to either Costa Rica or the United States, the Nicaraguan GDP was slightly lower than average, but Contra violence was only significantly elevated during years prior to the sending of migrants to the United States, as predicted.

Figure 4 indicates the cumulative frequency of US-bound and Costa Rica-bound emigration from the five communities between 1970 and 1998. Migration to the United States is indicated by the dashed line and that to Costa Rica by the dotted line. For comparison we indicate the cumulative share of Nicaraguan migrants as measured from INS statistics (the solid line). The similarity of the LAMP curve and the INS curve validates the representativeness of our data, and again provides evidence of the time-lag in INS data on admission to legal permanent residence. Between 1984 and 1990, a period that corresponds to the height of the Contra War, the cumulative frequency of out-migration measured by the LAMP is above that measured by the INS. Thereafter the INS data catch up and the two curves proceed in very close association through 1998 (the last year for which INS data are available). In contrast, the curve for cumulative Costa Rican
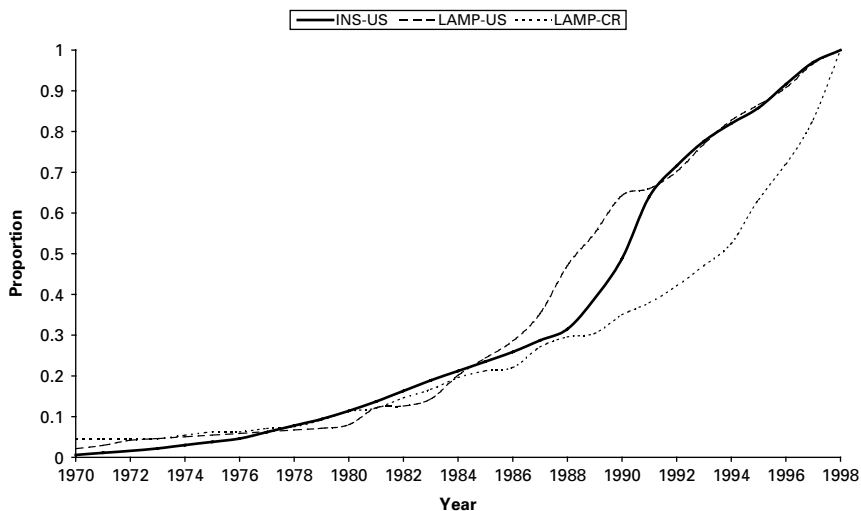
Fig. 4. *Cumulative frequency of migration to the USA (INS and LAMP data) and Costa Rica (LAMP data only).*

emigration proceeds in a slower and more regular fashion, with its greatest period of acceleration coming after 1994.

'*Political*' *or* '*economic*' *migrants?*

The time trend and the general tendencies observable in emigration from Nicaragua to the United States thus consistently suggests a link to political violence, whether one relies on data from the INS or the Latin American Migration Project. As one would expect, the more inclusive LAMP data correspond more closely with the rise and peak in violence. To the extent that economic and political influences can be realistically separated, we examine the link between economics, politics, and emigration more precisely by undertaking a discrete time event history analysis. Given the level of Contra War violence and Nicaraguan GDP in year t, we predict the likelihood that the household sent someone to the United States, sent someone to Costa Rica, or sent no one out of the country in year t + 1, controlling for each household's demographic circumstances, human capital, physical capital, and social capital in year t and basic community-level characteristics.

   Table 3, which shows the results of this analysis, provides evidence for the role of economic factors along with an even stronger role for political factors. The effect of Nicaraguan GDP on the likelihood of sending a household member to the United States or to Costa Rica was significant for both destinations, though more so in predicting migration to Costa Rica. In general, the higher the GDP in Nicaragua, the lower the odds of migrating

