Demography (2015) 52:989–1015
DOI 10.1007/s13524-015-0396-z

The Effects of Gendered Social Capital on U.S. Migration: A Comparison of Four Latin American Countries

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Published online: 8 May 2015

Abstract This article contributes to understandings of gendered social capital by analyzing the effects of gendered ties on the migration of men and women from four Latin American countries (Mexico, Costa Rica, Nicaragua, and the Dominican Republic) to the United States. The research theorizes the importance of strong and weak ties to men and women in each sending country as a product of the gender equity gap in economic participation (low/high) and incidence of female-led families (low/high). The findings reveal that ties to men increase the odds of migration from countries where gender equity and incidence of female-led families are low, while ties to women are more important for migration from countries where gender equity and female-led families are high. Previous research on migration and social capital details the importance of network ties for providing resources and the role of gender in mediating social capital quality and access to network support. Results reveal that not only are different kinds of ties important to female and male migration, but migrants from different countries look to different sources of social capital for assistance.

Keywords Gendered migration · Social capital · Social networks · Latin America

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Introduction

In this research, we extend understandings of gendered social capital by comparing the effects of gendered networks on the migration of men and women from four Latin American countries (Mexico, Costa Rica, Nicaragua, and the Dominican Republic) to the United States. Network ties are a form of social capital that provides potential migrants with access to resources in their sending and receiving countries, but not all forms of social capital have equal value for migration (Fussell 2004, 2010; Fussell and Massey 2004). Male and female migrants access social capital differently, and gender shapes the kinds of resources available through network contacts (Cerrutti and Gaudio 2010; Curran et al. 2005; Grasmuck and Pessar 1991; Kanaiaupuni 2000). Prevailing gendered institutions in sending countries influence men and women's access to social capital and, subsequently, their odds of migrating to the United States. By analyzing gendered migration from four countries to the United States, we address the following questions: How do gender and the sending country influence the effects of social capital on migration, and how does the gender composition of migrant social capital influence the odds of migration?

We conceptualize gender as a dynamic social structure that forms a building block of major social institutions and processes (Acker 1992; Martin 2003; Risman 2004). Based on research suggesting that gender hierarchies and distributions of power influence both motivations and resources for migration, we view migration as a "gendered institution" (Grasmuck and Pessar 1991; Hondagneu-Sotelo 1992). Although existing research details the general importance of social capital for migration, we examine how gendered social capital produces different migration outcomes for men and women in particular national contexts (Garip 2008; Massey and Zenteno 1999). Using logistic regression, we analyze the effects of gendered household and community networks on the odds of migration by gender and across countries.

Theoretically, our findings illuminate how gender equity in the economy and typical family structures in sending countries influence the kinds of gendered social capital used for migration. There are many ways to measure the gendered nature of social structures, but we focus on two in particular: the reported gender equity gap in economic participation and typical family patterns in the country of origin (Hausmann et al. 2009; Massey et al. 2006). These measures influence the value of gendered social capital for migration. Empirically, we analyze the relative importance of strong and weak ties to men and women for the odds of migration. We also consider the effects of frequency of trips and duration of stay in the host country as well as the volume of household and community ties to migrants (proxies for strong and weak ties), distinguishing between male and female forms of each.

Networks and Migration

Previous research on networks and migration has found that connections to individuals with migration experience increase the likelihood of migration (Davis et al. 2002; Massey 1987; Massey and España 1987). As the number of ties between sending and receiving societies grows, the cost of international migration declines because network ties provide potential migrants with practical assistance in preparing to migrate as well

as leads and contacts for employment and social services in the receiving country. However, familial networks and community networks provide different resources (Curran and Rivero-Fuentes 2003; Massey and Espinosa 1997; Tilly 2007; Winters et al. 2001). More specifically, strong ties and weak ties are different forms of social capital that influence the probability of migration.

Strong ties in the form of close friends and family members involve effort, trust, and financial commitment (Wellman 1990). Strong ties to previous migrants in the sending country provide information about how to migrate, and strong ties in the host country ease the transition into a new social environment and provide access to food, shelter, and information about employment, health care, and social services (Aguilera and Massey 2003; Amaeudo-Dorantes and Mundra 2007; Boyd 1989; Munshi 2003). Thus, we hypothesize generally that ties to family members of either gender who have previously migrated will increase the odds that an individual will migrate from all sending countries:

> *Hypothesis 1A* (H_{1A}): A greater number of household ties to previous migrants will increase the odds of migration.

Weak ties to members of a broader community are also important for migration because expansive networks of acquaintances tend to be more diverse than strong ties (for example, in terms of age, education, and occupation), thus providing access to a wider range of resources and opportunities (Granovetter 1973). Weak ties can especially supply resources for migration in the absence of strong ties (Kanaiaupuni 2000; Winters et al. 2001). Previous research on networks and migration has found that the cost of international migration declines for prospective migrants as the number of ties between sending and receiving societies grows (Massey 1987; Mines and Massey 1985). Over time, migration flows become increasingly self-sustaining with each additional person in the stream (Massey and Zenteno 2000). For this reason, we hypothesize that community networks provide nonredundant social capital that facilitates migration:

> *Hypothesis 2A* (H_{2A}): A higher proportion of migrants in the community will increase the odds of migration.

Gender and Network Social Capital

Although the strength of ties affects the kinds of available resources, so do broader social structures, such as gender. Research shows that (1) men and women access networks differently; (2) the gender composition of a network influences its available resources; and (3) network effects on migration differ for men and women (Boehm 2012; Erickson 2004; Grieco and Boyd 1990; Hondagneu-Sotelo 1994a; Pessar 1999). Gender influences cultural expectations about migration, and the degree of gender inequality shapes the resources that men and women in the same household can obtain through their networks (Hagan 1998; Menjivar 2006; Pedraza 1991; Zlotnik 1995).

Gender significantly shapes access to opportunities in sending countries, and the gender of household ties has important effects on migration. In families where men are the primary breadwinners, male migrants in the household often make the decision to

migrate and encourage the migration of other family members. Male network ties also provide resources for finding employment in the receiving country. On the other hand, female networks provide other types of resources, including social support and information about housing, food, and healthcare, thus helping new migrants to establish themselves in the host country (Hagan 1998; Ho 2006; Hondagneu-Sotelo 1994b; Moore 1990). Female kin are also more likely to provide emotional support and physical care to both male and female kin, thus facilitating transitions into new and unfamiliar living situations (Ho 2006; Wellman 1990). Thus, we hypothesize,

> *Hypothesis 1B* (H_{1B}): The effects of household ties to migrants will differ depending on whether they are male or female ties.

