

*New Evidence on Destination Decisions of Unauthorized Mexican Migrants: Does Social Capital Still Matter?*

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**Abstract:** *The geography of Mexican migration has changed significantly in the past several decades. Once primarily confined to Southwestern and coastal states and metropolitan New York, Los Angeles, Miami, and Chicago, Mexicans are now increasingly attracted to new urban, suburban, and rural destinations in the U.S. South, Midwest, and West. Scholarly explanations for this dispersal focus primarily on changing immigration policy, the restructuring of the U.S. and Mexican economies, and the linking of social networks between places of origin and destinations. Drawing on a new dataset on unauthorized Mexican migration (The Migrant Border Crossing Study), this paper reassesses the role of human capital, social capital, and occupational experience in migrant destination decisions and connectedness of Mexican sending and U.S. receiving regions. Results suggest human capital and occupational concentration have a limited impact on destination decisions, while regions of Mexico, affected by Mexican economic liberalization, appear connected to new destinations. Social ties to the United States also continue to be significant determinants for unauthorized migrant destinations. Further, social network composition, as it relates to the presence or absence of family members with U.S. citizenship or the presence or absence of family members without U.S. citizenship in one's social network, varies across migrants.*

## **Introduction**

The geography of Mexican migration has changed significantly within the past two decades. Once primarily confined to the southwest, coastal states, and metropolitan New York, Los Angeles, Miami, and Chicago, Mexicans are now increasingly attracted to new urban, suburban, and rural destinations in the U.S. South, Midwest, and West (Singer 2004; Massey 2008; Riosmena and Massey 2012). A growing body of research documents the changing geographic trends in Mexican and Hispanic<sup>1</sup> migration to and within the United States (Singer 2004; Massey 2008; Lichter and Johnson 2009). Other research focuses on the large-scale economic and political forces and migrant social structures that explain changing migration flows (Kandal and Parrado 2005; McConnell 2008; Massey 2008). Still other scholarship investigates the economic and social consequences of new immigration in receiving location, along with the institutions that promote and hinder immigrant incorporation (Zúñiga and Hernández-León 2005; Massey 2008; Marrow 2011; López-Sanders 2011; Schmalzbaurer 2009, 2011).

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<sup>1</sup> Immigrants and Hispanics have both experienced geographic diversification but Mexican immigrant dispersion has been particularly prominent (see U.S. Census 2000, 2010)

While there exists a substantial body of qualitative and quantitative work on the contemporary geographic dispersion of Mexican settlement patterns in the United States, limited research specifically addresses the individual destination decisions of unauthorized Mexican migrant border-crossers. The few studies that have examined the destination decisions of Mexican have neither thoroughly investigated the heterogeneity within the unauthorized population nor incorporated legal status (except as a control variable) into the analysis (McConnell 2008; Riosmena and Massey 2012). Moreover, most quantitative studies of unauthorized migration and destination decision making has relied on data from the Mexican Migration Project (MMP), which does not reflect the contemporary unauthorized experience, which takes places in a context of increased interior and border enforcement.

The paper offers new insight on unauthorized Mexican migrant destination decisions by examining the individual-level factors influencing geographic preferences during the contemporary context of economic restructuring in the United States and heightened border and interior enforcement by the U.S. government. We do so by examining the distribution of unauthorized Mexican migrants' decisions across a *traditional*, *new*, and *re-emerging* destination typology (Riosmena and Massey 2012). We pose several research questions: What destinations are unauthorized Mexican migrants trying to reach? Are most unauthorized Mexican migrants traveling to traditional states like California or Texas, or are individuals bypassing these gateways in favor of states with shorter histories of Mexican settlement? We are also interested in the individual level factors that may help predict one destination type over another. We consider three competing, though not mutually exclusive, approaches to understanding these destination decisions: human capital, social capital, and occupational channeling. For example, does English proficiency or higher levels of relative education change the odds that a migrant

would choose one destination type over another, as human capital theory might suggest? We are also particularly interested in investigating whether social ties matter and, if so, *which ties* in a migrant's network structure appear to be most important in determining destination choices.

To address these research questions we will draw on data from the second wave of the Migrant Border Crossing Study (MBCS) (Slack et al. 2013). The MBCS is an unprecedented cross-sectional study of unauthorized crossings along the U.S.-Mexico border that was conducted between 2009 and 2012. Interviews were conducted at ports of entry and migrant shelters in five border towns and Mexico City with over one thousand repatriated migrants. The MBCS provides detailed information about their most recent border crossing experience, including their modes of crossing, experiences with violence in the desert, and interactions with U.S. authorities during apprehension and removal. The survey also includes multiple questions about place of origin, social ties to the United States, levels of human capital, and occupational history

This paper is organized into four sections. We begin with an overview of the literature explaining the geographic dispersion of Mexican immigration across the United States. We then review and critique theories that have been used to explain immigrant destination decisions. We then discuss the MBCS dataset and measures and methods used in the analysis. Lastly, we present the preliminary results of this analysis and discuss the potential implications for furthering our understanding of the U.S. destination choices of Mexican migrants.