Table 3. *Additive event history analysis predicting migration to the USA and Costa Rica versus staying at home: households from five Nicaraguan Communities*

| Independent Variables	Migration to US		Migration to Costa Rica	
	B	SE	B	SE
Intercept	−4.709***	1.305	−4.043***	0.957
Economic-political situation				
Gross domestic product	−0.094*	0.047	−0.086**	0.035
Contra war activity	1.119***	0.336	−1.186*	0.517
Demographic characteristics				
Female head	0.204	0.401	−0.254	0.298
Spouse present	−0.746	0.839	0.526	0.599
Age of household	0.023	0.018	0.059***	0.015
Age of spouse (if present)	0.032*	0.015	−0.019	0.013
Children ever born	0.021	0.050	0.040	0.039
Number of minors	−0.197**	0.072	−0.048	0.051
Human capital				
Head's education				
<6 years	–	–	–	–
6–9 years	0.689*	0.276	0.008	0.219
9–12 years	0.777*	0.349	−0.253	0.326
13 + years	1.286***	0.373	−0.391	0.511
Spouse's education	−0.009	0.037	0.021	0.033
Head's occupation				
Unskilled manual	–	–	–	–
Agriculture	−0.158	0.470	−0.277	0.297
Domestic service	0.502	1.070	0.079	0.446
Other services	0.251	0.761	−1.089	0.735
Skilled manf.	0.238	0.387	−0.175	0.256
Professional	0.812**	0.313	−0.374	0.277
Unemployed/not in LF	0.612	0.385	−0.634*	0.320
Spouse employed	−0.321	0.307	−0.082	0.253
Physical Capital				
Own home	0.319	0.243	−0.435*	0.196
Own land	−0.001	0.002	0.001	0.001
Own business	0.403[+]	0.232	−0.337	0.247
Social Capital				
No. family ties to US	0.405***	0.075	−0.265	0.190
No. family ties to C.R.	−1.020[+]	0.564	0.133	0.134
Community Traits				
Community one	–	–	–	–
Community two	−1.310**	0.404	0.681**	0.258
Community three	0.135	0.374	0.583	0.389
Community four	−2.194**	0.683	0.301	0.451
Community five	−0.586[+]	0.345	−0.201	0.303
Paved road access to highway	0.022	0.371	1.216***	0.369
Number of household years	18,702			
Chi square	2,573			

[+]p<.10, *p<.05, **p<.01, ***p<.001.
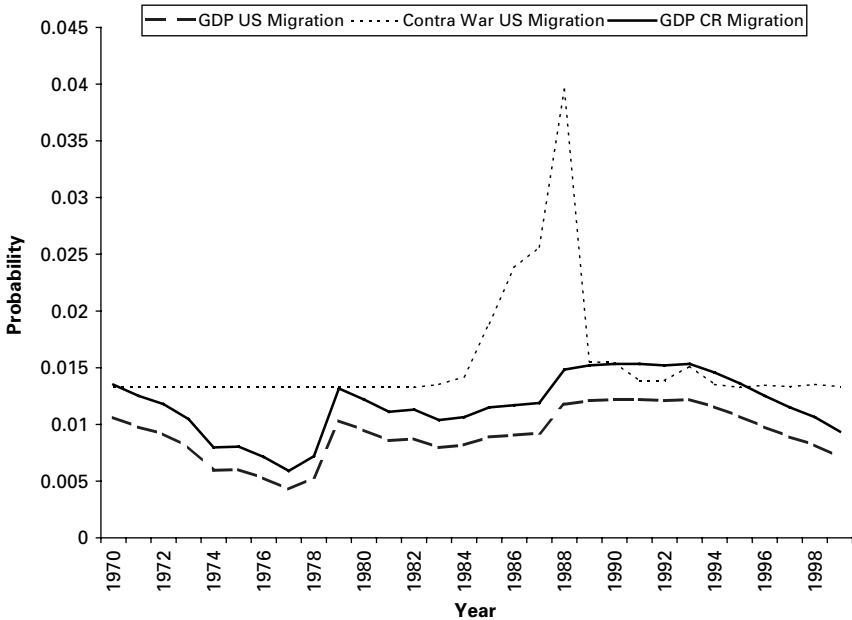
Fig. 5. *Probability of migration: economic vs. political model.*

either to Costa Rica or the United States. Conversely, the lower the level of economic production in Nicaragua, the greater the odds of out-migration to both places. Thus, household migratory behaviour is indeed influenced by trends in the national economy.