Given that women do the majority of family work in most societies and are often less integrated into paid employment, strong ties within the household are especially important for women's migration. These household ties reduce risks and increase social, emotional, and economic support (Hagan 1998; Ho 2006; Willis and Yeoh 2000). Also, in countries with low gender equity in the economy, women often have few weak ties with others in their community that can provide valuable social capital for migration, while men's higher economic position strategically places them to meet different kinds of people and integrate them into their networks. This leads men to have more weak ties, especially to other men who are coworkers, friends, and advisors (Erickson 2004; Hagan 1998; Moren-Cross and Lin 2006). For example, research on Mayan culture has revealed that women's confinement to domestic roles limits their weak ties with others in their community, while men benefit from weak ties that they develop through work and extracurricular activities (Hagan 1998). Weak ties to men can then provide access to diverse information, opportunities, and other potential contacts that facilitate economic opportunities in the home country, and resources for migration if there are few opportunities at home, especially for male potential migrants (Granovetter 1973; Moore 1990):

> *Hypothesis 2B* (H_{2B}): Community networks of male migrants will increase the odds of migration, especially for men.

The Gendered Structural Context

Most migrants move to obtain employment that will support their families and improve their living conditions, and out-migration tends to increase when there are better economic opportunities in the host country than in the sending country (Lindstrom 1996). To theorize how gendered social capital is likely to influence migration from different countries, we examine the intersection of two structural contexts: the incidence of female-led families and gender equity in economic participation. Gendered economic opportunities and family structures shape the gender division of labor in the workplace and the home, both of which influence the social capital resources available to potential migrants. Table 1 classifies the four sending countries of this study by gender equity in economic participation (high and low) and incidence of female-led families (high and low).

Table 1 Indicators of gender equity in economies and families across countries

	Gender Equity in Economic Participation Hausmann et al. (2009)	
Incidence of Female-Led Families (Massey et al. 2006)	Low	High
Low	Mexico	Costa Rica
High	Nicaragua	Dominican Republic

Using the World Economic Forum's 2009 gender equity gap rankings (the gap in equality of opportunity between men and women), Table 1 classifies Mexico and Nicaragua as *Low* in gender equity, and Costa Rica and the Dominican Republic (DR) as *High* in gender equity. Gaps in gender equity throughout these four Latin American countries are much larger than in the United States (17 of 134 countries): Mexico (114), Nicaragua (104), Costa Rica (84), and the DR (67) (Hausmann et al. 2009).[1]

Table 1 also classifies the four sending countries according to their incidence of female-led families (Donato 2010). The DR and Nicaragua have a *High* incidence of female-led families, representing roughly 30 % of families in both countries (Barrow 1996; Ho 1999; Massey et al. 2006). Couples in Nicaragua and the DR often have consensual unions, and men and women commonly live separate lives and maintain loose and unstable bonds. In contrast, Mexico and Costa Rica have a *Low* incidence of female-led families, with only 13 % of Mexican households and 22 % of Costa Rican households headed by women (Massey et al. 2006). In these countries, the male breadwinner–female homemaker division of family labor is the cultural norm (Oliveira 1998; Stromquist 1998). With this framework, we classify the four countries with respect to gender equity in economic participation/incidence of female-led families as follows: Mexico (Low/Low), Costa Rica (High/Low), Nicaragua (Low/High), and the DR (High/High). This suggests differential use of gendered social capital in each country, based on the interaction of gender dynamics in the home and economy.

Migration From Four Latin American Countries

The four sending countries have distinct migration histories. Mexico, the only country to share a border with the United States, has been sending labor-based migrants to the United States since at least the beginning of the twentieth century (Massey et al. 2003). Because Mexicans have typically exceeded their quota for legal immigration, a substantial proportion of immigrants from Mexico are unauthorized (Fussell 2010; Riosmena 2010).

Unauthorized migration is a gendered process in that it involves many risks that men are more likely to assume than women. Also, men in Mexico are more likely than women to work outside the home, giving men greater access to opportunities and

[1] We use the 2009 Global Gender Gap Report because 2009 was the first year for which the gender equity gap for economic participation and opportunity subindex was comparable for all five countries. The subindex is a weighted composite of five measures, and data for two measures were not available for Nicaragua for earlier years.

information in the labor market and economy (Hausmann et al. 2009). Gender-traditional family patterns are maintained in migration: women tend to follow their husbands, partners, or other relatives from Mexico to the United States as "tied movers" (Kandel and Massey 2002; Mahler 1999; Massey et al. 2006). Consequently, ties to men are likely to be important both for navigating opportunities in Mexico and for migrating in search of opportunities abroad. Men have traditionally led the process of migration from Mexico to the United States, in a culture of migration that encourages young men to see migration for employment in the United States as part of the life course, and that induces women to migrate for family unity (Donato 2010; Kandel and Massey 2002).

Alternatively, Costa Rican migration to the United States is more sparse, more recent, and more often documented. Fewer than 70,000 Costa Ricans have immigrated to the United States since 1931, and few have entered the country without legal documentation (Morrissey 2005; OECD 2009). Costa Rica also ranks higher in gender equity than Mexico because it has a high literacy rate, educational gender parity, and greater access to economic opportunities for women (Hausmann et al. 2009). However, like Mexico, Costa Rica is dominated by married-couple families with a relatively traditional gender division of labor (Hausmann et al. 2009). Men are still typically the sole or primary breadwinners, and only 47 % of women participate in the paid labor force (Hausmann et al. 2009). Consequently, weak ties to men are likely to be more important than ties to women for accessing resources and opportunities in the marketplace.

Strong ties to men are also important for potential migrants from Costa Rica. Similar to Mexico, Costa Rican migration is typically male-led, and Costa Rican women tend to migrate as tied movers rather than independently (Massey et al. 2006). As a result, married women are more likely to migrate for family unity than single or married women are to migrate for economic opportunities. Thus, typical family structures in Costa Rica mean that strong ties to men will facilitate migration for both men and women, but weak ties are more likely to promote migration for men. For Mexico and Costa Rica, we hypothesize,

> *Hypothesis 3* (H3): As tied movers in countries with more traditional family patterns, married women will be more likely to migrate than unmarried women.

Migration to the United States from the DR and Nicaragua differs from Mexican and Costa Rican migration in two important ways: political turmoil in the home country was the primary motivation for initial migration streams, and migration from both countries is more female-led (Donato 2010). One possible reason for more female-led migration patterns is the greater prevalence of consensual unions and female-headed families with children, which encourage women to migrate for economic opportunities (Barrow 1996; Massey et al. 2006). Women also have stronger economic positions in these countries, both of which have high literacy rates and more women than men enrolled in secondary or tertiary education (Hausmann et al. 2009). Thus, Nicaragua and the DR contain large populations of women with educational qualifications for employment.

However, Nicaragua ranks just behind Mexico in gender equity in economic participation (*Low*), with the third largest gap of the four countries. Although girls

exceed boys in educational attainment, significant economic inequality remains, with only 45 % of adult women participating in the labor force and a gender pay ratio of 58 % (Hausmann et al. 2009). This significant inequality in the workforce suggests that weak ties to women are unlikely to provide valuable resources for employment or for opportunities to migrate. At the same time, many women in Nicaragua need to provide economically for their children as primary breadwinners. The lack of good economic opportunities for women in Nicaragua may create a disparity between needing to work and opportunities to work, producing a desire to migrate.