### *History of Mexican Geographic Dispersion*

Prior to 1990, the majority of Mexican migrants, whether authorized, unauthorized, temporary or permanent, settled in three states: California, Texas, and Illinois. California alone

received over 60 percent of Mexican migrants during the first half of the 20<sup>th</sup> century, many of whom came to the state to work in agriculture (Massey and Capoferro 2008). These patterns of Mexican migration reflect both the historical and structural conditions during the early eras of Mexican migration to the United States. The annexation of Texas (1836-1845), the Mexican cession of its northern territory (1848), and the Gadsden Purchase (1853) facilitated longstanding cultural, economic, and social ties. These cross border ties, along with geographic proximity to Mexico, made the southwest a natural destination for Mexican migrants. Further, labor demand for non-Chinese and non-Japanese workers in the early 20<sup>th</sup> century resulted in mass recruitment of Mexicans to the traditional states experiencing economic and industrial development following westward expansion and economic development, including Illinois and to a lesser extent Indiana (Cornelius 1981; Massey, Durand, and Malone 2002). Traditional settlement patterns were further reinforced by the formation of social networks in these areas and the continued interest of business in Mexican labor, reflected in U.S. policies such as the Bracero Program, a binational agreement between the U.S. and Mexico for the recruitment of temporary contract laborers from Mexico to the United States from 1963 until its formal end in 1963 (Calavita 1992). Even as the distribution of migrants' "occupations on first trip" shifted away from agricultural work to service and unskilled work between the 1960s and 1980s, migrants continued to settle in rural and urban areas within traditional states (Massey 2008).

However, settlement patterns ultimately underwent noticeable changes in the 1990s. Mexican immigrants began moving out of traditional states and new migrants began traveling directly to other states rather than stopping in traditional gateway destinations like California (Zúniga and Hernández-León 2005; Massey 2008; Riosmena and Massey 2012). States in the South and Southeast have since undergone significant, and in some cases "hyper" Mexican

population growth,<sup>2</sup> while traditional states along the border and in the southwest have experienced little to no growth (Singer 2004; Massey 2008).

One set of explanations for this transition relates to the liberating effects of the 1986 Immigration Reform and Control Act (IRCA), in which nearly 2.7 million immigrants, many of whom were Mexican, became legal permanent residents (Baker 2010). IRCA transformed the lives of many immigrants in the United States by providing a pathway to citizenship for undocumented individuals. After IRCA many Latina/os and mixed-status families were able to fully participate in public life without fear of apprehension and deportation (Massey et al. 2002). Geographic mobility also became a reality for many, as immigrants were able to gain legal documentation and venture to new regions previously avoided due to their legal status (Durand, Massey, and Parrado 1999). While this benefitted unauthorized individuals by allowing them to escape the abuse and exploitation risked in living at society's extreme margins, IRCA was not unanimously viewed as a complete success. Originally intended to deter future unauthorized migrants, strict employer regulations did little to stop flows of unauthorized migration from Latin America and did little to prevent employers from utilizing migrant labor. Nativist and anti-immigrant sentiment in the Southwest urged policy makers to deal with the remaining and potential future "immigration problem[s]" (Massey et al. 2002). This rally for anti-immigrant legislation may best be remembered in the context of California's Proposition 187 in which "anti-immigrant hysteria" sought to prevent unauthorized immigrants from accessing public school and other public services, and required state agencies to crack down on individuals using or producing false immigration documents (Massey and Capoferro 2008). In many instances, this resulted in the deterioration of Mexican living conditions, prompting internal migration out of

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<sup>2</sup> Other researchers discuss different contributing factors in population growth across new and traditional destinations by disentangling direct and indirect growth resulting from both general Mexican-U.S. migration and natural increase (Lichter and Johnson 2009)

traditional gateways to new areas that had not previously experienced large flows of migration (Light 2006). Further, this legislative response preceded an exceptional build-up of enforcement activities and operations along the U.S-Mexico border by the U.S. government

The first of these enforcement efforts at well established crossing point was Operation Blockade in 1993, which involved the fortification of the El Paso sector of the border. Operation Blockade, seen as a success by many, ushered in similar operations such as, Operation Gatekeeper in California in 1993, Operation Rio Grande in Texas in 1997 and Operation Safeguard in Arizona 1999. These “prevention through deterrence” initiatives sought to discourage migrants from crossing through well-established urban crossing corridors by increasing apprehension and enforcement at specific points along the border and within the interior (Eschbach et al. 1999). Subsequent migrant flows have been redirected to more treacherous regions of the border, giving Border Patrol “a tactical advantage” (448), but also resulting in a deflection of crossings attempts away from historic points of unauthorized entry into the Sonoran desert, a change that some have described as a “funnel effect” (Rubio-Goldsmith et al. 2006). The redirection of unauthorized migration flows and increased interior enforcement in traditional urban centers also resulted in many migrants forgoing traditional destinations in favors of less patrolled regions of the country (Massey, Durand, and Malone 2002).