Contra War activity, however, appeared to shape migratory processes to an even greater degree, though in opposite directions for migration to Costa Rica compared to the United States. Whereas the effect of the war on the likelihood of US-bound migration is strongly positive and significant, Contra War violence had a strong and significantly negative effect on the probability of migrating to Costa Rica. In other words, during times of rising Contra military activity, Nicaraguans from our five sample communities were more likely to migrate to the United States and less likely to migrate to Costa Rica, even when national economic circumstances held constant. Hence, controlling for all of the variables in the model, when Contra violence levels were at their midpoint, households were 40 per cent more likely to migrate to the United States; and at the height of Contra activity the likelihood more than tripled. On the other hand, households were 70 per cent less likely to migrate to Costa Rica at the height of the war.

Figure 5 shows the effect of economic and political influences on probabilities of migration. The dashed line shows the predicted effect of GDP on the likelihood of migrating to the United States and the solid line indicates

the effect of GDP on the probability of Costa Rica migration. The dotted line shows the predicted effect of Contra War activity on the probability of US migration. Predicted probabilities were generated by inserting mean values into the equation of Table 3 and letting the variable in question (GDP or Contra War violence) vary across time.

This graph illustrates two points. The first is that the intensification of the Contra War itself was much more powerful in predicting migration to the United States than the related deterioration of the Nicaraguan economy. Second, the fall in GDP has more important in predicting migration to Costa Rica than to the United States. During the period of the greatest escalation of Contra War conflict, between 1986 and 1988, the annual probability of migrating to the Unites States rose to 0.04. In comparison, during the period when the Nicaraguan economy had deteriorated to its lowest level, the probability of US migration rose only to about 0.01. The probability of migrating to Costa Rica during this time period was slightly higher, at 0.015.

In accord with previous research,[25] we expected Nicaraguan migration to the United States to be more strongly selected with respect to various kinds of capital than migration to Costa Rica, and generally our findings supported this. Whether or not a household sent a migrant to the United States was strongly and positively predicted by having relatives with US migrant experience (social capital), by having a head with a professional occupational status and a secondary school education (human capital), by the older age of a spouse and, marginally, by business ownership (financial capital). In addition, US-bound migration was negatively correlated with having family ties to Costa Rica, by residence in San Juan, Rosario and El Real, and by the presence of minors in the household.

In contrast, the likelihood of migration to Costa Rica was not influenced by class at all, and where there was any evidence for socioeconomic selectivity it was in the opposite direction of that observed for migrants to the United States. Costa Rica migrant households, for example, were less likely than non-migrant households to own their homes. In addition, their households were older and their heads were less likely to be unemployed or retired. Migrants to Costa Rica were most likely to reside in San Juan and migration trips were strongly correlated with the existence of a paved road connecting a community to a major thoroughfare. Unlike US migrant households, destination family ties had no impact on the likelihood of migrating to Costa Rica, suggesting the lesser need for a social support system when migrating to a relatively low-risk destination.

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[25] See Jones, 'Causes of Salvadoran migration to the United States,' pp. 193–4; Funkhouser, *Immigration and the Workforce: Economic Consequences for the United States and Source Areas*, pp. 139–42, and Funkhouser, 'Migration from Nicaragua: Some Recent Evidence', pp. 1211–2.

The estimates reported in Table 3 are thus consistent in suggesting that Nicaraguan migration to Costa Rica was driven by national economic conditions and was not very selective with respect to human, physical or social capital. To the extent that there was selection, it appears to have been largely demographic, favouring older households from a community located closer to the Costa Rica border. Also, in line with economic migration, which is generally more circular and frequent in nature, Costa Rica-bound migration was strongly correlated with the existence of a paved road linking the community to a major thoroughfare.

Migration to the United States seemed to be more highly selective with respect to various forms of capital and, while also linked to the vicissitudes of the economy, was more strongly related to the intensity of political violence. Yet if the underlying process of US migration was highly selective of households with access to human, physical, and social capital, then we would not expect all segments of society to be equally influenced by an upsurge in political instability. It may have been that the Contra conflict acted primarily on those people who were prone to migrate (those with capital assets), making them that much more likely to leave during periods of Contra warfare and political strife. As a purely additive model, Table 3 cannot address this possibility.

