

NEW EVIDENCE ON DESTINATION DECISIONS OF UNAUTHORIZED MEXICAN  
MIGRANTS: DOES SOCIAL CAPITAL STILL MATTER?

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## **ABSTRACT**

Ricardo Martinez-Schuldt: New Evidence On Destination Decisions of Unauthorized Mexican Migrants: Does Social Capital Still Matter?  
(Under the direction of Jacqueline Hagan)

The geography of Mexican migration has changed significantly in the past several decades. 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 destination. Drawing on a new dataset on unauthorized Mexican migration (The Migrant Border Crossing Study), this paper assesses the role of individual-level characteristics including human capital, social ties, and occupational experience in unauthorized migrant destination decisions. Results suggest human capital and occupational experience are not associated with destination decisions. In contrast, social ties in the United States hold significant associations with unauthorized migrant destinations. In particular, the legal status of social network members in the United States explains variations in destination choice. These findings suggest that studies of migrant destination choices should also consider the social capital provided to newcomers through mature or more established network structures.

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## CHAPTER 1: 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 Latino<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).

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 quantitative studies that have examined the destination decisions of Mexican have not thoroughly investigated the heterogeneity within the unauthorized

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<sup>1</sup> Immigrant and native-born Latinos have both experienced geographic diversification but specifically Mexican immigrant dispersion has been particularly prominent (see U.S. Census 2000, 2010).

population beyond incorporating 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 preference have 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.

More general research on immigration has also emphasized the importance of social ties--including the social capital these ties offer--in impacting a wide variety of migrant behavior and immigrant incorporation abroad (Macdonald and Macdonald 1964; Massey et al. 1987; Boyd 1989; Christiansen 1996; Singer and Massey 1998; Cerrutti and Massey 2001; Palloni et al. 2001; Aguilera and Massey 2003; Krissman 2005 Hagan 2008; McConnel 2008). The majority of these quantitative studies operationalize social ties or social capital as the presence or absence of interpersonal connections to former/current migrants or as the percent of Mexican community members abroad. These analytical strategies consistently find beneficial effects of social capital and have withstood scrutiny of causal impact social capital with respect to homophily (Palloni et al. 2001; Mouw 2006). However, neither measure fully examines how migrant networks can and have evolved since 1965. This is especially important because the absolute number of naturalized, legal permanent resident (LPR), or U.S.-born members of Mexican migrant networks has increased over the past several decades. For instance, despite an increase in the percent foreign-born by total population and a decrease in the percent naturalized among the foreign-born since 1970, the absolute number of naturalized foreign-born immigrants increased in the United States (Bloemraad 2006). As Bloemraad suggests, the apparent decline in the percent of the foreign-born that is naturalized in the United States since 1970 reflect a rapid increase in the foreign-born rather than a decrease in the propensity of immigrants to naturalize.

Furthermore, around six percent of Mexicans in 2011 were naturalized, which is about half the size of all Hispanic immigrants, and about one percent greater than all immigrants (Gonzalez-Barrera and Lopez 2013; Brown and Patten 2014). Along with this, Mexico remains the largest source of the United States' foreign-born population (Brown and Patten 2014) despite stalled growth of the unauthorized Mexican immigrant population in more recent years (Passel, Cohn and Gonzalez-Barrera 2013). The implication is that the absolute number of Mexican networks that include a naturalized or legal permanent resident (LPRs) in the United States has no doubt increased. Again, the use of traditional measures of social capital cannot estimate if social tie characteristics have differential outcomes for migrant decisions and behavior, beyond number of ties or closeness of the ties (Espinosa and Massey 1999). This is important insofar as more mature network ties to U.S. citizens and LPRs provide immigrants to unique social capital not available to migrants exclusively connected to former seasonal migrants, temporary workers, or unauthorized immigrants.

This study offers new insight on unauthorized Mexican migrant destination decisions by examining the individual-level factors associated with geographic preferences during the contemporary context of economic restructuring in the United States and heightened border and interior enforcement by the U.S. government. I do so by examining the distribution of unauthorized Mexican migrants' decisions across a *traditional*, *new*, and *re-emerging* destination typology (Riosmena and Massey 2012). I 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? I am also interested in the individual-level factors that may help predict one destination type over another. I 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? I am 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 I draw on data from the second wave of the Migrant Border Crossing Study (MBCS) (Slack, Martinez, Whiteford, and Peiffer 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.