Other researchers explain the geographic dispersion of Mexicans immigrants to new destinations as a consequence of economic restructuring in the United States and Mexico (Zúñiga and Hernández-León 2005; Kandal and Parrado 2005; Hirschmen and Massey 2008; Riosmena and Massey 2012). Economic restructuring refers to the strategy used by U.S. industries to avoid declining profits and remain competitive in the world market. Restructuring

strategies include downsizing personnel, lowering wages, informalizing labor relations through sub-contracting, and relocating to areas where union organizing is much less common (Bluestone and Harrison 1982; Portes and Sassen 1987). For example, Kandal and Parrado (2005) link the Hispanic population growth and geographic diversification in the 2000 Census to the geographic relocation of the much of the meat processing industry (see also Stull, Broadway, and Griffith 1995). Hernández-León and Zúñiga (2000) similarly attribute the emergence of rural Georgia as a new destination for both internal and international Mexican migrants to the development and expansion of the state's textile industry. The construction industry in North Carolina also grew from the mid-1980s to mid-2000s requiring a large immigrant work force (Pew 2007). Latinos were particularly in successful in gaining employment in the construction industry due to falling wages limiting competition from native workers and because of their ability to rely on skills learned from past work experience (Hagan et al. 2011). Overall, the labor force of these industries has historically been made up of Mexican immigrants but economic restructuring and relocation of these industries and their expansion now attracts them to new destination.

However, economic restructuring has not solely occurred on the U.S. side of the border. Restructuring and economic liberalization in Mexico resulted in the displacement of many Mexicans workers as state operations were privatized, tariffs were removed, and agricultural markets and urban industries in Mexico were exposed to globalization and international competition (Wise 2009; Hagan forthcoming). Using data from the 2006 Mexican Survey of Population Dynamics, Riosmena and Massey (2012) show that new rural sending regions in Central and South Eastern Mexico drive much of the new destination migration in the American South and American East, though the largest proportions of migrants from these new sending regions settle in border and historical U.S. destinations. Further, much of this stream is made up



of unauthorized migrants from regions that were predominantly affected by neo-liberal policies (Riosmena and Massey 2012).

Ultimately, economic restructuring and changes in immigration legislation played a role in the geographic distribution of Mexican immigrants. However, these large-scale processes obscure the micro level social mechanisms that play a role in destination preference formation. To better understand individual level destination decisions occurring in the context of these economic and political transitions, we review relevant theories of migration.

## **Theoretical Framework & Past Research**

### *Social Networks and Social Capital*

Discussion of social networks dominates the sociology of migration literature. “Social network” commonly refers to the “web” of family, friendship, and community ties or personal relationships in which an individual is embedded (Massey et al. 1987; Boyd 1989). Migrant social networks may also include “organizationally defined social relations” connecting individuals to a variety of more external structures that facilitate migration, ranging from religious organizations to labor recruiters or *coyotes* (smugglers) (Christiansen 1996; Hagan 2008; Hernández-León 2008; Krissman 2005). But past research and literature emphasize the importance of personal networks to the point that social and personal networks are often used interchangeably (Boyd 1989: 639). The discussion of social networks as central to understanding migration as a complex social process is not a recent phenomenon. MacDonald and MacDonald (1964) observed some decades ago that *chain migration*, or “movement in which prospective migrants learn of opportunities, are provided with transportation, and have initial accommodation and employment arranged by means of primary social relationships with

previous migrants” (82) as influential in migration patterns in Southern Italy in the late 18<sup>th</sup> century. Their definition of chain migration situates social networks as the driving force of migration for individuals that follow the pioneer immigrants. Though MacDonald and MacDonald do not specifically refer to it, implicit in their discussion of chain migration and social relationships is the concept of social capital.

Social capital refers to the resources available to an individual by virtue of their membership in a social network (Bourdieu and Wacquant 1992). Though not necessarily valuable as is, social capital can be “converted” or drawn on (in the form of social obligation) in order to improve or maintain one's position (Bourdieu 1986; Bourdieu and Wacquant 1992). Since Bourdieu and Wacquant's discussion, the concept of social capital has been refined and now is often discussed as a primary resource that initiates, facilitates, and perpetuates migration by lowering social and economic costs associated with the migration process (Massey et al. 1993). Individuals can draw on ties with kin and friends throughout the migration process to determine when to migrate, to ensure safe and successful passage to their destination, to locate housing, to secure a place in the labor market, and assist more generally with integration into the co-ethnic community (Massey et al. 1987; Singer and Massey 1998; Cerrutti and Massey 2001; Palloni et al. 2001; Aguilera and Massey 2003). Social ties link sending communities to specific receiving communities by encouraging migrants to travel to locations in which community members, friends, and relatives already reside (Massey et al. 1987; Hagan 1994; Menjivar 1994). However, scholarship also notes that social networks are not static but transform over time (Boyd 1989). Further, many studies reveal social networks do not function in an exclusively positive manner. Social networks, and the social capital they provide, may have different forms and functions across different groups of individuals, deteriorate in their ability to provide useful resources over

time, may host conflicting interests, generate benefits at the expense of others, constrain freedoms, come at the cost of community solidarity, break down and divide members, or block upward mobility for an individual (Portes and Sensenbrenner 1993; Menjivar 1994; Hondagnue-Sotelo 1994; Mahler 1995; Hagan 1998).