In contrast, the DR is *High* on both economic equity and the incidence of female-led families. Women in the DR earn better relative wages (66 % as much as men for similar work) than women in other Latin American countries, and 60 % of DR women participate in the labor force. The DR has the smallest gender equity gap in economic participation across the four countries (67 of 134), although female unemployment is high (28.8 %) (Hausmann et al. 2009). As a result, many women in the DR have high motivation to seek employment opportunities and economic security elsewhere, especially if they are also primary breadwinners. In this context, both weak and strong ties to women are likely to provide valuable resources for finding economic opportunities, including opportunities abroad. Examining the impact of gender structures in households and economies on the use of social capital in migration from these four countries, we derive the following hypotheses:

> *Hypothesis 4A* (H_{4A}): Strong and weak ties to women will increase the odds of migration in countries with high gender equity and a high incidence of female-led families.
> *Hypothesis 4B* (H_{4B}): Strong and weak ties to men will increase the odds of migration in countries with low gender equity and a low incidence of female-led families.

Migration Experience as a Source of Social Capital

Although the number of weak and strong ties to migrants is important, the quality of ties can vary depending on how frequently or how intensively network ties activate migration-related resources. Some migrants actively move back and forth between host and sending countries, while some spend extended periods in the host country. The frequency of migration trips and length of time spent in the United States represent different kinds of migration experience that influence the resources available through network ties. Frequent trips between sending and host countries allow migrants to maintain ties in their communities of origin that facilitate future migration of other community members, even when migrants settle permanently in the host country (Winters et al. 2001). As a result, strong ties to previous migrants that make numerous trips between countries should increase the odds of migration (Davis et al. 2002; Massey and Zenteno 1999; Winters et al. 2001).

Extended periods in the receiving country can also cultivate new resources that facilitate the settlement of other migrants by establishing stronger ties and more resources in the host country, although very long periods in the host country can also encourage assimilation and acculturation (Curran et al. 2005; Massey et al. 2006; Portes

and Stepick 1993). We argue that frequency and duration of migration trips represent different kinds of *migration experience* that enhance the value of network ties as individuals cultivate social capital in sending and host countries, respectively. This leads to the following hypothesis:

> *Hypothesis 5* (H_5): Strong ties to migrants who make frequent trips between the United States and their community of origin or who spend more time in the United States will increase the odds of migration.

Data and Methods

Table 2 summarizes our hypotheses. To test these hypotheses, we use data from the 2010 Mexican Migration Project (MMP) and the 2010 Latin America Migration Project (LAMP).[2] The MMP and LAMP data collection used an ethno-survey approach, which combined ethnographic methods with representative survey sampling. In Mexico, interviewing occurred during the winter months, when seasonal migrants return home. Because seasonal migration is less common in the LAMP countries, interviewing occurred throughout the year.

The 2010 MMP data set contains information about 128 communities in 22 states in Mexico between 1982 and 2009. The sample size for each community is 200 unless the community has less than 500 residents. The LAMP data come from surveys of households in seven communities in the DR between 1999 and 2000, seven in Costa Rica between 2000 and 2002, and nine in Nicaragua between 2000 and 2002. To make the MMP data comparable with the LAMP data, we use MMP data from households in 25 sending communities surveyed between 1999 and 2002, instead of households from all possible years collected (see Sana and Massey 2005).

Study Population

We limit our analysis to adult offspring of the household head who were aged 17–40 between 1999 and 2002. These restrictions are similar to those used by Curran and Rivero-Fuentes (2003), with the goal of including individuals in the sample who are most at risk for migration and most likely to be influenced by family networks. A limitation of this strategy is that there are no data on employment status, parental status, or number of children for these individuals. However, sampling the primary adults in the household (the parents) would limit the measures of migrant network ties in the data (Curran and Rivero-Fuentes 2003). In contrast to Curran and Rivero-Fuentes (2003), we extend the age range from 17–25 to 17–40 and control for age to account for potential differences in migration patterns between Mexico and the other three countries. A comparison of models using 17- to 25-year-olds and 26- to 40-year-olds revealed no significant differences in effects between these age groups. We also include

[2] The MMP and LAMP are both collaborative research projects based at Princeton University and the University of Guadalajara. The data are available online (http://mmp.opr.princeton.edu/ and http://lamp.opr.princeton.edu/).

Table 2 Hypothesized migration differences by forms of social capital

	Hypothesis	Variables	Direction of Effect
H_{1A}	A greater number of household ties to previous migrants will increase the odds of migration.	No. of male migrants in household No. of female migrants in household	+
H_{1B}	The effects of household ties to migrants will differ depending on whether they are male or female ties.	No. of male migrants in household No. of female migrants in household	~=
H_{2A}	A higher proportion of migrants in the community will increase the odds of migration	Log_2(% male migrants) Log_2(% female migrants)	+
H_{2B}	Community networks of male migrants will increase the odds of migration, especially for men.	Log_2(% male migrants)	+
H_3	As "tied movers" in countries with more traditional family patterns, married women will be more likely to migrate than unmarried women.	Female × Married → in Mexico & Costa Rica	+
H_{4A}	Strong and weak ties to women will increase the odds of migration in countries with high gender equity and a high incidence of female-led families.	No. of female migrants in household Log_2(% female) → potential migrants from Dominican Republic	+
H_{4B}	Strong and weak ties to men will increase the odds of migration in countries with low gender equity in the economy and a low incidence of female-led families.	No. of male migrants in household Log_2(% male migrants) → potential migrants from Mexico	+
H_5	Strong ties to migrants who make frequent trips between the United States and their community of origin or who spend more time in the United States will increase the odds of migration.	Male household trips Female household trips Male household months Female household months	+

married individuals in our sample and control for marriage or consensual unions to account for the influences of an individual's spouse or partner.

Measures

We operationalize our dependent variable, *international migration*, as migration from the home country to the United States in the three years prior to the survey (see Cerrutti and Massey 2001; Massey et al. 2006). The independent variables reflect the quantity, quality, and composition of respondents' networks and are proxy measures for social capital. We measure household network ties by the number of household members who have migrated to the United States more than three years before the survey, which we disaggregate by gender. The *number of male migrants in household* is the number of male household members and other male offspring no longer living in the household who have migrated to the United States; the *number of female migrants in household* is similar for female household members. We also measure two types of migrant experience of household members: frequency, measured by number of trips; and duration,

measured in months (see Curran et al. 2005). We calculate these measures separately by gender of ties (*female household trips*, *male household trips*, *female household months*, and *male household months*). We standardize *female household trips* and *female household months* by the number of women in the household, and *male household trips* and *male household months* by the number of men in the household. A limitation of the data is that they include no detailed measures of the maturity of networks, network ties to particular labor market destinations, or ties within ethnic enclaves in the United States.

We measure community networks using migratory prevalence ratios. The MMP contains prevalence ratios based on living adults in the community-year (Massey et al. 1994). We replicate these measures in the LAMP data for Nicaragua, Costa Rica, and the DR. The migration prevalence ratio is the proportion of persons aged 15 and older in the community who have ever been to the United States up to and including a particular year. For our analysis, we calculate the prevalence ratio for the year that was three years prior to the survey so that our measure precedes the dependent variable, *international migration*, and is consistent with the household network variables. We then multiply the ratio by 100 to obtain estimates for the variables (*% female migrants in the community* and *% male migrants in the community*).

