Mexican Migration and Union Formation in Sending Communities: A Research Note

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August 28, 2011

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Abstract

This study examines how levels of male migration influence non-migrant women's transition into first unions in Mexico. Results show that women in municipalities with high levels of male migration are more likely to delay or forego transitions into first unions than their counterparts in municipalities with low levels of migration. An in depth analysis of the underlying mechanisms reveals that migration influences women's family formation processes in multifaceted ways. On the one hand, migration promotes women's transition into a first union by creating the economic conditions necessary for women to specialize in home production and increasing the net gains to marriage. Migration also appears to encourage early marriages by reducing single women's participation in paid labor, which in turn, prevents single women from prolonging their marital searches. On the other hand, migration depresses women's transition into marriage by diminishing the quantity of marriageable men in local marriage markets.

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Introduction

A unique feature of Mexican migration to the U.S. is the high rates of circular migration among men and the relatively low rates of migration among women (Cerrutti and Massey 2001; Marcelli and Cornellius 2001; Wildsmith and Frank 2005). The gender selective nature of Mexican migration, coupled with its large scale, have profound implication for union formation patterns in Mexico because they give rise to high rates of spousal separation among married couples and create shortages of marriageable men for single women.

High rates of spousal separation and the imbalance of men and women in local marriage markets have profound implications for non-migrant women's family formation behavior as they alter incentives to marry and create imbalances in local marriage markets. Over the short-run, spousal separation prevents couples from enjoying the gains to marriage that arise due to gendered division of labor and economies of scale. Faced with higher prospects of spousal separation and consequent need to assume the dual demands of paid labor and home production, single women in communities with high levels of male migration may forego marriages (Becker 1974). Over the long-run, however, episodes of spousal separation due to migration can improve the economic well-being of migrant families. Increases in the economic security afforded by marriage can make marriage a more attractive institution for single women in communities with high levels of male migration. At the same time, the disproportionate removal of single men from local marriage markets may prolong marital searches for some women, who have a hard time finding a spouse given the scarcity of potential partners (Oppenheimer 1988; Raley 1996; South and Lloyd 1992).

Although prior research has shown that the gender selective nature of Mexican migration reduce incentives to marry and create imbalances in local marriage markets, there has yet to be an

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empirical study exploring how aggregate levels of international migration influence the union formation behavior of non-migrant women in Mexico. This paper assesses whether women living in municipalities with high levels of international male out-migration are more likely to delay or forego transitions into first unions than their counterparts in municipalities with low levels of international male out-migration. It also examines how the mechanisms detailed in the various theories of marriage, such as married women's labor force participation, quantity and quality of marriageable men, and the ability for women to prolong their marital searches, contribute to the relationship between levels of male migration and transitions into first unions.

The research note is organized as follows. I first review relevant theories of marriage and explore how migration may influence the transitions into first unions using each theoretical lens. This is followed by a description of the data and methods. I then present the results and discuss its implications for understanding how migration influences family life in sending communities.

Background

Migration affects transitions into first unions by altering incentives to marry and changing the quality and quantity of potential spouses in local marriage markets. A central perspective for understanding how levels of male migration alter incentives to marry is Becker's specialization and trade model of marriage. This model argues that single men and women enter into marriage when both partners perceive the gains to outweigh the costs of marriage (Becker 1974). All else being equal, the net gains to marriage are optimal when men specialize in labor market activities; women specialize in home production; and each spouse trades on the comparative advantage afforded by specialization (Becker 1974; Sweeney 2002). As a result, any activity interrupting the gendered division of labor will reduce the net gains to marriage and result in foregone marriages. Using the lenses of this theoretical model, it is unclear how levels of male migration will influence women's transition into first unions.

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Over the short-term, the migration of male household member may expose families to severe financial hardships. Specifically, in the months following migration, male migrants may not be in a position to send remittances to their families in Mexico due to direct costs of moving, joblessness, and the lag between their arrival and the date of first payment (Aysa and Massey 2004; Kanaiaupuni 2000). In the absence of financial support from their migrant husbands, wives often must engage in paid labor so that they can sustain their families economically (Hondagneu-Sotelo 1994; Kanaiaupuni 2000). The possibility that they may have to assume the double burden of home production and paid labor as married women will render marriage a less attractive institution for single women. Over the long-term, however, migration of male household members improves the financial well-being of families (Parrado 2004). The wealth accumulated in destination countries provide married women with the economic conditions necessary to fully specialize in home production and optimize the gains to marriage by trading on the comparative advantage afforded by specialization. The resulting net gains to marriage will make marriage a more attractive institution for single women in sending communities.