The thesis is organized into four sections. I begin with an overview of the literature explaining the geographic dispersion of Mexican immigration across the United States. I then review and critique theories that have been used to explain immigrant destination decisions. I then discuss the MBCS dataset, measures of variables, and methods used in the analysis. Lastly, I present the results of multivariate analysis and discuss their 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 (Massey 2008). 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 connections, 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, 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 U.S. 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 1942 until its formal end in 1964 (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. Established Mexican immigrants began moving out of traditional states and newcomer 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, most 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 who could prove they had been living in the United States since January 1, 1982. Moreover, successful applicants were able to sponsor immediate family members and many Latinos 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 U.S. regions previously avoided due to their legal status (Durand, Massey, and Parrado 1999). While this newfound mobility 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, IRCA’s second major provision, Employer Sanctions, did little to stop flows of unauthorized migration from Latin America and did little to prevent employers from hiring undocumented labor. Nativist and anti-immigrant sentiment in the Southwest urged policy

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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).

makers to deal with the remaining and potential future “immigration problem[s]” (Massey et al. 2002). The 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 schools and other public services, and required state agencies to pursue and prosecute 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 traditional gateways to new areas that had not previously experienced large flows of migration (Light 2006). Further, 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 U.S. interior (Eschbach, Hagan, Rodriguez, Hernandez-Leon and Bailey 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, McCormick, Martinez and Magdalena 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 favor of less patrolled regions of the country (Massey et al. 2002).

Other researchers explain the geographic dispersion of Mexican immigrants to new destinations as a consequence of economic restructuring in the United States and neoliberal policies in 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 to 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 Latino population growth and geographic diversification in the 2000 Census to the geographic relocation of 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 Hispanic Center 2007). Latinos were particularly 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 in their home communities (Hagan, Lowe, and Quingla 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 destinations.

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 (Hernandez-Leon 2008; Wise 2009; Hagan, Hernandez-Leon, and Demonsant 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 drive destination choices. To better understand individual level destination decisions occurring in the context of these economic and political transitions, I review relevant theories of migration.

## CHAPTER 2: NETWORK STRUCTURE, WORK EXPERIENCE AND DESTINATION CHOICES

### *Social Networks and Social Capital*

Discussion of social networks dominates the sociology of migration literature. “Social networks” 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 external structures that facilitate migration, including religious organizations, labor recruiters, or *coyotes* (smugglers) (Christiansen 1996; Hagan 2008; Hernández-León 2008; Krissman 2005). Most studies of migrant social networks emphasize the importance of personal networks to the point that social and personal networks are often used interchangeably (Boyd 1989: 639). Incorporating social networks into theoretical models to understand the migration 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; Hondagne-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 network structure compositions and how variations may impact the migration process. Espinosa and Massey (1999) do reveal that quality and quantity of social network ties matter in predicting the odds that a migrant undertakes an undocumented journey on their first trip. They find that characteristics such as possessing closer ties (immediate family versus distant family member, etc.), more numerous ties, and personal ties with more migration experience 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. For example, in 2010 there were around 800 thousand Latinos in North Carolina, a new migrant destination. The majority of these Latinos are Mexican (U.S. Census 2010). 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 in North Carolina, the latter's ties would be more likely to be undocumented. While necessarily simple, this comparison illustrates the point that migrant networks vary to the extent that some individuals will possess ties to U.S. citizens while others will not. Further, network compositions inline with the general patterns in California and North Carolina should more broadly vary 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) social ties to the United States are associated with variations in destination choices, (2) mature network ties, operationalized as having family with U.S. citizenship living in the United States, are associated with traditional destinations.

### *Human Capital and Occupational Channeling*

Scholars also rely on neo-classical theory and human capital approaches to understand the migration process and the destination decisions of migrants (Sjaastd 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. In the empirical literature 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 in empirical analyses (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 and abroad (Waldinger 1996; Hagan et al. 2011). Sanderson and Painter II (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 construction in Mexico should channel migrants to similar sectors in the U.S. south where there has been growing demand for construction workers (Pew Hispanic Center 2007). McConnell (2008) also finds an association 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 (3) *traditional* forms of human capital measured as English proficiency and years of formal education are not associated with destination decisions, but (4) occupational

experience is associated with destination outcomes such that 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.

### **CHAPTER 3: DATA AND SAMPLE**

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, I 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 an unauthorized border crossing, were 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.<sup>3</sup> 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 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-September 11, 2012, 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 individuals 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, including variables not used in the analysis, may provide a picture of the respondents interviewed and the typical contemporary unauthorized Mexican

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<sup>3</sup> One possible concern with the MBCS data is that apprehended and repatriated migrants differ from migrants that are never apprehended on the interior or along the U.S. Mexico border. While this is a valid concern Espenshade (1995) estimated that the probability of apprehension in the mid-1990s was around .32 (or 1/3). As far as I am aware this estimate has not been updated with the same methodological rigor utilized by Espenshade. However, it is unlikely that this estimate has since decreased following Operations Hold the Line, Gatekeeper, and Safeguard. Thus, the MBCS's methodology would miss the perfectly evasive unauthorized migrants. Given even conservative increases in the estimates of the probability of apprehension given contemporary border militarization, it is unlikely that the size of the "perfect migrant" population is large enough to impact MBCS's generalizability.