Empirical comparison of models using linear only, logarithmic, and linear plus quadratic terms for percentage migrants in the community reveal that the logarithmic transformation provided the best fit to the migration data. This suggests that the effects of migrants in the community are nonlinear, such that increases in the percentage of migrants in the community have diminishing rates of return: a change in the percentage of community members that migrated from 0 % to 5 % has a larger effect than an increase from 45 % to 50 %. To ease interpretation, we present models using a logarithm with base 2 so that the odds ratios in the model represent the change in odds when the percentage of migrants in the community doubles.[3] Measures of household and community social capital variables include migration occurring more than three years prior to the survey. All social capital variables are grand mean–centered in order to reduce the correlation between main and interaction terms. Table 3 presents the measures and metrics for all variables in the model.

Because family structure may influence migration, we control for the marital status of the respondent's parents (*two parents*) and whether the respondent is married or in a consensual union (*married*). We also control for previous migratory experience, age, education, and country of origin. We differentiate previous migration experience according to whether the respondent had previously migrated with legal documentation (*previous documented migration*), without legal documentation (*previous undocumented migration*), or not at all (*no migration*), with documented migration as the reference category. Because previous research has found that education has nonlinear effects on migration, we code it into three categories: 0–9 years (*primary*), 10–12 years (*secondary*), and 13 or more years (*postsecondary*), with 0–9 years as the reference category. In the pooled models, we use country indicators (*Nicaragua, Costa Rica, DR*), with Mexico as the reference.

[3] The convention of using the natural logarithm produces the same results, but it is less intuitive to interpret an increase of a factor of 2.72 (the base of the natural logarithm).

Table 3 Measures and metrics for dependent, independent, and control variables

Variable	Metric
Dependent	
International migration	1 = Migrated at least once within 3 years prior to survey
Independent/Control	
Female	1 = Female
Two parents	1 = Parents are married or in consensual union
Age	In years
Secondary	1 = 10–12 years of education
Postsecondary	1 = 13+ years education
Married	1 = Married or in a consensual union
Previous documented migration	1 = Migrated >3 years prior to survey with legal documentation
Previous undocumented migration	1 = Migrated >3 years prior to survey without valid documents
Nicaragua	1 = yes
Dominican Republic	1 = yes
Costa Rica	1 = yes
Household Social Capital (strong ties)	
No. of male migrants in household	Number of male household members and other males who no longer live in HH, who have migrated to the United States
No. of female migrants in household	Number of female household members and other females who no longer live in HH, who have migrated to the United States
Female household months	Average number of months other female household members were in the United States
Female household trips	Average number of times other female household members migrated to the United States
Male household months	Average number of months other male household members were in the United States 3+ years prior to survey
Male household trips	Average number of times other male household members migrated to the United States
Community Social Capital (weak ties)	
% female migrants in community	% women in the community who migrated to United States
% male migrants in community	% men in the community who migrated to United States

Strategy and Design

We use logistic regression to predict the likelihood of migration to the United States within three years of the survey. Because the sample stratifies households by community and stratifies social capital clusters within communities, we use robust standard errors to account for correlated error terms. The tables present effects as odds ratios. Odds ratios between 0 and 1 indicate a negative relationship (the variable decreases the odds of migrating), and odds ratios above 1 indicate a positive relationship (the variable increases the odds of migrating).

We expect differences by gender and by country because sending countries have diverse histories of migration, gendered economic opportunities, and typical family structures; previous research on these countries has shown differences between them (Donato 2010; Fussell 2010; Sana and Massey 2005). To analyze how gender and sending country influence migration, we include appropriate interaction terms (see the appendix) and construct separate models by gender and by country. For ease of interpretation, we present the pooled model and separate models by gender in Table 4, and separate models by country in Table 5.

Results

Table 4 presents descriptive statistics for all variables in the analysis. The table reveals that the majority (97 %) of individuals aged 17–40 in these countries did not migrate to the United States. Unsurprisingly, given Mexico's shared border and long history of migration to the United States, migration from Mexico is more common than from the other countries. Undocumented migration is also most common from Mexico, where 3 % of respondents migrated without documents in the last three years. Table 4 also reveals that young adults in Mexico are the least educated, and young adults in the DR are the most educated. Consistent with literature that indicates greater prevalence of traditional marriage in Mexico, Mexican potential migrants are more likely to be married or in a consensual union (Massey et al. 2006; Sana and Massey 2005).

With regard to social capital, Table 4 reveals that respondents in Mexico, on average, have more household ties to migrants of both genders than respondents in other countries. In all countries, the mean *number of male migrants in household* is larger than the mean *number of female migrants in household*, although the differences are small in the DR and Nicaragua. In Mexico and Costa Rica, male migrants in the household also took more trips and spent more months in the United States than female migrants did, in comparison with small gender differences in these measures in the DR and Nicaragua. Respondents in Mexico had larger community migratory networks and a larger gender difference in the size of those networks than in other countries. Thus, Table 4 illustrates that potential migrants from Mexico have more migratory social capital resources and that these resources are more male-dominated than in the other countries.

Table 5 presents odds ratios for the pooled sample and separate models by gender. The pooled model aggregates results from the four sending countries and for both genders, revealing that women from these four countries have only .32 times as high odds of migrating to the United States as men. The odds of migration also decrease with age by 3 % per year. Marital status has no significant effects for men, but the interaction term suggests that married women have 1.74 times higher odds of migration than unmarried women, supporting the theory that women migrate as tied movers (H_3). Increasing levels of education appear to decrease the odds of migration, such that the odds of migration are 83 % as high for potential migrants with secondary education and 64 % as high for those with postsecondary as for those with only primary education. Country indicators show that respondents have significantly lower odds of migrating from Nicaragua or the DR than from Mexico. Individuals who have not migrated