The availability of potential spouses may also affect transitions into first unions. The imbalanced sex ratio model argues that the availability of potential spouses, the number of competitors, and gender norms interact to affect transitions into first unions (Guttentag and Secord 1983). According to this theoretical model, women seek to form stable relationships that can serve as optimal setting for childbearing and childrearing; whereas, men seek to form relationships that do not entail long-term commitments (Guttentag and Secord 1983). Given the gender differences in family goals, the gender in short supply will carry out its family objectives. A shortage of women in local marriage markets will promote transitions into first unions; whereas, a surplus of women will result in delayed or foregone unions (Guttentag and Secord 1983). Migration from Mexico to the U.S. selectively removes single men from local communities, and as such, it engenders shortages of marriageable men

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in local marriage markets in Mexico (Pavon 1990). The resulting unfavorable distribution of men relative to women results in delayed or foregone unions (Parrado and Zenteno 2002).

Other theoretical perspective argues that the quality, and not the quantity, of potential partners affect transitions into first unions. Oppenheimer's marital search model argues that single men and women set an economic bar for marital life (Oppenheimer 1988). During their marital searches, single men and women try to obtain clues about the potential spouses' economic prospects and conclude their search when they encounter a potential spouse who can meet their economic expectations about marital life (Oppenheimer 1988). In societies where men are expected to be the primary breadwinner, single men's economic prospects are crucial determinants of marriage timing (Oppenheimer 1988; Sweeney 2002). Also influencing women's marital timing is single women's employment status as they determine single women's ability to finance prolonged marital searches (Oppenheimer 1988).

The flows of migration from Mexico to the United States mostly represent labor migration, and as such, all else being equal, migrants will represent a positively selected group with respect to employment outcomes and economic prospects. The disproportionate removal of men with favorable economic prospects will force women of certain socioeconomic strata to delay or forego transitions into first unions as they will experience greater difficulty in finding potential partners who meet the economic bar for marriage (Lichter et al. 1991).

Empirical studies on the impact of migration on union formation in sending communities

Migration research on sending communities focuses on the impact of remittances on economic conditions and inequality (Massey and Parrado 1994; Kanaiaupuni and Donato 1999). Notably scarce in this literature are studies examining the impact of migration on family formation processes (Stark 1988; Parrado 2004). Two empirical studies provide insights about the impact of migration on union formation patterns for women in sending communities.

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Parrado (2004) found that international migration is a disruptive event that delays union formation for men. According to him, single migrants delay their union formation while they are abroad because of their uncertain economic futures and the complexities associated with maintaining a transnational household (Parrado 2004). Yet, upon their return, migrant men marry at higher rates than their non-migrant peers because the wealth accumulated in the destination countries makes them more attractive in local marriage markets (Parrado 2004).

Choi and Mare (2008) show that men living in areas with low rates of male migration but high rates of female migration are more likely to be in a union than those residing in other communities (Choi and Mare 2008). This finding is consistent with the view that Mexican migration depresses transitions into first unions by giving rise to a shortage of marriageable men.

Based on the theoretical and empirical studies, how aggregate levels of male migration affect transitions into first unions is unclear. Therefore, this paper examines how levels of male migration in their municipality of residence affect transitions into first unions and investigates how the mechanisms described by the various theories of migration contribute to this relationship.

Data

I pool data from the 10.6 percent Integrated Public Use Microdata Series sample of the 2000 Mexican Census, the International Migration Supplement of the 2000 Mexican Census, and the 2006 Encuesta Nacional de Dinamica Demografica (ENADID) (INEGI 2000; Minnesota Population Center 2007; ENADID 2008). The two census data are used to construct the variables that are aggregated at the municipality level[1]. ENADID 2006 is used to observe women's transition into first unions.

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[1] Municipalities are political and administrative units akin to "counties" in the U.S. They have been used to define local marriage markets in prior work on the local marriage market conditions and union formation patterns (Parrado and Zenteno 2002; Choi and Mare 2008).