Though studies have thoroughly examined the positive and negative consequences of being embedded in social networks, few studies have examined the impact different network composition may have with regards to the legal status of individuals that make up a networks that cross national boundaries. Espinosa and Massey (1999) do reveal that compositions of social networks matter in predicting the odds that a migrant undertakes an undocumented journey on their first trip. They find that characteristics such as greater closeness, more numerous ties, and migration experiences of network members, increase odds of migration. Despite these considerations of network composition, researchers have not thoroughly examined the maturity of Mexican networks in terms of changing legal composition. It is likely social networks differ in levels of legal maturity across destination types. As of 2010, there were around 800,000 Latinos in North Carolina, a new destination. The majority of these Latinos are Mexican. Further, almost 44 percent of the 800 thousand Latinos in North Carolina are estimated to be undocumented (U.S. Census 2010; Passel and Cohn 2011). This stands in stark contrast with a traditional state such as California, which is home to almost 14 million Latinos, with 18 percent estimated to be unauthorized (U.S. Census 2011; Passel and Cohn 2011). This means that a randomly selected Mexican individual would be more likely to have social ties to California than in North Carolina, but that if a person with ties to California is compared with a person with ties to North Carolina, the latter's ties would be more likely to be undocumented. This comparison illustrates the point that migrant networks are likely to vary in their maturity, and therefore the legal and citizenship

status individuals maintain within the network, across traditional, new, and re-emerging destinations.

Motivated by these considerations, this study aims to study the effect of network composition on destination choices. Specifically, this study tests the following hypotheses: (1) network composition and the social capital it offers, measured in terms of family and friendship ties to the U.S., are associated with destination choices, (2) mature network ties, operationalized as having family with U.S. citizenship living in the United States, are associated with traditional destinations, and (3) less mature network ties, measured as having friends and family living in the United States, are associated with new destination outcomes.

#### *Human Capital and Occupational Channeling*

Scholars also rely neo-classical theory and human capital approaches to understand the migration process and the destination decisions of migrants (Sjaastad 1963; Borjas 1987; De Jong 2000; Foulkes and Newbold 2010). Human capital approaches place migration decisions, such as the decision to migrate, when to migrate, or where to migrate, within a series of individual cost-benefit analyses. When it comes to choosing destinations, migrants make these individual-level calculations and seek to maximize economic returns to human capital. Human capital is broadly defined as formal language skills, training and certification, and years of formal education (Becker 1975; McManus, Gould, & Welch, 1983; Massey et al. 1993). Higher levels of formal education and host country language proficiency may allow migrants to diversify their choice of potential destination while others may be forced to pick strategic locations where education and language ability matter little for their integration and to secure work (Nogle 1997; Massey and Espinosa 1997; Foulkes and Newbold 2010; Dustman 2002, 2003).

Social scientists studying migration continue to include human capital measures in statistical models to predict a variety of social and economic outcomes, though past research on the inability to transfer human capital, especially for unauthorized migrants, suggests that formal human capital is less important than other forms of capital, including social capital (Chiswick 1979; Aguilera and Massey 2003; Chiswick and Miller 2007). Furthermore, scholars note serious limitations to traditional definitions and measurements of human capital (such as years of education), mainly due to their failure to account for skills and on-the-job training acquired informally or “naturally” in countries of origin (Waldinger 1996; Hagan et al. 2011). Sanderson and Painter (2011) identify what they call “occupational channels” or a supply-side explanation where “occupations serve as channels for migration, facilitating migration to specific occupations and sites in the destination country and discouraging migration to other occupations and sites” (463).

Sanderson and Painter II (2011) test the presence of occupational channels linking the Mexican and U.S. economies in the context of economic restructuring in the United States. Drawing on MMP data, they find significant links between industrial sectors in Mexico and the United States and argue that these links reveal the importance of supply-side explanations of new destination formation. More generally, migrants develop skill sets in occupations in Mexico that later provide “ready-made paths” for migrants’ economic mobility in the United States (Sanderson and Painter II 2011: 462). These channels, linked by economic sectors, facilitate migration to specific occupational sectors and ultimately to specific destinations. For example, past work experience in food processing in Mexico channeled migrants to similar sectors in the U.S. south. McConnell (2008) also finds a relationship between occupation in Mexico and migrant destination, such that migrants with agricultural experience are more likely to travel to

rural areas than large non-traditional urban destinations. Thus, this analysis tests the additional hypotheses that (4) human capital measured as English proficiency and years of formal education are not associated with destination decisions, but (5) occupational experience is associated with destination outcomes such that Manufacturing/Transportation/Construction experience is associated with new and re-emerging destination outcomes.

The selection of U.S destination is a complex and multi-dimensional decision. The neo-classical, social network, and occupational channeling theories of migration are not exclusive of one another, but through the use of appropriate data it is possible to test the four outlined hypotheses.

## **Data**

Much of the research on migration between Mexico and the United States is informed through empirical analyses of the Mexican Migration Project (MMP), a collaborative research project based at Princeton University and the University of Guadalajara. Strengths of MMP include, but are not limited to, the use of rich migration histories, migration histories that span the whole 20<sup>th</sup> century, and detailed information on households including members abroad, their relationship to household heads, and their migration experience. While the MMP has been central to social scientists' emergent understandings of migration, it is not without limitations. A primary concern regarding MMP is it cannot capture the political and economic contexts of present-day Mexican migration patterns. This concern is likely a function of the retrospective process for collecting information of past migration trips. Furthermore, despite collecting information between 1987 and 2013, the majority of respondents' U.S. trips took place prior to 2000 (see MMP 143 person files). This is problematic for research concerned with destination

choices following economic restructuring in the United States and Mexico and during our current political climate of increased border and internal enforcement.