Table 4 Means and standard deviations for all variables, pooled and by country

	All Countries (SD)	Mexico (SD)	Costa Rica (SD)	Nicaragua (SD)	Dominican Republic (SD)
Dependent Variable					
Internal migration	0.06	0.08	0.04	0.01	0.03
	(0.23)	(0.28)	(0.20)	(0.12)	(0.18)
Control Variables					
Female	0.51	0.52	0.50	0.53	0.49
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Two-parent household	0.73	0.81	0.71	0.58	0.69
	(0.44)	(0.40)	(0.45)	(0.49)	(0.46)
Age	27.21	27.26	26.85	27.18	27.45
	(6.71)	(6.60)	(7.04)	(6.85)	(6.57)
Married/union	0.54	0.59	0.44	0.49	0.47
	(0.50)	(0.49)	(0.50)	(0.50)	(0.50)
Education					
Primary					
Secondary	0.26	0.22	0.28	0.34	0.32
	(0.44)	(0.42)	(0.45)	(0.47)	(0.47)
Postsecondary	0.19	0.15	0.23	0.22	0.26
	(0.39)	(0.36)	(0.42)	(0.41)	(0.44)
Previous Migration					
No migration	0.97	0.96	0.97	0.99	0.98
	(0.17)	(0.19)	(0.17)	(0.10)	(0.15)
Documented	0.01	0.01	0.02	0.01	0.02
	(0.10)	(0.08)	(0.15)	(0.08)	(0.15)
Undocumented	0.02	0.03	0.01	0.00	0.00
	(0.13)	(0.17)	(0.08)	(0.06)	(0.00)
Migration Experience					
Male household trips	0.23	0.35	0.10	0.05	0.08
	(0.91)	(1.18)	(0.30)	(0.24)	(0.34)
Female household trips	0.05	0.06	0.03	0.04	0.07
	(0.24)	(0.22)	(0.14)	(0.26)	(0.34)
Male household months	9.25	12.81	4.61	4.27	6.50
	(27.67)	(32.13)	(16.67)	(19.69)	(24.62)
Female household months	3.71	4.19	1.79	2.79	5.69
	(15.79)	(15.55)	(10.70)	(13.99)	(24.20)
Migrant Social Capital					
No. of male migrants in household	0.39	0.58	0.22	0.12	0.22
	(0.82)	(0.96)	(0.56)	(0.40)	(0.67)
No. of female migrants in household	0.15	0.18	0.07	0.09	0.19
	(0.49)	(0.52)	(0.28)	(0.39)	(0.71)

Table 4 (continued)

	All Countries (SD)	Mexico (SD)	Costa Rica (SD)	Nicaragua (SD)	Dominican Republic (SD)
% Male migrants in community	18.69	23.55	11.29	11.35	17.67
	(13.91)	(14.88)	(9.72)	(7.67)	(11.90)
% Female migrants in community	7.62	6.58	5.07	7.39	17.55
	(7.66)	(6.00)	(3.20)	(5.52)	(14.22)
N	14,149	7,809	1,921	3,037	1,382

before also have significantly lower odds of migrating than those who have previously migrated with legal documentation.

With respect to the effects of social capital, there are three significant findings: (1) ties to male migrants in the household increase the odds of migration, (2) ties to female migrants in the household increase the odds of migration, and (3) a higher percentage of male migrants in the community increases the odds of migration. Each additional household tie to a male or female migrant increases the odds of migration 1.17 and 1.44 times, respectively, supporting the hypothesis that household ties will increase the odds of migration (H_{1A}). To understand the effects of migrants in the community, one must account for the logarithmic transformation of the original variable using base 2. Accordingly, when the percentage of male migrants in the community doubles, the odds of migration are 1.59 times higher.[4] This supports the hypothesis (H_2) that community ties to migrants increase the odds of migration. However, the gender of weak ties matters: the percentage of female migrants in the community has no significant effect. Thus, strong ties to migrants of both genders have a significant impact, but only weak ties to men influence migration, supporting hypothesis H_{2B}. Results of the pooled model do not support our hypothesis (H_5) that migration experience (the number of trips between countries and the duration of time spent in the United States) influences the decision to migrate.

Table 5 also presents separate models by gender for the pooled data. These models confirm that marriage positively influences the odds of female migration but has no significant effect on male migration. The odds of migrating are 1.56 times higher for married women than for unmarried women, providing initial support for the hypothesis (H_3) that women migrate as tied movers. In contrast, education has significant effects only for men, whereby more education decreases the odds of migration. The odds of migrating are 75 % as high for men with secondary education and 52 % as high for men with postsecondary education as for men with only primary education. This suggests that educated men may have better economic opportunities in their home country than their less-educated counterparts, who migrate for better employment prospects in the United States. The effects of previous migration are the same for men and women: both have significantly lower odds of migrating if they have never migrated than if they migrated before with documentation.

[4] We obtained this odds ratio by adding the logit coefficients for married and female × married, and then exponentiating the sum to obtain the odds ratio.

Table 5 Odds ratios for migration to the United States from four Latin American countries, pooled and by gender

	Full Model (robust SE)	All Men (robust SE)	All Women (robust SE)
Female	0.32***	—	—
	(0.04)		
Two-Parent Household	0.99	1.03	0.96
	(0.10)	(0.13)	(0.16)
Age	0.97***	0.96***	0.98*
	(0.01)	(0.01)	(0.01)
Married/Union	0.91	0.93	1.56**
	(0.10)	(0.11)	(0.26)
Female × Married	1.74**	—	—
	(0.30)		
Education			
Secondary	0.83†	0.75*	0.98
	(0.08)	(0.10)	(0.16)
Postsecondary	0.64**	0.52***	0.84
	(0.08)	(0.09)	(0.18)
Country of Origin			
Nicaragua	0.39***	0.34***	0.47**
	(0.07)	(0.08)	(0.13)
Dominican Republic	0.62**	0.35***	1.28
	(0.11)	(0.09)	(0.33)
Costa Rica	0.98	1.00	0.93
	(0.14)	(0.17)	(0.24)
Previous Migration			
Undocumented	0.79	0.66	0.93
	(0.21)	(0.21)	(0.52)
No migration	0.12***	0.10***	0.15***
	(0.03)	(0.03)	(0.06)
Migration Experience			
Male household months	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)
Female household months	0.99*	0.99*	1.00
	(0.00)	(0.00)	(0.00)
Male household trips	1.00	1.02	0.99
	(0.03)	(0.04)	(0.05)
Female household trips	1.21	1.10	1.33†
	(0.17)	(0.31)	(0.20)
Migrant Social Capital			
No. of male migrants in household	1.17**	1.05	1.36***
	(0.06)	(0.07)	(0.09)

Table 5 (continued)

	Full Model (robust SE)	All Men (robust SE)	All Women (robust SE)
No. of female migrants in household	1.44***	1.45**	1.42**
	(0.13)	(0.19)	(0.17)
Log_2(% male migrants in community)	1.74***	1.92***	1.49***
	(0.10)	(0.15)	(0.14)
Log_2(% female migrants in community)	0.94	0.94	0.93
	(0.04)	(0.05)	(0.06)
Constant	1.43	1.92	0.28*
	(0.46)	(0.79)	(0.15)
–2 Log-Likelihood	–2,579.67	–1,547.77	–1,007.85
Likelihood Ratio Chi-Square	842.39***	536.37***	292.28***
Pseudo-R^2	.175	.193	.122
N	14,149	6,871	7,278

$^{\dagger}p$ <.10; *p < .05; **p < .01; ***p <.001 (two-tailed tests)

In terms of social capital, the separate models reveal that household ties to female migrants increase the odds of migration 1.42 times for women and 1.45 times for men for each additional female migrant in the household, but that strong ties to male migrants have significant effects only for women's migration. Each additional male migrant in the household is associated with 1.36 times higher odds of migration for women. This supports the hypothesis that the gender of strong ties matter for migration (H_{1B}) as well as the idea that male strong ties are especially important for women, who may lack network ties that men obtain through employment and other community involvement. Male ties within the household provide an important bridge to resources outside the household for women.

The effects of female household ties are more surprising, although they support previous findings that strong ties to women provide social, emotional, and economic support for migration (Hondagneu-Sotelo 1994a; Menjivar 2006). Female networks provide social support and information on resources such as housing, food, and healthcare, thus helping new migrants to establish themselves in the host country and facilitating transitions into new and unfamiliar living situations (Connidis 1989; Hogan et al. 1990).