The 2000 Mexican Census collected information on age, sex, and employment status. It also contains geographic identifiers specifying the state and municipality of residence in January 1st, 2001 and date of interview. The *International Migration Supplement* asks respondents to provide proxy reports about the last international trip that each household member[2] took between January 1, 1995 and the date of interview. The proxy reports contain information about the migrant's age at the time of migration, sex, date of departure, country of destination, country of residence on the date of the interview, and date of return to Mexico.

ENADID 2006 is a nationally representative survey designed to provide reliable information on women's demographic activities, such as fertility, marriage, and mortality. It is a cross-national, multi-stage sample of 38,923 women between the ages of 15 and 54 who are residing in 966 municipalities. ENADID collected retrospective histories of marriage and fertility in which respondents reported entry and exit dates for first unions. It also includes geographic identifiers for the state, municipality, and locality of residence in January 1st, 2001, which permits linking information about women's transition into first unions to the contextual variables on gender-specific rates of migration, local marriage markets, and women's employment rate.

Although pooling these datasets offers a unique opportunity to examine the aggregate effects of migration on union formation, this approach is not without limitations. A complete specification of a model of transitions into first unions require data on women's socioeconomic characteristics, dating behavior, and local marriage market conditions for each year that the women are at risk of marriage (Parrado 2004). As is the case with most survey datasets, such detailed accounts are unavailable in Census and ENADID data; and thus, some variables that ideally would have been included in the study

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[2] Household member is defined as an individual who lived in the respondent's household in 1995, before they migrated to their country of destination.

of transitions into first unions cannot be included in the present study. Pooling data also means that the sample is restricted depending on the data availability across the three datasets. Specifically, I have to restrict my sample to women whose marriage outcomes are affected by the net flows of migration between 1995 and 2000. Stated differently, I need to restrict my sample to women ages 15 and older in 1995, who remained single until 2000. This means left censoring my analyses to transitions that occurred during the respondent's teens. The left censoring will understate both: the overall rates of transitions into first unions as well as variations in the rates of transitions into first unions depending on the level of male migration as women living in municipalities with low levels of male migration are more likely to transition into first union during their teens.

Sample

The analysis uses data on women born between 1967 and 1981, who remained single until December 2000 and are residing in Mexico in 2001, focusing on transitions that occur between 2001 and 2006. I apply the lower age bound (i.e. born in or prior to 1981) because women born after 1981 are too young for their marital prospects to have been affected by migration between 1995 and 2000 (n=11,914 or 31 %). I apply the upper age bound (i.e. born in 1967 or after) because women who remained single until 35 are a select group who may have decided to forego marriage altogether (n=11,343 or 30%). I exclude women who transitioned into marriage prior to 2001 to ensure the proper ordering of events and that the sampled women are affected by the net flows of international migration (n=10,989 or 28%). The sample is also restricted to respondents who provided accurate reports on the date of transition into first unions (n=38 or 0.1%), and reported geographic identifiers for the state and municipality of residence in 2001 (n=189 or 0.5%). Once these sampling restrictions are applied, I end with a sample of 4,450 women living in 671 municipalities. The number inside the

parenthesis denotes the number of cases and percent of ENADID respondents who are excluded because of the sampling restrictions.

Measurement and Methods

    Entry into first unions uses information about the date they transitioned into their first union to construct a time-varying, dichotomous variable capturing whether the respondent transitioned into their first union in the person-year in observation.

    Level of male migration[3] is constructed using information from census data. To construct this variable, I first compute the net inflow of adult male migrants involved in international migration. For a given municipality, men's net flow of migration is computed by subtracting the number of international return migrants from the number of international out-migrants and dividing this number by the municipality's male residents in 1995. It can be formally expressed as follows:

$$\frac{E_o^M - I_o^M}{N_{95}^M}$$

where E_o^M denotes the municipality's adult[4] male residents in 1995 who migrated abroad[5] between 1995 and 2000; I_o^M denotes the number of adult men who migrated into the municipality from abroad between 1995 and 2000; and N_{95}^M denotes the municipality's male residents in 1995. Using the computed measures on the net flow of male migration, I classify the municipality as communities with

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[3] Because of the gender selective nature of Mexican migration, communities with large levels of male migration also tend to be the communities with largest gender differences in the absolute and relatives levels of international migrants.