To consider whether an upsurge of Contra activity selectively heightened the propensity of capital-rich households to migrate, we interacted the Contra violence indicator with dummy variables for college education, professional status, land ownership, and number of family ties to the United States. Only the interaction of Contra activity with family ties proved to be statistically significant, justifying a re-estimation of the model to include this relationship. The results of this analysis are presented in Table 4.

The coefficients under the 'Economic-Political situation' heading show the main effects of Contra violence. The panel below it, under the 'Political interaction' heading, show the coefficients corresponding to the significant interaction between violence and the number of US family ties. These estimates indicate that households with family ties to current or former US migrants were more likely to migrate in general, but they were even more likely to do so during periods of civil strife. The same interaction had no effect on the likelihood of migration to Costa Rica, however, which continued to be shaped primarily by circumstances in the national economy.

To demonstrate the power of the interaction between Contra activity and social capital, in Figure 6 we held all variables constant at the mean and plotted the annual probability that a household with a maximum number of US family ties sent a migrant on a first trip to the United States between 1970 and 1999. First we generated the predicted probability using the additive model in Table 3 and then using the interactive model in Table 4. Each

Table 4. *Interactive event history analysis predicting migration to the USA and Costa Rica versus staying at home: households from five Nicaraguan Communities*

Independent Variables	Migration to US		Migration to Costa Rica	
	B	SE	B	SE
Intercept	−4.757***	1.303	−4.041***	1.120
Economic-political situation				
Gross domestic product	−0.094*	0.046	−0.086*	0.035
Contra war activity	0.852*	0.380	−1.143*	0.525
Political interaction				
Contra War*US family ties	0.387*	0.200	−0.596	1.710
Demographic characteristics				
Female head	0.215	0.401	−0.254	0.298
Spouse present	−0.705	0.841	0.526	0.599
Age of household	0.023	0.018	0.059***	0.015
Age of spouse (if present)	0.032*	0.015	−0.019	0.013
Children ever born	0.024	0.049	0.040	0.039
Number of minors	−0.205**	0.072	−0.048	0.051
Human capital				
Head's education				
<6 years	–	–	–	–
6–9 years	0.697*	0.276	0.008	0.219
9–12 years	0.780*	0.350	−0.253	0.326
13 + years	1.246***	0.377	−0.391	0.511
Spouse's education	−0.008	0.037	0.021	0.033
Head's occupation				
Unskilled manual	–	–	–	–
Agriculture	−0.096	0.470	−0.277	0.297
Domestic service	0.571	1.070	0.080	0.446
Other services	0.326	0.764	−1.090	0.735
Skilled manf.	0.281	0.391	−0.173	0.256
Professional	0.856**	0.317	−0.374	0.277
Unemployed/not in LF	0.661	0.389	−0.633*	0.319
Spouse employed	−0.321	0.307	−0.082	0.253
Physical capital				
Own home	0.319	0.243	−0.435*	0.196
Own land	0.000	0.002	0.001	0.001
Own business	0.405[+]	0.232	−0.337	0.247
Social Capital				
No. family ties to US	0.337***	0.090	−0.232	0.204
No. family ties to C.R.	−1.059[+]	0.578	0.133	0.134
Community traits				
Community one	–	–	–	–
Community two	−1.310**	0.404	0.681**	0.258
Community three	0.181	0.374	0.584	0.389
Community four	−2.166**	0.683	0.300	0.451
Community five	−0.602[+]	0.346	−0.201	0.303
Paved road access to highway	0.059	0.371	1.215***	0.369
Number of household years	18,702			
Chi square	2,570			