border-crosser. As Table 2 shows, the typical unauthorized Mexican migrant is a 32-year-old male from the traditional sending region in Mexico and with no work experience prior to leaving his or her community of origin in Mexico.<sup>4</sup> MBCS's sample female subsample at 17 percent is higher than typical population estimates which are around 10 percent (Instituto Nacional de Migración 2011). This is another possible advantage of MBCS in that the sizeable sample of female migrants allows for the estimation an effect for gender, which has not been explored in previous quantitative research on destination choices of Mexican migrants (McConnel 2008). The average number of previous crossing attempts (not including the most recent attempt which was the subject of the interviews) is 3.88. Past research, based on MMP data, typically report on migration trips whereas 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 two studies were based on data collected prior to the Prevention through Deterrence Campaign and 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 also consistent with past research (Singer and Massey 1998; Orrenius 2001; Massey et al. 2002). Lastly, the largest proportion of the sample crossed through the Tucson sector (40 percent) with San Diego (15

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<sup>4</sup> Sex, age, region born, and work experience included in the analysis. See measurement of variables for greater detail.

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.

## CHAPTER 4: MEASUREMENT OF VARIABLES USED IN THE ANALYSIS

### *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 discussed 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).

Alternative typologies of immigrant-destination types at the state level are discussed in the literature (Durand, Massey and Capoferro 2005; Massey and Capoferro 2008). These typologies, including that used by Riosmena and Massey (2012), have some discrepancies despite being consistent for most states. For example, California and Texas are routinely characterized as traditional states and North Carolina is routinely characterized as a new destination. However, Arizona, Florida, and New York are each individually characterized as a gateway in some context and a new destinations in others<sup>5</sup> (Durand, Massey and Capoferro 2005;

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<sup>5</sup> Relying on census data, Durand and Massey (2003) provide the top ten destination states of Mexican migrants from 1900-2000 and illustrate that Florida does a top ten receiving state until 1990 (5<sup>th</sup>) and 2000 (6<sup>th</sup>) and while Arizona is in the top four across the whole century. New York ranked in the between seventh and tenth in nine of the ten decades but received <2% of the migrant population in each instance. Thus, more recent growth likely justifies

Riosmena and Massey 2012). These discrepancies are possibly a result of past researchers focusing on *all* Latin American immigrants versus *Mexican* immigrants or a result of categorizing states during specific eras of Mexican migration. Thus, the Riosmena and Massey (2012) typology is superior in that it categorizes states based on the historical presence of *Mexicans* immigrants and the change in the size of the *Mexican* foreign-born population across the twentieth century. Relying on three destination categories is not as refined of an approach as used in past research, which has distinguished between different metropolitan areas or small and large urban areas as well as rural areas within states (Singer 2004; McConnell 2008; Singer 2009). 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 MBCS not asking about specific city destinations. Despite this, MBCS remains the timeliest and richest dataset available to address this study's research questions. Furthermore, the three-category typology allows for analysis that follows in the same tradition as past research that has distinguished between types of immigrant destinations (Singer 2004; McConnell 2008; Sanderson and Painter II 2011). Table 2 displays the proportions for each category of *Destination Classification*. It reveals that the vast majority (71 percent) of respondents indicated that their destination was a state that falls into the traditional category. Despite the clear preference for traditional state destinations, a non-trivial proportion of respondents indicated that they were trying to reach other states during their last crossing experience. About 17 percent of respondents were attempting to reach a new destination with the remaining 12 percent attempting to travel to a re-emerging destination.

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categorizing New York as a new destination. Regardless, alternative categorizations of New York did not result in substantially different results.

### *Independent Variables*

Table 2 displays the descriptive statistics for independent variables used in the analysis. Social network composition is measured by the variables under the heading *Social Ties*. This includes an exhaustive and exclusive categorical measure that gauges strong and weak social ties in the United States and specifically in the respondent's intended destination (Granovetter 1973). An individual migrant can have family members, only friends and acquaintances, or no social contacts in their U.S. destinations. It should be noted that individuals with both friends and family were coded at the family-specific level. I include an additional measure for whether or not a respondent has a family member with U.S. citizenship. One minor limitation is that these variables are not exclusive. Thus, an individual might have no social contacts in their destination but have family members with U.S. citizenship. Table 2 displays the percentage distribution for each of the *Social Ties* variables. Around eleven percent of the sample had no social contacts in their intended destination at time of the survey. The majority of the sample, almost 67 percent, had at least one family member in their destination. Around 22 percent of the sample has only friends or acquaintances in their destination. Lastly, about 47 percent of the sample had a family member with U.S. citizen. The social tie variables (*Social Ties*) used in my analysis 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). Despite this, my multidimensional measures indicate varying degrees of existing social ties in the United States, rather than the general migration experiences of a respondent's social ties. Thus, I am able specify *family* and *no-family with*

*citizenship* as the reference categories in the multivariate analysis which will simultaneously allow us to estimate the effects of having social ties in the United States (versus not having ties) and having social ties to U.S. citizens.