[4] Individuals are classified as adults if they are ages 15 and over.

[5] 97.3 percent of international migrants in the *International Migration Supplement* report United States as their destination country.

high levels of male migration when the net flow of migration is above 75 percentile[6] of the flows for country as a whole (or 5.22 percent).

Four variables measure the characteristics of the respondent's municipality of residence that can influence the timing and incidence of marriage. The first variable, which is designed to capture the quantity of available partners, is a ratio of the number of single men to women in a given age group who live in the same municipality in 2000. It can be expressed as follows:

$$\sum_{a-2}^{a+7} M_a \bigg/ \sum_{a-5}^{a+4} F_a$$

where a denotes women's age; M_a denotes the number of single men a years of age living in the municipality; and F_a denotes the number of single women a years of age living in the municipality. The ratio, which was initially constructed by Parrado and Zenteno (2002), is based on 10 year age groups in which women choose men who are on average 3 years older. The measure assumes that a 20 year old woman marries men who are between the ages 18 and 27 and they are in competition with women who are between the ages of 15 and 24 years of age.

The second variable, which is designed to measure the quality of potential partners, is the percentage of single men who are employed in a given age group in the same municipality and is expressed:

$$\sum_{a-2}^{a+7} E_a^M \bigg/ \sum_{a-2}^{a+7} M_a$$

where E_a^M denotes the number of single men, who are employed, a years of age, and living in the same municipality and M_a denotes the number of single men a years of age living in the municipality.

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[6] Side analyses were performed using the continuous variable on the net flow of male migrants and categorical variables using other cutoff points (e.g 50th and 90th). They all yield similar results.

The third variable, which is designed to capture women's ability to finance their marital searches, is the percentage of single women who are employed in a given age group in the same municipality. It can be expressed as follows:

$$\sum_{a-5}^{a+4} E_a^W \bigg/ \sum_{a-5}^{a+4} F_a$$

where E_a^W denotes the number of single women, who are employed, a years of age, and living in the same municipality and F_a denotes the number of single women a years of age living in the municipality.

The fourth variable, which is designed to measure women's participation in paid labor, is the percent of married women who are employed in a given age group and living in the same municipality. It can be computed as:

$$\sum_{a-5}^{a+4} L_a^W \bigg/ \sum_{a-5}^{a+4} C_a^W$$

where L_a^W is the number of employed, married women, a years old , and living in a municipality and C_a^M is the number of married women a years old and living in the same municipality.

Lastly, I also include a limited number of control variables that have been identified by prior work as key determinants to the timing and incidence of marriage. Age is a time-varying covariate that classifies each person-year files into four categories: ≤19, 20-24, 25-29, ≥ 30. Education is a time-fixed covariate distinguishing respondents by their completed years of schooling: primary school (≤ 6), middle and high school (7 to 12), and college (≥13). Municipalities are defined "rural" when the percent of adults in the agricultural sector is above the median of the percentages for the country as a whole (or above 5.5 percent).

Analysis Plan

The analysis has two parts. In the first part, I compare the socio-demographic characteristics of women residing in municipalities with low and high levels of migration and document how married women's labor force participation and local marriage market conditions vary across the two types of communities defined by levels of male migration. In the second part, I present a series of discrete-time logistic regression models of transitions into first unions[7]. These models successively introduce measures for women's socio-demographic characteristics, married women's labor force participation, and local marriage market conditions to determine how each set of measures influence the relationship between levels of male migration and transition into first unions. These analyses are based on person-year files, which are constructed using information from the detailed retrospective histories of marriage. Age is the clock for these analyses and observations are censored at entry into first union or date of interview, yielding a sample of 63,775 person-years files. These models document entry into a first union, which occur when the women are between 20 and 39 years of age.

Three other analytical steps deserve mention. I took careful steps to ensure the proper temporal ordering of events. Aggregate levels of male migration refer to net flows of international migration that took place between 1995 and prior to the date of interview in 2000; the mediators (i.e. local marriage market conditions and women's employment) are measured at the date of interview; and women's transition into first unions occur between 2001 and 2006. I also corrected the standard errors in the models to account for the clustering of person-year observations within individuals and municipalities and the consequent correlation in error terms for the nested observations[8]. Lastly, I weight all the analyses.