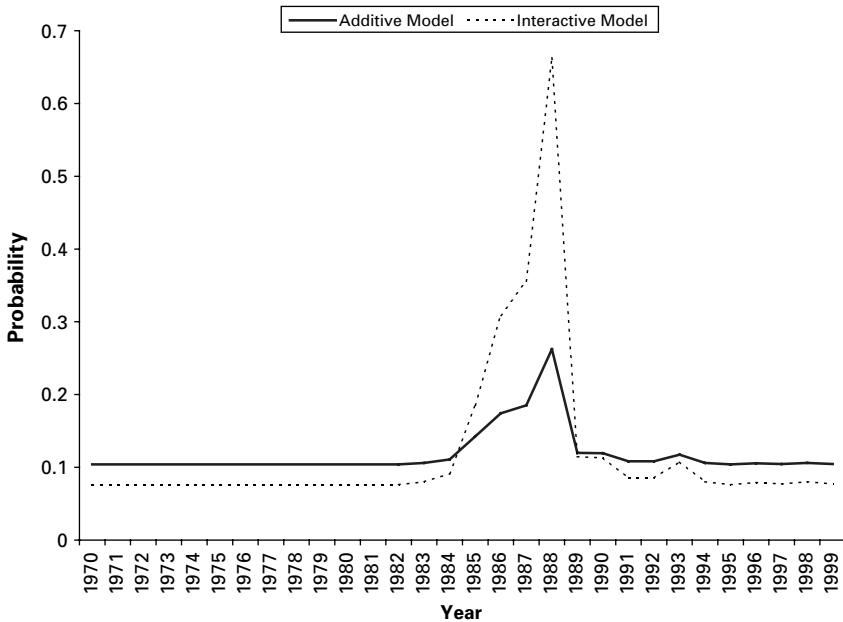[+]p<.10, *p<.05, **p<.01, ***p<.001.

Fig. 6. *Probability of migrating to the USA with maximum family ties.*

model shows social capital as a constant with Contra activity levels varied according to year.

The solid line in Figure 6 shows the probability predicted by the additive model. As can be seen, the likelihood that a household with multiple US family ties sent someone to the United States was constant at 0.11 from 1970 to 1981, then rose gradually to around 0.19 in 1987. It then jumped to 0.26 in 1988. After falling to 0.12 in 1989, it stabilised at around 0.10 for the remainder of the decade. The dashed line in the Figure shows the trend in predicted probabilities when Contra violence is allowed to interact with the number of US family ties. In this case, the probability is flat at around 0.08 from 1970 through 1982 then rises to 0.36 in 1987 before increasingly rapidly to 0.66 in 1988, the peak year of Contra activity. It then falls to 0.08, rebounds somewhat, but after 1994 returns to stay at around 0.08. In other words, among Nicaraguan households with access to substantial social capital, the first jump in Contra War violence in 1985, for example, brought about a twenty-fold increase in the odds of out-migration to the United States.

We also plot the interactive effect of Contra activity and social capital in the reverse scenario, when Contra violence is held fixed at its height in 1988 and US networks are permitted to fluctuate. As in the previous graph, Figure 7 shows both the additive model and the interactive model. The solid
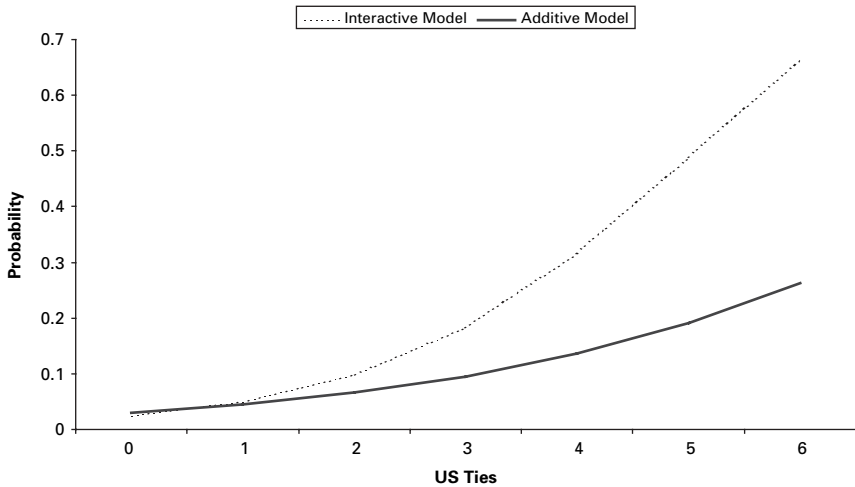
Fig. 7. *Probability of migrating to the USA when contra activity is at its height: additive vs. interactive models.*

line representing the additive model shows that when a household had one US family tie, the probability of migration to the United States was 0.05. With maximum number of network ties (six in our sample), the probability increases to 0.26. Upon allowing social capital to interact with Contra activity, the dashed line representing the interactive model shows that when networks were few (one or zero), the probability of migrating was about the same as in the additive model. But when a migrant household had more networks, the probability of migration increased exponentially. With three family ties, for example, the probability of migration in the interactive model compared to the additive model increased by twice the amount; a maximum number of family ties tripled the probability.