With these limitations in mind, we instead base this study on data gathered in the second wave of the Migrant Border Crossing Study (MBCS). The MBCS is an unprecedented cross-sectional survey of Mexican migrants who attempted or succeeded the unauthorized border crossing, then apprehended by any U.S. authority (either while crossing or once in the United States), and subsequently returned to Mexico voluntarily or through formal orders of removal. The interviews were conducted with these former migrants in person. The Wave II sample was collected between 2010 and 2012 in Tijuana and Mexicali, Baja California; Nogales, Sonora; Ciudad Juárez, Chihuahua; Nuevo Laredo, Tamaulipas and Mexico City (N = 1,110). Ninety percent of these interviews took place in 2011 (Slack et al. 2013).

[Figure 1 about here]

Figure 1 shows the approximate location of survey sites along the border and in the interior of Mexico. Mexico City was included to locate and survey those migrants who were returned to Mexico through a program offered by the Mexican Interior Repatriation Program (MIRP), which offered flights to Mexico City as one of the alternatives to border drop offs. The sample was randomly recruited at migrant shelters and official ports of entry in these cities. The response rate for the survey was around 94 percent. MBCS limits its sample frame to individuals eighteen years of age or older, who had not previously been interviewed for the study, who crossed the U.S.-Mexico border post 9/11, and who had returned to Mexico within one month of the interview (Slack et al. 2013). Interviews lasted around 45 minutes and were carried out in

Spanish by graduate students and professional interviewers. While at the time of interview these individual might intuitively be considered deportees or return-migrants as opposed to migrants, the information gathered is related to both their most recent migration and their deportation experience.

Some descriptive statistics of variables not used in the analysis may provide a picture of the respondents interviewed and the typical contemporary unauthorized Mexican border-crosser. The typical unauthorized Mexican migrant is a 32-year-old male from the traditional sending region in Mexico and with work experience in manufacturing, transportation, or construction<sup>3</sup>. The average number of previous crossing attempts (not including the most recent attempt which was subject of the interviews) is 3.88. Past research, based on MMP data, typically reports on migration trips where as the MBCS reports crossing *attempts* so these numbers cannot be directly compared. However, despite differences in question wording the number of crossing attempts in MBCS is only slightly higher than the number of lifetime trips previously reported (Singer and Massey 1998; Espinosa and Massey 1999). The average number of apprehensions is higher than past data with a mean of 2.87 (Singer and Massey 1998; Kimball, Acosta, and Dames 2007). However, these studies were based on data collected prior to the prevention to deterrence campaign or data limited to migrants from the states of Jalisco, Oaxaca, and Yucatán. The most recent crossing was also the first crossing attempt for around 16 percent of the sample. About 30 percent of the sample avoided apprehension and successfully made it to their destination during their most recent crossing attempt. Almost 72 percent of the respondents in MBCS relied on a *coyote* or a guide during their journey a figure that is only slightly higher than past research (Singer and Massey 1998; Orrenius 2001; Massey et al. 2002). Lastly, the largest proportion of

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<sup>3</sup> Sex, age, region born, and work experience included in the analysis. See measurement of variables for greater detail.



the sample crossed through the Tucson sector (40 percent) with San Diego (15 percent) and Laredo (14 percent) being the next two highest traversed sectors in the MBCS sample. Though apprehension statistics by sector vary over time, this distribution across sectors of crossing is consistent with CBP apprehension statistics, particularly in 2011 when the majority of the interviews were carried out (U.S. Custom and Border Protection 2013). Based on apprehension statistics, MBCS slightly over-sampled respondents who crossed the El Paso sector and under-sampled respondents from the McAllen/Rio Grande sector. We will now outline the variables used in the analysis.

## **Measurement of Variables**

### *Dependent Variable*

The MBCS provides information on respondents' U.S. destination during their last crossing with responses ranging from specific cities and states such as "Appleton, WI" to only states, for example "Virginia". Because of this variation, destinations are coded at the state level in this analysis. The dependent variable is a state destination classification used by past researchers interested in connecting U.S. destinations to Mexican sending communities (Riosmena and Massey 2012). This typology, which is displayed in Table 1, organizes states into one of three categories, *traditional*, *re-emerging*, or *new destination*, contingent on each state's historical presence of Mexicans and the change in the size of the Mexican foreign-born population throughout the 20<sup>th</sup> century (Riosmena and Massey 2012).

[Table 1 about here]

These three destination categories are not as refined as categories used in past research, which has distinguished between small and large urban areas as well as rural areas within states. A typology that includes distinctions between rural and urban destinations would provide a more nuanced analysis of destination decisions, but is not possible due to the data limitations of the MBSC. These three categories and the variation in responses, however, allow for the analysis of destination choices following the same tradition (Singer 2004; McConnell 2008; Sanderson and Painter II 2011). Table 2 displays the means for each category of *Destination Classification*. It reveals that the vast majority (69 percent) of respondents indicated that their destination was a state that falls into this category. Despite the clear preference for traditional state destinations, many respondents indicated that they were trying to reach other states during their last crossing experience. About 16 percent of respondents were attempting to reach a new destination with the remaining 12 percent attempting to travel to a re-emerging destination.