Formal human capital is captured through two variables: a migrant's years of formal education and English language proficiency. For the purposes of this analysis, years of formal education are collapsed into four categories indicating if the respondent completed 0-6, 7-8, 9-11, or 12 or more years of formal education.<sup>6</sup> The two largest groups are 0-6 years of education and 9-11 years of education making up 35 and 40 percent of the sample, respectively. A small fraction (10 percent) completed seven or eight years of education while 15 percent completed 12 or more years of education.

Respondents were also 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 tongue/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 job prior to leaving their community of origin. These responses were then coded into a series of categories and collapsed to form *Source*

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<sup>6</sup>I included alternative measures of education as a continuous measure, collapsed categories, and dichotomous indicators for greater than 8 and greater than 12 years of formal education. Results do not differ substantially between models.

*Country Work Experience.* This categorical variable distinguishes between five categories: (1) unemployed or not working,<sup>7</sup> (2) agriculture, (3) manufacturing and transportation, (4) construction, and (5) other including service and hospitality. This variable captures experience by occupational sector, which the theory of occupational channeling suggests should be related to destination decisions. As Table 2 reveals almost 30 percent of the sample indicated that they were not working or unemployed before they left their community of origin. The remaining respondents were about evenly split between agriculture (17 percent), manufacturing and transportation (18 percent), construction (16 percent), and other (18 percent).

I 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 32 percent in south/eastern Mexico.

Finally, I 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 about 18 percent of the MBCS wave II sample is female and the mean age is about 32 years old. *First Cross* and *Years5* are included as controls for whether their most recent crossing experience

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<sup>7</sup> While there are qualitative differences between the unemployed, stay-at-home mothers/fathers, students, and retirees, they can be grouped together when examining the connection between source country work experience and destination choices.

(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.<sup>8</sup>

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<sup>8</sup> Including years spent in the United States and squared terms for years spent in the United States and age did not change the results. Both of the squared terms were not statistically significant and were left out of the final model.

## CHAPTER 5: METHODS

I employ multinomial logistic regression in order to examine the association between individual-level characteristics and destinations outcomes. That is, I am 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). I estimate the coefficients with the following logits:

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

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 coefficients multiplied by variable values for  $1$  through  $n$  independent variables. Whereas ordered logistic regression estimates single coefficients for each variable, multinomial logistic regression estimates a coefficient for  $X_n$  in each logit model. For example,  $a|b$  indicates that the estimated coefficient of  $X_1$ , or  $\beta_{1,a|b}$ ,

applies to the new versus traditional destination logit, but this does not mean that  $\beta_{1,a|b} = \beta_{1,c|b}$ .

In the population I 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* I calculate all three logits and present coefficient estimates.

In order to preserve the structure of the existing data, I 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, I 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. Further, as Table 3 reveals two important findings. First, there are no apparent patterns in the missing data. The largest share of missing data comes from single item non-response opposed to patterned non-response across multiple items. However, as with all missing data I cannot be absolutely confident that the data are missing completely at random. However, as Table 3 also reveals, failure to impute results in estimating the regression model with 87 percent of the original study sample, which would result in a reduction in statistical power.

## CHAPTER 6: RESULTS

Table 3 presents the multinomial logistic regression coefficients and standard errors for the model predicting destination choices. 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, construction is the reference group for occupational experience, south/south east is the reference group for region born, family is the reference group for destination ties, and zero to six years of formal education is the reference group for the years of education categorical variable.

In the first column comparing new to traditional destinations, the regression results reveal that variations in social ties are associated with variations in destination outcomes. The coefficient for no contacts is -.604 and statistically significant at  $p < .05$ . These estimates suggest that unauthorized Mexican migrants with no social contacts in their destinations have lower log-odds of choosing a new destination versus a traditional destination when compared to a person with family in their destination. In terms of an odds ratio, a migrant with no contacts has about 46 percent lower odds of traveling to a new destination than to a traditional destination compared to a migrant with U.S. family ( $\exp [-0.604] = 0.546$ ). The effect for only friend is smaller in magnitude (-.401) but only significant at the  $p < .075$ . The other *Social Ties* variable which measures if a respondent has a family member with U.S. citizenship has a coefficient estimate of -.436 and this estimate is also statistically significant at  $p < .05$ . The coefficient estimate suggests that a migrant that has a social tie to a U.S. citizen family member has 35 percent lower odds of

traveling to a new destination compared to a traditional destination. There are no statistically significant differences in any of the effects estimated in the logit predicting a re-emerging versus a traditional, although migrants with U.S. citizen family also have smaller log-odds of traveling to a new destination versus a re-emerging destination when compared to a person with no family members with U.S.-citizen in the United States. This suggests that social capital characteristics are similar across traditional and re-emerging destinations.