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[8] I conducted statistical test to assess whether the baseline hazard for entry into first unions are proportional for the two types of communities (i.e. municipalities with small and large differentials in

Results

Descriptive Results

Table 1 describes how the socio-demographic characteristics of respondents, local marriage market conditions, and married women's labor force participations vary in accordance to levels of international male migration. Given the fact that Mexican immigrants to the United States traditionally originate from rural communities, it is not surprising that women from municipalities with high levels of male migration are lesser educated than those in municipalities with low levels of male migration. For instance, nearly half of the women in municipalities with high levels of male migration had primary education or below; whereas, one in five women in municipalities with low levels of male migration had comparable levels of education.

Table 1 goes here.

Married women in municipalities with high levels of male migration are less likely to work for pay compared to those who reside in municipalities with low levels of male migration. Ten percent of the married women in municipalities with high levels of male migration are employed, which compares to 17 percent in municipalities with low levels of male migration work for pay at the date of interview. This is consistent with the view that male migration affords non-migrant wives the economic condition necessary to specialize in home production.

Comparisons of local marriage market conditions by levels of male migration reveal that male migration has adverse effects on both: the quantity and quality of potential partners available to single women in Mexico. Single women in municipalities with high levels of male migration face substantially more unfavorable marriage markets than their counterparts with low levels of male

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levels of male and female migration). The test indicated that the baseline hazards are proportion for the two community types, and thus, I do not account for non-proportionality.

migration. There are approximately 85 single men for every 100 single women in municipalities with low levels of male migration, which compares to 74 single men for every 100 single women in municipalities with high levels of male migration. Non-migrant single men in municipalities with high levels of male migration also appear to face greater economic uncertainty than their counterparts in municipalities with low levels of male migration. Whereas three quarters of single men in municipalities with low levels of male migration are employed at the date of interview, only two-thirds of the single men living in municipalities with high levels of male migration are employed at the date of interview. Single women in communities with large differences in male migration are also less likely to work for pay compared with their counterparts in areas with low levels of male migration.

Based on my descriptive results, it is unclear how the union formation behavior of women in municipalities with high levels of male migration will vary from those in municipalities with low levels of male migration. On the one hand, married women in municipalities with high levels of male migration are afforded the opportunity to specialize in home production to a greater extent than their counterparts in municipalities with low levels of migration. Furthermore, single women in these municipalities are also less likely to be employed than their counterparts in municipalities with lower levels of migration, which impedes their ability to prolong their marital searches. On the other hand, single women in municipalities with high levels of male migration are more likely to experience shortages in the quantity and quality of marriageable men than those in municipalities with low levels of migration.

Multivariate analysis

In this section, I conduct multivariate analysis examining how women's transitions into first unions differ depending on the levels of male migration and how married women's labor force participation and local marriage market conditions influences the relationship between levels of male

migration entry into first unions. To do so, I conduct a series of discrete-time logistic regression

models where I successively account for socio-demographic characteristics, married women's labor

force participation, and local marriage market conditions. Table 2[9] presents the parameter estimates for

each model.

Table 2 goes here.

Model 1 only includes levels of male migration, socio-demographic controls, and rural/urban

residence. The results reveal that women living in municipalities with high levels of male migration

are more likely to delay or forego entry into first unions compared with their counterparts in

municipalities with low levels of migration. Women in municipalities with high levels of male

migration are 19 percent [(0.81-1)*100] less likely to transition into a first union than those in

municipalities with low levels of male migration. Two other notable findings deserve mention.

College educated women appear to be considerably less likely than those with lower levels of

education to transition into a first union. This finding is consistent with women's independence

hypothesis which argues that women who have the ability to sustain themselves economically will

forego marriage (Becker 1974; Sweeney 2002). The odds of transitioning into a first union are 16

percent lower for college educated women compared with women with only a primary education. In

contrast, women living in rural municipalities appear to be more likely to transition into a first union

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[9] I also computed the proportionate difference in the predicted hazard of entering into a first union by

levels of male migration. The odds ratio yield virtually the same predictions regarding the size of the

differences in the hazard of transitioning into first unions as the estimated proportionate difference in

the predicted hazard of entering a first union. I only report the parameter estimates of the discrete-time

logistic regression models. The figure of the predicted difference in the hazard of transitioning into a

first union is available upon request.

compared with those living in urban municipalities. The relative odds of transitioning into a first union are 35 percent [(1.35-1)*100] higher among those who reside in rural over urban communities.