The number of trips and amount of time spent in the United States by other household members do not influence recent migration in the pooled data, thus failing to support hypothesis H_5. This suggests that the number of strong ties influences migration, rather than the amount of contact with those ties or the intensity of their experiences in the host country after they migrate.

Weak ties, which are more varied and richer in different kinds of information than strong ties, are also significant in Table 5. The separate models by gender suggest that male community-level ties positively influence migration for both men and women, but female community-level ties do not. A doubling of the percentage of male migrants in the community is related to odds of migrating that are 1.92 times higher for male potential migrants and 1.49 times higher for female potential migrants. This is

congruent with the idea that weak ties to men are useful for finding opportunities and information related to employment, especially in countries where many women are not in the labor force, supporting hypothesis H_{2B}. If individuals migrate in search of economic opportunities, then ties to men in the community provide better access to employment-related information and resources (Mollenhorst et al. 2008).

Separate Models by Country

Table 6 presents separate models by country and suggests that the larger Mexican sample is driving the pooled sample results in Table 5. Table 6 reveals that gender differences in the odds of migrating are statistically significant only in Mexico and Costa Rica and are largest in Mexico. Also, only Mexico has a significant interaction between *female* and *married*, such that married women's odds of migrating from Mexico are 1.65 times as high as unmarried women's odds.[5] As a result, the gender gap in the odds of migration is also lower for married potential migrants from Mexico: married women's odds of migrating are 51.7 % as high as married men's odds, whereas unmarried women's odds are 26 % as high as unmarried men's. This provides support for the hypothesis (H_3) that married women are more likely to migrate as tied movers from Mexico, a country with gender-traditional families and low gender equity in the economy. The lack of similar significant effects in other countries fails to support this hypothesis for their migration patterns, and suggests that the unique Low/Low position of Mexico could be a source of this effect.

The main effect of marriage is significant only in Nicaragua, where married potential migrants are 4.5 times as likely to migrate as their unmarried counterparts. In terms of education, migrants from Mexico tend to have less education than nonmigrants, as was the pattern in Table 5, but migrants from the DR and Nicaragua tend to have more education than nonmigrants. In these countries, highly educated workers may face weak employment prospects at home along with greater ease of legal migration to the United States. In the DR, potential migrants with 10–12 years of education have 3.23 times higher odds and those with postsecondary education have 3.78 times higher odds of migrating than those with less than 10 years of education. For potential migrants in Nicaragua, secondary and postsecondary education increase the odds of migration 2.62 and 4.28 times, respectively, over those with less than 10 years of education. These education effects suggest that migrants from Mexico tend to have lower socioeconomic status (SES) in their home country, while those from Nicaragua and the DR come from higher socioeconomic backgrounds.

As in the full model, separate models by country reveal that recurrent trips between the sending and host countries have few significant effects, with two exceptions: (1) male household trips are positively related to migration from Costa Rica, where each additional trip is associated with 2.10 times higher odds of migrating; and (2) the number of female household trips has positive effects in the DR, where each additional migratory trip among female household members increases the odds of migration 2.22 times. In these cases, trips home from the United States may impart resources that engender confidence in the migration process, reinforcing networks in the sending country, facilitating the exchange of resources, and increasing the odds of family

[5] Please see footnote 4.

Table 6 Odds ratio estimates for migration to the United States from four Latin American countries, by country

	Mexico (robust SE)	Costa Rica (robust SE)	Dominican Republic (robust SE)	Nicaragua (robust SE)
Female	0.26***	0.41*	1.07	0.44
	(0.04)	(0.15)	(0.47)	(0.34)
Two-Parent Household	0.97	0.80	1.32	1.35
	(0.12)	(0.24)	(0.47)	(0.52)
Age	0.96***	0.96	1.05*	1.02
	(0.01)	(0.02)	(0.03)	(0.03)
Married/Union	0.83	1.14	0.40	4.50**
	(0.10)	(0.46)	(0.23)	(2.58)
Female × Married	1.99**	0.90	2.09	1.46
	(0.40)	(0.50)	(1.47)	(1.22)
Education				
Secondary	0.73**	0.84	3.23*	2.62*
	(0.09)	(0.27)	(1.60)	(1.22)
Postsecondary	0.39***	0.68	3.78**	4.28**
	(0.08)	(0.28)	(1.79)	(2.13)
Previous Migration				
Undocumented	0.65	1.85	1.00	3.57
	(0.24)	(1.39)	(omitted)	(4.05)
No migration	0.11***	0.17***	0.12***	0.02***
	(0.04)	(0.09)	(0.07)	(0.02)
Migration Experience				
Male household months	1.00	1.00	0.99	0.99
	(0.00)	(0.01)	(0.01)	(0.01)
Female household months	1.00	0.99	0.99	0.99
	(0.00)	(0.02)	(0.01)	(0.01)
Male household trips	1.01	2.10*	1.19	2.00
	(0.03)	(0.69)	(0.33)	(1.28)
Female household trips	0.83	0.31	2.22**	0.88
	(0.19)	(0.48)	(0.55)	(0.46)
Migrant Social Capital				
No. of male migrants in household	1.20***	0.83	1.43	1.09
	(0.06)	(0.21)	(0.34)	(0.46)
No. of female migrants in household	1.49**	2.02	1.64**	0.71
	(0.18)	(1.03)	(0.31)	(0.44)
Log_2(% male migrants in community)	1.66***	2.13**	1.13	0.44
	(0.11)	(0.48)	(0.65)	(0.36)
Log_2(% female migrants in community)	0.96	1.15	0.87	2.76
	(0.04)	(0.31)	(0.47)	(2.00)

Table 6 (continued)

	Mexico (robust SE)	Costa Rica (robust SE)	Dominican Republic (robust SE)	Nicaragua (robust SE)
Constant	2.53*	1.28	0.02**	0.02**
	(1.07)	(1.10)	(0.03)	(0.03)
–2 Log-Likelihood	–1,895.75	–262.68	–165.82	–167.67
Likelihood Ratio Chi-Square	535.07***	109.13***	87.55***	146.25***
Pseudo-R^2	.152	.218	.192	.243
N	7,809	1,921	1,382	3,037

*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed tests)

migration. When considering the overall theoretical framework, the country differences in these effects support the idea that ties to men are more important in societies where gender equity is low (Costa Rica) and ties to women are especially important in societies where gender equity is higher (the DR) (H_{4A} and H_{4B}).

In terms of the number of ties, each additional tie to a male migrant in the household increases the odds of migration 1.20 times from Mexico only. This supports the hypothesis (H_{4B}) that strong ties to men are more important in a country with low gender equity in the economy and household. The number of female migrants in the household, on the other hand, is positively related to migration from both Mexico and the DR, where each additional female tie increases the odds of migrating 1.49 and 1.64 times, respectively. These results support the hypothesis (H_{4A}) that strong ties to women are more important in a country with higher gender equity in the economy and more female-led families (like the DR). However, these ties are also important in Mexico, which has low gender equity and more gender-traditional family structures, perhaps making a more general comment on the provision of social support by female strong ties.