The results in Table 3 also reveal that there are no associations between destination preference and human capital. The models also reveal that neither self-reported English proficiency nor years of formal education are significantly associated with any particular destination outcome. Table 3 also illustrates that source-country occupational experience also appears to have no association with destination choices for unauthorized Mexican migrants. Table 3 reveals no statistically significant findings for occupational experience and these results were consistent regardless of the reference group used. One possible explanation for this finding is that the average migrant in the MBCS data set, and unauthorized migrants in general, typically has accumulated migration experience. As mentioned, the average number of crossing attempts and apprehensions are 3.88 and 2.87, respectively, and the median number of years spent in the United States is five. It is likely that source country occupational experience prior to first crossing would not play as much of a role in decision-making during later trips or to more experienced migrants. For example, empirical research has shown that reasons for originally leaving one's communities of origin differ from later border crossing attempts (Martinez, Slack, Chávez, and Whiteford forthcoming). To address this possibility I ran two additional separate multinomial logistic regression models. The first additional model tested for interactions between occupational experience in Mexico and first time crosser. The second model replaced

“occupational experience before leaving community of origin” with “occupational experience before last cross”.<sup>9</sup> Ultimately, none of these models result in statistically significant findings that would point to an association between occupational experience in Mexico or in the United States prior to most recent crossing and destination choices.

Region of origin does, however, help predict destination choices. These results are consistent with the findings of Riosmena and Massey (2012) and suggest that there are regional linkages between the United States and Mexico. Relative to respondents born in south/south eastern Mexico, migrants born in traditional and northern sending regions have significantly lower log-odds (by .578 at  $p < .05$  and 1.02 at  $p < .01$ , respectively) of traveling to a new destination compared to a traditional destination. The same general association is found when comparing new destinations to re-emerging destinations. Relative to respondents born in Southern and 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.

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<sup>9</sup> This includes occupational experience in Mexico or on last trip to the United States. See Table 5 for sample proportions for each category.

## CHAPTER 7: SUMMARY AND DISCUSSION

A large body of research documents the changing geography of Mexican migration in the United States. This burgeoning scholarship documents trends in the geographic diversification of immigrant settlement patterns and investigates the economic, social, and political forces behind the new geography of Mexican migration to the United States (Singer 2004; Kandal and Parrado 2005; Massey 2008; Lichter and Johnson 2009; McConnell 2008). Despite the increased attention paid to new Mexican settlement patterns in the United States, few quantitative studies examine the individual level forces that are associated with migrants' destination choices. Furthermore, the heterogeneity within the Mexican unauthorized population is often overlooked and quantitative measures do not often go beyond including a dichotomous indicator variable for legal status in regression models. This approach has led to some insights such as the finding that unauthorized migrants have higher odds of traveling to large traditional urban settings compared to small urban settings, but the dichotomous indicator approach does not examine the characteristics *within* the subpopulation that are associated with different outcomes (McConnell 2008).

This thesis is motivated by previous research and contributes to the discussion of geographic dispersion and destination preference of unauthorized Mexican migrants at the individual level by testing three distinct though exclusive theories: social networks and social capital, human capital, and occupational channeling. I do so by analyzing data from the Migrant Border Crossing Study (MBCS), an unprecedented cross-sectional survey of unauthorized

Mexican migrants who attempted or succeeded an unauthorized border crossing along the U.S. Mexico border. Despite various limitations to the data, the MBCS remains one of the best available data sets to analyze associations between individual-level characteristics of unauthorized migrants and U.S. destination types in the current era of increased border militarization and securitization.

Findings are consistent with my first three hypotheses that network structure and the social capital it offers are associated with destination choices and that these associations vary depending on the quality or type of the social ties. For example, when compared to migrants with family in the United States, migrants with no social ties have greater odds of trying to reach a traditional destination. This is unsurprising given the longer history of Mexican migration to these areas and their contemporary demographic characteristics. Though not examined in this thesis, the motivations to migrate of first time migrants with no social contacts likely differ than the motivations of more seasoned migrants. As Martinez et al. (forthcoming) find, initial motivations for leaving one's community of origin are more likely to be economic or related to the "American Dream" while later trips are more likely to be for family reasons. In the absence of social ties a migrant would likely benefit more from traveling to traditional settlement states where there are more likely to be large established coethnic communities in which they may more easily navigate or seek assistance in securing housing or work.