Model 2 adds married women's labor force participation into the existing model. The introduction of married women's labor force participation widens the gap in the likelihood of transitioning into a first union for women in municipalities with low and high levels of migration. Once I account for married women's labor force participation, women in municipalities with high levels of migration are 36 percent [(0.64-1)*100] less likely to transition into a first union compared with their counterparts in municipalities with low levels of male migration. The doubling of the gap [$\frac{(0.64-1)}{(0.81-1)} \approx 2$] is attributable to the fact that male migration promotes transitions into first unions by allowing women to specialize in home production, optimizing the gains to marriage, and increasing the attractiveness of marriage as an institution for single women. A control for married women's labor force participation removes this advantage and widens the gap in the likelihood of transitioning into a first marriage among women in municipalities with high and low levels of male migration. Not surprisingly, single women in municipalities with high rates of married women's labor force participation are less likely to transition into a first union than their counterparts in municipalities with low rates of married women's labor force participation. The odds of entering into a first union decreases by 25 percent following a 5 percent rise in married women's employment rate in the respondent's municipality of residence.

Model 3 examines to what extent aggregate levels of male migration influence women's transitions by altering the quantity of marriageable men in local marriage markets, which is captured using the sex ratio of single men to women in the municipality. Differences in the quantity of marriageable men explain approximately 11 percent [$100 * \frac{(0.64-1)-(0.68-1)}{(0.64-1)} \approx 11\%$] of the gap in the likelihood of forming a first union between women in the two types of communities defined by levels

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of male migration. This finding suggests that male migration depresses women's transitions into first unions by removing marriageable men from local marriage markets. Consistent with the imbalanced sex ratio model, I find that women in municipalities with shortage of marriageable men in local marriage markets are less likely to form their first co-residential union compared with their counterparts living in municipalities with more favorable local marriage markets. The odds of entering into a first union decrease by 4 percent [100*(1.40-1)*10/100 ≈ 4%] when 10 single men are removed for every 100 women in local marriage markets.

Model 4 adds single men's and women's employment status into the model to explore to what extent migration influences women's transition into first unions by disproportionately removing men with favorable economic prospects from local marriage markets. Net of controls for quantity of marriageable men, single men's employment status has little influence on both: women's transition into first unions and the relationship between levels of male migration and women's transition into first unions. The differences in single women's transition into first unions stay virtually the same between municipalities with low and high levels of migration. Interestingly, single women's labor force participation rate seems to depress women's transition into first unions, which is consistent with the Oppenheimer's marital search model that suggests that women's economic position affect their ability to prolong their marital search. The odds of transitioning into a first union decrease by 10 percent following a 5 percent rise in single women's labor force participation in the respondent's municipality of residence. However, this variable also explains little of the association between levels of male migration and women's transition into first union. The inclusion of single women's employment rate widens gap in the hazard of transitioning into a first union by 3 percent [$100*\frac{(0.67-1)-(0.68-1)}{(0.68-1)} \approx 3\%$]. This is attributable to the fact that single women in municipalities with high levels of male migration

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are less likely to participate in paid labor than those in municipality with low levels of migration, and as such, are have fewer economic means to prolong their marital searches.

Conclusion

The analyses reported in this paper investigate how the gender selective nature of Mexican migration to the United States, coupled with its large size, influences the union formation patterns of non-migrant women in Mexico. Overall, aggregate levels of male migration appear to have a negative effect on women's transition into first unions. Women in municipalities with high levels of male migration appear to be less likely to transition into first unions than their counterparts in municipalities with low levels of male migration.

An in depth examination of the mechanisms driving the relationship between aggregate levels of male migration and women's transition into first union reveals that migration influence women's transition into first union in multifaceted ways. On the one hand, aggregate levels of male migration promote women's transition into first union by raising the attractiveness of marriage as an institution. Specifically, migration of a male family member improves the long-term economic wellbeing of migrant families, which provide women the economic conditions necessary to specialize in home production. This, in turn, increases the net gains to marriage and improves attractiveness of marriage for single women in local marriage markets. On the other hand, migration depresses women's transitions into marriage by creating imbalances in local marriage markets.