[Table 2 about here]

### *Independent Variables*

Social network composition is measured by the variable *U.S. Ties*. This measure includes exhaustive and exclusive categories meant to gauge strong and weak social ties to the United States (Granovetter 1973). An individual migrant can have family members with U.S. citizenship, family members without citizenship, only friends and acquaintances, or no social contacts in the United States. It should be noted that individuals with both friends and family were coded at the family specific level due to cell size concerns. Social ties that consist of family members with citizenship would suggest a respondent has mature ties (a more mature network

composition in terms of legal status). Table 2 displays the percentage distribution for *U.S. Ties*. Unsurprisingly, only around seven percent of the sample has no social contacts in the United States. The majority of the sample, almost 84 percent, has family members in the United States. The 84 percent with family in the United States is almost split with around 47 percent having family members with citizenship and 37 percent family without citizenship in the United States. Around nine percent of the sample has only friends or acquaintances in the United States. This social tie measure cannot be directly compared to past studies which have captured social capital through measures that count the number of migrant siblings or children a respondent has, indicate if a respondent is the spouse or child of a migrant, or indicate the percent of persons 15 or older in their community that have migration experience (Espinosa and Massey 1997; Singer and Massey 1998; Massey and Espinosa 1999; McConnell 2008). We utilize a multidimensional measure that indicates varying degrees of existing social ties to the U.S., rather than the general migration experiences of a respondent's social ties. Thus, we are able specify family with no citizenship as the reference category in the multivariate analysis which will simultaneously allow me to estimate the effect of having social ties to the U.S. (versus not having ties) and to estimate the varying effects different compositions might have on migrant destinations. That is, the effects of having family with citizenship or having only friendship ties versus family without citizenship ties are estimated.

Formal human capital is captured through two variables. The first variable measures a migrant's years of formal education and English language proficiency. For the purposes of this analysis, years of education is collapsed into a dichotomous variable with 1 signifying 12 or more years of education and 0 indicating that the respondent had less than 12 years of formal education. we take this approach to measuring education due to concerns over cell size and in

order to reduce the degrees of freedom<sup>4</sup>. Twelve years is also used for practical reasons, as it signifies the completion of *preparatoria*, and distinguishes migrants with the highest levels of education—the top 15 percent (see Table 2). The second human capital measure captures English language proficiency. Respondents were asked if they spoke any English and those who said yes were then asked a follow-up question asking them to gauge how well they spoke English (mother language/fluent, very well, or not very well). For the purposes of this analysis a dichotomous variable was constructed with those who said “yes” followed with “mother language/fluent” or “very well” coded as “1” for English proficient and the rest “0”. Table 2 also reveals that 12 percent of the sample is proficient with English. Both of these measures capture human capital that is, according to neo-classical theory and past research on human capital and migration, relevant to Mexican migrants and may be related to destination decisions (Nogle 1997; Massey and Espinosa 1997; Foulkes and Newbold 2010; Dustman 2002, 2003).

Respondents were also asked to indicate their “last job,” either in the U.S. or Mexico. These responses were then coded into a series of categories and collapsed to form *Experience by Sector*. This categorical variable distinguishes between four sectors that “last job” responses may fall into one of four categories: (1) agriculture, (2) manufacturing, transportation, or construction, (3) service including hospitality, and (4) other. This measure is potentially less refined than may be desired, as there is as much variation within the other category. Another limitation is that this categorization does not allow distinguish if a respondent’s last job was in the United States or Mexico. Instead it captures experience and is a less direct measure of occupational channeling. Nevertheless, this collapsing is sufficient for the purposes of this analysis. As mentioned, this

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<sup>4</sup> More detailed measures with education as a continuous measure did not produce different coefficient estimates for other variables

variable captures experience by occupational sector, which the theory of occupational channeling suggests should be related to destination decisions.

As Table 2 reveals almost half (45 percent) of the sample's most recent job was in manufacturing, transportation, or construction. Jobs in the service sector were the second most common response (20 percent). The remaining migrants in the sample worked in agriculture (19 percent) and other (11 percent). Information on occupation was missing for about five percent of the sample.

We also include a control for Mexican region of origin in the analysis. Though it is not possible to determine if migrants moved within Mexico during their life, this variable will approximate regional connections that may exist between regions in Mexico and regions in the United States as past research has suggested (Riosmena and Massey 2012). About 12 percent of the sample was born in the northern/border region of Mexico, 34 percent in the traditional migrant sending region (west central Mexico), about 21 percent in central Mexico, and 31 percent in south/eastern Mexico.

Finally, we also include simple demographic controls. *Female* indicates whether or not the respondent is female. *Age* measure the respondent's age since last birthday. Table 2 reveals that the mean age of the MBCS wave II sample is about 32 years old and about 18 percent of the sample is female. *First Cross* and *Years5* are included as controls for whether their most recent crossing experience (from which all other variables are derived) was their first and if the individual had spent more than 5 years of their life (the median of the sample) in the United States. The preliminary regression model also includes a control for the natural log of the migrant's household income. Descriptive results are also displayed in Table 2.