The novel finding of this analysis is that having U.S. citizen family ties in the United States is positively associated with greater odds in attempting to reach a traditional destination state versus a new destination state and having non-U.S. citizen family ties is associated with greater odds of reach a new versus traditional destination state. These results are important insofar as they have theoretical implications for understanding and researching contemporary

Mexican migration. First, and unsurprisingly, these results provide empirical support for the theoretical perspective that Mexican migration is a socially driven process. As highlighted in the literature, social networks and the resources provided through them work to initiate, facilitate, and perpetuate migration (Massey et al. 1993). 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). Moreover, past research has illustrated that migrant networks can erode over time, which may negatively affect immigrant incorporation (Hagan 1998). However, as the number and strength of ties in a network might change over time, so too can the legal status of members that make up networks. For example, opportunities arise to obtain citizenship to as migrants and their immediate family members gain more experience abroad.<sup>10</sup> Strengthening of networks through the inclusion of family members with U.S. citizenship also has implications for immigration incorporation. For example, health care access and utilization is shown to vary inversely with unauthorized status in the Mexican population (Bustamante, Fang, Carter-Pokras, Wallace, Rizzo, and Ortega 2012). While inclusion of U.S. citizen family in one's network may not directly affect an outcome like healthcare utilization, networks that incorporate U.S. citizens may indirectly affect outcomes by providing reliable and beneficial sources of information. A percentage distribution of the U.S. ties variable, as shown in Table 2, speaks to the maturity of contemporary unauthorized Mexican migrant's social ties, with regards to the presence of family with citizenship. It is unlikely that Bracero era migrants had similar rates of social ties to U.S. citizens.

This thesis also provides a novel examination of the relationship of social ties in the United States and destination decisions by utilizing a multidimensional social tie measure that, to

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<sup>10</sup> The degree that this is possible depends on the host nation's immigration and citizenship laws.

my knowledge, has not been used in previous studies. The results emphasize that differences in the composition of social ties appear to have differential outcomes and these findings speak to the importance of incorporating social capital measures beyond presence or absence of social ties or the number of community members abroad in regression models that predict migration behaviors and other migration related outcomes. Future analysis should consider how different qualities in ties further affect decisions throughout the whole migration process, especially for unauthorized migrants. For example, in what other ways might ties to U.S. citizen family members affect individuals' migration decisions and how might they affect opportunities for newcomers in places of destination?

Although 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, I do not analyze if variation in closeness of family ties impacts destination preferences in the regression models. However, Table 6 illustrates the distribution of family ties reported by migrants with U.S. citizen family ties in the United States. The MBCS allowed for multiple mentions of family members with citizenship so the categories in Table 6 are not mutually exclusive and thus the proportions do not sum to one. For the largest proportion, or 45 percent, of the subsample the family member is either an adult or minor child. In the next largest category the family member is a sibling (30 percent). The remaining categories can be ranked as follows: cousins (27 percent), aunts/uncles (26 percent), spouses (15 percent), and mother and fathers (less than 5 percent each). Because this is potentially less informative than ideal, Table 7 reports a correlation matrix for all seven categories. The highest correlations are between those with children and spouses, father and mothers, and cousins and aunts. Almost all (data not shown) of the respondents with U.S citizen spouses also had U.S. citizen children living in the United States. This group also represented the

highest proportion for all bivariate comparisons. That is, 13 percent of all migrants with U.S. citizen family reported having both their spouse and children as having U.S. citizenship and living in the United States. This does not include individual who may have one immediate family member with U.S. citizenship but no other family members. In addition, this means that almost half of respondents had their spouses and/or a child living in the United States during their last crossing attempt.

Returning to the findings, there is mixed evidence to support my fourth hypothesis that destination outcomes are not associated with human capital and no evidence to support my fifth hypothesis that destination outcomes are associated with occupational experience for unauthorized Mexican migrants. Education does appear to be associated with destination outcomes; however, there does not appear to be any substantive meaning to the finding that the least educated group has greater odds of traveling to new destination state versus a traditional state compared to the second least educated group. I would infer more about the existence between education and destination preference for unauthorized immigrants if these same results applied to the least and most educated groups. Regardless, given the patterns of significance in the effects for education I am hesitant to conclude one way or the other.