This study contributes to the literature about family formation processes by examining how the mechanisms detailed in the various theories of marriage influence union formation behavior within the context of migration. Although past studies have examined how migration affects gendered division of labor and local marriage market conditions separately, little is known about how the various mechanisms interact with one another to engender changes in the union formation behavior of non-

migrant women living in communities with high levels of migration. (Hondagneu-Sotelo 1994; Kanaiaupini 2000). Furthermore, the study contributes to the body of work that stresses the importance of recognizing the role of migration in engendering changes to sending communities, paying special attention to its effect on non-migrant women who are largely ignored in studies of migration (Frank and Heuveline 2005). Lastly, the study provides insights about the effect of migration on future population composition and size, given the strong normative preference for childbearing within the context of migration.

I conclude the study with a recommendation that future data collection efforts and empirical studies to pay attention to the implications of migration for family life in sending communities and make a more strenuous effort to include non-migrant women in Mexico in their analyses.

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Tables

Table 1. Socio-demographic Differences by Levels of International Male Migration

	Low				High				Total			
A. Individual Characteristics												
Education (%)												
Primary	20				45				23			
Middle and High School	38				38				38			
College	41				18				39			
Total	100				100				100			
Age (%)												
20-24	11				7				10			
25-29	49				51				49			
30-34	28				27				28			
35+	13				15				13			
Total	100				100				100			
	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max
B. Municipality												
% of international male migrants	1.54	1.49	-2.78	5.22	9.76	3.95	5.23	21.75	3.60	4.27	-2.78	21.75
% of employed, married women	16.98	8.43	0.59	65.85	10.36	5.24	1.81	25.66	15.32	8.27	0.59	65.85
Sex ratio: single men to women	0.85	0.30	0.18	2.75	0.70	0.29	0.26	2.03	0.81	0.30	0.18	2.75
% of employed, single men	75.24	8.42	40.11	97.05	66.55	12.03	32.44	90.65	73.07	10.17	32.44	97.05
% of employed, single women	49.55	13.92	10.90	78.51	40.62	11.53	9.10	70.05	47.31	13.90	9.10	78.51
Rural (%)												
Urban	56				32				50			
Rural	44				68				50			
Total	100				100				100			
No. of women	3,962				488				4,450			
No. of municipalities	503				168				671			

Source: 2000 Mexican Census, International Migration Supplement of 2000 Mexican Census, and ENADID 2006.
Notes: All analyses are weighted.

Table 2. Discrete-Time Logistic Regression Models Predicting Transitions into First Unions

	Model 1		Model 2		Model 3		Model 4	
	exp(β)	β/se	exp(β)	β/se	exp(β)	β/se	exp(β)	β/se
Net flows of international male migration								
High	0.81	-1.76	0.64	-3.76	0.68	-3.19	0.67	-3.21
Education (Middle and High School)								
Primary	0.91	-1.14	0.87	-1.64	0.88	-1.48	0.89	-1.37
College	0.84	-2.33	0.87	-1.93	0.87	-1.92	0.85	-2.26
Age* (25-29)								
20-24	0.45	-12.70	0.40	-13.78	0.40	-13.82	0.38	-14.77
30-34	0.87	-1.27	1.01	0.05	1.01	0.07	1.12	0.99
35+	0.44	-3.14	0.56	-2.21	0.56	-2.23	0.62	-1.80
Rural (Urban)								
Rural	1.35	3.46	0.89	-1.00	0.88	-1.17	0.90	-0.87
Married women's labor force participation								
% of married women who are employed			0.95	-6.89	0.96	-6.80	0.98	-2.27
Quantity of potential partners								
Sex ratio of men to women					1.40	2.17	1.31	1.73
Quality of potential partners								
% of single men who are employed							1.00	-0.94
Women's ability to prolong marital searches								
% of single women who are employed							0.98	-3.91
Intercept								
Intercept	0.04	-44.50	0.12	-11.97	0.09	-10.58	0.20	-5.79

Source: 2000 Mexican Census; International Migration Supplement of the 2000 Mexican Census, and ENADID 2006
Notes: All analyses are weighted. Standard errors account for the clustering of observations within individuals and municipalities. * denote time-varying covariates.