Community social capital also has statistically significant effects only in countries with low gender equity and only for ties to men. A doubling of the percentage of male migrants in the community increases the odds of migration 1.66 times from Mexico and 2.13 times from Costa Rica, but has no effect on migration from Nicaragua or the DR. Female migrants in the community, however, have no effects on migration from any country. These findings support our hypothesis (H_{4B}) that weak ties to male migrants increase the odds of migration from countries with low gender equity.

Table 7 in the appendix presents models with interaction terms for gender with social capital variables (Model 1), gender and country of origin (Model 2), and country of origin by social capital (Model 4). These models give results similar to those in Tables 4 and 5. Coefficients were significant for interactions among *female* × *number of male household migrants*, *female* × *percentage male migrants in the community*, and *female* × *DR*. In comparison with the pooled model in Table 4, the log-likelihood and information coefficients (AIC/BIC, not shown) do not significantly improve with the addition of two-way interactions for gender with social capital, although an *F* test comparing the models suggests that the additional variables significantly improve the model ($\chi^2 = 38.26$, df = 9, $p < .001$) (see Table 7 in the appendix A, Model 1). The

addition of interactions among country and gender, marriage, and social capital do, however, improve the model fit ($\chi^2 = 89.22$, df = 30, $p < .001$) (see Table 7 in the appendix, Model 4). We also analyze three-way interactions among country of origin, gender, and network social capital variables, but the model does not significantly improve ($\chi^2 = 33.39$, df = 27, $p = .18$) (results available from authors). The lack of a significant effect with the inclusion of three-way interactions may be a consequence of the small number of migrants from Costa Rica (81), the DR (49), and Nicaragua (46), which limits our ability to detect relationships with statistical reliability in models that differentiate social capital effects by both country and gender.[6] Consequently, we do not find that the effects of social capital on migration by gender vary significantly in the four countries that we examine, although data on more migrants from the LAMP countries might discern differences.

To further understand the characteristics of migrant men and women from Nicaragua, Costa Rica, and the DR, we examine specific cases within each country. This confirms the multivariate results and offers some additional insights about migrants in the LAMP. First, migrants from Costa Rica, Nicaragua, and the DR are especially likely to have multiple strong ties to migrants of both genders. In Costa Rica, most women who migrated had multiple strong ties, although this effect is not statistically significant because of the small number of migrants in the sample. In Nicaragua and the DR, male migrants tend to have ties to migrants of both genders in their household. These relationships support predictions about gender equity effects in these countries.

Second, the negative relationship between education and migration in Mexico and Costa Rica appears to influence only male potential migrants. Men with lower SES from these countries experience economic pulls to the United States. However, because women from these countries are more likely to be tied movers than to migrate independently, education has no significant effect for women. In both Mexico and Costa Rica, women are more likely to migrate if they are married or in a consensual union. In contrast, there is a clear positive relationship between education and migration in the countries with more female-led families—Nicaragua and the DR—whereby individuals with more education are more likely to migrate. In Nicaragua, the education-migration relationship is stronger for men than for women. In the DR, both men and women with more education are considerably more likely to migrate to the Unites States.

Discussion and Conclusions

Previous research on the relationships among gender, social capital, and migration has largely analyzed migration from a single country. In contrast, we examine the effects of gendered household and community networks on the migration of men and women from multiple sending countries: Mexico, Costa Rica, Nicaragua, and the DR. Recognizing that gender conditions the value of social capital, we theorize the importance of strong and weak ties to men and women in each sending country as a product of the gender equity gap in economic participation × incidence of female-led families. We

[6] Four failures were completely determined in the model that included three-way interactions.

thus conceptualize a reliance on different kinds of network ties in migration as a product of gender structures in the sending country.

Our analysis includes measures of the number, gender composition, and strength of ties. The results reveal that having more migrants of either gender in the household or a higher percentage of male migrants in the community increases the likelihood of migration. These findings support the hypotheses that a greater number of household-level strong ties and a higher proportion of community-level weak ties will increase the odds of migration (H_{1A} and H_{2A}), and the hypothesis that male community networks in particular will increase migration (H_{2B}). In terms of strong ties, the number of male household ties has significant positive effects only on women's odds of migration and on migration from Mexico to the United States. These effects, along with the significantly higher odds of migration for married women from Mexico, provide some support for the hypothesis (H_3) that women migrants follow male family members as tied movers from countries with low gender equity and traditional family patterns. Overall, the results support our hypotheses about differences between countries with high or low gender equity (H_{4A} and H_{4B}): ties to women increase the odds of migration more when gender equity is higher (the DR), and ties to men increase the odds of migration more when gender equity is low (Costa Rica and especially Mexico).

The results also suggest that migration experience, in the form of the number of migration trips among household members, influences migration only from Costa Rica and the DR. Consequently, support for our hypothesis that this form of social capital would positively influence migration (H_5) is limited to these countries. Thus, social and economic contexts influence the effect of migratory travel back and forth on further migration. Again, male ties are more important in Costa Rica, where male household members that maintain consistent contact with family members back home encourage others to follow, while ties to female migrants are important in the DR (supporting H_{4A} and H_{4B}). The duration of migratory stays has no effect in any country (failing to support H_5).

Several forms of social capital have no significant effect in the LAMP data, probably because of the small number of migrants to the United States in the sample. Very few of the potential migrants from LAMP countries migrated to the United States within three years of the survey, representing a major limitation of the data. Some potential migrants from the LAMP countries may have migrated to other countries, such as from Nicaragua to Costa Rica, but the data contain no information about this. With the small number of migrants in the sample, especially female migrants, it is difficult to discern significant differences between migrants and nonmigrants or between male and female migrants. There are also no data on the employment status of potential migrants or the number of children that they have. This limits our ability to test some hypotheses about how gender differences in migration patterns vary by country.

Despite this, the analysis tells us that gendered social capital is relevant to migration by gender. Male contacts provide more important resources to potential migrants from countries dominated by traditional households, such as Mexico and Costa Rica, fostering male-led migration patterns. In contrast, strong ties to women increase the likelihood of migration from the DR, where there is a higher incidence of female-led families, and the gender equity gap in economic participation is the lowest of all four countries. In this context, women have more opportunities and are more likely to be decision-makers in their homes. Future research should consider exploring the link

between gender structures in the economy and in family patterns as a way of theorizing the reliance on gendered social capital for migration, utilizing larger samples from multiple countries that vary along the dimensions that we have identified to fully tease out these effects. Moreover, it appears that the characteristics of strong ties that encourage migration differ in countries with lower levels of migration, such as Costa Rica and the DR. Future research may investigate the reasons that migrants benefit from different types of ties in countries with high- versus low out-migration, or where most migration is legally documented versus a significant proportion being undocumented.

Our findings also contribute to the literature on networks and social capital. Past work has detailed the importance of social capital for providing resources and the role of gender in mediating social capital quality and access to network support (Erickson 2004; Wellman 1990). Using the case of international migration, we reveal that this relationship is dynamic and variable. Not only are different kinds of social capital important for female and male migration, but migrants from different countries look to different sources of social capital for assistance. In this respect, future work must look deeper into how specific kinds of ties influence migration while conceptualizing social capital as a diverse concept.