This analysis is not without limitations and can be complimented with future research. First, this analysis shares the same limitations of all other cross-section studies. Seminal sending community research projects like the Mexican Migration Project and the Mexican Migration Field Research Program that rely on ethno-survey methodology allow for analyses that include time components or model changes over time. However, these project and their methodology are unlikely to reflect the contemporary unauthorized experience of crossing especially considering that enforcement has led migrants to have lower probabilities to return to countries of origin and

engage in repeat migration (Massey, Durand and Malone 2002). Future research could attempt panel studies of unauthorized migrants, however this is unlikely given their precarious status both following failed migration attempts and once they succeed in arriving to their U.S. destinations. A more plausible solution is to examine these associations through repeated cross-sectional studies, an approach that is possible with future waves of the MBCS's methodological approach. Second, this thesis does not address destination level characteristics that might be associated with destination preference. While the question about the impact of destination characteristics is beyond the scope of this study, future research should assess the role social, economic, and political contexts of destinations play in attracting or deterring unauthorized migrants. A choice-level characteristic analysis would further our understanding of the contemporary process of unauthorized migration. Finally, it is possible that rates U.S. citizenship family ties are overestimated because MBCS is based on self-reports. It is possible that uniformed migrants might not distinguish between legal statuses such as work permits or permanent residency and citizenship. If this is not clear to respondents it is possible that MBCS respondents over estimate their social ties with U.S. citizenship. Despite this, it is important to note that the majority of all ties are to immediate family members, which may limit reporting error (assuming that migrants are more informed about the status of their immediate family compared to their extended family). Regardless, it is clear that these results speak to the general importance of family connections to the United States and how these connections impact migration decisions. Previous research suggests that the majority (52 percent) of unauthorized migrants cite their family in the United States as the reason for wanting to attempt another border crossing in the near future compared to the quarter that cite needing to seek employment (Martinez et al. forthcoming). This finding is no doubt consistent with destination choices, but

the characteristics of family connections and social ties in general leads migrants on paths to different U.S. states.

## APPENDIX

Figure 1. Research Site Locations



Table 1. Destination Typology Presented by Espinosa and Massey (2012)

Destination Type	Description	States
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 September 11 <sup>th</sup> , eras	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 eras	Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming

Table 2. Descriptive Statistics for Variables used in Analysis (MBCS second wave)

<b>Variable</b>	<b>Mean/Proportion</b>	<b>Standard Deviation</b>	<b>Min.</b>	<b>Max.</b>	<b>% missing</b>
<b>Dependent Variable</b>					2.70
Traditional	0.71	-	0	1	
New Destination	0.17	-	0	1	
Re-Emerging	0.12	-	0	1	
<b>Controls</b>					
Female	0.176	-	0	1	<1%
Age	31.925	31.925	8.98	18	<1%
First Cross	0.165	-	0	1	0
Years in U.S. (>5)	0.565	-	0	1	2.34
<b>Social Ties</b>					<1%
Destination Ties					1.08
<i>Family</i>	0.67	-	0	1	
<i>Only Friends</i>	0.22	-	0	1	
<i>No Contacts</i>	0.11	-	0	1	
Family with Citizenship	0.47	-	0	1	1.44
<b>Human Capital</b>					
Years of Education					3.51
<i>0 to 6 years</i>	0.35	-	0	1	
<i>7 to 8 years</i>	0.10	-	0	1	
<i>9 to 11 years</i>	0.40	-	0	1	
<i>12 or more years</i>	0.15	-	0	1	
English Proficient	0.122	-	0	1	3.24
<b>Occupational Experience in Mexican Community of Origin</b>					5.05
Unemployed/Not Working	0.30	-	0	1	
Agriculture	0.17	-	0	1	
Manufacturing/Transportation	0.18	-	0	1	
Construction	0.16	-	0	1	
Other (service/hospitality/etc.)	0.19	-	0	1	
<b>Region Born</b>					2.25
North	0.12	-	0	1	
Traditional	0.34	-	0	1	
Central	0.21	-	0	1	
South	0.31	-	0	1	
<b>N = 1,110</b>					

Table 3. Patterns of Missing Across All Variables Used in Analysis (0 = missing; 1 = complete)

Percent of Cases	U.S. Ties	Age	Female	Region Born	Years U.S.	Occupation	Destination	English Proficiency	Education
<b>87%</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
2	1	1	1	1	1	1	1	0	1
2	1	1	1	1	1	1	0	1	1
2	1	1	1	1	1	1	1	1	0
2	1	1	1	1	0	1	1	1	1
1	1	1	1	1	1	0	1	1	1
<1	1	1	1	0	1	1	1	1	1
<1	1	1	0	1	1	1	1	1	1
<1	1	1	1	0	1	1	1	1	0
<1	1	1	1	0	0	0	1	0	0
<1	0	1	1	0	0	0	0	0	0
<1	1	1	1	0	1	1	0	1	1
<1	1	1	1	1	0	0	1	1	0
<1	1	1	1	1	1	0	1	0	1
<1	1	0	1	1	1	1	0	1	1
<1	1	0	1	1	1	1	1	0	1
<1	1	0	1	1	1	1	1	1	1
<1	1	1	0	1	0	0	0	1	1
<1	1	1	1	0	1	0	1	0	0
<1	1	1	1	0	1	0	1	1	1
<1	1	1	1	0	1	1	0	1	0
<1	1	1	1	0	1	1	1	0	0
<1	1	1	1	1	0	1	1	1	0
<1	1	1	1	1	1	0	0	1	1
<1	1	1	1	1	1	0	1	1	0