The Meaning of Political Migration

The evidence presented here adds to the debate on the economic versus political motivation of migration. When it comes to the strict definition set forth by the INS, our findings on Nicaraguan migration during the Contra War illustrate that even though migration was economically motivated in part, it was much more strongly linked to the intensification of the Contra conflict. Our study also overcomes the shortcomings of earlier work, such as limited degrees of freedom, limited controls, and a reliance on INS data. We merged life history data from the Latin American Migration Project with national-level data on political conflict and GDP to study the process of out-migration from five communities in Nicaragua between 1970 and 1999. We predicted that migration to Costa Rica was more likely to fit an economic

model whereas migration to the United States would be more indicative of a political response to US military intervention in that country. Our results suggested that while migration from our five communities to Costa Rica was connected to economic trends in Nicaragua, it did not appear to be a direct response to the intensification of the Contra War. By contrast, US-bound migration was more strongly related to the intensity of Contra War violence (as indicated by the annual count of news articles on the subject appearing in the international press). Migration to the United States was quite highly selective of human, social, and physical capital, and we found that social capital in particular interacted strongly with levels of Contra violence in predicting US-bound migration. Although the odds that a household would send someone to the United States during the peak of the Contra War were high, they were much higher when the household also had a strong network of family ties to the United States.

In sum, emigration from Nicaragua to the United States was somewhat 'economic' in its positive relationship with low levels of GDP in the early 1990s. But beyond its economic relationship, it was even more 'political' in that it was much more strongly determined by underlying trends in Contra War activity, peaking at its highest rate in 1988 during the height of the war. Emigration to Costa Rica was 'economic' in that it was predicted mainly by trends in Nicaraguan economic performance. During periods of acute conflict, conditions were apparently such as to induce better-off residents to draw on social capital resources they had at their disposal and flee to the United States. During periods of economic stagnation, in contrast, Nicaraguans from a wide variety of class backgrounds headed for neighbouring Costa Rica to manage risks, overcome market failures, or enhance family incomes.

Thus, it was not the direct threat of violence that drove members of the upper middle classes to the United States. Nor was it the coming to power of a Marxist regime. None of the communities we studied was *directly* touched by warfare or violence. In the immediate wake of the triumph of the Sandinista Revolution in 1979 the odds of migration to the United States did not increase significantly, and they increased very slowly until 1986. According to our data, few people appeared to be fleeing communist persecution during the first seven years of the Sandinista regime. It was only when the US-sponsored Contra War accelerated after 1983 that people appeared to abandon Nicaragua in relatively large numbers – not because of direct exposure to violence but because of a broader feeling of vulnerability owing to the systematic destabilisation of the Sandinista government and Nicaraguan society generally by the US-backed incursion. Moreover, since we hold economic conditions constant, the rise in departures cannot be attributed to the economic effects of the Contra War, but rather to the social

and political consequences of the violence. Although our analysis does not allow us to identify what, exactly, were the proximate political circumstances that induced so many people to leave for the United States, we are reminded of a remark made by Alejandro Portes during a lecture at the 1992 meeting of the Sociological Research Association. After noting a strong tendency for immigrants to come from countries where the United States had sponsored direct or indirect military incursions, he suggested that 'what goes around comes around.' In this article, we have shown that an elevated rate of out-migration to the United States was a direct consequence of the Reagan administration's military incursion to topple the Sandinista regime. Ironically, those most likely to leave were those with the most social, human, and financial capital at their disposal, but they chose to migrate not just because the economy was in decline, but because of the broader climate of fear and insecurity created by the US-sponsored counter-revolutionary war.