## Methods

We employ multinomial logistic regression in order to examine the relationship between individual-level characteristics and destinations outcomes. That is, we are interested in modeling destination outcomes as a function of individual-level characteristics. In this case the categories *traditional*, *new*, and *re-emerging* are not logically ordered. Thus, multinomial logistic regression is the most appropriate analysis as the dependent variable is a non-ordered categorical variable (Long 1997).

The multinomial logit model can be thought of as an extension of the binary logit model, but instead of estimating one logit this method estimates multiple logits concurrently (Long 1997). we estimate the coefficients with the following logits:

$$\text{Ln} \left[ \frac{\text{Pr}(\text{new}|x)}{\text{Pr}(\text{traditional}|x)} \right] = \beta_{0,a|b} + \beta_{1,a|b}x_1 + \dots + \beta_{n,a|b}x_n$$

$$\text{Ln} \left[ \frac{\text{Pr}(\text{re-emerging}|x)}{\text{Pr}(\text{traditional}|x)} \right] = \beta_{0,c|b} + \beta_{1,c|b}x_1 + \dots + \beta_{n,c|b}x_n$$

$$\text{Ln} \left[ \frac{\text{Pr}(\text{new}|x)}{\text{Pr}(\text{re-emerging}|x)} \right] = \beta_{0,a|c} + \beta_{1,a|c}x_1 + \dots + \beta_{n,a|c}x_n$$

The first equation suggests that the natural log of the odds of *new destination* versus *traditional destination* is equal to the estimated intercept plus a series of coefficient by variable values for  $1$  through  $n$  independent variables. In the population we know that,

$$\text{Ln} \left[ \frac{\text{Pr}(\text{new}|x)}{\text{Pr}(\text{traditional}|x)} \right] + \text{Ln} \left[ \frac{\text{Pr}(\text{re-emerging}|x)}{\text{Pr}(\text{traditional}|x)} \right] = \text{Ln} \left[ \frac{\text{Pr}(\text{new}|x)}{\text{Pr}(\text{re-emerging}|x)} \right]$$

however, this is not usually true in sample data (Long 1997). In order to determine coefficients for the *new destination* versus *re-emerging destination* we calculate all three logits. Finally, we present coefficient estimates in Table 3.

A calculated Hausman statistic (not shown) fails to reject the null hypothesis for the models tested, which suggests that the irrelevant alternative IIA assumption holds. Thus, coefficients might be different but the overall effect suggests no evidence of a difference between models depending on available choices in the dependent variable.

Finally, In order to preserve the structure of the existing data, we use Multiple Imputation (MI) to replace missing values with plausible ones, as MI is considered superior to case/list-wise deletion (Graham, Olchowski, and Gilreath 2007). Furthermore, we also rely on “multiple imputation, then deletion (MID)” for the missing dependent variable values (von Hippel 2007). Imputation and deletion on the dependent variable allows for more efficient estimates without estimating models with potentially problematic imputations (von Hippel 2007). Overall, coefficient estimates for imputed and non-imputed data do not differ significantly but the imputed data is preferred as it allows for estimates while not losing information provided by observations with at one or more value missing.

[Table 3 about here]

## **Results**

Table 3 presents the multinomial logistic regression coefficients and standard errors for the model predicting destination choice. The first two columns present the logits for *new* and *re-emerging* versus *traditional* destination and the third column presents *new* versus *re-emerging*

destination. In all three models, manufacturing/transportation/and construction is the reference group for occupational experience and south/south east is the reference group for region born. Also, family without citizenship is the reference group for U.S. social ties.

Consistent with hypothesis one, U.S. social ties appear to be associated with destination choices. The coefficients for family with citizenship (-0.442) and no contacts (-0.885) are statistically significant. The coefficients suggest there is a negative relationship between both categories, relative to family with no citizenship. More specifically, compared to a person with only family with no U.S. citizenship living in the United States, unauthorized Mexican migrants with family with citizenship and migrants with no contacts have lower odds of choosing a new destination state compared to a traditional destination. For example, a migrant with no contacts has about 59 percent lower odds of traveling to a new destination than to a traditional destination compared to a migrant with U.S. family without citizenship ( $\exp[-0.885]=0.413$ ). These results are also consistent with hypotheses three and four that mature network ties, operationalized as having family with U.S. citizenship living in the United States, are associated with traditional destinations and less mature network ties, measured as having friends and family living in the United States, are associated with new destination outcomes, though there appears to be no statistically significant effect for friends compared to non-citizen family living in the United States.

Occupational experience appears to have little to no relationship with destination choices for unauthorized Mexican migrants and human capital measures reveal mixed findings. With multivariate analysis there are no statistically significant findings for occupational experience and these results were consistent regardless of the reference group used. There also appears to be no relationship between destination preference and self-reported English proficiency. The only



relationship appears between higher education and re-emerging destination versus a traditional destination. The coefficient estimate for edu12 of 0.524 suggests that compared to an individual with less than 12 years of formal education an individual with 12 years of education has about 69 percent higher odds of traveling to a re-emerging destination than to a traditional destination. Overall, these findings are not consistent with hypothesis four and five. Instead, there appear to be mixed findings for hypothesis four that there is no relationship between English language proficiency or education and destination choices and no support of “occupational channeling” in the case of contemporary unauthorized Mexican migrants (Sanderson and Painter II 2011).