Source: The Migrant Border Crossing Study (Second Wave; Study Sample N = 1,100)

Table 4. Multinomial Logistic Regression Model on Multiply Imputed Data Predicting State Destination Type  
(Coefficients & Standard Errors)

	New Vs. Traditional	Re-Emerging Vs. Traditional	New Vs. Re-Emerging
<b>Demographics &amp; Migration Experience</b>			
Female	-0.051 (0.236)	-0.411 (0.297)	0.362 (0.349)
Age	<b>-0.030**</b> (0.011)	-0.003 (0.011)	<b>-0.027+</b> (0.014)
First Crossing	-0.034 (.241)	-0.189 (0.294)	0.141 (0.346)
Years in U.S. (5 or more)	-0.082 (0.199)	-0.096 (0.226)	0.015 (0.275)
<b>Social Ties</b>			
Destination Ties (Family=Reference)			
<i>Only Friends</i>	<b>-0.402+</b> (0.226)	-0.321 (0.252)	-0.082 (0.313)
<i>No Contacts</i>	<b>-0.604*</b> (.303)	<b>-0.642+</b> (0.380)	0.039 (0.454)
Family with Citizenship (yes)	<b>-0.436*</b> (0.194)	0.207 (0.622)	<b>-0.537*</b> (0.266)
<b>Human Capital</b>			
Years of Education (0 to 6 Reference)			
7 to 8	<b>-0.625+</b> (0.377)	0.400 (0.297)	<b>-1.057*</b> (0.457)
9 to 11	-0.024 (0.204)	0.015 (0.247)	-0.036 (0.294)
12 or more	-0.022 (0.273)	<b>0.518+</b> (0.299)	-0.514 (0.365)

English Proficient	-0.069 (0.315)	-0.142 (0.320)	.086 (0.410)
<b>Occupation in Mexico</b> ( <i>Construction=Reference</i> )			
Unemployed/Not Working	0.192 (.299)	-0.150 (0.324)	0.392 (0.412)
Agriculture	0.453 (0.314)	0.336 (0.342)	0.130 (0.431)
Manufacturing or Transportation	0.250 (0.316)	0.451 (0.316)	-0.183 (0.422)
Other (service/hospitality/etc.)	0.487 (.316)	0.361 (0.339)	0.113 (0.426)
<b>Region of Origin</b> (South/East-Reference)			
Traditional	<b>-0.579*</b> (0.230)	0.305 (0.249)	<b>-0.890**</b> (0.308)
North	<b>-1.022**</b> (0.365)	-0.053 (0.343)	<b>-0.984*</b> (0.471)
Central	0.191 (0.218)	0.181 (0.293)	0.019 (0.330)
Constant	-0.111 (0.463)	<b>-1.888***</b> (0.524)	<b>1.753**</b> (0.641)

Source: The Migrant Border Crossing Study (Second Wave; N = 1,080)

20 imputations

+p<.1 \*p <.05 \*\*p<.01 (two tailed tests)

Table 5. Occupational Experience in Mexico or United States Before Most Recent Crossing

<b>Occupational Experience</b>	<b>Proportion</b>
Unemployed/Not Working	0.14
Agriculture	0.19
Manufacturing/Transportation	0.22
Construction	0.19
Other (service/hospitality/etc)	0.25
N = 1,080	

Table 6. Family Contacts in the U.S. with Citizenship\*

<b>Family Contact</b>	<b>Percent</b>
Spouse	15
Child	45
Sibling	30
Mother	3
Father	5
Cousin	27
Uncle/Aunt	26

N = 517

\*Percents are not exclusive and thus do not add to 100 percent

Table 7. Correlation Matrix for Family Connections with U.S. Citizenship

	<b>Child</b>	<b>Spouse</b>	<b>Sibling</b>	<b>Father</b>	<b>Mother</b>	<b>Uncle/Aunt</b>	<b>Cousin</b>
<b>Child</b>	1						
<b>Spouse</b>	0.4322	1					
<b>Sibling</b>	0.096	0.1214	1				
<b>Father</b>	0.1139	0.1134	0.2332	1			
<b>Mother</b>	0.0763	0.0612	0.2522	0.453	1		
<b>Uncle/Aunt</b>	0.0441	0.0334	0.0075	0.0571	0.0742	1	
<b>Cousin</b>	0.0662	0.0344	0.1424	0.1109	0.1236	0.3886	1

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