Acknowledgments Authors' names are presented alphabetically to reflect equal contributions. Thank you to C. Alison Newby, Bonnie Erickson, Janine Baxter, Erin Leahey, Francisco Perales, Tsui-o Tai, Sergi Vidal, Mark Western, Jane Zavisca, and to the incredibly helpful reviewers at *Demography* for their comments and contributions to the finalization of this article.

Appendix

Table 7 Logistic regression estimates (odds ratios) of the probability of migration to the United States from four Latin American countries, interaction models

	Model 1	Model 2	Model 3	Model 4
Female	1.33	0.93	0.96	0.83
	(0.52)	(0.43)	(0.44)	(0.40)
Two-Parent Household	1.00	1.00	1.01	1.00
	(0.10)	(0.10)	(0.10)	(0.10)
Age	0.97***	0.97***	0.97***	0.97***
	(0.01)	(0.01)	(0.01)	(0.01)
Married/Union	0.92	0.91	0.84	0.84
	(0.11)	(0.10)	(0.10)	(0.10)
Secondary	0.83†	0.83†	0.82†	0.84†
	(0.08)	(0.08)	(0.08)	(0.09)
Postsecondary	0.64**	0.62***	0.62***	0.63***
	(0.08)	(0.08)	(0.08)	(0.09)
Nicaragua	0.39***	0.34***	0.11***	0.65
	(0.07)	(0.08)	(0.04)	(0.72)
Dominican Republic (DR)	0.63	0.35***	0.37***	1.00
	(0.12)	(0.09)	(0.10)	(0.79)

Table 7 (continued)

	Model 1	Model 2	Model 3	Model 4
Costa Rica	0.99	1.01	1.02	0.25*
	(0.14)	(0.17)	(0.20)	(0.16)
Undocumented	0.77	0.75	0.77	0.75
	(0.21)	(0.20)	(0.21)	(0.21)
No Migration	0.12***	0.11***	0.12***	0.11***
	(0.03)	(0.03)	(0.03)	(0.03)
No. of Male Migrants in Household	1.05	1.05	1.06	1.07
	(0.07)	(0.07)	(0.07)	(0.07)
No. of Female Migrants in Household	1.44**	1.45**	1.45**	1.57**
	(0.19)	(0.19)	(0.19)	(0.24)
Male Household Months	1.00	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)
Female Household Months	0.99*	0.99*	0.99*	0.99
	(0.00)	(0.00)	(0.00)	(0.01)
Male Household Trips	1.02	1.02	1.02	1.02
	(0.04)	(0.04)	(0.04)	(0.04)
Female Household Trips	1.08	1.10	1.08	0.64†
	(0.28)	(0.31)	(0.30)	(0.17)
Log_2(% male migrants in community)	2.07***	1.96***	1.96***	1.91***
	(0.15)	(0.15)	(0.15)	(0.15)
Log_2(% female migrants in community)	0.88*	0.93	0.93	0.93
	(0.04)	(0.05)	(0.05)	(0.05)
Female × Married	1.71***	1.74**	1.73**	1.68**
	(0.30)	(0.31)	(0.31)	(0.30)
Female × No. of Male Migrants in Household	1.28**	1.28**	1.29**	1.28**
	(0.12)	(0.11)	(0.11)	(0.12)
Female × No. of Female Migrants in Household	1.01	0.99	0.97	0.90
	(0.18)	(0.18)	(0.18)	(0.17)
Female × Male Household Months	1.00	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)
Female × Female Household Months	1.01	1.01	1.01	1.01
	(0.01)	(0.01)	(0.01)	(0.01)
Female × Male Household Trips	0.96	0.96	0.96	0.97
	(0.07)	(0.07)	(0.07)	(0.06)
Female × Female Household Trips	1.22	1.22	1.28	1.58
	(0.37)	(0.39)	(0.43)	(0.44)
Female × Log(% male migrants in community)	0.64***	0.73**	0.73**	0.75*
	(0.07)	(0.09)	(0.09)	(0.09)
Female × Log(% female migrants in community)	1.16†	1.01	1.01	1.02
	(0.09)	(0.09)	(0.09)	(0.09)

Table 7 (continued)

	Model 1	Model 2	Model 3	Model 4
Female × Nicaragua		1.42	1.12	1.22
		(0.51)	(0.41)	(0.49)
Female × Costa Rica		0.90	0.90	1.03
		(0.28)	(0.29)	(0.31)
Female × DR		3.90***	4.11***	3.90***
		(1.45)	(1.58)	(1.59)
Married × Nicaragua			6.09***	5.88***
			(2.65)	(2.57)
Married × Costa Rica			0.98	1.02
			(0.26)	(0.28)
Married × DR			0.81	0.77
			(0.27)	(0.28)
Nicaragua × No. of Male Migrants in Household				1.00
				(0.38)
Nicaragua × No. of female Migrants in Household				0.92
				(0.29)
Nicaragua × Male Household Months				0.99
				(0.01)
Nicaragua × Female Household Months				1.00
				(0.01)
Nicaragua × Male Household Trips				2.69†
				(1.48)
Nicaragua × Female Household Trips				0.97
				(0.38)
Nicaragua × Log(% male migrants in community)				0.23†
				(0.19)
Nicaragua × Log(% female migrants in community)				3.32†
				(2.40)
DR × No. of Male Migrants in Household				0.99
				(0.20)
DR × No. of Female Migrants in Household				1.08
				(0.24)
DR × Male Household Months				0.99
				(0.01)
DR × Female Household Months				0.99
				(0.01)
DR × Male Household Trips				1.48†
				(0.34)
DR × Female Household Trips				3.17**
				(1.07)
DR × Log(% male migrants in community)				0.94
				(0.46)

Table 7 (continued)

	Model 1	Model 2	Model 3	Model 4
DR × Log(% female migrants in community)				0.81
				(0.37)
Costa Rica × No. of Male Migrants in Household				0.63*
				(0.15)
Costa Rica × No. of Female Migrants in Household				1.77
				(1.00)
Costa Rica × Male Household Months				1.00
				(0.01)
Costa Rica × Female Household Months				0.99
				(0.02)
Costa Rica × Male Household Trips				2.21*
				(0.78)
Costa Rica × Female Household Trips				0.32
				(0.56)
Costa Rica × Log(% male migrants in community)				1.24
				(0.28)
Costa Rica × Log(% female migrants in community)				1.21
				(0.34)
Constant	0.11***	0.13***	0.13***	0.16***
	(0.05)	(0.06)	(0.06)	(0.07)
–2 Log-Likelihood	–2,565.63	–2,558.25	–2,546.15	–2,520.74
Likelihood Ratio Chi-Square	935.31***	951.81***	932.3***	1,013.9***
Pseudo-R^2	.180	.182	.186	.194
N	14,149	14,149	14,149	14,149

$^{\dagger}p$ <.10; *p < .05; **p < .01; ***p <.001 (two-tailed tests)

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