Finally, these models support the findings from Riosmena and Massey (2012) that there is regional connectedness between the United States and Mexico in which a relatively larger portions of migrants from central and southern Mexico are traveling to new destinations. Relative to respondents born in south/south eastern Mexico, migrants born in traditional and northern sending regions have lower odds of traveling to a new destination compared to a traditional destination. The same relationship is found when comparing new destinations to re-emerging destinations. Relative to respondents born in south/south eastern Mexico, migrants born in traditional and northern sending regions have lower odds of traveling to a new destination compared to a re-emerging destination

## **Conclusion**

In this paper we rely on data from the Migrant Border Crossing Study to examine the relationship between relevant individual-level characteristics of unauthorized Mexican migrants, such as U.S. social ties, human capital measures, region born, and occupational experience, and their state destination preferences. Results show support for the social network, mixed support

for the human capital theory of migration, and provide no evidence for the “occupational channeling” theory of migration and destination choices. Furthermore, analysis provide additional support to the idea that the recent growth of the Mexican population in the American South is made up of a many migrants traveling from central and south/south eastern Mexico. In our analysis, region born was associated with U.S. destinations in this fashion.

Our analysis provides a novel examination of the relationship of social ties to the United States and destination decisions by utilizing a multidimensional social tie measure that, to our knowledge, has not been used in previous studies. Our measure of social ties distinguishes between having a tie(s) to a family member with citizenship, a tie(s) to a family member without citizenship, a tie(s) to only friends or acquaintances, or no social contacts/ties in the United States. A percentage distribution of the U.S. ties variable speaks to the maturity of contemporary unauthorized Mexican migrant’s social ties, with regards to the presence of family with citizenship. Almost half of respondents report having a U.S. citizen family member living in the United States. It is likely that Bracero era migrants did not have similar rates of social ties to U.S. citizens. While this analysis does not provide a glimpse of change over time, for example since the Bracero era, it does stand as a reminder that social networks are not static (Boyd 1989). As the number of ties in a network might change over time, so too can the legal status of members that make up networks. This is also an important reminder, as this analysis also shows that differences in social ties, on this legality dimension, appear to have differential outcomes. Future analysis should consider how different qualities in ties further affect decisions throughout the whole migration process.

However, our analysis is not without limitations. In the future we plan to address two main issues. First, we will disaggregate the occupational categories used to capture occupational

experience and separate construction to be its own exclusive group. As is, almost 45 percent of the respondents report their last job as being in manufacturing, transportation, and construction. Following the practice of past research, these three responses currently constitute one collective category (McConnell 2008; Sanderson and Painter II). However, the literature on the growth of the construction industry in the American South suggests respondents with experience in construction maybe drawn to the South given the success of Latinos in accessing employment in this industry (Pew 2007; Hagan et al. 2011). Furthermore, we know there is a non-trivial number who report their last job as being in construction.

Second, we will try to disentangle where a respondent's last job was. Currently, we do not distinguish whether a respondent's last job was in Mexico or if their last job was in the United States. The MBCS survey instrument indicates that respondents were asked if they had a job in their community prior to their decision to migrate. Those that said "yes" were then asked what their job was. We will be able to cross reference these responses with the "last job" question to determine if their last job was in Mexico (prior to their decision to migrate). Determining if last job was in the United States will require referencing a variety of variables because it was not specifically asked in the survey. Ultimately, we are not yet sure if it will be possible to determine with 100% accuracy if a respondents last job was in the United States based on other contextual information. Distinguishing between last job in Mexico and last job in the United States will better capture "occupational channeling".

Finally, though the U.S. social ties measure used is multidimensional it still does not capture the complexity of a migrant's social ties to the United States. For example, we do not further explore the exact familial relationship between respondents and family members in the U.S., despite MBCS's ability to do so. It is very likely that having a U.S. citizen spouse or child

impacts decisions in the whole migration process differently than having a U.S. citizen cousin or brother. Due to data limitations we were not able to also examine the composition of ties in addition to the number of ties. Also, this analysis groups individuals with friends and family into the same category as individuals with only family, though it is unlikely much difference would be found.

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## Appendix A

Figure 1. Research Site Locations



Table 1. Destination Typology discussed by Espinosa and Massey 2012

| <b>Destination Type</b> | <b>Description</b>   | <b>States</b>   |
|-------------------------|--|---|
| Traditional             | Larger migration flows during the <i>Enganche Era</i> 1900-1929 and the <i>Bracero Era</i> 1942-1964 | Arizona, California, Illinois, Indiana, New Mexico, Michigan, Ohio, Texas, and Wisconsin  |
| New                     | Larger migration flows post IIRCA 1985 and post 9/11 era   | Alabama, Arkansas, Connecticut, Delaware, Washington D.C., Florida, Georgia, Kentucky, Louisiana, Maine, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, and West Virginia |
| Re-Emerging             | Larger migration flows during the <i>Undocumented Era</i> 1965-1985 and post 9/11 era                | Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming  |

\*Tables not included with online version